ABSTRACT

Title of Dissertation:	NETWORKS THAT MATTER: AN EXPLORATORY CASE STUDY ON THE SIGNIFICANCE OF PEER NETWORKS FOR GRADUATE SCHOOL CHOICE AMONG STUDENTS OF COLOR IN A MCNAIR PROGRAM
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Efforts to broaden participation and access in graduate education have proliferated in recent decades, with federally funded interventions established to increase the number of historically marginalized students in graduate education (Council of Graduate Schools, 2008). The Ronald E. McNair Post-Baccalaureate Achievement Program, a notable intervention, prepares high-achieving students from low-income, first-generation, and racially minoritized backgrounds to pursue doctoral degrees through scholarly activities, research, and advising (Council of Graduate Schools, 2008; McNair Scholars Program, 2020). Although access to graduate education has traditionally focused on equipping students through the necessary tools and resources, limited consideration has been given to the potential impact of peer networks

established within these programs in the advancement of Students of Color towards graduate education.

Using an exploratory single-site case study methodology, this study examined a twofold phenomena: the factors influencing the graduate school choices of Students of Color in a McNair Scholars Program, and the impact of peer networks within the program on their decision-making processes. By conducting interviews with 14 program alumni and 3 staff, observing program events, and analyzing program artifacts, this study aimed to address three central research questions: (1) How do Students of Color who have participated in a McNair Program describe their graduate school choice process? (2) How, if at all, do students' McNair Program peers influence the ways students engage in the graduate school choice process? (3) How do McNair Programs facilitate or inhibit the influence that peer relationships play in the graduate school choice processes of Students of Color?

Key findings of the study underscored the relational elements and factors that influenced the graduate school choice process of Students of Color. Furthermore, the findings revealed that peer networks established within the McNair Program provided Students of Color with social capital that aided in their navigation of the graduate school choice process. Students of Color received support, encouragement, validation, and knowledge from their peers, including cohortmates, older peers, and alumni, to make informed decisions about their futures. Moreover, the McNair Program that served as the site for this case study intentionally fostered an environment that nurtured these meaningful peer relationships. The study results yield transferable and practical insights to the field of higher education as well as future avenues for research on Students of Color as they explore their post-baccalaureate options.

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Chapter 1: Introduction

People of Color comprise a significant portion of the United States population, yet their presence in graduate education is not representative of this.[1] Today, People of Color make up almost 40% of the population in this country, which is nearly double the representation of Students of Color who are enrolled in graduate programs (U.S. Census Bureau, 2020; Okahana & Zhou, 2019). According to a report by the Council of Graduate Schools, only 24.1% of the graduate student population identifies as domestic Students of Color (Okahana & Zhou, 2019; Walsh et al., 2021).[2] In fact, Students of Color are disproportionately underrepresented in STEM graduate programs and fields of study that are associated with the most lucrative job prospects and earning potentials (American Council on Education, 2019; Council of Graduate Schools, 2021; Walsh et al., 2021). Meanwhile, researchers have argued the importance of diversity in graduate education as a mechanism for improving the health and growth of the U.S. American workforce and economy (American Council on Education, 2019; Harvey & Allard 2011; Hunt et al., 2015; Griffin et al., 2012).

To address this lack of diversity, higher education leaders and stakeholders have engaged in a national discourse centered on the importance of access-related programming in increasing representation in graduate education. Graduate schools, institutions, and the federal government have been both reactive and proactive in their efforts to broaden education preparation and experience. Others offer programs like the University of Chicago's Summer Research Opportunity Program (SROP) to provide first-generation low-income college Students of Color

[1] People of Color and Students of Color are individuals who identify as Black, African-American, Latinx, Afro-Latinx, Chicanx, Asian, Asian American, South Asian, Middle-Eastern, Pacific Islander, Native American, bi-racial, and multiracial.

[2] In this dissertation, the primary population under study are domestic Students of Color.

with opportunities to engage in rigorous academic and research projects with faculty (Council of Graduate Schools, 2008). These experiences help shape students' interests, readiness, and competitiveness for graduate education.

There are several federal programs that promote increased access to graduate education for Students of Color, as well. One exemplary program is the Ronald E. McNair Postbaccalaureate Achievement Program, which is the focus of this study (Council of Graduate Programs, 2008). The McNair Program is a federally funded TRIO Program designed to encourage high-achieving students from low-income, first-generation, and racially minoritized students to pursue doctoral degrees (McNair Scholars Program, 2020). Represented at almost 200 institutions, the McNair Program serves as a mechanism to alleviate barriers to graduate education by providing participants with opportunities to engage in undergraduate research, mentoring, and skill-set building to prepare for their graduate education. Several research studies have captured the effectiveness of program participation and the trajectories of their participants, particularly for Students of Color (Fifolt et al., 2014; Gittens, 2014; Posselt & Black, 2012; Restad, 2013; Scholars, 2020; Smell, 2019; Waiters Martinez, 2014).

In addition to these programs, higher education researchers have studied issues of access in graduate education with hopes of providing recommendations that can remedy the racial and ethnic gaps in attendance we see (Griffin et al, 2012; Griffin & Muñiz, 2011; Posselt, 2015; Strayhorn et al., 2013). Much of the extant research on access to graduate school has focused on experiences that enhance graduate school-going behaviors for Students of Color as well as the barriers that they face in enrolling in their desired graduate programs. There is an abundance of research that examines how particular undergraduate experiences and relationships such as faculty mentoring and participation in undergraduate research activities bolster Students of

Color's aspirations to attend graduate school (Adedokun et al., 2013; Bowman & Holmes, 2018; Cuellar & Gonzalez, 2019; Lindholm, 2004; Luedke et al., 2019; Hanson et al., 2016; Ramirez, 2013; Rodriguez Amaya et al., 2018; Strayhorn, 2010; Trolian & Parker, 2017).

Other bodies of research on access to graduate education have documented inequities within graduate school recruitment practices, admissions processes, and funding. Researchers have also found that recruitment practices for graduate school are exclusionary towards Students of Color (Griffin et al, 2012; Griffin & Muñiz, 2011; Posselt, 2015; Posselt et al., 2017)). Faculty are responsible for selecting students and awarding aid, but rarely coordinate their efforts with the university and graduate school administrators who are in charge of outreach and recruitment of prospective students (Posselt, 2015). In Posselt's (2015) expansive review of recruitment processes of graduate programs, she found that faculty and administrators were unlikely to look outside the network of highly prestigious universities for qualified applicants. More often than not, highly prestigious universities lack racial diversity and the composition of their student bodies (Posselt, 2015). Even if graduate diversity officers are in charge of recruitment practices, Griffin and Muñiz (2011) contend that they still face challenges in their efforts to recruit diverse students due to a lack of diversity in the campus community, prevalence of racism in campus environments, and access to funding for outreach. As a result of the narrow scope and troubled outreach process, recruitment practices sustain existing barriers to graduate education as Students of Color are more likely to be overlooked (Griffin & Muñiz, 2011; Posselt, 2015).

In addition to flawed recruitment efforts, Posselt (2015) argued that admissions processes in graduate education are a form of gatekeeping to ensure that disciplines and programs remain exclusive and selective. Graduate education admission systems gauge excellence through evaluative measures and distinctions rooted in meritocracy, disciplinary cultures, privilege,

elitism, and institutional norms, such as Graduate Record Examinations (GRE) scores and attendance at selective undergraduate institutions (Posselt, 2015). Some have criticized the reliance on standardized test scores like the GRE can lead to systematic biases in the graduate admissions process and ultimately narrow access to graduate school for Students of Color (Sólorzano et al., 2005; Solórzano et al., 2000; Stewart & Haynes, 2015; Teranishi & Briscoe, 2006).

Funding for graduate education is an additional barrier. The availability of funding offered by graduate schools impacts a student's decision to enroll in graduate school (Carlton, 2015; English & Umbach, 2016; Griffin et al, 2012). The lack of funding or ambiguity in funding packages can negatively deter students from enrolling in post-baccalaureate programs. This issue is particularly salient for Students of Color, and research suggests the anticipation of high costs and minimal financial aid decreases their aspirations for attending graduate school (Carlton, 2015). For instance, Black and Latinx graduate students have reported serious concerns about access to financial aid, costs, and debt associated with pursuing a graduate degree (Ramirez, 2013; Strayhorn et al., 2013).

Although preparation and barriers to graduate education have been intimately studied, few researchers have examined how Students of Color navigate these issues or how they make decisions about attending graduate school. To date, limited studies have explored how Students of Color search, apply, and select their graduate programs. Recent studies in this area have not explored how students' graduate choice processes may be influenced by their interpersonal relationships. Specifically, this study explored how Students of Color's participation and relationships within a graduate preparation program inform their decision-making process to attend graduate school.

Problem Statement

To improve our understanding and approaches to supporting students in their pursuit and participation in graduate education, Posselt and Grodsky (2017) called upon researchers to explore how undergraduate students make choices about applying to and entering specific programs and fields of study. Other scholars such as Ramirez (2013) and Cuellar and Gonzalez (2019) have similarly called for researchers to spend more time examining the graduate school choice processes[3] and journeys of Students of Color. Existing literature focusing on graduate school choice for Students of Color is limited; extant literature often assumes that the choice process is the same across racial and ethnic groups (Cuellar & Gonzalez, 2019; English & Umbach, 2016; Lindholm, 2004; Ramirez, 2013; Strayhorn, 2010). However, Students of Color in higher education are impacted by their social and political worlds in nuanced ways that white students do not. As a result, this may have an influence on how Students of Color navigate the graduate school choice process. The need for research in this area presents an opportunity to address a gap in our understanding of how Students of Color make critical decisions about their future trajectories and participation in graduate education.

The McNair Program has been recognized as a valuable intervention to increase graduate school access for Students of Color. Existing studies on the McNair Program have examined how programmatic elements (such as faculty mentoring, exposure to undergraduate research and scholarly activities, and targeted advising) shape graduate school enrollments (Fifolt et al., 2014; Gittens, 2014; Posselt & Black, 2012; Restad, 2013; Scholars, 2020; Smell, 2019; Waiters Martinez, 2014). However, there are aspects of the McNair Program experience that are unique to its participants and have not been fully explored. For example, the McNair Program provides

[3] Graduate school choice is defined as a process in which an individual pursues any post-baccalaureate degree program at the master's or doctoral level (English & Umbach, 2016).

graduate school preparation to a cohort of undergraduate students and a network of peers from partner institutions, but little is known about these relationships or their impact. Studies have shown that peer relationships have positive effects on the development of college aspirations and enrollment (Cabrera & La Nasa, 2000; Cox, 2017; Deo & Griffin, 2012; Palmer & Gasman, 2008; Stanton-Salazar, 2011; Villalpando & Solórzano, 2004; William & Kristan, 2006). Further research is needed to explore if and how peer relationships can have a similar effect on graduate school access and choice. To date, there are no studies that explicitly explore the impact of these cohorts and peer relationships on graduate school choice for Students of Color participating in the McNair Program.

Exploring how Students of Color pursue graduate school with the guidance of their peers can inform how McNair Programs continue to decide to incorporate intentional peer interactions into programming. The implication of this research sheds light on the ongoing transformative impact that McNair Programs have on the graduate school access journeys of their participants. The findings of this study also have larger implications beyond the McNair Program. For example, many graduate preparation programs and undergraduate research initiatives provide opportunities for students to work with faculty and peers. By figuring out the unique benefits that peers contribute to these experiences, my research may assist other programs (re)think about the ways they center peer interactions in their programming. This could ultimately make their programming more effective. In addition, my study builds on existing research and knowledge about graduate school access by centering the voices and experiences of Students of Color who have gone unidentified and underrepresented in this field of research (Cuellar & Gonzalez, 2019; Ramirez, 2013).

Purpose of Study and Research Questions

The purpose of this study was to examine whether and how peer interactions and relationships within a McNair Program influence the graduate school choice processes of Students of Color. Graduate school choice is defined as a process in which an individual decides to pursue any post-baccalaureate degree program at the master's or doctoral level (English & Umbach, 2016). More specifically the study sought to address three central questions:

- How do Students of Color who have participated in a McNair Program describe their graduate school choice process?
- How, if at all, do students' McNair Program peers influence the ways students engage in the graduate school choice process?
    - How do students provide and receive information about post-baccalaureate plans?
- How do McNair Programs facilitate or inhibit the influence that peer relationships play in the graduate school choice processes of Students of Color?

Significance of Study

Redistribution of Employment & Economic Outcomes for Graduate Degree Holders

Ensuring increased access to graduate education is crucial to promoting the social mobility and financial success of Students of Color, as well as the overall economic well-being of the country (English & Umbach, 2016; Whitford, 2020). The number of students earning a bachelor's degree has doubled in the past 20 years (Chamorro-Premuzic, 2020; U.S. Census Bureau, 2020). According to the most recent data from the U.S. Census Bureau, 42% of adults over 25 years old in the United States have obtained a bachelor's degree (U.S. Census Bureau, 2020). As a result, the value of the bachelor's degree in the U.S. American workforce has decreased, and employers have added educational and professional training requirements for this

generation of workers (Chamorro-Premuzic, 2020; Posselt & Garces, 2014; Williams, 2020). Graduate degrees are increasingly required for competitive entry and mid-level positions that have good salaries (Blagg, 2018). For example, the Center on Education and the Workforce (2020) projected that STEM, Healthcare, Social, and Community Services are not only the fastest-growing fields but also will require higher levels of post-secondary education and training.

Research on outcomes of graduate education suggests that higher levels of educational attainment improve an individual's social and economic status (English & Umbach, 2016; Perna, 2004; Perna, 2006). Median annual earnings and full-time employability increase with each additional level of educational attainment across race and ethnicity (American Council of Education, 2019). In addition, graduate degree holders are more likely to be employed than those with a high school or bachelor's degree (Association of Public and Lab Grant Universities, 2020). While the benefits of graduate degrees on economic and employment outcomes are great, the number of graduate degree holders remains inequitable across race and ethnicity (Council of Graduate Schools, 2021). Students of Color do not receive graduate degrees at the same rates as their white counterparts (Council of Graduate Schools, 2021).

The demand and desire for advanced degree attainment have gained further attention as workers across the nation are navigating economic challenges due to the COVID-19 Pandemic (Whitford, 2020). The Strada Education Network surveyed 350,000 U.S. American adults and found that individuals with graduate degrees secured employment and job prospects at higher rates than other degree holders during the pandemic (Strada Center for Consumer Insights, 2020). While this outlook is unfortunate for the many who have and continue to struggle with financial and employment security, it raises a valid rationale for the timeliness of exploring

graduate school access and attainment, particularly for Students of Color who have been severely impacted by the pandemic (Fox, 2020). Graduate degree attainment can offer Students of Color security as they navigate into what has become a turbulent workforce with a demanding call for more credentialism.

Diversity in Graduate Education Enhances Leadership in the Workforce & Higher Education

With a nationwide need to diversify the workforce and the next generation of leaders, administrators have a responsibility to seek ways to improve racial diversity, particularly within graduate education (Carnevale et al., 2016; Council of Graduate Schools, 2008). Graduate education aims to provide individuals with professional opportunities and specialized training to improve the nation's economic well-being and leadership (Council of Graduate Schools, 2008; Council of Graduate Schools, 2021). In addition, graduate education offers invaluable benefits that diversity brings to the U.S. American workforce and higher education (Council of Graduate Schools, 2008; Council of Graduate Schools, 2021; Posslet & Garces, 2014). Posslet and Garces (2014) contend that increasing racial diversity in graduate education furthers the goals of diversifying the workforce.

Diversifying graduate education has a significant impact on advancements in the workforce and the development of leadership in higher education. People with diverse life experiences, training, and cultural backgrounds are likely to see the world differently and bring different perspectives that are essential to solving problems and reaching breakthroughs (Page, 2007). Racial diversity in graduate education exposes students to individuals with perspectives different than their own and prepares them to engage in global markets and multicultural settings while fostering creativity and innovation to solve complex social issues (Council of Graduate

Schools, 2008; Harvey & Allard 2011; Hunt et al., 2015; Griffin et al., 2012; Rogers & Molina, 2006).

The discourse around the value that diversity brings into professional and academic spaces is grounded in a large body of research on undergraduate education and workplace diversity. Seminal research has demonstrated that diversity in the undergraduate classroom improves cognitive skills, critical thinking, retention, and acquisition of academic content, as well as expands students' perspectives on different points of view on life and learning (Antonio et al., 2004; Bowman, 2010; Denson, 2009; Gurin et al., 2002; Hu & Kuh, 2003; Milem, 2003). Diversity in the workplace yields similar outcomes. Increased racial diversity and inclusion allow for the exchange and integration of perspectives and cognitive resources within groups to elaborate on improving innovations, problem-solving, financial success, group performance, and overall personal development (Hunt et al., 2015; Jayne & Dipboye, 2004; Richard, 2000; Roberson, 2019). Hunt et al. (2015) conducted a quantitative study to examine the relationship between racial and gender diversity and company financial performance. They found that a more diverse leadership team results in better financial performance, improved customer orientation, employee satisfaction, and recruitment of high-quality talent.

Diversity in graduate education also has direct implications for improving higher education leadership and administration. A graduate degree is a necessary prerequisite to taking on senior-level leadership roles in the academy. This study comes at the heels of decade-long concerns about the racial homogeneity of higher education administrators (Gasman et al., 2015). Scholars have argued that the lack of diversity at the more experienced leadership level in higher education has detrimental effects on the outcome of students and the development of the academy (Gasman et al., 2015; McNair et al. 2020; Webb, 2022). Gasman et al. (2015) and Nair

(2019) asserted that the lack of diversity in senior leadership impacts how leaders perceive current and future students' needs as well as issues of climate and equity in higher education. Increased diversity at the senior leadership level ensures that diverse viewpoints are taught, included, represented, and defended in university decisions that impact students, faculty, and administrators (McNair et al., 2020; Nair, 2019).

To meet the demand of the workforce and higher education leadership requires diversification of thoughts and identities to support the needs of our global society. Therefore, we need to better understand how Students of Color make decisions about pursuing graduate education to fill leadership positions in the workforce and higher education that will enhance productivity and innovation in this country.

Improving Faculty Representation within the Academy

Higher education institutions need more racial diversity in graduate education to help diversify the professoriate. Increasing diversity in graduate training is a critical part of increasing faculty diversity because it is the pool from which the next generation of professors will be drawn (Gasman et al., 2015).[4] Students of Color who attended graduate school will have the potential to become faculty members who significantly impact the lives of individuals inside and outside of the academy. Currently, the racial/ethnic distribution of faculty is not representative of the changing demographics of this country or the student populations that they serve at the undergraduate and graduate levels (Griffin, 2019a; Settles et al., 2021; Whittaker et al., 2015).

[4] Increasing the number of graduate Students of Color and faculty of color will not solve issues of equity and inclusion on campuses alone. Instead, universities and colleges that seek to increase the number of Students of Color entering graduate school can incorporate equitable and sustainable practices that support the development of their students. As a result, an institutional culture can shift to become more inclusive and supportive of Students of Color as a whole. This shift in campus culture and climate is a step towards dismantling issues of equity and inclusion in the academy.

My study is being conducted at a time when there is a national push to increase faculty diversity across institutions.

As of 2018, the National Center for Education Statistics reported that roughly 65% of all full-time faculty members were white compared to their Faculty of Color. Of all full-time faculty, a total of 25% represent individuals who identify as Black, Latinx, and Asian/Pacific Islander (National Center for Education Statistics, 2018). Much of the progress made in faculty diversity demographics over the last decade or so has been a result of an increased representation of Asian American faculty as well as an influx in hiring for non-tenure-track and part-time positions (Finkelstein et al., 2016; Griffin, 2019a). Research studies connected issues of faculty diversity to inequities in hiring and recruitment, lack of mentorship, and hostile campus climates (Fries-Britt, & Kelly, 2005; Griffin, 2019a; Griffin & Reddick, 2011; Moore, 2017; Thomas & Hollenshead, 2001). Additionally, disparities in racial diversity of faculty can be correlated to disproportionate numbers of Students of Color obtaining graduate degrees and leaving academia (English & Umbach, 2016; Griffin, 2019; Griffin et al., 2012; Ramirez, 2013).

Diversifying the faculty has several positive implications for the state of higher education. First, with an increased number of graduate Students of Color matriculating into faculty roles, there will be an increased representation of role models and mentors who share similar racial/ethnic identities with the increasing number of Students of Color entering higher education (Benitez et al. 2017; Cole & Griffin 2013; Crisp et al. 2017; Griffin, 2019a; Guiffrida 2005; Patton & Catching, 2009; Ramirez, 2013). Increased faculty representation can contribute to Students of Color's self-concept and interest in pursuing similar careers or retention in higher education (Ramirez, 2013).

Second, Faculty of Color make meaningful and unique contributions to student learning and engagement (Eagan & Garvey 2015; Griffin, 2019a; Maydun et al., 2013; Turner, 2002; Umbach 2006). Faculty of Color are more likely to employ a broader range of pedagogical techniques and interact more frequently with students as compared to their white counterparts (Umbach, 2006). In addition, Umbach (2006) found that more faculty diversity was related to the increased use of effective approaches to teaching and learning. For example, Faculty of Color often engage their students through student-centered learning, which can lead to better learning outcomes for students (Griffin, 2019a; Milem, 2001; Umbach, 2006).

Third, a diverse professoriate is needed to produce critical and thoughtful research in the academy and beyond. Griffin (2019a) contends that Faculty of Color often have strong commitments to making scholarly contributions through research and discovery that are centered around improving the life and health of marginalized communities. They introduce new theoretical frameworks and methodologies in their respective fields. In addition, Faculty of Color are often the innovators of new areas of research and thought leaders on complex issues that impact marginalized populations (Baca Zinn & Zambrana, 2019; Griffin, 2019a). They are also more likely to translate research findings into practice to address public needs and concerns than their white counterparts (Griffin, 2019; Gibbs Jr & Griffin 2013; Martinez et al., 2017; Urrieta & Méndez Benavídez, 2007).

Faculty of color benefit and make contributions to higher education, and this can occur at higher rates through increased diversity in the pool of individuals from which the next generation of faculty will be drawn. This study will contribute to the existing dialogue around increasing racial diversity in graduate education by providing insights into how racially diverse students decide to attend graduate school and what social factors (i.e., peers) help facilitate their

matriculation into graduate school programs. The findings of this study may have practical implications for how faculty and institutional leaders facilitate graduate school access for Students of Color, with the hopes of driving a more diversified faculty body in the future. In summation, focusing on how Students of Color make decisions about attending graduate school is integral to understanding the first steps of the larger aim to promote better economic outcomes for this group as well as diversifying the professoriate, higher education, and workforce. We must first seek to understand how this student population is thinking about attending graduate school and the influences that play a role in their decision-making to attend if we desire to reach these positive outcomes for individuals and our society.

- Graduate School Choice— a process in which an individual makes a decision about whether they will pursue any post-baccalaureate degree program at the master's or doctoral level (English & Umbach, 2016).
- Students of Color — refers to individuals who identify as Black, African-American, Latinx, Afro-Latinx, Chicanx, Asian, Asian American, South Asian, Middle-Eastern, Pacific Islander, Native American, bi-racial, and multiracial. This does not include international students who identify themselves as Students of Color.
- Peer relationships — informal and formal social connections individuals foster over a lifespan (Reitz et al., 2014). In the context of this study, peer relationships in the McNair Program include cohort-mates, peer-mentors, graduate student mentors, alumni, and other McNair Scholars from different universities.
- Peer interactions — resource-based exchanges through informal and formal dialogue between students. These exchanges are described as a reciprocal and equal transmission of resources and support between individuals (Reitz et al., 2014).

Chapter 2: Literature Review

This chapter is broken up into three sections. The first section reviews the literature on factors that influence the graduate school choice process. In the second section, I review research on the role of peer relationships in educational outcomes, collegiate experiences, and post-baccalaureate aspirations. The third section provides an overview of the McNair Scholars Program and research on programmatic elements that have been reported as improving graduate school preparation and choice for Students of Color.

Graduate School Choice & Students of Color

Unlike undergraduate college choice, which has been widely researched for decades, there is far less literature about graduate school choice (English & Umbach, 2016; Ramirez; 2011). Graduate school choice is defined as a process in which an individual pursues any post-baccalaureate degree program at the master's or doctoral level (English & Umbach, 2016). In this section, I review the three major phases of the graduate school choice process: (1) aspiration development, (2) application, and (3) enrollment into a graduate program (English & Umbach, 2016)[5]. I discuss the personal, social, and institutional factors that influence the various phases of the graduate school choice process for Students of Color.

Phase 1: Aspiration Development

Phase one in the graduate school choice process is aspirational development (English & Umbach, 2016). Aspirational development refers to an individual's desire and ambition to pursue graduate school as a viable option after college (English & Umbach, 2016; La Nasa & Cabrera, 2000). Similar to descriptions of the undergraduate college choice process, college students and graduates develop occupational aspirations and discover that obtaining a graduate degree is

[5] I cover the English & Umbach's Graduate School Choice Model (2016) in greater detail in the conceptual framework section of this chapter.

necessary for securing that goal (Cabrera & La Nasa, 2000; Hossler & Gallagher, 1987). Some students may aspire to earn a graduate degree in order to climb professional ranks that are required to affect change in their fields and for their communities (Cuellar & Gonzalez, 2019).

In many cases, students who have an inherent attraction to academic work, a history of academic achievement, a family member with a terminal degree, and attended a prestigious institution have been more inclined to pursue a graduate degree (Lindholm, 2004; Wallace, 1965). For example, Cuellar and Gonzalez (2019) found that Latina/o students who attended public institutions were 43% less likely to attend graduate school than their white counterparts who attend private and highly selective institutions. The students who attended more selective institutions were also more likely to indicate an interest in pursuing a doctoral degree (Cuellar & Gonzalez, 2019). Moreover, Latina/o undergraduate students who attended research-intensive universities were more likely to matriculate into graduate programs due to their preparation and exposure to graduate-level activities (Cuellar & Gonzalez, 2019).

Pre-collegiate and undergraduate experiences often help inform and enhance students' aspirations to attend graduate school (Woodward & Howard, 2015). Particularly for Students of Color, participation in undergraduate research activities, engagement with faculty, exposure to mentoring relationships, and involvement in living learning programs can influence graduate school aspirations (Cuellar & Gonzalez, 2019; Gibbs & Griffin, 2013; Hanson et al., 2016; Inkelas, 2011; Ramirez, 2013; Strayhorn, 2010; Trolian & Parker, 2017; Winkle-Wagner & McCoy, 2016; Woodward & Howard, 2015). Winkle-Wagner and McCoy (2016) argued that these experiences and interactions contribute to how Students of Color become socialized into academic life and "foster early dispositions (i.e., passion, understanding of the discipline, and confidence in being a future scholar)"(p. 436).

For decades, institutions have promoted and expanded early undergraduate research experiences and opportunities for Students of Color. Across disciplines, researchers have found that Students of Color who engage in undergraduate research programming have increased interests and desires to attend graduate school and pursue an academic career (Adedokun et al., 2013; Bowman & Holmes, 2018; Cuellar & Gonzalez, 2019; Lindholm, 2004; Luedke et al., 2019; Hanson et al., 2016; Ramirez, 2013; Rodriguez Amaya et al., 2018; Strayhorn, 2010; Trolian & Parker, 2017). Strayhorn (2010) argues that Students of Color who engage in undergraduate research become more confident in their research abilities, more enthusiastic about their academic discipline, and interested in obtaining higher levels of education in their field. Moreover, Woodward and Howard (2015), in their study on Black males participation in undergraduate research activities, discovered that Black males in their first year of undergraduate took a research course that allowed them to work collaboratively, conduct graduate-level research, and gain socialization skills that ultimately influenced their interest in pursuing a Ph.D. Before taking that course and becoming involved in a program geared toward Black male excellence, students were unaware of what academic research entailed and the various opportunities and pathways available in research and teaching (Woodward & Howard, 2015).

Specific experiences in research can yield increased degree aspirations for Students of Color. These experiences include navigating databases, examining components of methodological and theoretical frameworks, developing protocols, conducting semi-structured and focus group interviews, presenting research in written and oral form, learning about careers in research, and faculty research mentors (Woodward & Howard, 2015). These rich research experiences during college can help students see themselves as graduate school ready and enhance their interests in pursuing an educational career beyond a bachelor's degree.

Similarly, Luedke et al. (2018) conducted a critical qualitative case study analysis of student and programs staff experiences in a one-week undergraduate research program geared toward supporting the development of first-generation, low-income Students of Color. Luedke et al. (2018) found that participating students developed the necessary skills and confidence to conduct research in their field. In addition, students were often provided with identity-affirming scholarships and research that reflected their lived experiences (Luedke et al., 2018). As a result, the students were able to see and *embrace* themselves as future scholars. In addition, Leudke et al (2018) argued that involvement in undergraduate research led to students' early socialization to graduate education. Socialization refers to processes through which an individual gains knowledge, skills, and values for a successful transition into a profession or academic field (Weidman & Twale, 2003). Undergraduate research opportunities offer Students of Color an opportunity to prepare for graduate education as well as validate their trajectories into academia.

Undergraduate research programs often have an element of faculty mentoring and advising built into the programming. According to DeAnglo et al. (2021), faculty play crucial roles in mentoring undergraduate students toward graduate level education. Several scholars have documented faculty mentors as institutional guides, networks of information regarding disciplines and academic hierarchies, and aids in boosting students' confidence and sense of fit about attending graduate school (DeAnglo et al. 2021; DeAngelo, 2009, 2010; Fuentes et al., 2014; Seymour et al., 2004).

While faculty mentoring and support is beneficial for most students, there are additional positive outcomes for Students of Color (DeAnglo et al., 2021; Davidson & Foster-Johnson, 2001; Felder, 2010). Scholars have found that Students of Color who have received faculty support and mentoring have had higher rates of persistence, academic and socioemotional

success in college, and socialization into graduate programs (DeAnglo et al., 2020; Luedke et al., 2019; Strayhorn & Saddler, 2009; Trolian & Parker, 2017). In the context of graduate school access, several studies highlighted that having positive and affirming interactions with faculty advisors, research mentors, and professors can enhance Students of Colors' aspirations for attending graduate school (Cuellar & Gonzalez, 2019; Griffin et al., 2010; Lindholm, 2004; Ramirez, 2013; Trolian & Parker, 2017).

In her study on academic career choices and aspirations of a diverse group of faculty members, Lindholm (2004) found that two-thirds of the faculty participants explained that their interest in entering an academic career stemmed from their undergraduate research experiences and being mentored by a faculty advisor or professor. Interactions with faculty members commonly helped participants identify their interests in pursuing graduate school plans and aspirations to become a faculty member (Lindholm, 2004; Ramirez, 2013). In a separate study, Hanson et al. (2016) found that good teaching practices, frequent interactions with faculty, challenging classes, experiential learning, and non-classroom interactions enhanced post-baccalaureate degree aspirations for Students of Color. For Latinas, Cuellar and Gonzalez (2019) and Ramirez (2013) found that students who had frequent interactions with faculty in mentoring activities, participated in an undergraduate research program, and worked a campus job have increased interest in graduate school.

Contrary to much of the extant literature, Trolian and Parker (2017) found that white students were more likely to benefit from interactions with faculty than Students of Color at a research intensive university. For instance, white students were more likely to report positive non-classroom interactions with faculty members and easier access to receiving recommendations from past instructors than non-white students. These findings imply that some

faculty interactions may not actually have a positive influence on Students of Color experiences. Despite Trolian and Parker's (2017) work, most literature identifies mentoring and positive faculty interactions as enhancing students' desires to attend graduate school (Inkelas, 2011).

Outside of undergraduate research, Students of Color who engage in particular co-curricular opportunities like living-learning programs have an increased likelihood of developing aspirations for graduate school. For example, undergraduate living-learning programs have been reported as an effective intervention in promoting graduate school aspirations in STEM graduate programs among Black women. Inkelas (2011) found that a one-year involvement in a living-learning program was associated with a positive relationship for the STEM graduate school plans for Black women. From their participation in living-learning programs, Black women were found to outcompete their counterparts in understanding concepts, solving complex problems, being more confident in their abilities, and most importantly, more likely to have plans to attend graduate school in a STEM field (Inkelas, 2011). Due to their highly student-centered environments and faculty support, living-learning programs provide students with various opportunities to discuss academic, career-related content, and receiving mentorship from peers and faculty (Inkelas, 2011). Similar to undergraduate research spaces, living-learning programs have a component of faculty mentoring that has the potential of enhancing students' desires to attend graduate school. These experiences can lead students into the next phase of their graduate school access journeys.

Phase 2: Application

With growing aspirations and confidence in their abilities to succeed in graduate school, individuals may begin making plans to submit applications to prospective graduate schools of interest. During the application phase, most students search for academic programs based on

different institutional attributes and characteristics (English & Umbach, 2016). For example, some students may search for schools that are geographically located in desirable areas with competitive funding packages (Cuellar & Gonzalez, 2019; English & Umbach, 2016; Hanson et al., 2016; Ramirez, 2013; Strayhorn et al., 2013). In addition, prospective students may seek out academic programs that house faculty who conduct similar research or programs that offer attractive course options (Sanders & Landrum, 2012).

After reviewing a list of potential graduate schools, a prospective student may be ready to begin the application process. Many graduate programs require entrance exams (i.e., GRE, GMAT, LSAT, MCAT), personal statements, writing samples, resumes/curriculum vitaes, academic transcripts, and letters of recommendation (Sanders & Landrum, 2012). As a part of the application process, students might undergo rigorous interviews with potential faculty members and representatives depending on the program (Sanders & Landrum, 2012).

Once the application is submitted, the fate of prospective students are in the hands of faculty members. Different graduate programs have unique cultures that may carry a different set of standards for how they assess prospective students and ultimately who they chose to offer a seat to in their graduate programs. Admission guidelines and criteria are shaped by disciplinary norms and faculty expectations. Posselt (2015) argued that admissions processes in graduate education are a form of gatekeeping to ensure that disciplines and programs remain exclusive and selective. Graduate school admission processes gauge excellence through evaluative measures and distinctions rooted in meritocracy, disciplinary cultures, privilege, elitism, and institutional norms (Posselt, 2015). Evidence from Posslet's (2015) study on PhD committees' practices and procedures demonstrates that admissions officers and faculty members of top programs select the "best" and the "brightest" candidates who were perceived to have the lowest

amount of risk during onboarding into the program as well as faculties' perceptions on whether or not a student will find belonging in their intellectual communities. Such judgments are often subjective and rooted in implicit biases held by faculty and can impact *who* is selected for admission into graduate school. As a result, this can present barriers for Students of Color.

Given that faculty are central to the admissions process for graduate programs, they largely have control in shaping how exclusive and accessible graduate programs are (Posselt, 2014; 2015). In 2019, Chari and Potvin developed the Post-Graduation Career Intentions Survey to gather information on STEM undergraduate students' interest in graduate school and understanding of the graduate school application process. The survey was also administered to faculty in physics graduate programs. Chari and Potvin (2019) found that faculty and students rated letters of recommendation, prior research experiences, and GPA/grades in math and related sciences to be important criteria for graduate school applications. However, the ranking of which criteria mattered most differed between faculty and students, which suggests that students may be placing more emphasis in areas of the application that faculty are less likely to consider. For example, faculty ranked letters of recommendation as to the second most important criteria whereas students ranked it at the first place. Instead, the faculty ranked GPA and grades as the first most important criteria. This work demonstrates that students, admissions coordinators, and faculty may have different perceptions of what is considered valuable in an application. For this reason, admissions processes and criteria for graduate school can be somewhat elusive to students who are navigating the application process.

Phase 3: Enrollment

After applying to graduate programs, admitted students decide if and what school they will attend. An individual's choice about attending graduate school or a particular program is

shaped and defined by an individual's personal, social, institutional, and economic context (English & Umbach, 2016; Mertz et al., 2012; Millett, 2003, Mullen et al.,2003; Ramirez, 2013; Perez & Gong 2005; Poock & Love, 2001; Strayhorn et al., 2013).

In the enrollment phase, students weigh a number of factors related to institutional attributes and characteristics to inform their final decisions on whether or not they will attend graduate school (Ramirez, 2013). Some institutional attributes can include special academic programs, academic reputation, financial aid availability, academic reputation, student involvement, location/proximity to home, tuition/costs, size, campus climate, input from spouse/partner, and quality of faculty (Cuellar & Gonzalez, 2019; Hanson et al., 2016; Ramirez, 2013; Strayhorn et al.,2013). The extent to which these factors influence decision-making can vary by students' identities like race, gender, and first-generation status. While most students consider these similar characteristics and attributes in their graduate school choice process, there are factors that remain more distinct and salient for Students of Color based on their relationship with higher education. Of all institutional attributes, campus climate, financial aid, and location and proximity to family appear to play the most vital role in the decision-making process of Students of Color (Cuellar & Gonzalez, 2019; Ramirez, 2013; Strayhorn et al., 2013).

Research suggests that Students of Color are more likely to be influenced by the campus racial climate than their white counterparts when deciding whether or not they will attend a particular graduate school (Cuellar & Gonzalez, 2019; Poock & Love, 2001; Ramirez, 2013). Campus climate can affect how Students of Color engage on campus, influencing aspirations for graduate school, and most importantly their transitions into graduate school (Cuellar & Gonzalez, 2019). A study on Latino/a undergraduate students' aspirations for attending graduate school concluded that students were more likely to attend graduate programs at schools with

positive campus and department cultures despite rank or institutional reputation (Cuellar & Gonzalez, 2019). Similarly, Ramirez (2013) found that Latina/os also cited campus climate as a factor shaping their graduate school choice process. Participants made decisions to attend their particular institution despite not having highly-ranked programs because the department and campus climate was welcoming and inclusive (Ramirez, 2013).

In addition to campus climate, financial aid and perceptions of additive student debt play a major role in whether or not a student will enroll and matriculate into a graduate program. In her study of Latino/a doctoral students, Ramirez (2013) found that Latino/a doctoral students were particularly concerned over college costs and access to financial aid when deciding whether or not to attend specific graduate schools. The majority of participants in Ramirez's (2013) study picked doctoral programs that were well-funded with competitive financial aid packages. Comparably, research by Strayhorn et al. (2013) showed that HBCU graduates' decision-making processes were affected by financial considerations. For example, Black men were concerned about the opportunity to work while enrolled in a graduate program and the cost of attendance. On the other hand, Black women were more concerned about access to financial aid. These findings suggest that within the same racial groups, the type of financial concern can differ. Nonetheless, the anticipation of high costs and minimal financial aid can deter Students of Color from enrolling in graduate school (Carlton, 2015).

In regards to the perceived amount of debt, research suggests Students of Color experience pressure in deciding whether or not financing their education through student loans is a feasible option for them (Kerby, 2012). Students of Color, and Black women in particular, are more likely to borrow, default on loans, and carry debt loads to pursue higher education (Scott-Clayton & Jing Li, 2016). Generally, the debt load for Students of Color is generally higher than

the debt of white students (Kerby, 2012; Scott-Clayton & Jing Li, 2016). However, Black women carry the largest amount of student loan debt in comparison to all racial and ethnic and gedner groups (AAUW, 2021). A 2017 report from The American Association of University Women (AAUW) estimated that Black women owe 20% more in student loan debt than white women do after completing college.

Concerns about the impact student loan debt has on Students of Color, namely Black women, have received heightened attention in the field. During their graduate education, Black women have to make critical decisions about financing their education while accounting for how additional student loan debt will impact their navigation of graduate school as well as life beyond academia (Bostick et al. 2022; Bostick, 2021). Bostick (2021) argued that Black women facing high burdens of student loan debt repayments experience exacerbated inequalities in home buying, employment, income stability, and generational wealth. These implications of student loan debt are a reality that can be salient for other groups of Students of Color. Given this information, one can ascertain that pursuing a graduate degree without adequate financial support and means can become a hurdle in aspiring, applying, enrolling, and matriculating into a master's or doctoral program.

Another factor related to graduate school choice is location and proximity to family and home. This appears to be especially salient for Latinx students. Ramirez (2013) and Cuellar and Gonzalez (2019) found that location and proximity to home were key factors as Latinx students decided where to pursue a doctoral degree. Latinx doctoral students are more likely to trade off more selective institutions for ones that are closer to home in order to stay connected with family than other racial/ethnic groups (Ramirez, 2013). In their study on gender differences in graduate school choice preferences among Black students, Strayhorn et al. (2012) found that both Black

men and women choose schools based on their location and proximity to home and work. The connection to family and home is particularly evident for Black and Latinx students. While other racial and ethnic groups may experience this, research has highlighted that Black and Latinx students consider input and require emotional support from their family members and partners when making a final enrollment decision (Ramirez, 2012; Maton & Hrabowski, 2004; Strayhorn et al., 2013). This is unsurprising given that Students of Color often identify one person or their entire family as an explanation to further their education or prefer to remain close to home to provide financial assistance to family members (Mitchall & Jaeger, 2018; O'Shea, 2016).

At the end of the enrollment phase, students may or may not decide to matriculate into a graduate program. Students who successfully enroll and matriculate into a graduate program are then no longer navigating the graduate school process (English & Umbach, 2014). Students who decide not to enroll at graduate school by the end of the third phase can revisit phases one or two when they are ready to pursue graduate school again. This process can be iterative and considerations for what factors students consider when selecting schools can change based on their social and contextual influences (English & Umbach, 2016).

Altogether, research on graduate school choice for Students of Color indicates that there are a number of considerations that students balance when choosing a graduate program. However, there are few studies examining the factors that influence the multiple stages of the graduate school choice process, specifically for Students of Color. Of the studies that exist, most utilize retrospective accounts on their enrollment choices. My study captured how Students of Color navigated each phase of the graduate school choice journey and what factors they considered along the way as they made decisions about life after graduation. Moreover, existing research on graduate school choice does not examine the extent to which peers influence post-

baccalaureate plans for Students of Color. While well studied in the context of college choice, little research has focused on how peers influence how Students of Color develop aspirations, apply, and eventually enroll in graduate programs. My study explored how peers inform the graduate school choice processes for Students of Color, particularly within a cohort-style preparation program: the McNair Scholars Program.

The Influence of Peer Relationships on Higher Education Access and Aspirations

While older bodies of research in the mid-20th century argued that peers had a largely negative influence on students' conduct and academic performance, more recent research suggests peer influence on student outcomes is largely positive (Villalpando & Solórzano, 2005). In fact, research showed that peers positively impact academic performance, identity formation, cognitive and emotional development, and college-going aspirations (Newman & Newman, 1976; Piaget, 1932; Sullivan, 1953; Villalpando & Solórzano, 2005). Specifically, the quality and nature of students' interactions with peers can have an impact on their self-efficacy, motivation, and matriculation into a post-secondary institution (Bryk & Schneider, 2002; Perez-Felkner, 2015). Below, I review the extant literature on peer relationships on pathways into higher education, as well as the retention and success of Students of Color.

Peers and College Choice for Students of Color

A large body of research conveys that peers have a positive influence on college aspirations and enrollment outcomes for Students of Color (Acevedo-Gil,2017; Cabrera & La Nasa, 2000; Holland, 2011; Missaghian, 2021; Muhammad, 2008; Nunez et al., 2007; Perez-Felkner, 2015; Pérez & McDonough, 2008; Sokatc, 2006; Villalpando & Solorzano, 2005). Several studies suggest Students of Color in secondary school contexts who receive encouragement and support from peers during their college access journeys are more inclined to

enroll in college and be better informed about how to navigate college (Gonzalez et al., 2017; Missaghian, 2021; Muhammad, 2008; Nunez & Bowers, 2011; Sokatch, 2006; Tierney & Venegas, 2006). For instance, Perez-Felkner (2015) conducted a mixed-methods case study to examine the educational pathways of Students of Color attending a charter high school in Chicago. Students experienced academic, personal, and social obstacles in their post-secondary education planning that they shared with their families and peers. The students in the study viewed their peers as mentors and supporters of their college goals. Students that shared similar social identities were closer and could relate to one another about their foreseen struggles around topics like financing their college education.

Formal peer relationships also have a positive effect on college-going behaviors and aspirations for Students of Color. Tierney and Venegas (2006) conducted an ethnographic mixed-methods study of six low-income high schools in an urban area to explore the role of peer-counselors in Students of Color's college aspirations. They found that peers can create social support networks and fictive kin groups that encourage a culture of college-going behaviors. Specifically, students who had peer counselors were more likely to receive emotional and academic support when applying for college than those who did not. With the guidance and support of older students in their high school, students could see themselves as "college-ready". Luedke (2020) argued that effective peer counselors can also be near-aged students who are currently in college. In a qualitative study, Luedke (2020) researched how first-generation college Students of Color from two predominantly white community colleges shared their knowledge and cultural capital with local high school students. Mentors acted as role models to the high school students that they worked with. Participants were committed and took ownership in sharing important resources and information about the college-going and matriculation

process with their younger peers. In both studies, peer and near-peer mentors and counselors helped Students of Color during their college-going journeys.

Information sharing through peers is a consistent theme across research on the college choice process. Nunez and Bowers (2011) argued that peers have a more significant effect on the college choice decisions of Latinx students compared to all other racial groups. Nunez and Bowers (2011) found that Latinx students were more likely to seek advice from their peers for sources of information when they did not receive adequate support from school agents. Like Latinx students, Black students have also reported receiving encouragement and support from their peers during the college choice process. For example, Sokatch (2006) and Muhammad (2008) found that friends' plans to attend college were significant predictors of college enrollment for Black and Latinx students from low-income backgrounds. In a later qualitative study exploring the role of peer influences on the college choice process, Holland (2011) found that African American students identified their peers from high school and informal college counselors as pivotal influences. During their college access journeys, students reported that their peers helped them research different colleges and universities and decide which institution they would attend. In addition, students recalled being recruited by their friends to join college preparation programs like TRIO to obtain valuable information about the college enrollment process.

Socio-emotional support is infused in the process of information-sharing among Students of Color, particularly for Black and Latinx students. González et al. (2003) found that Latinas who participated in a targeted honors high school program created a network of peers who supported and reinforced their motivation to attend elite colleges. For Latinas in this study, their peers offered not only encouragement to attend college but also privileged information about the

college admissions process they had not received from their counselors or family members. In a more recent study, Missaghian (2021) found that low-income and first-generation Latinx students relied heavily on families and peers when it came time to decide on enrolling in college. The study also revealed that students relied on their peers to be a soundboard and support system as they determined what majors and careers they should pursue. Like Latinx students, Black students have also reported receiving encouragement and support from their peers during the college choice process. For example, Sokatch (2006) and Muhammad (2008) found that friends' plans to attend college were significant predictors of college enrollment for Black and Latinx students from low-income backgrounds. In both studies, students benefited from sharing their experiences and concerns with one another about their college access journeys.

In contrast to these findings for Latinx and Black students, American Indian and Asian Pacific American students appear to have less favorable experiences when interacting with their peers during the college choice process. Fann's (2004) study on American Indian high school students' college choice experiences revealed that students received negative feedback and backlash from peers about their desires to attend college. Students expressed that they felt that they would be stigmatized or treated differently for going to college. These findings imply that college choices for American Indian students are tightly connected to the messages they received from their cultural counterparts and ties. For Asian Pacific American college students, Teranishi et al. (2004) found that students typically discussed their college plans with their peers. Those who took advice from friends were more likely to enroll in a less selective college than a more prestigious one.

Other work on the schooling and academic experiences of Asian American students suggests that peers can be a key influence on their academic and social success (Kim & Gasman,

2011; Peng & Wright, 1994). In a study examining the college choice experiences of Asian American high school students, Kim and Gasman (2011) found that students received information about college from their family, friends, and school personnel. While school personnel were described as providing fruitful information, students mentioned that their peers were helpful in making sense of the information that they have received from their counselors. Given that college choice is a complex process, students in the study relied on their friends and recently graduated peers for comfort and guidance on what information they need the most to make decisions about attending college.

Social Networks in College: Sense of Belonging, Student Organizations, and Post-Graduation Plans

In a systematic review of literature on social networks and social supports in academic success in higher education, Mishra (2020) argued that social networks (inclusive of religious affiliations, family, faculty, and peers) play a significant role in the academic success of Students of Color in higher education. Distinctly, peer networks in college offer students an opportunity to develop close and long-term relationships (Mishra, 2020). Through classroom interactions, campus social organizations, and co-curricular programming, peer networks become vital for socio-emotional and academic support as well as career guidance in college for Students of Color (Brooms & Davis, 2017; Grier-Reed et al., 2011; Harper, 2015; Mishra,2020; Palmer et al., 2011; Pérez II, 2014; Strayhorn, 2010).

Sense of Belonging

A number of scholars have written about the importance of developing a sense of belonging and community for the retention and success of Students of Color on college campuses (e.g., Gonzales et al., 2015; Harper & Newman; 2016; Kelly et al., 2021; O'Meara et

al., 2017; Rankin & Thomas, 2020). Developing a community and having positive peer interactions may be particularly critical at predominantly white institutions, where Students of Color are often few in numbers and have to navigate more hostile environments. For example, a study by Kelly et al. (2021) suggests that Black undergraduate women use their relationships to validate one another in their experiences at predominantly white institutions and promote one another's retention. Similarly, Rankin and Thomas (2020) explored the experiences of undergraduate, graduate, and early career Black women in computing. The undergraduate Black women in the study experienced forms of gendered racism. The women found a sense of family with other women who shared their same ethnic background and experiences with marginalization, encouraging and motivating them to persist.

Black undergraduate men have also been documented to benefit from support by their same race and gendered peers (Brooms & Davis, 2017; Harper & Newman, 2016). Brooms and Davis (2017) argued that Black male undergraduates rely on their bonds with their peers that support their retention in higher education. Black male undergraduates operate in higher education spaces that are particularly unwelcoming and unsafe. Their peer relationships allow them to establish microcommunities on their campuses, as well as improve their engagement with student organizations and academic opportunities (Brooms & Davis, 2017). For example, Harper and Newman (2016) found that academically successful Black male students were heavily involved in student organizations. These young men met peers with shared identities and interests, which helped counter feelings of isolation and homesickness as they transitioned to college. Due to their racialized experiences in higher education, Black men and other Students of Color, lean on their peer relationships to enhance their sense of belonging and overall success.

Latinx students also find a sense of community through peer networks on college campuses. In an action research study, Gonzales et al. (2015) examined the first to second-year retention rates in a learning community for Latinx students. The study revealed that students benefited from interactions with faculty and peers in the center. However, once the Latinx students left the center and the support structure of their community of peers, they faced challenges navigating other campus environments. Further, the study showed Latinx first-year students who received support from peers were more likely to succeed in their transition and retention in college. Similarly, Rodriguez and Blaney (2021) conducted a phenomenological qualitative study to explore the role of peer relationships in undergraduate Latinas' persistence and sense of belonging in STEM programs at an R-1 institution. They found Latinas often felt marginalized in their STEM environments by their male counterparts and navigated feelings of isolation. Latina students suggested that they could build a sense of *familia* with culturally similar peers in Latinx student groups. This peer aspect helped them persist in challenging environments and times while navigating higher education. This evidence demonstrates that Students of Color, specifically Black and Latinx students, uniquely benefit from having strong peer relationships; they help students find a sense of belonging and support in environments that have been historically unwelcoming, racist, sexist, and unsafe.

Sense of belonging among Students of Color also manifests through their participation in multicultural centers and cultural organizations. Multicultural centers offer invaluable spaces for marginalized student groups who are seeking a safe haven on their campuses with peers who may feel alienated on their campuses (Doan, 2011; Guiffrida, 2003; Harper & Quaye, 2007; Museus, 2008; Patton, 2006). Student-centered organizations are often affiliated with multicultural centers. Doan (2011) argued that student involvement in ethnic organizations

provides a space for student groups who want to establish connections with peers of similar backgrounds and learn about other cultures. Museus (2008) found that African American and Asian American students who participated in ethnic student organizations used these spaces for cultural expression, advocacy, and sources of validation on their campuses.

Ethnic and cultural organization spaces such as Greek societies and race-based leadership programs can provide a space where Students of Color receive support from their peers (Druery & Brooms, 2019; Hernandez, 2008; Dever, 2020; Miranda et al., 2020). In a qualitative case study on Latinx sororities and fraternities, Miranda et al. (2020) found that the Latinx college students who participated in these organizations had an increased sense of belonging and felt connected to peers that shared and recognized their cultural values and interests. A similar theme was observed by Dever (2020). In a different case study on the impact of peer relationships and networking across Black sorority alumni, Dever (2020) found that Black undergraduate women who were affiliated with a Black sorority at historically white college relied on their sorority sisters as a source of support, mentoring, and source of identity expansion and formation. In spaces that lack diversity and inclusion, Dever (2020) argues that sororities can serve as where Black women can help shape their identities as Women of Color. Like other racial groups, Black women thrive in community with one another on campuses that have been historically alienating for them.

Involvement in race-based leadership programs with peers on college campuses can help support a sense of belonging for Students of Color (Brooms, 2018; Brooms, 2019; Brooms et al., 2020; Druery & Brooms, 2019). In a qualitative study exploring the experiences of Black male undergraduates in a Black male leadership initiative, Druery and Brooms (2019) found that their engagement in the program improved their college experience. Students reported developing a

strong brotherhood and network of support through their peer-mentoring relationships. The student narratives revealed that students' involvement in the leadership space acted as a culturally affirming and validating space that helped them progress and remain resilient in their undergraduate studies. Student engagement in these kinds of organizations is critical, connecting Students of Color to peers who can support their sense of belonging, retention, and success in college.

Post-graduate Plans and Career Development

In addition to promoting a sense of belonging on college campuses, a few studies have highlighted peer networks as influential in informing post-baccalaureate and career aspirations for Students of Color (Carpi et al., 2017; Winkle-Wagner & McCoy 2016; Stolle-McAllister et al., 2010). For instance, Stolle-McAllister et al. (2010) conducted a study to examine how the Meyerhoff Scholarship Program helps socialize Black students into the STEM field. Similar to the McNair Scholars Program, the Meyerhoff Scholar Program is designed to increase diversity in the STEM field by preparing students from racially minoritized backgrounds for academic careers. Across three groups of students in a Meyerhoff Scholar Program, Vela (2010) found that students described their relationship with networks with peers and faculty to be the most important aspect of the program. Networks of peers and faculty allowed students to find a sense of belonging and community within their program as well as affirming their interests in entering the STEM field.

A similar finding surfaced in a case study by Capri et al. (2017). Carpi et al. (2017) explored the role of undergraduate research programs in STEM in fostering early career ambitions for Students of Color. Using case study methods, Carpi et al. (2017) found that students who participated in the program built a community with their same-year and older peers

through their research projects. These relationships provided students with information about career opportunities and pathways. Further, students who engaged with older students and recent alumni felt affirmed by others' perceptions of their ability to be successful in STEM. Moreover, students who connected with older peers established a strong network for future professional opportunities. In a separate study, Winkle-Wagner and McCoy (2016) found that Students of Color who engaged in graduate preparation programs acquired knowledge and skills from their peers that prepared them for graduate school. Students of Color developed peer social networks that extended beyond their participation in the graduate preparation program. Students reported that even if they did not attend the same institutions, they remained connected and supported in their transition into graduate school. While these three studies suggest that peers can be influential in the development of Students' of Color aspirations to pursue graduate studies, there is more research that can be done to support these findings. These studies have not examined the direct role and influence that peers have played in how Students of Color make decisions about whether or not to graduate school.

In summation, existing research on peer relationships has shown to have positive effects on educational attainment and aspirations as well as rates of retention in higher education. Peer networks positively influence the academic success, well-being, and retention of Students of Color. However, there is little evidence of how peer relationships inform the graduate school choice processes of Students of Color. There is more to explore and understand about how peers influence and/or support the graduate school access journeys of Students of Color. Thus, my study aimed to this gap in the literature by exploring how peers inform the decision-making behaviors of Students of Color within a McNair Program as they made choices about pursuing graduate school.

The McNair Program and Graduate School Access

In this final part of the literature review, I identify the scope and goals of the McNair Program to set the context for my study. I then explore the role of three programmatic elements of the McNair Program and how they contribute to graduate school aspirations and enrollment. Specifically, I examine research on how student participation in research activities, faculty mentoring, and cohort-style programming influence the graduate school aspirations and decision-making for McNair Program participants.

Scope and Goals of McNair Scholars Program

The McNair Program is a federally funded TRIO program supporting 151 institutions across the United States and Puerto Rico (Scholars, 2020). The McNair Program serves students who identify as low-income, first-generation, and/or traditionally underrepresented in graduate education (Scholars, 2020). In 1986, the McNair Program formally began after the passing of the second African American astronaut, Ronald E. McNair, Ph.D., in the Challenger explosion (Baness King, 2011; Renbarger, 2019). To honor Dr. McNair and his passion for promoting access to post-secondary schooling for people of color, the McNair Program was established to recruit students from underrepresented backgrounds into doctoral studies (Byrd-Johnson, 2017; Renbarger, 2019). With this in mind, the McNair Program intends to prepare and train historically underrepresented students for doctoral studies.

Each fiscal year, an institution's McNair Program can support a total of 25-30 students (Renbarger, 2019). While students are often recruited in their sophomore year, seniors and juniors may also apply to enroll in the program (Renbarger, 2019). To gain admission to a McNair program, applicants must demonstrate high academic potential (U.S. Department of Education, 2021). Eligible students must complete a rigorous application process including an

interview with McNair Program administrators, a writing sample, transcript and academic history, personal statement, and faculty recommendation letter(s) (Renbarger, 2019).

Once accepted, McNair scholars have access to research opportunities, funding, fee waivers for graduate applications and exams, faculty mentors, academic counseling, and a community of support from peers and McNair Program staff (Fifolt et al., 2014; Gittens, 2014; Posselt & Black, 2012; Restad, 2013; Scholars, 2020; Smell, 2019; Waiters Martinez, 2014). Each McNair program has its own culture and approach to facilitating graduate school preparation. While this is true, across every McNair Program, there are shared approaches to programming that research suggests result in positive student outcomes (i.e. enrollment into graduate school). During their participation in the program, most students are encouraged to apply for graduate school during their senior year with the support of their McNair staff (Baness King, 2011). Once a student has graduated from college, they can no longer receive the immediate benefits and resources from their McNair Program (Baness King, 2011). However, McNair Program staff and administrators remain in contact with their alumni to continue supporting students who are still intending to pursue graduate school (Renbarger, 2019).

Programmatic Elements of McNair Scholars Program & Student Outcomes

Various studies have shown that participation in the McNair Program enhances graduate school aspirations and enrollment for their target population (Gittens, 2014; Humphrey et al., 2002; Ishiyama & Hopkins, 2003; MacPhee, 2013; Restad, 2013; Seburn et al., 2005; Strayhorn, 2010). Renbarger (2019) conducted a meta-analysis of studies on the McNair Scholars Program. She found that the program promotes students' personal, social, and academic growth and successfully assists students in entering graduate school. Renbarger (2019) found that 99% of quantitative studies examining the effectiveness of the McNair Program identified positive

outcomes for students such as increased graduate school enrollment rates in comparison to their counterparts of similar backgrounds and levels of academic achievement (Ishiyama & Hopkins, 2003; Humphrey et al., 2002; MacPhee, 2013; Seburn et al., 2005). Several qualitative studies have shown that participation in the McNair Program assists students in applying for graduate school, advocating for funding, improving their GRE scores, enhancing graduate school aspirations, and building confidence in becoming a researcher and scholar (Gittens, 2014; Nnadozie et al., 2001; Seburn et al., 2005; Strayhorn, 2010). Below, I review the role of three programmatic elements of the McNair Program and how they contribute to positive student outcomes of graduate school aspirations and enrollment.

Participation in Research & Other Scholarly Activities

The McNair Program requires students to complete individual research projects under the supervision of a faculty member (Renbarger, 2019). Typically, McNair students who conduct research showcase their work at local and national conferences in oral or poster presentation format (Restad, 2013; Waiters-Martinez., 2014). As argued above, scholars have consistently found that exposure to undergraduate research translates to increased and sustained interest in graduate education generally, and particularly for Students of Color (Cuellar & Gonzalez 2019; Fifolt et al., 2014; Gittens, 2014; Hanson et al., 2016; Lindholm, 2004; Posselt & Black, 2012; Ramirez, 2013; Strayhorn, 2010; Trolian & Parker, 2017). In the context of the McNair Program, several studies have reported similar findings.

For instance, Strayhorn (2010) conducted a statistical analysis of survey data examining the summer undergraduate research experiences of McNair Scholars. He found that engagement in summer undergraduate research enhanced Students of Color's aspirations for graduate school. Students who collected or analyzed data during the summer had higher degree aspirations than

their McNair peers who did not engage in data collection or analysis. These findings are consistent with later research conducted by Restad (2013), who conducted an in-depth, comparative interview study to examine former Portland State University McNair scholars' understandings of how the program influenced their graduate school experiences. She found that McNair alumni felt prepared for graduate school because of their experience in acquiring rigorous research skills, making presentations, and writing research papers. Similarly, Gittens (2014) conducted a qualitative study of 18 McNair alumni at different insitutions to explore early graduate school socialization among McNair Scholars. Gittens (2014) found that participants' involvement in research activities and internships better prepared them for graduate-level research and increased their chances of receiving funding (Gittens, 2014). These studies showcase the extent to which research opportunities through the McNair program help prepare students for graduate school. The skills highlighted in these studies are transferable to students' coursework and research commitments in graduate education (Gittens,2014; Restad 2013).

Program staff in the McNair Program are also aware of the benefits that early exposure to undergraduate research activities can have for Students of Color as they prepare for graduate studies. Nnadozie et al. (2001) surveyed 69 alumni and 35 program directors from all over the country to explore the success of students served by the McNair Program in graduate school. The survey results indicated that both students and program directors found participation in research activities as a critical factor in their decision and enrollment into graduate school, along with securing graduate school funding.

Participation in Faculty Mentoring Relationships

As a major component of the McNair Program, students work with faculty mentors on research projects (Renbarger, 2019). As cited in previous sections, positive and affirming

interactions with faculty advisors and research mentors can enhance Students of Color's aspirations for attending graduate school (Cuellar & Gonzalez, 2019; Lindholm, 2004; Ramirez, 2013; Trolian & Parker, 2017). Some scholars have examined the role of faculty research mentors in the McNair Program and the influence that mentoring relationships have on student outcomes. For example, Bancroft et al. (2016) employed a pilot study to examine the experiences of former STEM students in McNair Programs. Students in the MSP reported having positive interactions with faculty mentors that prepared them for interactions with faculty in graduate school. This finding affirms earlier research from Fifolt et al. (2014), who explored the relationship between faculty mentors and McNair Program students at a research-intensive university in the Southeast. Fifolt et al. (2014) found that both the students and faculty mentors experienced positive interactions with one another. Notably, the students felt that their mentorship experiences aided in their development of research skills and confidence to attend graduate school (Fifolt et al., 2014).

Neither of these studies named how faculty mentoring and interactions impact the graduate school access and choice journeys of Students of Color.[6] Bancroft et al. (2016) and Fifolt et al. (2014) grouped McNair Scholars under one monolithic group. These studies leave the reader unable to see potential differences and similarities across McNair scholars with different racial and ethnic identities in how they perceive interactions with their faculty advisors and mentors. Students' relationships and mentorship with faculty can vary due to similarities and differences in social identities between the two parties (McCoy et al., 2015). Nonetheless, their findings are similar to other studies that examine faculty mentoring and relationships with Students of Color in their graduate school pursuits (Cuellar and Gonzalez, 2019; Hanson et al.

[6] Both studies examined MSP cohorts and did not include the make-up of their study's samples.

2016; Ramirez, 2013; Woodard & Howard, 2015). Faculty mentoring and relationships in the McNair Program are a positive source of enhancing Students' of Color's desires to attend graduate school (Inkelas, 2011).

Participation in Cohort/Community Activities

In conjunction with faculty support and mentoring, studies have also suggested that MSP communities and cohorts provide positive support systems for students as they navigate college and consider their post-baccalaureate plans (Gittens, 2014; Posselt & Black, 2012). In the community, McNair scholars can engage with peers about their post-secondary plans and goals (Posselt and Black, 2012). Gittens (2014) found that McNair students felt like they belonged to a community with valuable connections and long-term support. Many participants in the study highlighted that program events such as doctoral preparation seminars, research and scholarly activities, cultural events, and summer research internship programs allowed them to exchange information and ideas with their peers. In these spaces, participants felt connected to their peers and developed "familial relationships" over time. The participants in the study cited their peers as valuable sources of emotional-support, validation Additionally, interactions with peers and staff resulted in students developing a better understanding of the process of obtaining a graduate degree **(**Gittens, 2014). In another study, Posselt and Black (2012) explored the development of research identities among ten first-generation students in a McNair Scholar Program. They found that first-generation students drew support from their cohort members and considered this support a source of motivation to attend graduate school. Given that peers and cohort mates have been evidenced to support students' motivations to attend graduate school, this research furher explored if and how peers influenced different aspects of the graduate school choice process for Students of Color in a McNair Program.

Summary of Literature Review

There are three gaps in the literature that my dissertation will address. First, research on graduate school access and choice that focuses specifically on the experiences and outcomes of Students of Color is limited. My dissertation directly addresses the call in the literature for more research on how Students of Color make decisions about attending graduate school. Second, existing research on how peers influence post-baccalaureate planning and outcomes is scarce. It is worth exploring how peers influence graduate school access, particularly for Students of Color, because we know that peers have a positive impact on college access for this student population.

Third, my research adresses gaps in the literature about the McNair Program and how participating students influence each other as they make decisions about enrolling in graduate school. The majority of research on the McNair Program aims to measure the effectiveness of their undergraduate research experiences and faculty mentoring models in promoting positive graduate school-going outcomes. Researchers have not focused on the impact of McNair cohort peers or alumni on the graduate school processes of their participants. In addition, most of the studies on the McNair Program have grouped students in larger demographic categories (I.e.first-generation, low-income, Students of Color) when conducting data collection and/or analysis. My study sought to address both gaps by focusing on the role of peers and cohort communities in the graduate school process for Students of Color. Respectively, my work centered on how different social identities (racial and ethicnity, generation status, and socieocomic status) informed participants interactions with their peers during the graduate school choice process. In sum, this findings of this work offer valuable insights to interventions and programs similar to McNair by shining light on an understudied resource, namely peer networks.

Frameworks

English and Umbach's (2016) Graduate School Choice Model and Social Capital Theory guided this study. The frameworks informed the development of research questions, interview protocol, and data collection. First, I outline the origin, core concepts, and application of English and Umbach's (2016) Graduate School Choice (GSC) Model and social capital theory in my research. Then, I discuss the limitations of employing these frameworks in my study.

Origin of English and Umbach's (2016) Graduate School Choice Model

Despite the expansion of graduate education across the United States, much of the theoretical and practical focus in the literature has centered on college choice research and models (English & Umbach, 2016). There are many undergraduate college choice models that conceptualize and theorize college decision-making processes and behaviors (e.g., Cabrera & La Nasa, 2000; Hossler & Gallagher, 1987; Iloh, 2018; Perna, 2006; Savitz-Romer & Bouffard, 2014). However, previous attempts to establish a graduate school choice model have lacked strong theoretical underpinnings or relied on factors influencing a population at a single institution (English & Umbach, 2016; Hearn, 1987; Poock & Love, 2001).

In an analysis of existing graduate school choice frameworks, English and Umbach (2016) found that most models and studies on graduate school choice provide descriptive data on the process but fail to capture enrollment behaviors. English and Umbach (2016) also questioned the data collection processes and samples for previous graduate school choice models. For example, they found that previous graduate school choice models utilized outdated data from the 1992–1993 Baccalaureate and Beyond study. English and Umbach (2016) argued that the landscape of higher education has changed dramatically and thus perspectives on graduate studies have evolved as well. With this in mind, English and Umbach (2016) developed the

Graduate School Choice (GSC) Model to account for the shortcomings associated with previous studies and models. Their GSC model is an adaptation of Perna's (2006) conceptual model of undergraduate college choice, which integrates habitus, cultural capital, social capital, and human capital theory.

Overview of English and Umbach's Graduate School Choice Model

The GSC model suggests that a student's decision manifests in a three-phase process: (1) development of graduate school aspirations, (2) application to graduate schools, and (3) matriculation into a graduate program (English and Umbach, 2016; See figure 1 for a visual aid the framework). This econometric framework[7] examines the decision-making process of pursuing a graduate education while also accounting for the differences in sociological factors such as race/ethnicity, gender, and socioeconomic status (Cohn & Geske, 1990; English & Umbach, 2016). Each phase of the decision-making process is nested in four layers of a student's background, experience, and context. The layers consist of (1) habitus, 2) the context of the undergraduate institution, 3) graduate school context, and 4) the social, economic, and policy context (English, 2012).

Following Nora (2004), English and Umbach (2016) posit that the habitus reflects a student's way of contextualizing how their lived experiences fit within the expectations of a college or university. This relates to the student's internal perceptions and beliefs about their place on a particular campus and/or degree program (Bourdieu, 1977; English & Umbach, 2016; McDonough, 1996). It is also linked to a sense of possibility and how others see what is possible for them in terms of their educational attainment. Habitus is informed by an individual's gender,

[7] An econometric model emphasizes enrollment and choice as the result of a rational process by which an individual estimates the economic and social benefits of attending college. This perspective on choice assumes that individuals compares the utility of attending a particular college over another as well as considerations of quality, prestige, expected cost, risk, and future earnings (Hossler et al., 2003; Iloh, 2018; Perna, 2006)

socioeconomic status, race/ethnicity, and other aspects of their social identities (English & Umbach, 2016; McDonough, 1996). In addition, habitus, inclusive of cultural and social capital[8], shapes how a student decides to pursue a graduate degree. Variables for social and cultural capital include English as a primary language, attending college out of state, parent education, SES, dependency status, high school designation, and 1st-year parent/relative paying tuition (English & Umbach, 2016).

The second layer accounts for the effects of the characteristics of a students' undergraduate institution on their graduate school choice. This layer includes institutional characteristics such as classification, prestige, resources, structural supports and barriers, and HBCU designation status.[9] A more explicit example of these institutional characteristics includes academic quality and graduation rates of undergraduate institutions.

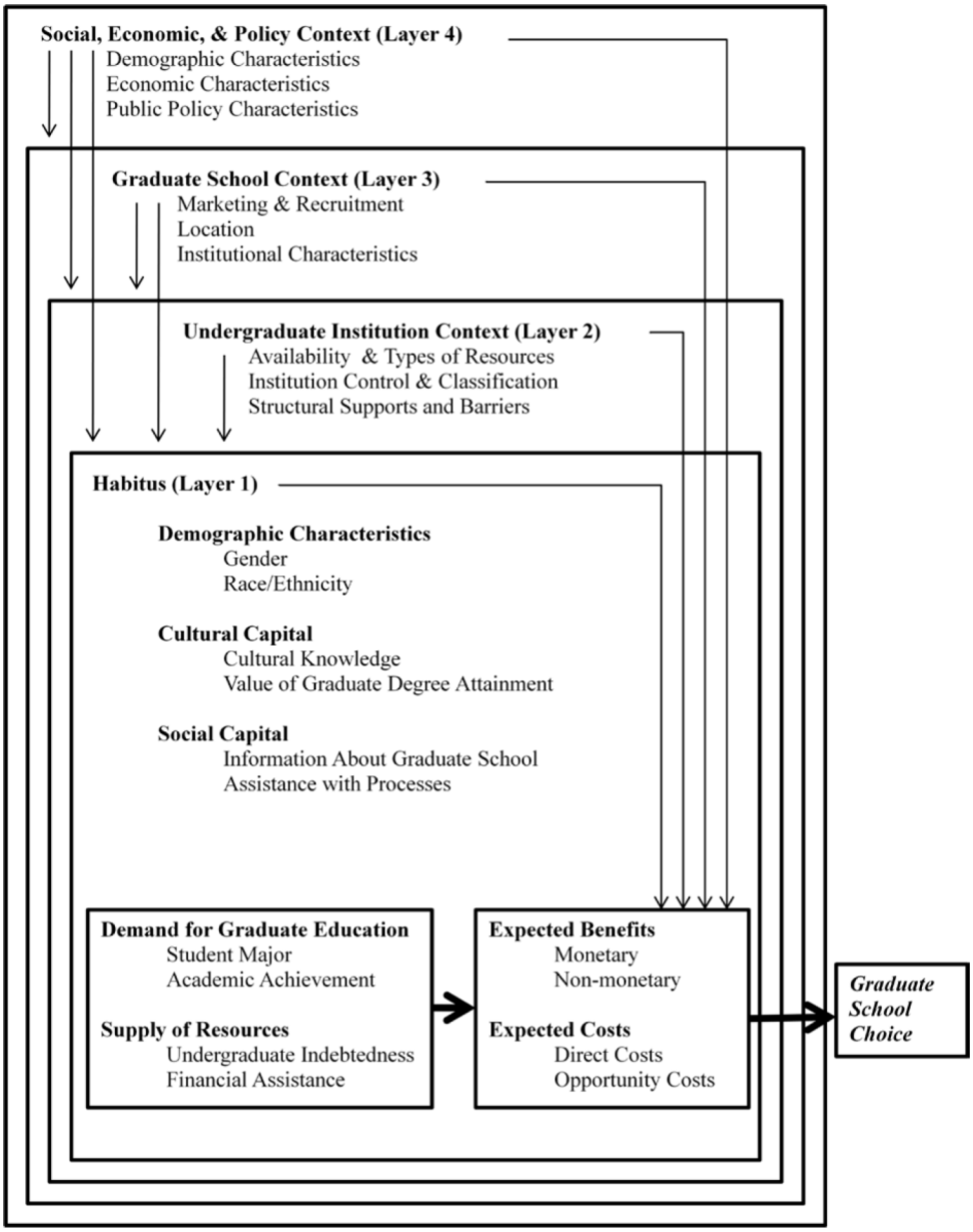
Instead of focusing on the higher education context in the third layer of Perna's (2006) model, English and Umbach's (2016) third layer focuses on the graduate school context. The graduate school context recognizes the role that higher education institutions play in influencing decisions about what graduate programs to attend. For example, higher education institutions convey information and recruitment messages to students through advertising and marketing (Perna, 2006). Lastly, the fourth layer is consistent with Perna's (2006) model, which is the social, economic, and policy context. English and Umbach (2016) did not define the fourth layer in detail. However, Perna (2006) described the social, economic, and political context as "changes in social forces (e.g., demographic changes), economic conditions (e.g., unemployment rate), and public policies (e.g., the establishment of a new need-based grant program)" (p.119).

[8] I expand on cultural and social capital in the following section.
[9] The framework does not control for other institutional types.

In the context of graduate school access and choice, examples could include the expansion of funding for graduate students or the increased need for diverse professionals in STEM fields.

Figure 1.

Graduate School Choice Model by English and Umbach (2016)



Graduate School Choice Model as Lens for this Study

The English and Umbach (2016) model was chosen as a foundation for this dissertation because it is the most recent and comprehensive graduate school choice framework to date. The GSC model covers each phase of the choice process students undergo in their graduate pursuits. The phases of the GSC model informed the development of the research questions and interview protocols of this study. Lastly, the model provided a contextual understanding of what social, structural, and institutional factors shape students' decision-making. These contextual factors allowed me to consider how various environments and experiences impact graduate school choice, specifically in the McNair Program. Moreover, the model has not yet been applied to studies on graduate school access and choice and is grounded in quantitative research. Since the model was created on the basis of a literature review and then tested empirically to evaluate the applicability of the model, my work had the opportunity to further validate the existing model.

Lastly, the model does not address the role of peers in college choice. While the model includes social capital, it is captured through measurements of parental higher education level, family income, and primary language spoken in the home. The current definition of social capital in this model lacks interpersonal factors that shape how social capital is transmitted to individuals. The role of peer relationships in this study extend the definition of social capital in the GSC model. In sum, my study contributes to the body of research on graduate student choice and access through the application of the GSC model in a qualitative study and adds a much-needed interpersonal aspect to a particular layer of the model.

Social Capital as a Theoretical Perspective

In the GSC, social capital is a part of the habitus layer, influencing graduate school choice. Social capital is the second framework that guided this study in order to emphasize how

interpersonal relationships and interactions impact the development of social capital and the extent to which social capital influences how individuals navigate the graduate school process. Social capital refers to the resources and information individuals inherit over the course of their lives through their interpersonal relationships and networks (Bourdieu, 1986; Coleman, 1990; Crawley et al., 2019; Lin, 2001). In this section, I discuss the origin, perspectives, and application of social capital in this study.

Origin of Social Capital Theory

Social capital was ushered into sociological and anthropological arenas by Pierre Bourdieu (1986) and his larger work on cultural capital. Pierre Bourdieu (1986; 1997) introduced the concepts of cultural, social, and economic capital as a structural critique of social and cultural reproduction (Bourdieu,1997; Yosso, 2005). In its early conception, Bourdieu's theory suggests that individuals from the dominant culture possess various forms of cultural capital (norms and behaviors), social capital (social network and connections), and economic capital (financial and monetary wealth) that provide them with advantages in society (Bourdieu, 1986; 1997; Yosso, 2005). Under Bourdieu's interpretation, cultural, social, and economic capital are inherited and possessed by the affluent and accumulated over time through generations to reflect specific sets of knowledge and abilities valued by the elite and American institutions (Bourdieu, 1997, 1986; Yosso, 2005). Bourdieu (1997, 1986) asserted that the three forms of capital are acquired in three ways: from family, formal schooling, and professional settings. Additionally, cultural capital can be converted into economic and social capital in certain conditions (Bourdieu, 1986).

Perspectives of Social Capital

As a function of cultural capital, social capital is operationalized "as an asset, embedded in social relations, to improve one's life outcomes" (Garcia, 2014, p. 32). Social capital is an aid

in understanding how individuals navigate micro-macro structures in society (Coleman, 1990). When social capital is activated, actors within a social network impart information, resources, and opportunities to one another (Coleman, 1990; Garcia, 2014; Stanton-Salazaar, 1997). Exchanges across members are an investment in an individual's or collective's success (Bourdieu, 1986). Social networks and connections are often grounded in trust, collaboration, empathy, reciprocity, and belonging (Coleman, 1988; Crawley et al, 2019; Plagens, 2011).

Relationships among members of a social network vary. For instance, strong ties in social networks are horizontal, meaning that individuals share social status (Crawley et al., 2019). Whereas weak ties represent the vertical relationships between individuals (i.e., those who share different social statuses) (Crawley et al., 2019). Both degrees of relationships are invaluable to the wealth of an individual's social capital and contribute to a resource-rich network of supportive ties (Garcia, 2014).

Bourdieu (1986) posited that the amount of social capital an individual possesses is a result of the size of their network and their economic and social standing. Those with access to larger networks of influential and powerful people have a wealth of social capital. As a result, Bourdieu (1986) reasoned that social capital becomes a mechanism through which the dominant group can maintain control and reproduce inequalities. If social capital is the currency for political power, economic development, and developing traditional values, then the assumption lies that the wealthiest have more valuable social capital than the poor.

The assumption that non-dominant communities do not access or lack *valuable* social capital has perpetuated deficit-based narratives and lenses of Communities of Color in education research. Deficit thinking suggests that Students of Color and their families are at fault for academic performance because they enter school without normative cultural skills and that their

parents do not value or support their children's education (Yosso, 2005). Thus, the notion that Students of Color do not have the social capital they need to succeed is reproduced through academic achievement narratives, intervention programs, and matriculation into post-secondary institutions (Yosso, 2005; Stanton-Salazar, 2011).

Scholars such as Yosso (2005) have refined and challenged Bourdieu's interpretation of social capital to address issues of classism and racism. With a critical race lens[10]Yosso (2005) argued that Communities of Color possess a wealth of social capital through their families, school, and faith-based communities. Communities of color engage in social networks that provide valuable professional and personal support while an individual navigates society's most complex and historically exclusive institutions (Yosso, 2005). Communities of color utilize their social capital for resource-sharing, educational attainment, legal justice, and employment (Yosso, 2005). Students of Color who have access to higher education information will often bring back knowledge and resources to their communities to aid others' awareness (Yosso, 2005). This allows for Students of Color to be agents of social capital to others in their own communities and educational spaces.

Social capital has been used widely in studies to explore student access, persistence, and success in higher education (e.g., Brooms, 2018; Crawley et al., 2019; Deo & Griffin, 2011; Farmer-Hinton, 2008; Gasman & Palmer, 2008; Missaghian, 2021; Pérez & McDonough, 2008). For instance, Pérez and McDonough (2008) employed social capital to examine the college choice processes of Latinx students. The results of their study indicated that school counselors, family members, and peers were a valuable source of social capital in how Latinx students

[10] Critical Race Theory is applied in legal and educational spaces to interrogate the racialized practices and systems of oppression that operate to disenfranchise communities of color (McCoy & Rodricks, 2015). Scholars use CRT to disrupt dominant ideologies on race, center race in educational discourse, and amplify communities of color's counternarratives. (Gildersleeve et al., 2011; Harris & Linder, 2018; Patton, 2016).

acquired information about the college. Similarly, Brooms (2018) explored the role of a Black Male Initiative program in promoting social and cultural capital for Black undergraduate men. Black males in the study found that they gained a strong community and social network through the program that enhanced their academic experiences and sense of self and belonging.

In these examples, researchers used social capital to explore how interpersonal relationships in different contexts shape and inform a student's ability to access and navigate in higher education spaces. Up until now, social capital has not been examined in the graduate school choice processes of Students of Color. My study adds to the existing application of social capital in access literature, particularly around accessing graduate school. In addition, the findings of this study validate peers as an invaluable source of social capital.

Applying A Social Capital Lens

Social capital theory was chosen as a supporting framework in this study because it emphasizes the role of social networks on life outcomes. First, this dissertation examined the extent to which peer relationships are viewed as influential social networks in the graduate school choice processes of Students of Color in a McNair Program. A social capital lens helped identify how different actors within peer networks contribute to a student's sensemaking about attending graduate school. Second, social capital allowed me to identify what resources, opportunities, information, and supportive relationships between peers inside the McNair Program help facilitate graduate school choice processes for participating Students of Color. Lastly, a social capital lens informed this study's research questions, methods, and the analysis of findings.

Limitations of the Frameworks

In qualitative research, Sadler and Fowler (2006) asserted that researchers often find that there is not a single framework that adequately addresses all of their data. Thus, there are several limitations when applying theoretical and conceptual frameworks in research studies. In the case of my dissertation, there were two limitations of applying the aforementioned frameworks to my work.

First, each element of the GSC model was created to broadly address the graduate school choice processes of all students. While the broadness of this model can be used to prompt generalizations about the decision-making processes students engage in during their graduate school access journeys, it did not fully capture the experiences of Students of Color. Students of Color often access and engage in higher education in ways that their white counterparts do not. Students of Color navigate barriers related to their racial and ethnic identities at the entry and exit of their college experiences that can impact their post-baccalaureate trajectories (Ash et al.,2020; Banks & Dohy, 2019; Blosser, 2020; George Mwangi et al., 2018; Harper et al., 2009; Harwood et al., 2018; Hurtado et al., 2015; Patton, 2016; Solórzano et al., 2005; Warren & Coles, 2020; Yosso et al., 2009). As a result, factors that influence the choice for Students of Color can manifest differently than how it does for white students. My research provided further insight into how Students of Color navigate the graduate school process and aspects of their decision-making processes that have not been captured or fully accounted for by the GSC model.

Second, the GSC model assumes that social capital is an influential force driving graduate school choice and enrollment. English and Umbach's (2016) description of social capital in the GSC model is directly aligned to Bourdieu's perspective on social capital, which limits acknowledgment of the assets that Students of Color already possess in their social

networks. To counter this limitation, I expand the definition of social capital in the model and incorporate a more critical and inclusive lens. The findings of this study expand and validate Yosso's (2005) assertion that Students of Color can be agents of social capital in their own ways as they acquire specialized knowledge in navigating higher education spaces. Thus, in this study, peer relationships and networks with one another were recongized as a source of empowerment, information, and care. Both frameworks allowed me to address gaps in the literature on how peers influence graduate school access for Students of Color, particularly within a McNair Program. With these things considered, my research furthers the application of the GSC model and social capital theory in graduate school access literature with Students of Color using a qualitative approach.

Chapter 3: Methodology

The purpose of this study was to examine whether and how peer interactions and relationships within McNair Programs influence the graduate school choice process for Students of Color. The study seeks to address three central questions:

- How do Students of Color who have participated in a McNair Program describe their graduate school choice process?
- How, if at all, do students' McNair Program peers influence the ways students in the program engage in the graduate school choice process?
    - How do they provide and receive information about post-baccalaureate plans?
- How do McNair Programs facilitate or inhibit the influence that peer relationships play in the graduate school choice processes of Students of Color?

In this chapter, I summarize the methodology conducted for this study. First, I share how my epistemological stance influenced the development and design of this project. After, I provide a description of the data collection including sampling procedures, followed by a discussion of the analysis process. Then, I provide a brief explanation of ethical considerations and trustworthiness of this research. I conclude the chapter with a positionality statement and the methodological limitations.

Epistemological Stance

This qualitative study was grounded in a social constructivist epistemology. A social constructivist worldview refers to an individual's understanding of how the world is constructed through multiple subjective meanings of their lived experiences (Creswell, 2018). Individuals' meanings and social constructions of the world are influenced by their interactions with individuals, contexts, and cultural norms (Creswell, 2018). According to Mertens (2019), qualitative researchers with a social constructivist lens assume that "multiple realities exist that

are time and context-dependent" (p. 297). Thus, constructivist researchers rely on their participants to make sense of their experiences and external realities (Daly, 2007).

Social constructivism undergirded the design of my dissertation. Under constructivism, researchers seek out varied meanings and multiple realities through the perspectives and lived experiences of participants (Burr, 2015; Creswell, 2018; Crotty, 1998; Lincoln & Guba, 2000; Schwandt, 2007). In my study, I adopted this constructivist stance to ensure that participants' narratives about graduate school choice and their interactions with their peers are at the center of the study. My chosen research methodology, case study, allowed meaning to be constructed among participants and myself, the primary researcher.

Secondly, researchers with this lens often seek to understand the processes of individuals within their specific contexts (Creswell, 2018). My study employed a case study design that privied context and processes as a means for exploration (Merriam, 1998; Yin, 2014). The UMBC McNair program acted as the context in which the case study was being conducted. The graduate school choice process represents the social process that individuals engaged in while participating in the McNair Program. Third, constructivist researchers recognize that their own background and lived experiences shape how they interpret their data and engage in the research process (Creswell, 2018). A constructivist worldview allowed me to recognize how my own identities and lived experiences, particularly as an insider/outsider and my previous work on graduate school access, shaped my interpretations of the data (Creswell, 2018). This reflexivity and awareness were fundamental to ensuring that my work remained credible and trustworthy (Mertens, 2019).

Case Study Research Methodology

I employed a case study methodology to better understand whether and how peers influence how Students of Color within a McNair Program make decisions about attending graduate school. A case study is defined as an intensive, holistic description and analysis of a single instance, phenomenon, or social unit bound by a single person, group of people, event, program, or institution (Merriam, 1998; Yin, 2014). The study of a case or multiple cases can be bounded by time, place, or meaning (Yin, 2014). Unlike other research methodologies, a case study is designed to investigate a particular phenomenon within its real-world context in a contemporary setting (Creswell, 2018; Yin, 2014). Case studies are characterized by thick descriptions of data collection procedures involving multiple sources of data and reports of case descriptions and themes (Yin, 2014).

Case study methodologists agree that case studies are suited to examine complex social processes in their natural settings (Merriam, 1998; Yin, 2014). In my research, I examined a complex social process (i.e., decision-making about attending graduate school) that Students of Color undergo in the context of their McNair Program. Thus, a case study method was justifiable for this research. This study utilized an exploratory, single-site case study approach to investigate the extent to which peers influence Students of Color in a McNair Program's decision to attend graduate school. The use of an exploratory case study is employed when the phenomena of interest have been understudied (Yin, 2014). As of now, the impact of peer relationships on graduate school choice has been an understudied aspect of the McNair Scholars Program experience for Students of Color and in graduate school access literature. While my research process highlighted the various factors that influenced their decision to attend graduate school, the focus of the study will remain on whether and how peers influence those choices.

The Case and Site Rationale

This case study was bounded by the University of Maryland, Baltimore County (UMBC) McNair Scholars Program (Merriam, 1998; Yin, 2014). Since 1992, the UMBC McNair Scholars Program has prepared and assisted first-generation, low-income, and historically underrepresented students in their pursuits of graduate education and doctoral training (McNair Scholars Program, 2021a). As a federally funded TRIO program, the UMBC McNair Scholars Program must ensure that its participants meet requirements for research activities, graduate school enrollment, retention, and doctoral degree attainment. I provide a comprehensive review of the case site in Chapter 4.

I selected the UMBC McNair Program as the research site of this study for three reasons. Prior to this study, I served as a volunteer at program conferences and on graduate student panels hosted by the program. In addition, I engaged in several scholarly projects with past and current program staff members. Overtime, I built rapport with key actors in the program that rendered ease of access in securing the UMBC McNair Program as the case site for this research. Secondly, through my volunteer efforts, the program staff learned that I was a participant in the McNair Program at my undergraduate institution. My status as a McNair alumnae helped garner support and interest in my work by staff and students in the program. Third, the UMBC McNair Program model employs a holistic critical mentoring (HCM) framework that centers the experiences of students and their peers (Hunt, 2019; See Chapter 4 for in-depth review of HCM framework). Through this framework, program staff have facilitated a strong peer-culture that is embedded in its vision, mission, and design, which is relevant to my phenomenon of study.

Description of Sample and Data Collection Procedures

The sample consisted of alumni and program staff from the UMBC McNair Program. I interviewed 14 McNair Alumni and three program staff members. I employed a purposeful sampling strategy to recruit and select participants. Purposeful sampling and snowball sampling in qualitative research studies allows researchers to identify and select participants who can offer rich information that is related to the phenomenon of interest (Creswell, 2018; Merriam, 1998). In this study, I utilized criteria-based selection as my primary approach to selecting participants. Criteria-based selection was used to select participants based on a predetermined list of attributes or characteristics (Creswell, 2018; Patton, 1990). The following criteria was used to select and recruit student participants (Creswell, 2018):

1. **The student alumni self-identified as Black, African-American, Latinx, Afro-Latinx, Chicanx, Asian, Asian-American, South Asian, Middle-Eastern, Pacific Islander, Native American, bi-racial, or multiracial.** Participants with these racial/ethnic identities are considered Students of Color in higher education (UW-Madison's Multicultural Student Center, 2021). Given that Students of Color are at the focal point of the study, the participants must belong to at least one of the above categories.
2. **Student alumni were recent alumni from the UMBC McNair Program and at least 18 years or older at the time of the study.** Participants must have graduated between 2018 and 2022 from UMBC. Participants included alumni who did and alumni who did not enroll into a graduate program immediately after completing their undergraduate degree.Alumni that did not enroll in a graduate program were encouraged to participate in this study because the goal of this work did not aim to measure enrollment outcomes.

Rather, this study examined their retrospective accounts of navigating the graduate school choice process.

Recruitment Efforts

To recruit participants, I shared the criteria for alumni with the program director. Using the criterion, the program director then provided me with a list of eligible participants. Afterwards, I sent three rounds of recruitment emails to prospective participants. The recruitment emails included an overview of the study, consent form, demographic questionnaire, and flyer (See Appendix A-F for recruitment materials). The questionnaire collected information regarding prospective participants' interest in the study and to verified whether they met the criteria. In addition, I asked program staff to share recruitment emails and flyers with alumni who may be interested in participating in the study.

After verifying interest and eligibility, I began initial correspondence with the alumni participants to start the data collection process. Then, using participant-driven sampling, I asked these participants to recommend other potential alumni that would help further my understanding of the graduate school choice processes of Students of Color within the UMBC McNair Program. Alumni participants were awarded a $25 gift card incentive for their participation in the study. Gift card incentives were delivered electronically to alumni participants via email within 24 hours after completing their interview.

Participant Sample

The participant sample consisted of UMBC McNair alumni and program staff. There were a total of 14 alumni participants in the sample with various racial and ethnic identities as well as generation statuses (see Table 1).

Table 1.

Alumni Participant Demographics

Pseudonym	Pronouns [a]	Salient Identities [a]	Years in Program [b]	Graduation Year [c]	Graduate School Enrollment [d]	Degree or Employment Type
Jay	He/Him	Continuing-Generation, Black, Nigerian	4	2022	Yes	Doctoral Program
Sandra	She/Her	First-Generation, Mestiza, Latina	2	2022	No	Pre-Doctoral Fellowship Program
Alicia	They/Them	First-Generation, Latine, white	2	2022	Yes	Dual Master's to Doctoral Program
Breon	He/Him	Continuing-Generation, Black, African American	4	2021	Yes	Doctoral Program
Julian	He/Him	First-Generation, Latino	2.5	2021	Yes	Doctoral Program
Cameron	He/Him	Continuing-Generation, Black, African American	3	2021	Yes	Master's Program
Ayanna	She/Her	Continuing-Generation, Black, Ethiopian	3	2021	Yes	Master's Program
Brooklyn	She/Her	First-Generation, Black, African American	1	2021	Yes	Doctoral Program
Ruth	She/Her	First-Generation, Asian, white, Russian	4	2020	Yes	Master's Program
Fatima	She/Her	First-Generation, Black, Nigerian American, Yoruba	3	2020	No	Full-time Researcher
Dante	He/Him	First-Generation, Black, African American	1	2019	Yes	Doctoral Program
Hamed	He/Him	Continuing-Generation, Black, West African	2.5	2019	No	Pre-Doctoral Fellowship Program
Darnell	He/Him	Continuing-Generation, Mixed, Black	3	2019	No	Deferred Doctoral Program; Full-time Researcher
Akira	She/Her	Continuing-Generation, Black, African American, Nigerian American	2.5	2018	Yes	Doctoral Program

Note. This table demonstrates the demographic information for the alumni in the participant sample.
[a] Alumni self-identified descriptors are organized by gender pronouns, generation status, race, and ethnicity All alumni participants self-identified as Students of Color.
[b] This denotes the number of years in which a participant was enrolled in the UMBC McNair Program.
[c] This denotes the year in which the participant completed their undergraduate degree at UMBC.
[d] In the table, an affirmative graduate school enrollment refers to participants that enrolled in graduate school within the first-fall semester after completing their undergraduate degree.

Every participant self-identified as a Student of Color. The alumni sample skewed predominantly Black and African American, which is representative of the demographics of recent graduates in the UMBC McNair Program. Six participants identified as women and seven participants identified as men, respectively. One participant identified as non-binary. Alumni in the sample graduated between 2018 and 2022 from UMBC and had been a participant in the McNair Program for at least one year. In addition, the majority of the sample immediately enrolled into a graduate program after completing their undergraduate degrees. Four participants did not immediately enroll into a graduate program, instead they pursued a gap-year opportunity.

In regards to the program staff sample, two staff members identified as Black and African American men and one identified as a mixed-race Black woman (see Table 2). In Chapter Four, I provide a description of each program staff member's role and responsibilities in the program.

Table 2.

Program Staff Participant Demographics

Pseudonym	Pronouns	Salient Identities	Position Title
Malachi	He/Him	First-Generation, Black	Program Director
Marie	She/Her	First-Generation, Black, Mixed-Race	Program Coordinator
Rashad	He/Him	Continuing- Generation, Black, Jamaican, African-American	Graduate Assistant

Note. This table demonstrates the demographic information for the program staff in the participant sample.

[a]Program staff self-identified descriptors are organized by gender pronouns, generation status, race, and ethnicity.

Data Collection Procedures

Case studies leverage multiple sources of information to capture the "depth" of the case (Yin, 2014). Depth refers to the degree to which a researcher captures the holistic context of a case through thick and rich descriptions of data (Mills et al., 2010). For the purpose of this study,

I engaged in interviews, observations, and document analysis to achieve the depth consistent with case study research. Data for this study was collected between June 2022 and September 2022. Below, I review and describe each data source and the method of data collection that was employed in this research.

Semi-Structured Interviews

Merriam (1998) contends that interviews can elicit information from one person or group of individuals when we cannot observe their thoughts, feelings, emotions, or past lived experiences. Given the nature of this case study, I prioritized data collection methods (i.e., interviews) that allowed participants to share their voices and stories in their own words about their graduate school choice process (Carpi et al., 2017). Centering student voices also aligned with the program's holistic critical mentoring approach and core values (Hunt, 2019).

Consistent with case methodology, I conducted in-depth, semi-structured interviews with alumni and program staff. Each interview lasted approximately 45-90 minutes over Zoom. The interviews were recorded with the consent of the participant and later transcribed. The use of a semi-structured interview approach encouraged flexibility when exploring a participant's decision-making process and narrative (Creswell, 2018; Denzin, 1989).

During each interview, I took notes to capture non-verbal cues, gestures, and other forms of body language that would not appear in the transcription. Including gestures and body language were an integral part of the collection and analysis process because non-verbal cues helped dictate the tone and expression of a participant's responses (McLellan et al., 2003). After each interview, I wrote a one-page memo to reflect on the interview experience and identify potential themes. Memoing allows researchers to be immersed in the data collection and explore

initial sensemaking (Birks et al., 2008). Through the writing of memos, I reflected on the participants' experiences as well as my own memories as a McNair Scholar.

Prior to their interview, alumni completed a questionnaire to capture demographic information. The demographic questionnaire helped shape some of the interview questions during my session with the participants (e.g. tailoring questions to reflect enrollment decisions). Two protocols were developed for interviews with alumni participants and program staff participants. The interview protocol for alumni consisted of questions related to relationships with peers within the McNair Program and decision-making processes about attending graduate school (See Appendix G for Alumni Protocol). The interview protocol for program staff captured program characteristics, as well as how the program context did or did not help cultivate peer relationships among Students of Color (See Appendix H for Staff Protocol).

During the recruitment, screening, and interview process, I provided each participant with a consent form (Mertens, 2019). I asked for written and verbal consent from each participant before proceeding with initial screening and data collection. Through email, I offered a written consent form one week before each interview to inform them of their rights to not answer questions they are not comfortable with and their ability to withdraw from the study and/or interview at any time without penalty. At the time of the interviews, I reviewed the consent form with the participant and then asked for consent to record the interview. I informed each participant that they could request that we stop recording at any point.

To protect the identity and confidentiality of the participants, I used pseudonyms for each participant (Mertens, 2019; Yin, 2014). During interview sessions, participants were provided the opportunity to select pseudonyms for themselves. All audio files and transcriptions of

interviews were stored on a password-protected computer. Data access was limited to the chair of this dissertation and myself.

Program Event Observations

In conjunction with interviews, I conducted observations of three UMBC McNair program events. Observations are an effective data-gathering tool in case study research because they can be used to verify information from other data sources (Yin, 2014). Observations, in particular, assisted the answering of my third research question, which aimed to understand the extent to which McNair programs facilitate peer relationships. Of the three program events observed, one was conducted at a Family Gathering/Saturday Academy meeting and two observations were at bi-weekly senior meetings. In these spaces, program staff and students discussed topics related to graduate school access such as developing personal statements, graduate school selection, fellowship and graduate assistantships, and coordinating work accountability groups with peers. During the fieldwork, I took detailed notes to capture how the structure of events and meetings facilitated interactions and comments made by students and their peers while engaging in conversations around graduate school choice topics (See Appendix I for Observation Guide).

Program Documents and Artifacts

To further explore the context of the case, I incorporated several artifacts and UMBC McNair program documents to develop inferences about the organization's activities, communication, and networking (Yin, 2014). I reviewed artifacts and documents that included data on graduate school enrollment rates, annual program guides, graduate school preparation toolkits, and curriculum plans. These documents helped to further build the context of the case under study. These documents were useful in providing key contextual information about how

the UMBC McNair Program fostered peer interactions and relationships during graduate preparation activities (See Appendix J for Document Analysis Guide). Each data source assisted in the development of a rich and thick description of the case profile, findings, and overall triangulation of data points.

Analytic Strategy

Thematic analysis is a method in qualitative research that refers to a researcher's approach to identifying, analyzing, and reporting repeated behaviors, ideas, experiences, and patterns in a data set (Kiger & Varpio, 2020). Data were thematically analyzed from June 2022 to February 2023 in three phases. In subsequent paragraphs, I provide a description of each phase of the data analysis process that informed the development of the study's findings.

After each interview, I wrote a one-page memo to reflect on the interview experience and identify patterns within the data. This memoing allowed me to engage in initial sensemaking that later informed phases of data analysis, including the design of the codebook used for this study (Lincoln & Guba, 1985; Saldaña, 2021). In the first phase of analysis, I reviewed each data source in its entirety. After the initial reading of each data source, I wrote several analytical memos to capture emerging themes and concepts relevant to the research questions, theoretical frameworks, and literature (Merriam, 1998). These memos informed the development of the initial codebook.

The initial codes in the codebook were developed using an inductive and deductive approach (Merriam, 1998). Inductive codes were derived from new and emerging themes that were not associated with the literature or frameworks of this study (Emerson et al., 2001). Whereas, deductive codes were established from concepts and categories from this study's literature and frameworks (Mertens, 2019). This early coding schema included codes like:

“aspiration factors”, “challenges”, “steps to search and apply”, “search factors”, “enrollment factors”, “changes in post-baccalaureate intentions”, “weight of program expectations”, “LSAMP/Meyerhoff Affiliation”, “program staff or faculty support”, “alumni support”, “shared backgrounds”, “peers as accountability”, “peers as sounding boards”, “peers as motivation”, “peers as validation”, “program events”, and “isolated program experiences” (See Appendix K for codes, their respective applications, and meanings). In iterations, the codebook was applied to each participant’s transcripts, followed by program documents and observation notes using Dedoose, a data analysis software.

With the working codebook, I engaged in three rounds of open coding to identify early themes and concepts that arose from the data. Open coding allows researchers to form categories of information relevant to the study’s phenomenon (Creswell, 2018). During open coding, researchers are able to identify early concepts and ideas that appear multiple times in the data set (Williams & Moser, 2019). After open-coding was completed, I began phase two of the analysis process.

In the second phase of analysis, I engaged in multiple rounds of axial coding. During axial coding, I refined emerging themes and concepts that I developed during my initial coding process (Creswell, 2018; Mertens, 2019). Through axial coding, I grouped codes into categories that were refined into themes that are reported in the findings chapter of my dissertation (Saldaña, 2016). During phase one and two, I engaged in peer-debriefing and member-checking to assess my preliminary interpretations of the findings and emerging themes.

In the last phase, I then wrote a comprehensive case profile of the UMBC McNair Program that included institutional characteristics, program design and mission, and an overview of program activities and curriculum (Merriam, 1998; Yin, 2014). As a critical component of

case study research, I provided a thick description of the program context and participants' experiences (Merriam, 1998; Yin, 2014). The comprehensive case overview was developed through data collected from interviews, observations, program documents as well as web-based information from the UMBC website.

Ethical Considerations

During the data collection and screening process, I provided each participant with a consent form (Mertens, 2019). I asked for written and verbal consent from each participant before proceeding with data collection. Through email, I offered a written consent form one week before each interview to inform them of their rights to not answer questions they are not comfortable with and their ability to withdraw from the study and/or interview at any time without penalty. At the time of the interviews, I reviewed the consent form with the participant and then asked for consent to record the interview. I informed each participant that they could request that we stop recording at any point during the interview.

To protect the identity and confidentiality of the participants, I used pseudonyms for each participant (Mertens, 2019; Yin, 2014). During interview sessions, participants were provided the opportunity to select pseudonyms for themselves. All audio files and transcriptions of interviews were stored on a password-protected computer within one week of each interview. Data access was limited to the chair of this dissertation and myself.

Trustworthiness

To ensure the trustworthiness of my analyses, I employed the four following techniques: 1) triangulation, 2) member-checking, 3) thick-rich descriptions of the case, and 4) peer-debriefing (Lincoln & Guba, 1985; Yin, 2014). First, I used multiple data collection techniques to corroborate data. Yin (2014) argued that the use of multiple sources of data allows for

triangulation which has the potential to strengthen the validity and credibility of research findings. Thus, I cross-referenced each data source to increase trustworthiness (Lincoln & Guba, 1985; Mertens, 2019; Yin, 2014). Second, I engaged in participant member-checking. Member-checking allowed for each participant to make corrections and clarify statements that may have been unclear or distorted in their transcripts (Mertens, 2019). Member-checking was conducted after interviews were transcribed and at the conclusion of phase three in the analysis process. Providing participants with their transcripts and my early analysis ensured that the interpretation of the findings accurately represent their lived experiences and reality (Merriam, 1998).

Third, I offered thick and rich descriptions of the context, participants, and methods. Thick and rich descriptions of these elements are consistent with strong, reliable case study research (Yin, 2014). By doing so, future researchers who want to replicate the study can arrive at similar findings and conclusions (Yin, 2014). Fourth, I engaged in peer-debriefing with colleagues who provided critical and meaningful feedback that challenged my thinking and writing (Lincoln & Guba, 1985; Mertens, 2019). All documents with participant information were masked and cleaned to ensure confidentiality and anonymity. My colleagues were given a document of preliminary findings and asked to provide thoughtful feedback and critiques. After my colleagues read through the document, I scheduled short meetings to debrief on their interpretations and feedback. Colleagues included other doctoral candidates, the chair of this dissertation, and committee members. I took detailed notes during conversations with peer-debriefers to refer to as I engaged in the remaining phases of analysis and writing for this study (Mertens, 2019).

Researcher Positionality

Patel (2016) asserted that researchers must remain aware of how their social locations and experiences shape how they approach and design research studies (Patel, 2016). Thus, I have a responsibility as a researcher to share my relationship with this work and how my experiences may shape the interpretations of the overall study (Creswell, 2018). Given my past involvement and current interactions with McNair Programs, I have an insider-outsider status as the researcher in this study. Insider-outsider status can have a multi-layer effect on research credibility, data collection practices, and study outcomes (Muhammed et al., 2015). Researchers who hold an insider-outsider position within their research can build stronger relationships and rapport with their participants and elicit information from participants that outsiders of the context or community may not be able to gather (Glense, 2011; Muhammed et al., 2015). In this section, I first discuss how I am an insider to the case study. After, I name how I am also an outsider.

As the first in my family to complete undergraduate studies and gain admission into a doctoral program, I feel an immense amount of pressure, some self-imposed, to complete this educational path successfully. During my undergraduate experience, I had little to no knowledge of what was beyond the four years of my degree. At the time, I would not have envisioned myself as a doctoral student or someone who would receive an advanced degree. It was not until my acceptance into a Ronald E. McNair Scholars program that I developed aspirations to attend graduate school. With the support of the McNair Program (faculty, staff, and cohort mates), I successfully applied and enrolled into graduate school. Without the commitment of my advisors, faculty members, and peers, I would not have been exposed to rich research activities, the nature,

and culture of graduate education, or even the simple cultivation of wanting and aspiring to be a *doctora.*

Specifically, my peers in the McNair Program were vital in my graduate school access journey. As I reflect back to this time in my life, I am reminded of how my sister scholar and McNair cohort mate, Tiffany, led the way. I recall when Tiffany and I, along with three other cohort mates, worked together to write and review one another's personal statements. From proofreading our personal statements to cross-checking supplemental essays, my peers helped refine my writing and voice in these graduate school applications. In community, we spent hours and hours searching the internet for graduate programs and faculty that matched our interests and aspirations. When the time came down to submit our applications, we were in it together. We held one another closely as acceptance and rejection letters poured into our emails. We even accepted our offers into graduate school on the same day and celebrated over dinner with our McNair advisors. I relied on the support and guidance of my peers who were engaging in the same process as I was. To this day, we continue to shape one another's journeys as we navigate through doctoral programs and higher education in general. The peer relationships that I cultivated while in the McNair Program had a direct influence on the various phases of my graduate school access journey as well as the curiosity driving this study.

With this being said, I find myself deeply situated and invested in the work that I have chosen to explore in this study. As an alumni of the McNair Program, I hold an insider status. Like many of the scholars who will be represented in my study, I too have undergone the graduate school choice process in the community of my peers and support of a McNair Program. I anticipated being able to build a strong rapport and connection with participants due to my identities as a first-generation, Student of Color in higher education and McNair alum. I found

ease in developing a strong rapport and connection with the participants that would not otherwise manifest for outsiders (Chavez, 2008; Glense, 2011). As an insider, I remained aware of how the participants' experiences within and beyond the McNair may vary from my own. Specifically, I was mindful of how my experiences with the peers within my McNair program may look drastically different or similar to those of the participants. To do so, I was intentional about seeking out disconfirming evidence that counters my own experiences by engaging in critical self-reflection through memoing.

Beyond my tenure with the McNair Program as an alumni, I have volunteered as a mentor to current McNair students at my graduate institution, spoken at workshops for different McNair Programs across the east coast, as well as moderated panels and presentations for McNair Conferences. My consistent engagement with the McNair Program has led me to become deeply connected to this case study and this particular McNair community. In particular, I have dedicated time to volunteering at the UMBC McNair Program over the last two years. I have an ongoing relationship and strong rapport with one of the program staff. I have also engaged with several of UMBC McNair students through passive interactions in workshops, presentations, and panel discussions. For this reason, I have been gifted with access to the research site. While I may perceive a sense of "closeness" with the participants and program staff as a result of my involvement, I remained mindful of my identities as volunteer shifts to the researcher during interactions with participants and staff (Chavez, 2008; Labaree, 2002; Muhammed et al., 2015). Memoing throughout the research process aided in my commitment to remain grounded and reflexive of my biases and interactions with participants and the data.

Although I share similar identities as the participants and have been a volunteer for the UMBC program, I am also an outsider. Unlike the participants in this study, I was not a

participant in the UMBC McNair Program. Each McNair Program has its own culture and context. I remained open to new understandings and perspectives of the UMBC McNair Program. In addition, my role as a researcher positions me as an authority figure when connecting with alumni of the program (Creswell, 2018). Yakushko et al. (2011) contends that one of the greatest challenges of being a researcher with an insider-outsider status is the inability to see how power and privilege come into play in relation to the people within our community. This itself positioned me as an outsider within the UMBC McNair community. To ensure that I was able to give as much as I received in this work, I engaged in reciprocity by connecting participants with resources for succeeding in their graduate education as well as supporting the UMBC McNair Program through volunteerism (e.g., hosting workshops, helping to facilitate events, offering mentorship to current students). In addition, I plan to share my research findings with the program staff team and their advisory board in the near future, as they are eager to learn about how they can further emphasize the use of peer interactions to help influence the graduate school access journeys of their students. This duality as an insider and outsider rendered me responsible for remaining reflexive and mindful throughout the development and execution of the study (Chavez, 2008).

Issues of Scope and Study Limitations

Using a case study methodology, this study offers novel insights into how Students of Color navigated their graduate school choice processes while in the UMBC McNair Program. Like any research endeavor, this study has issues of scope and limitations. First, a common critique of case study research is that it provides limited generalizability (Merriam, 1998; Yin, 2014). This presents itself as an issue of scope. Given that this study examined the experiences of Students of Color within a particular context, the findings of this study are site-specific and will

not be generalizable to all Students of Color, students in other McNair Programs, or students in other graduate preparation programs (Merriam, 1998; Yin, 2014). However, applying case study methodology positions this research as an opportunity to speak back to the larger literature on a given topic and offer transferable insights that researchers can examine in future studies (Merriam, 1998; Yin, 2014). The findings of this study may be applicable to Students of Color with shared characteristics and participation in the McNair Program, but caution and care should be taken in the interpretation and application of the findings in other contexts (Merriam, 2009). With this in mind, as the primary investigator of this study, my goal was to draw a holistic account of Students of Color within the UMBC McNair Program to develop a robust set of recommendations for research, practice, and policy.

In addition, the context in which this particular McNair program operates is unique. As highlighted in Chapter 4, UMBC is well recognized for its efforts in preparing undergraduate students for graduate school and beyond. Given this context, there are likely to be layers of the graduate school-going culture at UMBC that may make this sample of alumni particularly likely to want to attend graduate school in the first place without the need or reliance on peer support from the UMBC McNair Program. To tease out these distinctions, I clarified when and how the McNair Program influenced the participants in their decision-making about attending graduate school in the findings chapter of this dissertation. In addition, the uniqueness of this program context may result in findings that are very site-specific and may have implications for the transferability of the findings. The unique context elicits rich findings that may contribute to the way scholars and practitioners think about graduate school choice and graduate school-going cultures.

Third, my use of the English and Umbach (2016) GSC model and social capital theory presented conceptual limitations in this work. Conceptual and theoretical frameworks are used as lenses for researchers to develop their research design and interpretation of findings (Fowler, 2006; Yin, 2014). The lenses that I used in this study may have not captured all the variables at play or the experiences of Students of Color during their graduate school choice processes in the McNair Program. I focused primarily on how Students of Color have engaged in the three phases of the graduate school choice process and the roles that their peers played during each of those phases. By looking closely at these elements, I remained open to identifying other actors who may have played a role in a student's decision-making process about attending graduate school. To do so, I took detailed notes about if and how other actors may have played a role in a participant's graduate school choice journeys during the interview.

Another limitation of this study is the retrospective nature of participants' narratives in the sample. Participants in this study were called to reflect on their experiences in the program and the early years of their undergraduate tenure. While participants' perspectives were no doubt critical in understanding their graduate school choice processes and relationships with their peers in the program, there is a possibility that their recounted memories shared during their interview might have been different from their experiences at the time when they occurred (Merriam, 2009).

Lastly, the goal of this study was to center the experiences of Students of Color in their graduate school choice journeys within one McNair program. The sample of alumni in this study are not representative of all racial and ethnic identities under the umbrella term, "Students of Color." With this in mind, I heed caution to future researchers and practitioners as they interpret

and apply these findings to students whose racial and ethnic identities are not reflected in this work.

Chapter 4: Case Profile

This chapter provides an overview of the site for this case study, the UMBC McNair Scholars Program. I based this comprehensive case profile on information I gathered through an analysis of existing program information available on the university's website, including program marketing and design materials. Additionally, I refined this analysis with data extracted from program documents provided by administrators and observations and interviews with program alumni and staff participants. In subsequent paragraphs, I describe the program setting and institutional context in which the UMBC McNair Scholars Program operates. Then, I present the program's goals and objectives and follow with a description of program characteristics (i.e., activities, events, curriculum).

Institutional Context and Setting

The McNair Scholars Program at the University of Maryland, Baltimore County (UMBC) was established 30 years ago. UMBC is a mid-sized, public research university in Baltimore, MD. UMBC is largely a commuter campus, but offers limited housing to undergraduate students. UMBC offers 67 undergraduate majors and 92 graduate programs. As of fall 2022, UMBC enrolls almost 14,000 undergraduate and 3,400 graduate students. Almost 81% of the undergraduate student body is enrolled full-time. Of UMBC's 1186 faculty members, approximately 64% are full-time, about 36 % are part-time respectively (University of Maryland, Baltimore County, 2022).

In 2017, the university was designated as a Minority Serving Institution (MSI) (University of Maryland, Baltimore County, 2022). In fall 2022, 51.6 % of undergraduates identify racially and ethnically as a Person of Color: 19.6% of students identify as African American, 7.9% as Hispanic, 19.3% as Asian American, and 4.8% as multiracial (Institution Data Dashboard for University System of Maryland, 2022). In addition, approximately 25% of

the student body identifies as a first-generation college student (O'Grady, 2020). By gender, about 53% of undergraduates identify as male[11] (Institution Data Dashboard for University System of Maryland, 2022).

UMBC has been recognized by national ranking systems for colleges for its excellence in teaching and innovation at the undergraduate and graduate levels. UMBC has a strong reputation for producing successful graduates from the sciences, engineering, information technology, human services, and public policy fields (University of Maryland, Baltimore County, 2021). According to federal government data, UMBC produces the most undergraduate Black students who pursue M.D.-Ph.D.s in the natural sciences and engineering than any other college in the nation, including HBCUs (National Science Board, 2022). The success of students at UMBC has been indicative of the commitments of university leadership, faculty, and staff.

For instance, scholars have recognized Dr. Freeman A. Hrabowski III, the university's long-standing president, as a key actor in spearheading a more holistic and rigorous approach to supporting first-generation, low-income and historically marginalized students, particularly within the STEM field at UMBC (see Kezar, 2019). Through decades of President Hrabowki's administration, the university's focus on student-centered practices has expanded beyond STEM departments into other departmental cultures on the campus. With this being said, the university's success in supporting students in the sciences can be attributed to the commitments of the university's previous president and the various pipeline programs on campus that are committed to providing research and mentorship opportunities to students seeking advanced degrees (Winnick, 2021). For instance, UMBC is the home of the Meyerhoff Scholars Program. In 1988,

[11] University public figures on student gender demographics did not capture students with a non-binary gender identity.

a partnership between the Meyerhoff family and President Hrabowski introduced the Meyerhoff Scholars Program to UMBC (University of Maryland, Baltimore County, 2022b).

Serving nearly 200 students each academic year, the Meyerhoff's Scholar Program was designed to increase the racial diversity of leaders in the STEM field Meyerhoff Scholars Program. (n.d.). Over the last 30 years, the program has been considered a national model for supporting undergraduate students in their interests to pursue doctoral studies through research experiences, financial support, professional development, advising, and mentorship Meyerhoff Scholars Program. (n.d.). Campus programs like Meyerhoff have helped shape the post-baculurate trajectories of their alumni by providing the aforementioned support and resources.

In addition to the Meyerhoff Program, the university provides services to support undergraduate students in their development and preparation for graduate study through federally funded grant programs and the career services center on campus (Office of Academic Opportunity Programs, n.d.). For example, the Office of Academic Opportunity Programs (AOP) at UMBC offers resources and support to traditionally underrepresented students in higher education to promote their academic success and increase students' interest in enrolling in graduate school. The AOP supports four TRIO Programs[12] and the NSF-funded Louis Stokes Alliance for Minority Participation (LSAMP) Program. The TRIO Programs at UMBC include Classic Upward Bound, Educational Talent Search, Upward Bound Math/Science, and the McNair Scholars Program (Office of Academic Opportunity Programs, n.d.).

[12] Trio Programs are federally funded interventions that are designed to provide educational opportunities and outreach to students from historically marginalized backgrounds. Trio Program include eight inniatatives that are targetted to serve and motivate students who are first-generation, those from low-income backgrounds, and individuals with disabilities to and through higher education (U.S. Department of Education, 2023).

The LSAMP Program and the UMBC McNair Scholars Program specifically support undergraduate students with mentorship and access to research opportunities to advance students' pursuits of graduate education. The LSAMP program supports universities in their pursuit of increasing the number of students matriculating into STEM disciplines. LSAMP ultimately aims to diversify the STEM workforce. The program offers mentorship, access to learning communities, exposure to research activities, professional and leadership development, graduate school preparation workshops, and wellness sessions. LSAMP often helps to support and sponsor the work of Meyerhoff and McNair Scholars.

The UMBC McNair Scholars program is designed to prepare and train historically underrepresented students to successfully enroll in doctoral studies. Similar to Meyerhoff and LSAMP, the McNair Program provides holistic mentorship, research opportunities, financial support and assistance, and individualized advising for the graduate application process. Unlike the other two programs, the UMBC McNair Scholars Program recruits a smaller, more intimate cohort of students across various disciplines. Commonly, UMBC students can be participants of the McNair, Meyerhoff, and LSAMP Programs simultaneously to receive additional guidance and mentorship in their respective fields.

Programs like Meyerhoff, LSAMP, and McNair contribute to UMBC's strong graduate-school-going culture. Like the nature of a college-going culture[13], a graduate-school-going

[13] A college-going culture is defined as a high school's organizational habitus influence on the norms and resources around attending college (Engberg & Gilbert, 2013). Robinson & Roksa (2014) argue that some school contexts have a strong college-going culture, which is reflected in their expectations and resources regarding college readiness and preparation. These contexts also normalize college enrollment and the culture can influence a student's aspirations and preparation for college (McClafferty, McDonough, & Núñez, 2009; Robinson & Roksa, 2014). Some components of a college-going culture can be constituted as "hours spent on college counseling and resources such as financial aid assistance, college fairs, and college course options at a high school were significant factors in predicting the 4-year college-going rate at the school" (McClafferty, McDonough, & Núñez, 2009, pp. 850).

culture ensures that students interested in pursuing advanced degrees are supported in their development of research and professional skills that will help them become attractive candidates and prospects for graduate programs. The culture is supported by these programs that are deeply committed to educating students on advanced degrees pathways through mentorship, advising, professional development opportunities, and financial support.

UMBC McNair Scholars Program Goals and Objectives

Since 1992, the UMBC McNair Scholars Program has prepared and assisted first-generation, low-income, and historically underrepresented students in their pursuits of graduate education and doctoral training (McNair Scholars Program, 2021a). As a federally funded TRIO program, the UMBC McNair Scholars Program must ensure that its participants meet requirements for research activities, graduate school enrollment, retention, and doctoral degree attainment. According to the program's website, 80% of UMBC McNair participants must complete a research project or scholarly activity during each program year (McNair Scholars Program, 2021a). Additionally, 70% of UMBC McNair participants must be accepted and enrolled into a post-baccalaureate program by the fall term after their graduation. Of those who enroll in a post-baccalaureate program after graduation, 90% of McNair alumni must continue to be enrolled in their program over a ten-year period. Moreover, 10% of UMBC McNair alumni are expected to receive a research-based doctoral degree within ten years of their graduation from UMBC (McNair Scholars Program, 2021a). These program benchmarks are unique to the UMBC McNair Program and are set by the federal government. Students must meet the benchmarks for the program to remain eligible for funding in future grant cycles.

Currently, the program can serve up to 30 students in total, including sophomores, juniors, and seniors at UMBC. Recruitment for the program begins in the fall of every academic

year. To be eligible, students must identify as low-income and first-generation or as a member of a group that is underrepresented in graduate education. Prospective students must express interest in starting graduate school immediately after completing an undergraduate degree, desire to earn a Ph.D., and have at least a 3.0 GPA.

To apply, students must complete an online application and participate in a group interview process. The application consists of tax verification forms, resume/CV (highlighting academic and extracurricular awards, honors, and scholarships and involvement in campus and community organizations), an unofficial undergraduate transcript from current and any previous colleges, personal statement (highlighting proposed research project and program interest), spring semester class schedule, and a recent headshot (McNair Scholars, 2021d). After carefully reviewing the application and the results of the group interview, applicants are offered an in-person interview to meet with McNair administrators, staff members, and current scholars (Eligibility: McNair Scholars Program, 2021a). Once accepted into the program, students will remain scholars throughout their tenure as an undergraduate student at UMBC.

UMBC McNair students are required to engage in research experiences, professional development opportunities, McNair workshops and seminars, conferences, graduation ceremonies, and academic, personal, and professional goal-setting. Each year, research experiences include a student's participation in a summer research program at UMBC or another institution, engagement in research or scholarly activities with the support of a faculty mentor, and presentation of research at a national conference and the UMBC McNair Research Conference .Professional development and graduate school preparation activities include attending workshops, boot camps, seminars, and courses on various topics like GRE test preparation, networking, undergraduate writing and research skills, and financing a graduate

education. Students are also required to to support their peers by attending graduation ceremonies, UMBC McNair conferences, and McNair Family Weekends . In addition, students must complete various forms to capture their academic, professional, and personal goals each semester and throughout their academic years. These forms help students assess their progress and completion to meet the McNair Program's goals (e.g. graduate school application) and their own (e.g. undergraduate GPA, practicing self-care during the semester). I provide further detail on these activities in subsequent sections of this chapter.

McNair Program Team and Community of Support

The UMBC McNair Program is led by a community of administrators, staff, faculty, students, and alumni on their campus. Below, I provide an overview of the different actors who shape the UMBC McNair Program and their activities. Afterwards, I present the list of program activities and events designed to support students in their journeys to graduate school.

Administrators. A community of administrative and student staff members leads the McNair Program. Four administrative staff oversee the day-to-day operations of the program. The administrative team consists of a program director, program coordinator, graduate assistant, and administrative assistant. The program director, coordinator, and graduate assistant are participants in this study.

The program director oversees the vision, development, and design of the program. Through high-level engagement with students and staff, the program director is responsible for adapting the program's expectations, requirements, and metrics for success to meet students where they are. The current program director, Malachi, is a Black male and proud first-generation college student. Malachi is an alumnus of UMBC and the McNair Scholars Program. Malachi first joined the UMBC McNair Scholars Program as a math instructor in 2013 and

served as assistant director from 2013-2019. In the fall of 2019, Malachi became the director of the program and is currently completing an interdisciplinary doctoral degree in the humanities and social sciences. Prior to Malachi's rise to leadership, there were many transitions in leadership and administration which left the program shifting its culture, priorities, expectations, and programming.

In collaboration with the program director, the program coordinator is responsible for day-to-day operations, organizing and facilitating program events, assisting with grant renewal processes, and advising students on individual and group bases. The program coordinator meets with students one-on-one to develop Individual Development Plans (IDP). In addition, the program coordinator serves as the liaison and collaborator between the First Generation Network[14] and the McNair Scholars Program. The program coordinator, Marie, joined the UMBC McNair team in 2019. Marie identifies as a Black, mixed-race woman. She is a first-generation student and a graduate of the McNair Scholars Program at her undergraduate institution. Marie is also a doctoral candidate in the field of student affairs and higher education.

The graduate assistant supports the planning, coordination, facilitation, and implementation of program events. The graduate assistant is also responsible for capacity building. The graduate assistant came on to support the creation of the Friends of McNair Scholars Program, which was designed to support students who do not meet McNair requirements and/or McNair students who have decided not to pursue graduate school immediately after completing their undergraduate degrees. The graduate assistant, Rashad, is of

[14] The First-Generation Network is a campus wide initiative to support the success of first-generation college students. The network delivers programming and disseminates resources to promote retention, academic success, and belonging of first-generation students at UMBC. Additionally, the faculty workgroup that leads the network provides training to other UMBC professionals that are interested in becoming advocates for first-generation students on their campus (First Generation Network. (n.d.).

African-American and Jamaican heritage. At the time of data collection, Rashad had been in his position for about a year and was beginning his master's degree.

Student Positions. The administrative staff receives support from up to six McNair scholars and federal work-study students who serve as administrative generalists, McNair ambassadors, and teaching fellows. Program staff described student leaders and staff as "integral" to the program's function and design. Administrative generalists provide day-to-day operational support of program events and implementation. McNair ambassadors oversee the assessment, inventory, records, public relations and communications, scholar development, special events, and administrative-based tasks to maintain program operations (See Table 3 for a list of ambassador positions). They are also responsible for supporting program development and implementation (McNair Scholars Program, 2021b). Teaching Fellows support the instruction and development of enrichment courses and new student orientation.[15] As a Teaching Fellow, a student serves as a teaching assistant (TA) every week during the fall semester for the research methodology course that all incoming scholars are required to take in their first semester in the program.

Most student staff are supported by work-study stipends and will stay in their roles until graduation. These student staff positions are available for prospective and current McNair students. Students who work as student staff members gain exposure to the program and are often later recruited to participate in it. Program administrators also invite McNair alumni to work as summer mentors and program conference assistants. Alumni mentors are paid stipends and attend monthly program meetings and host office hours for students seeking assistance with graduate school application materials, academics, and personal matters.

[15] I discuss the enrichment courses in more detail in latter paragraphs.

Table 3.

Description of Student Ambassador Positions

Ambassador Roles	Description of Responsibilities
Public Relations Ambassador	Connect peers to undergraduate research opportunities through social media Spotlight student achievements and current research activities Interview peers on their journeys and experiences in the program Collaborate with other ambassadors to share student stories on social media and other internal and external outlets
Scholar Development Ambassador	Design resources for different scholarly activities (e.g., resource guide on searching and applying for undergraduate research opportunities)
Assessment Ambassador	Gather information to capture student progress towards program goals and feedback on program activities Organize and analyze data to support annual program reports on student outcomes and engagement
Conference Ambassador	Serve as a liaison for annual conference attendees Support scholar engagement and log attendance
Orientation Ambassador	Design orientation programming for incoming cohorts Serve as a key informant regarding program requirements and expectations for new admitted McNair students
Event Ambassador	Participate in committee meetings for different program events related to orientation, graduation, and annual conferences Assist in coordinating and facilitating event activities

Note. This table displays examples of ambassador positions in the UMBC McNair Program.

Community of Support and Oversight. The UMBC McNair community extends beyond program staff and student workers. The UMBC program administrators employ a holistic critical mentoring framework to their program model. The framework emphasizes supporting a student or "mentee's" whole self through connections with UMBC McNair staff, their peers in the program, formal and informal faculty mentors, as well as actors in the wider UMBC

community (Hunt, 2019; see Figure B for visual aid of framework). As a core element of the model, the program encourages members of the larger UMBC community to apply to serve as mentors to support students' academic and personal development.

Figure 2.

Holistic Critical Mentoring Framework (Hunt, 2019)



Each McNair participant has three UMBC faculty or staff mentors who support the graduate school preparation and choice process (McNair Scholars Program, 2021b). All mentors must undergo an application and pre-screening process (McNair Scholars Program, 2021b). Upon entry to the McNair Scholars Program, each student is paired with a McNair Mentor. The McNair Mentor holds a graduate degree and may not necessarily be in the students' field or discipline, but they are knowledgeable about the graduate school process. In addition, each student is paired with a Faculty Research mentor who is from the student's field and discipline. A Faculty Research Mentor is charged with guiding their mentee through independent research

projects and introducing them to their discipline's culture. Students may work with several Faculty Research Mentors during their time in the McNair Scholars Program (McNair Scholars Program, 2021b).

As senior year approaches, students are paired with a Wisdom Mentor from the UMBC Wisdom Institute.[16] Wisdom Mentors are retired faculty and staff members from the UMBC community. These mentors are knowledgeable about the graduate school process and life after graduation. Mentors must commit to working with mentees on a weekly or monthly basis. In addition, the program asks the Wisdom Mentors to serve yearly as a guest speaker or panelist at a McNair Scholars Program and complete the UMBC McNair Mentor training.

Lastly, the program also has a McNair Advisory Council (MAC), consisting of about 20 UMBC faculty, staff, administrators, retirees, and McNair alumni. The MAC provides program staff with guidance on project development, internal and external matters that may impact the program, and the creation of a network of McNair participants (McNair Scholars Program, 2021c).

Program Activities and Components

The UMBC McNair Program has a strong graduate school-going culture that is complimented by its intentional programming to prepare cohorts of students for graduate school. There are many activities and points of engagement that students are required to participate in as a UMBC McNair Scholar. Each form of programming allows for students to engage in graduate school preparation activities, professional development, and wellness activities with their cohort of McNair peers. Many of the activities include the entire McNair cohort or are grade-specific to

[16] Founded in 2018, The Wisdom Institute serves as the UMBC's Association for Retirees and is designed to enhance connections with past and present faculty, staff, and students. The institute is central to the university's commitment to community and continued connection among campus actors (Wisdom Institute, 2023).

ensure that the community of scholars is well supported. The following section will provide an overview of the program curriculum, activities, and events.

Pre-McNair. In recent years, the program director has invited prospective students to observe in program activities before applying for the program. The Pre-McNair Scholars Program provides an opportunity for students who are new to UMBC or those who do not meet the academic requirements to gain exposure to the program and learn about the different opportunities available. Pre-McNair scholars are invited to attend monthly workshops and conferences, if funding allows. More often than not, Pre-McNair students will apply and be inducted into the program after displaying commitment to meeting academic and program requirements. In addition, Pre-McNair students are able to meet with current students in the program to learn more about program expectations and their own sensemaking about attending graduate school. Connecting with other students in the program and being involved in programming allows Pre-McNair students to assess their fit for the program and develop connections with current students.

Orientation and McNair Courses.

The program provides a four-day orientation experience for incoming McNair students and is led by the Teaching Fellows, Orientation Leaders, and Program Ambassadors. Incoming students are introduced to one another and attend workshops about program requirements, expectations, and graduate school. This four-day experience is called McNair 101 and is the first of three touchpoints that all incoming students must participate in.

In the summer, students take McNair 102. McNair 102 is facilitated by a teaching fellow and a lecturer from the UMBC Writing Center. The course offers students an opportunity to gain exposure to academic writing, research guides, and UMBC library resources. Students learn the

skills needed to complete annotated bibliographies, write literature reviews, practice research presentations, and develop research proposals. The last touchpoint, McNair 103, is a research methodology seminar that is offered in the fall semester. McNair 103 is a credit-bearing research methods course. The course is housed within the UMBC Africana Studies department. Incoming students attend orientation for each course together. With each session, they deepen their relationships with cohort mates as they learn more about program expectations and their own journeys to graduate school.

Engagement in Scholarly Activities and Exploration. The McNair Program encourages students to participate in scholarly activities year-round. These include research projects, conference presentations and attendance, and graduate school visits. Engagement in these scholarly activities helps students prepare for graduate school-level research.

As a signature element of the McNair Program, each student is required to complete a research project. The program encourages students to engage in summer research activities at different universities across the country. Engaging in research at other universities allows students to refine their research skills while gaining exposure to other institutional cultures. Immersed in new and unfamiliar environments, students are challenged to build their personal network and develop independence. This experience assists students with thinking about where they may want to attend graduate school, finding potential faculty with whom they may want to work in the future, and expanding their research skills. In addition to summer research experiences, students complete research projects at UMBC under the supervision of a faculty mentor.

Students have opportunities to present their research at a UMBC McNair conference and beyond. Students must attend conferences hosted by the UMBC McNair Scholars program and

are required to present at research conferences if they have completed a research project. If students are interested in presenting their research at different conferences during the school year, the program champions and encourages them to do so. The program also encourages students to attend peers' presentations to show support for their work.

With regard to graduate school visits, all students have the opportunity to visit graduate schools in person and virtually. In-person graduate school visits are sponsored by the UMBC McNair Scholars Program or the host university. Graduate school visits are a valuable experience for students to learn more about different institutions and new geographic contexts and histories. Most students travel as a group, chaperoned by program staff. On some occasions, students will travel with one or two of their McNair peers to visit graduate schools that they are all interested in attending. In recent years, in-person graduate school visitations were limited for the McNair cohorts due to COVID-19 restrictions.

McNair Assignments. As a part of program requirements, students must complete a variety of written assignments and feedback surveys. To track the progress of these assignments, students are given a yearly checklist to follow and a program guide of all deadlines for each semester. Students can complete these assignments at or outside of McNair Scholars Program events. I review below just a few of these assignments, like McNair Portfolios Enhancements, graduate school lists, and exit surveys.

*McNair Portfolio Enhancement, Semester Review*s, *Individualized and Semester Development Plans*. McNair students are asked to document their goals, progress toward reaching those goals, and extracurricular engagement for each semester and academic year. For example, each student is asked to complete four McNair Portfolio Enhancements each semester (Figure 3). The McNair Portfolio Enhancement captures students' academic, personal, social, and

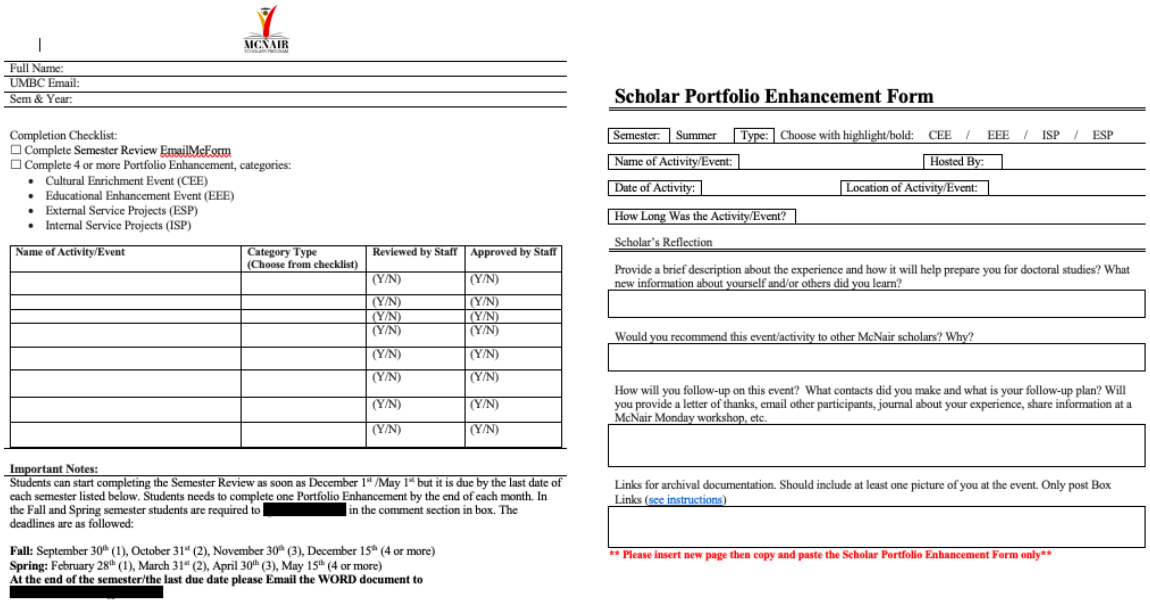
professional engagements on and off campus. Students are required to participate in enrichment, engagement, and service opportunities at the institution, as well as in their greater community. The program requires that its students engage in service work in order to develop valuable leadership skills as well as to become community-oriented. Students are encouraged to add service experiences to their resumes and personal statements as a part of their graduate school preparation process. There are four kinds of enhancement opportunities that a student can partake in and document in their portfolios: internal, external, educational, and cultural.

Internal service calls for students to volunteer time to the program itself. Students may volunteer time in the form of a student staff position or may sit on recruitment processes. An external service project requires students to volunteer outside of the McNair Scholars Program or to places in the greater Baltimore area to offer their time. For instance, some students may work with elementary or secondary students in a school or non-profit setting. Students may also include any educational enrichment activities that they have been involved in during that semester. Cultural service challenges students to find something outside of their culture to attend. This could be attending a student organization geared toward a racial/ethnic group different than their own or attending a religious-affiliated event.

After engaging in activities, the program staff asks that students document each activity using the portfolio enhancement form. At the end of the form, there is space allotted for students to reflect on their experiences and how they may be shaping their professional and personal journeys. The portfolio then becomes a tool for students to capture their engagement in various activities as well as a valuable reference as they work on their personal statements for graduate school.

Figure 3.

Template Example of the Scholar Portfolio Enhancement Form



Full Name:
UMBC Email:
Sem & Year:

Completion Checklist:
☐ Complete Semester Review EmailMeForm
☐ Complete 4 or more Portfolio Enhancement, categories:

- Cultural Enrichment Event (CEE)
- Educational Enhancement Event (EEE)
- External Service Projects (ESP)
- Internal Service Projects (ISP)

Name of Activity/Event	Category Type (Choose from checklist)	Reviewed by Staff	Approved by Staff
		(Y/N)	(Y/N)
		(Y/N)	(Y/N)
		(Y/N)	(Y/N)
		(Y/N)	(Y/N)
		(Y/N)	(Y/N)
		(Y/N)	(Y/N)
		(Y/N)	(Y/N)
		(Y/N)	(Y/N)

Important Notes:
Students can start completing the Semester Review as soon as December 1st /May 1st but it is due by the last date of each semester listed below. Students needs to complete one Portfolio Enhancement by the end of each month. In the Fall and Spring semester students are required to [redacted] in the comment section in box. The deadlines are as followed:

Fall: September 30th (1), October 31st (2), November 30th (3), December 15th (4 or more)
Spring: February 28th (1), March 31st (2), April 30th (3), May 15th (4 or more)
At the end of the semester/the last due date please Email the WORD document to [redacted]

Scholar Portfolio Enhancement Form

Semester: Summer Type: Choose with highlight/bold: CEE / EEE / ISP / ESP
Name of Activity/Event: Hosted By:
Date of Activity: Location of Activity/Event:
How Long Was the Activity/Event?
Scholar's Reflection
Provide a brief description about the experience and how it will help prepare you for doctoral studies? What new information about yourself and/or others did you learn?
Would you recommend this event/activity to other McNair scholars? Why?
How will you follow-up on this event? What contacts did you make and what is your follow-up plan? Will you provide a letter of thanks, email other participants, journal about your experience, share information at a McNair Monday workshop, etc.
Links for archival documentation. Should include at least one picture of you at the event. Only post Box Links (see instructions)
** Please insert new page then copy and paste the Scholar Portfolio Enhancement Form only**

In conjunction with the portfolios, the program requires students to fill out a semester review and development plans. The semester review provides a summary of students' academic updates, research participation, and conference attendance. Unlike the portfolio, the semester review's focus is on the student's reported activities in their academic and professional lives. Activities captured in the portfolio can be included in the semester review.

The individualized development plans (IDP) are similar to the semester review; however, IDPs are designed to help students with goal setting for the next academic semester or year. The program asks students to complete an IDP once a month throughout each semester. Students meet with the program staff to review their monthly development plans, celebrate successes, and identify areas in which they may need further support and encouragement. IDPs are useful for capturing student academic achievements, extracurricular activities, and progress towards applying to graduate school. While the portfolio enhancements, semester reviews, and IDPs are a

more individualized task, some students work on these assignments together during the semester at McNair meetings or informally after classes or on weekends.

Graduate School Lists and Senior Excel Sheets. Rising seniors are required to develop a list of potential graduate schools. The program highly encourages students to develop a list of at least 12-13 schools and apply to at least 6-9 schools. The program provides each student with an Excel spreadsheet to document graduate programs of interest (Figure 4). Students upload the spreadsheets to the community Box folder. Students can access the spreadsheets of current and former students to see where others have previously applied.

Figure 4.

Template for Graduate School List

Priority	#	Name	Loction (City, State)	Program of Study	Areas of Research	McNair Fellowship	Master	Ph.D	Link	Application Opens	Master Application Deadlines	Ph.D Application Deadlines	Notes	Applied
Dream	1													Not Started
	2													Not Started
	3													Not Started
	4													Not Started
	5													Not Started
Target	6													Not Started
	7													Not Started
	8													Not Started
	9													Not Started
	10													Not Started
	11													Not Started
	12													Not Started
	13													Not Started
	14													Not Started
	15													Not Started

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Graduate School Information					
Name					
Location (City, State)					
Program of Study					
Areas of Research					
Graduate Program Type					
Application Open					
Application Deadline					
Applied					
McNair Fellowship					
Insert more Row if Needed					
Application Requirements					
	Select	Specific Requirement/Potential Resources Needed			
Application Type		Link			
Graduate Record Examination (GRE)		Analytical Writing:	Quantitative Score:	Verbal Score:	
Letters of recommendation Needed					
Transcripts					
Personal Statement					
Insert more Row if Needed					
Potential Faculty					
	Name	Research Interest	Current Publication #1	Current Publication #2	CV/Resume
Faculty #1					
Faculty #2					
Faculty #3					
Insert more Row if Needed					
Recommenders Faculty					
	Name	Department	Phone	Email	
Faculty #1					
Faculty #2					
Faculty #3					
Insert more Row if Needed					
Relevent Research Experiences for Undergraduates (REU) Available					
	Name	Deadline	Application Requirements		
REU #1					
REU #2					
REU #3					

In addition to the graduate school lists, the program asks seniors to update their progress on different aspects of the graduate school search and application processes. The senior Excel spreadsheet allows students to track both their progress on and completion of tasks like asking for faculty recommendation letters, reaching out to prospective faculty and programs, and completing personal and research statements. The completion of the senior Excel spreadsheet allows peers to gauge their progress against their application goals and deadlines.

Exit Survey. Graduating students must complete an end-of-the-year survey. The survey is designed to capture a student's next steps after graduation (e.g., attending graduate school, taking a gap year, going into a pre-doctoral program). In addition, the survey provides a space for students to reflect on their time in the program and identify areas in which they may need more assistance. Using survey data, program staff implement changes to programming and assess effectiveness based on student feedback.

Monthly Family Gatherings/Saturday Academy. Every month, new and current McNair students have group meetings with program staff. "Family Gatherings," also referred to as "Saturday Academy" meetings, are typically held on the first Saturday of each month from 9am to 5pm. The morning session held from 9am-12pm provides an opportunity for a community check-in. Each gathering begins with an icebreaker and community-building activity followed by individual students sharing updates regarding academic (i.e., coursework, research experiences, graduate school applications) and non-academic matters (i.e. personal challenges, exciting life changes). Students then break out into subgroups to connect with one another. In subgroups, students will share updates regarding their summer research projects and parts of the graduate school application that they may be struggling with. Students may also use the time in their sub-groups to schedule virtual accountability sessions to work on McNair assignments and application materials for graduate school (e.g., personal statements, research statements, resumes, and graduate school lists). After a break, the gathering reconvenes until 5pm for different workshops co-hosted by the First-Gen network at UMBC. Other first-generation college students outside of the McNair Scholars Program are invited to attend the Saturday Academy portion (1pm-5pm). Each meeting concludes with updates about program events and assignment reminders.

McNair Mondays. Throughout the academic year, the UMBC Program offers bi-weekly workshops on Mondays during a block of unscheduled university time. Participation is not mandatory, but it is highly encouraged. The workshops foster an environment where students are exposed to various topics to prepare them for graduate studies. Workshops topics include informational sessions on graduate school such as sharing self-care and wellness practices, developing rapport with prospective faculty advisors, asking faculty for letters of

recommendations, using social media to create and leverage professional connections, financing graduate school, and building organizational and time management skills. Some workshops have a guest speaker. Guest speakers range from UMBC faculty and staff to McNair Scholars alumni.[17]

The inclusion of McNair alumni at McNair Monday events is especially relevant to the graduate school-going culture in the program. Students are able to learn more about graduate school from near-peers who have completed the graduate school choice process and are in the midst of completing their graduate degrees. Alumni provide key information about the graduate school experience that students can take into consideration as they continue to navigate their own journeys.

Bootcamps. All students are required to attend at least one of two boot camps offered each semester. Bootcamps are one-day experiences. From 9am-5pm, program staff invite students to come together as a community and complete outstanding tasks related to their academic coursework, McNair assignments, and application materials for graduate school. Example tasks include writing recommendation letter email requests to faculty, revising personal statements, and developing a graduate school list. The program staff provides a continental breakfast and lunch. Several breaks are offered to students throughout the duration of the event. At the beginning of the bootcamps, program staff encourage students to set goals of what they would like to accomplish at the session. Students work together or independently on tasks throughout the day. For example, some students work together to review one another's personal

[17] It is important to note that McNair Mondays are no longer being hosted by the UMBC McNair Program. Instead, McNair Monday's are now a part of the Family Gatherings/Saturday Academies. The participants in the study attended both McNair Mondays and Family Gatherings/Saturday Academies during the time in the program and referenced both in interviews.

statements and receive additional feedback from program staff. Other students may use the time to complete late course assignments. At the conclusion of the session, students share what they were able to accomplish, what support they may need to meet their next goal, and what support they are able to offer others. Ultimately, bootcamps offer students a space for work-related accountability amongst their peers.

"S2S" Peer Mentoring Pod Groups and Bi-Weekly Senior Meetings. Throughout the academic year, the program offers several opportunities for students to connect with one another without the facilitation of a staff member. Students are required to attend "scholar to scholar," also referred to as S2S meetings. There are two kinds of S2S meetings: peer mentoring pods and senior meetings. The peer mentoring pods are small groups of 3-4 scholars who meet monthly across cohorts and grade levels. The pods are student-led and offer students an opportunity to get to know each other, check in regarding wellness and academic progress, and provide accountability to meet semester goals and McNair assignments.

The second S2S meeting is required for seniors. These meetings are facilitated by staff members as well as the students who participate. On a bi-weekly basis, seniors meet with one another to provide updates regarding their graduate school search and application process. The meetings offer a safe space for students to share their experiences navigating the process as well as considerations they are making as they prepare for their transition out of undergraduate education.

Let's Talk Grad School Series. Throughout the academic year, the program invites panels of faculty and staff members to discuss different topics regarding graduate school**.** Examples of topics covered during the series include how to develop a network in graduate school, navigating personal life during graduate school, and budgeting as a graduate student. At

the end of each series, students are asked to provide feedback on the sessions and topics for future ones. These series sessions are offered twice a semester with scholars required to attend one session per semester.

Torch Ceremony. At the end of each program year, program staff and students organize an end of the year celebration event. The Torch Ceremony serves as a space where returning students, which includes current seniors, “pass the torch” to incoming students. The incoming cohort of students are then inducted into the program. In addition, existing seniors receive a medallion to mirror the hooding ceremony of a PhD graduation. This event models what is to come in the future for the students as well as the role they play in empowering those who follow behind them in the program.

Friends of McNair Scholars Program. As highlighted in previous sections, the Friends of McNair (FOM) Program serves students that are not interested in pursuing graduate school immediately after completing their undergraduate degree. The FOM program was created after one student decided that they no longer wanted to pursue a graduate degree immediately after completing their bachelor's. In collaboration with the program staff, the student proposed developing a program that could provide resources and support to those who might also be considering alternative paths as a McNair scholar or who do not meet the criteria for admission into the program. The FOM program allows students in McNair cohorts to remain connected to their peers who are exploring alternative pathways. Students who participate in the FOM can attend workshops related to preparing for the GRE, explore gap year and service programs, and speak with graduate school and workforce representatives from the local community.

McNair Family Weekend. At the beginning of each semester, the McNair Scholars Program invites students to a weekend-long event to engage in workshops around the graduate

school process and community-building activities. As a jumpstart to the new academic semester, the weekend provides a space for students to get reacclimated into the program and get into the swing of things for this next semester. This space also allows students to connect as a community and plan other informal program events for the remainder of the semester. In addition, McNair family weekends offer an opportunity for incoming scholars to meet the community as a whole for the first time after their induction into the program.

Community-Building Outings. While much of the year-round programming offered is geared towards supporting students' readiness to pursue graduate studies, the program staff and student leaders host several non-academic community-building activities. These informal meeting opportunities are designed to allow students and staff to get to know each other outside of the program. Outings are planned sporadically throughout the semester and include activities like bowling, dinner, or escape rooms.

Summary

Each program activity and component reviewed aims to provide students with the tools necessary to prepare for graduate school as well as spend a significant amount of time with their peers to meet program requirements. As such, Program events and activities provide the context in which students are encouraged to engage with their peers. In the next chapter, I will discuss how the context and initiatives of the program inform how Students of Color navigate the graduate school choice process. In addition, I will provide an analysis of how program events, design, and leadership facilitate peer relationships among Students of Color in their sensemaking about pursuing graduate school.

Chapter 5: Findings

In this study, I explored how Students of Color in the UMBC McNair Program engaged in the graduate school choice process and the extent to which their peers in the program informed their decision-making processes. I also sought to understand how the UMBC McNair Program acted as a container for facilitating and/or inhibiting peer relationships. In this chapter, I present key findings, which have been informed by the English and Umbach (2016) Graduate School Choice (GSC) Framework, Social Capital Theory, and data extracted from interviews, program documents, and observations.

This chapter is organized into three parts. Each part corresponds to one of the study's research questions. The first part addresses how participants conceptualize the graduate school choice process. In the second part, alumni described the utility and impact of their peer relationships in the UMBC McNair Program concerning their pursuit of graduate school. The third and final part analyzes how leadership influences impacted the development of peer relationships in the program.

Part One: Graduate School Choice for Students of Color in the UMBC McNair Program

Ten alumni participants enrolled in a graduate program immediately after completing their bachelor's degree, and four did not. Despite differences in enrollment decisions, all participants shared similar perspectives and experiences in navigating the graduate school choice (GSC) process. Each participant discussed their motivations and considerations for pursuing a graduate degree and the factors that shaped their search processes and their ultimate decision to pursue a pathway that resonated with their goals at the time.

To capture the participants' conceptualization of their GSC process, I present the findings in sections consistent with the three phases of the GSC Framework. In the first section, I offer a thematic analysis of how participants discussed their development of graduate school aspirations.

In the second section, I discuss how participants used a systematic approach to navigate the search and application phase. For the third section, I review the salient factors influencing participants' decisions to enroll in a specific graduate program.

Developing Graduate School Aspirations

Participants' graduate school aspirations were shaped by three things: (1) exposure to and awareness of graduate school, (2) motivations to obtain a graduate degree, and (3) anticipated challenges of attending graduate school.

Developing Awareness about Graduate School

Most participants did not enter college with clear graduate school aspirations, although a few did. At the beginning of college, participants were largely unaware of the career paths available with a graduate degree or what graduate education encompassed. Most participants who entered college with less exposure to post-baccalaureate pathways were first-generation college students. As the first in their family to attend college, they had less access to the social capital gained by having a parent who attended college and/or graduate education. First-generation participants described the concept of graduate school as "distant," "new," and "something that only lawyers and doctors did." Over time, participants would learn about graduate school through the UMBC McNair Program, undergraduate faculty, and peer networks. Conversations with these actors allowed participants to learn more about pathways into graduate school, which informed their aspirations' development.

The UMBC McNair Program was an opportunity in and of itself to create awareness that graduate school was an option for participants even before they ultimately applied to join the Program. Julian, a first-generation Latino student, transferred to UMBC from a community college. As a first-generation college student, Julian discussed wanting to pursue a college

degree to obtain a good-paying job. He shared, “at first you know all I wanted was a four-year degree in mechanical engineering, graduate, get a job, and I guess make what they say, make ‘engineering money.’” When he arrived at UMBC, he met the McNair Program’s director, who recruited him for the program at a school event. After joining the McNair Program, Julian learned more about the different career pathways and advanced degree options available as an engineering student. Julian noted, “McNair really changed my mindset of exactly what I wanted to do in the future, and one of those things was to pursue a graduate degree. So, if it wasn't for McNair, I don't think I would have gone to graduate school.” Julian's comment confirms his experiences in the McNair Program shaped his graduate school aspirations.

Like Julian, other participants who joined McNair early in their college careers recalled learning about graduate school from program staff. Participants discussed learning about the basics of graduate school at McNair recruitment events, orientation sessions offered to incoming students, and UMBC McNair alumni panels. Ruth, a white and Asian first-generation student, joined the McNair Program in her first year at UMBC. She shared, “McNair got to me within the first two weeks of college, so I think McNair opened up a lot of pathways for me by showing me the possibilities that are out there.” Ruth did not know much about the program, but she figured that it would “not hurt to be a part of a scholar's program” while in college. It was not until she interviewed program staff that Ruth learned the program supports students’ attendance in graduate school, and she continued to learn about graduate school through McNair orientation events. By joining McNair early on, Ruth learned more about the different career pathways and opportunities available to someone with a graduate degree. In other words, Ruth’s early involvement in McNair helped cultivate her interest in graduate school.

In addition to gaining exposure through the UMBC McNair Program recruitment and onboarding events, three participants offered clear examples of how they learned about graduate school from faculty members and peers inside and outside the McNair Program. Alicia, a white Latine first-generation student, described the first time they learned about what graduate school *was* and *how* it was possible for them. As a first-generation college student, Alicia said they knew little about graduate school. In their sophomore year of college, a faculty member contacted Alicia and recommended they look into the McNair Program because graduate school would be a feasible next step after completing their undergraduate degree.

One afternoon, the faculty member asked Alicia to attend a McNair recruitment event. Alicia responded to the faculty member with confusion about why they would attend a McNair event about graduate school. They shared, "I was like, 'Well, I'm not going to medical school, and I'm not going to law school.' I was like, 'I'm pretty sure that's all you could do.' Then he was like, 'There's a grad school for what you want to do.' I didn't know you could get a Ph.D. in what I wanted to do." While Alicia became interested in the possibility of pursuing graduate school, Alicia abandoned the idea for a bit of time and did not attend the recruitment event. Throughout the semester, Alicia continued to converse with this faculty member to learn more about what graduate school would entail and what graduate programs were available in their field of study.

At the event, Alicia learned that this faculty member had also been a McNair Scholar and was a faculty mentor in the program. They learned how the faculty member benefited from the services and resources they received as a McNair Scholar. In their interview, Alicia recalled an impressionable conversation that they shared with the faculty member about graduate school and being in McNair:

> "I emailed him and asked for a meeting. It was supposed to be 15 minutes, and he gave me a whole hour of his time. I was like, 'What is graduate school? What would I be doing?' And he explained very patiently and not judgmentally what grad school was, and it was when it started that little light of like, I might actually be able to consider this. People are doing things that I want."

The conversation with the faculty member became pivotal in the development of Alicia's graduate school aspirations. Alicia learned that graduate school could be a possibility after graduation. After conversation with the faculty member, Alicia felt empowered to attend the next recruitment event and learn more about how McNair could support their graduate school aspirations.

Brooklyn, a Black first-generation student, received messages from peers in her undergraduate program about getting a specialization in her field to be a competitive applicant in the job search. With this advice, Brooklyn began seeking opportunities to get support on campus to learn more about graduate school and what she might need to do in order to prepare and apply for graduate school. Brooklyn saw flyers for informational sessions on the McNair Program around campus. She reached out to one of her sorority sisters who had been in the program to seek her opinion on the program. "She always spoke highly of the program and how it helped her, so I was like, 'Okay, I think this will be a good thing for me to be a part of,'" Brooklyn said. With affirmation from her sorority sister about the program's impact, Brooklyn felt reassured that the McNair Program would help her learn more about graduate school and perhaps provide support with the next steps if she took that route. She explained, "I knew how challenging it was to navigate undergrad applications...I ended up going to one of the informational sessions and

was like, ‘Yeah, I think I really wanna be a part of this community. It'll help me to facilitate this new journey that I'm trying to go into that I really don't know much about.’”

Similarly, Dante, a Black first-generation student, first learned about graduate school through discussions with his peers outside of the McNair Program. Before speaking with his peers, Dante knew little about graduate school. During his first year of college, Dante was part of a book club with juniors and seniors. In book club meetings, his peers shared their graduate school plans, and he asked questions about what graduate school entailed. Living vicariously through older peers, Dante learned about what was possible:

> It was the fact that people I know could walk into graduate school. Watching them go through the process of applying and making decisions about where they would go and how they imagine their career would turn out, really was a very eye-opening experience. So, I thought that could be a logical possibility in my future.

Dante comment conveyed that he felt inspired as he witnessed his peers working on their personal statements together and deliberating on their different considerations about which programs they would settle on as their next best move after graduation. Observing others allowed Dante to envision himself as a future graduate school student, informing his aspirations.

In contrast to those who developed graduate school aspirations in college, four participants entered college planning to attend graduate school. All four participants identified as continuing-generation. Jay and Cameron learned about graduate school in high school. They attended high schools in districts with resources and funding to support their academic development and exposure to research opportunities. Cameron, a Black continuing-generation student, noted, "When I was in high school, I knew I wanted to study biochemistry, biology, life sciences. I was already doing research and knew I could continue that into graduate school.” Jay,

a Black continuing-generation student, also attended a high school where he could engage in research activities, which fueled his early graduate school aspirations.

Breon, a Black continuing-generation student, also described having an early interest in graduate school. Breon's mother, who was college educated, "did a whole lot of shaping" of his graduate school aspirations. He explained, "I grew up learning about higher education and being empowered by the idea of education truly being something that is valuable. So, that's of course why I'm in a Ph.D. program." Breon's mother ensured that he was always surrounded by communities that supported his aspirations and advances in academic work. In high school, Breon participated in the Upward Bound program, where he learned about pathways to college and gained some exposure to graduate school. Through Upward Bound and his mother's guidance, Breon developed a commitment to pursue college and graduate school. By his first year of college, Breon was adamant about pursuing graduate school. Before joining McNair, he was enrolled in the Meyerhoff Scholars Program. His enrollment in the McNair Program was described as additional "confirmation that attending graduate school was expected," and that it would present the "best opportunities in life for him."

Like Breon, Akira, a Black continuing-generation student, learned about graduate school from her parents. Her mother has two bachelor's degrees, and her father has a doctorate. Although her parents had taught her about the career options available for her if she went to graduate school, she "didn't think much about it" because she is not "someone who likes to plan too far in the future." Once she started to do research in her sophomore year, she felt that graduate school would be a great fit for her and her career goals. Regardless of the participants' varying degrees of awareness of graduate school as they entered college, they developed

graduate school aspirations over time. These aspirations would continue to develop as participants navigated the process and continued their learning about graduate school.

Motivations Driving Graduate School Aspirations

Each participant discussed what motivated them to pursue a graduate degree. Most participants were motivated to pursue graduate studies for two core reasons: (1) a perceived requirement for career mobility, professional goals, and status and (2) a tool for community advocacy and empowerment.

Career Mobility, Professional Goals, Status-Seeking

Many participants discussed the need to obtain an advanced degree in order to have career mobility, reach their professional goals, and legitimize their presence in their respective fields. Participants described obtaining a graduate degree as a necessary tool to enhance their prospects of getting competitive jobs and salaries. Sandra, a Mestiza Latina first-generation student who is beginning a pre-doctoral program, firmly believed that her undergraduate degree would not suffice in the current job market. She explained, “I was always kind of under the impression that undergrad is not enough. I needed to do something more. I was under the impression, and think rightfully so, that in this job market, an undergrad degree is not necessarily enough for what I want in life.” With this in mind, pursuing a graduate degree would allow Sandra to meet her professional goals.

Similarly, Fatima, a first-generation Black student, expressed that obtaining an undergraduate degree would not be sufficient to reach her professional goals. Fatima had always wanted to become a professor in order “to make valuable contributions” to her field. Thus, going to graduate school was a necessary step to fulfill that dream. Fatima shared, “Grad school was kind of always in the back of my mind as an option because I wasn't necessarily sure that I just

wanted to go and get a run-of-the-mill tech job." She continued, "When you have a Ph.D., you can be a professor, which is the career goal that I really was going for at the time and having a Ph.D. would kind of give me access to that position." Cameron also wanted to get a graduate degree to be "in a better position to be successful career-wise" with hopes of becoming "an innovator" that could "push boundaries" in his field.

Ayanna, a first-generation Black student, believed that pursuing a graduate degree would help springboard her into a career she was passionate about. Although Ayanna had not yet decided what field to enter, she said, "I just want to be an expert and just really good in my field." For Ayanna, a graduate degree would signify that she has developed a specialization and expertise in a given field. Similarly, Ruth wanted to become an expert and leading professional in her discipline. As a naturally competitive person, Ruth viewed a graduate degree as a new challenge to conquer and a means to "becoming one of the best" in her field. Ruth shared, "I didn't wanna just go to school, get a degree, work in accounting for the next 50 years or something. So, for me, that was like, 'Well, how can I keep going?' Which was a Ph.D. or something like it could be next for me to pursue." Ruth's ambition to pursue a graduate degree was driven by her desire to challenge herself in new ways and advance in her field.

Other participants also shared that obtaining a graduate degree was associated with their desire to garner a "legitimate status" as a professional in their fields. In some ways, participants felt that an undergraduate degree would not be enough for specific careers. As a result, pursuing a Ph.D. symbolized legitimacy and capability. Dante, Jay, and Alicia best illustrated this finding when they shared that a graduate degree would allow them to hold power and status in their desired professional positions and fields.

Dante stressed the importance of obtaining a doctoral degree to reach his professional

goals, explore his research interests, and hold leadership positions in his field. Dante wanted to lead community-based organizations and felt confident that a graduate degree would allow him to secure leadership opportunities that would otherwise feel "inaccessible" with just a bachelor's degree. Since his first year of college, Dante explained, "I really had a sense that graduate school could open doors that just getting a bachelor's degree could not open, particularly for the kinds of things that me and my friends wanted to do in terms of community work and impact. If you want to ascend to leadership, you really need credentials that could legitimize your place and your position." A graduate degree would be a tool in Dante's eyes that he could use to rise to leadership roles that would effect change in his community.

Jay, a third-year Black doctoral student, was also motivated to pursue a graduate degree to reach his goal of being a leader in his field. Early on, Jay knew that he would like to pursue a doctoral degree in electrical engineering. For Jay, securing a graduate degree would legitimize his skill set in his home country, where "they tend to view everything by age and even with the same background and education, they will not take you seriously." A graduate degree in his home country would be an important marker of expertise, especially for those younger than their colleagues. He reasoned, "There is respect that comes with a graduate degree. If I go back to my country and I decide that I want to do something with my grad degree, I will have my degree to back it up, and they will actually take me a little bit more seriously. Getting at least like a masters will actually let me stand out." This realization drove Jay's intentions to pursue higher education beyond college and helped inform his decision to pursue a graduate degree.

Anecdotes from Alicia's interview showcased their desire to pursue graduate studies to gain "social respectability" in their field and their family name. While Jay was seeking a graduate degree to establish his legitimacy given his age, Alicia sought a way to legitimize

themselves as a first-generation Student of Color:

> There's no doctors in my family. That does not exist. We do not touch that level of classed social respectability that I would see some people have. They have doctor on their name, and they get treated nicely. And I always saw that that was so impressive... I want that level of kind of respect in my work. It's literally 'put respect on your name," and it was also big because after I got my citizenship, I started using my full two-part name on all of my paperwork, and I started using it on my documents, so then it was like, I'm going to put doctor in front of a recognizably Hispanic name. So that was a big deal of like, I am bringing something to everyone.

Alicia's remarks suggest that obtaining a graduate degree would signify status. By becoming a doctor, Alicia would be able to bring honor to their family, their heritage, and their social status. While pursuing a graduate degree can help an individual reach a specific professional goal (e.g., university faculty member), these three participants exemplified the sentiments of others in the study who also sought to use their future graduate degrees as a marker of status and legitimacy.

Graduate Degree as a Tool for Community Advocacy and Empowerment

Participants' motivations to obtain a graduate degree were not limited to their desires for career mobility, employability, and status as leaders in their field. Several participants explained that a graduate degree was important because it would allow them to use their skills to uplift their communities. Being from a marginalized and/or first-generation background, participants developed a desire to uplift their communities and the generations that followed them. Some wanted to use their future graduate degrees to do research that would transform societal systems. Others wanted to become role models and mentors to teach others about accessing graduate school.

While in the UMBC McNair program, participants learned that those who shared similar backgrounds to their own used their graduate degrees to become leaders and advocates for access, equity, and inclusion inside and outside of higher education. Motivated by this, participants were further inspired to pursue a graduate degree. Dante reasoned, "Graduate school could open doors that just getting a bachelor's degree could not open, particularly for the kinds of things that me and my friends wanted to do in terms of community work and community impact." He paused and then continued, "I wanted to have a set of skills that I could bring back to the places that nurtured me." Dante grew up in a predominantly Black and Brown community in the Midwest where he would be one of few individuals in his family and community pursuing a graduate degree. His plan to obtain a graduate degree would allow him to bring a wealth of knowledge and resources about higher education to his family, community, and peers. As a graduate degree holder, he hoped to bring capital to peers and family members who might be interested in pursuing higher education.

Alicia saw pursuing a doctoral degree as a steppingstone to empowering marginalized communities. During their senior year, Alicia decided to pursue rhetoric of science and medicine in graduate school. Alicia dealt with several challenges regarding healthcare affordability as an adolescent and young adult. As someone who has been on "super high deductible insurance [their] whole life," Alicia wanted to pursue graduate school "to make life better for [their] communities and people outside of [their] community." Alicia's difficult experiences with the medical field led them to be passionate about pursuing research in graduate school that can help transform medical care and affordability for other communities that face the brunt of healthcare inequities.

In the UMBC McNair Program, Alicia learned from their faculty mentors that obtaining a

graduate degree would allow them to be a change-maker and embody a possibility model for other first-generation students interested in a similar path. Alicia planned to use their graduate degree to broaden access for others to higher education. Alicia noted,

> My mentors were very mission-driven people. They're like, 'I'm here, so it can be easier for someone else.' So now I'm here to be supportive [and] to guide and mentor first generation students, so they can go to grad school. To give them information that people whose parents went to grad school. To give resources in a way that people who aren't first gen always get to use their resources.

Like Dante and Alicia, several others believed that a graduate degree would equip them with the tools to guide those who follow in their footsteps. Ayanna was very clear in her motivations to pursue a graduate degree. As a Black woman in STEM, Ayanna had limited contact with faculty mentors and advisors who looked like her in her undergraduate department. Ayanna's love for teaching coupled with her identity as a Black woman, motivated her to obtain a graduate degree in order to "be a faculty member that would be representative." As a professor, Ayanna explained that she could work closely with students who shared similar identities: "I want to guide other students that shared my experiences and to give back more or give forward."

Cameron echoed Ayanna's interest in being represented in the field. Cameron felt an implicit commitment to break the glass ceiling in his field that does not have a strong presence of Black and other racially-minoritized groups. Cameron described this commitment in the following comment, "I think being from a minority background, I think that subtly pushed me to strive for success, to be representative in my field and discipline." These narratives illustrate the extent to which several participants' motivations to pursue graduate school were associated with their desire to uplift their communities through research, role modeling, and mentorship.

Anticipated Challenges Influencing Graduate School Aspirations

As participants offered their motivations behind wanting to pursue a graduate degree, they also commented on challenges that they foresaw in pursuing one. Participants reported two challenges that they anticipated in pursuing a graduate degree: (1) time and commitment to study and (2) finances.

Contemplating Commitment to Graduate Studies

Participants expressed concerns about remaining in school for additional time and committing to one discipline. For example, Cameron was completing his master's degree at the time of the study. While he is still interested in pursuing a doctoral degree, he disclosed that he had some concerns about the time commitment required to pursue one. He shared, "There's still a question of whether or not I should go for a Ph.D. because of how long it is." Brooklyn expressed concerns regarding the duration of a doctoral program after completing five years of college. Brooklyn stated, "I was ready to get out of undergrad. I did not wanna see school anymore. I felt like I was going to delay my time getting into the workforce and getting that experience so it was kind of like a double-edged sword in the aspect that other people are getting that experience in the workforce." For Brooklyn, attending graduate school would require more of her in terms of commitment and energy. In addition, Brooklyn felt that attending graduate school immediately after completing her undergraduate degree would delay her from gaining work experience. Compared to her counterparts, Brooklyn felt that others her age not attending graduate school would gain valuable work experiences by their mid-20s. She noted, "If I went to graduate school, I would not be able to work as soon as others my age. I feel like I would be locking myself in just one direction. I would have to play catch up."

Like Cameron and Brooklyn, other participants disclosed concerns about spending additional time in school and committing to one field of study. For example, Ayanna worried about managing workload expectations, prolonging her educational journey by several years, and being bound to a singular career path:

> I heard that the Ph.D. was very intimidating going into it because people would say, "Oh, you know, you have to really want it," so the work expectation felt intimidating. Then there is the time commitment. It's going to take the next four or five years. Then third, you have to be committed to that field that you're in, so I had to ask myself, "Do I really know what I want, do I really want this, do I really want to be in this field for the next whatever years?"

Once Ayanna received messages from other peers about the commitment associated with graduate school, she questioned the next steps and drive that would be required of her.

Hamed, a Black continuing-generation student, shared that he was unsure of where his path would lead after college and whether he could choose what he wanted to do with a graduate degree in engineering. He commented, "I was afraid of what the path would look like because let's say you do an engineering degree...it's more of a straight shot thing." At the time, Hamed believed that a graduate degree in engineering might narrow his ability to explore other career paths. Hamed decided to enroll in a pre-doctoral program to gain more exposure to the different pathways and research one could pursue through engineering. Unlike other participants among these examples, Hamed's doubts shaped his decision-making about the next steps he would take after graduation. At the time, Hamed's decision to delay his entrance into graduate school allowed him to reflect on his goals, interests, and professional ambitions. Hamed eventually enrolled into a doctoral program at the end of completing his pre-doctoral program. While the

reality and commitment of graduate school delayed Hamed's enrollment into graduate school, for the most part, it caused the other participants to think more seriously about enrolling in graduate school.

In addition to expressing concerns about the long-term time commitment, students also offered concerns about what their time would look like while they were in school. Several participants discussed the "labor" of being a graduate student as cumbersome. Graduate programs often call for students to commit many hours to studying, lab duties, service, and/or teaching loads that are tacked onto their family responsibilities and self-care. A few participant narratives nodded to concerns regarding work-life balance as a graduate student. For example, Cameron shared concerns about pursuing a graduate degree because he worried about balancing his work, personal life, and wellness. Cameron shared, "There's all things to worry about like lack of support, mental health during the process. and even worrying about things like finding time to be with loved ones and stuff like that." From his perspective, graduate school would call for him to commit to finding new ways to balance his work, life, and wellness, especially a support system in the location where he would choose to pursue his graduate degree. The life of a graduate student contributed to his concerns about pursuing and managing graduate school.

Concerns about Financial Stability and Funding Graduate Education

Nearly all of the participants identified finances as a worry that factored into the development of their graduate school aspirations and, later on, their enrollment decisions. Participants were concerned about whether they could afford graduate school and feared that they would incur student loan debt. As one participant put it, "I know this degree will not promise me that I will come out making more money than I could with a bachelor's degree. I don't want debt for nothing. I just can't risk that."

Two participants' narratives were exemplary of how concerns about finances influenced their graduate school aspirations. When Brooklyn began to learn about graduate school, she was unsure of how she could afford it and was "very nervous about the financial aspects of it all." She explained, "I knew that some graduate programs did not fully fund their students. That simply was not an option for me." Brooklyn's nervousness was amplified by the messages about how costly attendance could be. As a first-generation college student, Brooklyn was unaware of the funding opportunities available to her as a graduate student. In her interview, she shared fears about being unable to afford basic needs on a graduate student's stipend: "I thought, 'How am I gonna survive out here? The cost of living was so expensive. The apartments were expensive in comparison to what I would be paid. How am I gonna pay for groceries? How am I gonna do this?'" Through the UMBC McNair Program and alumni, Brooklyn continued to learn more about financing graduate school, which and alleviated many of her concerns. She offered,

> I learned that there are a lot of funding opportunities in grad school, and there are different things that you can do on campus as far as jobs that will get you paid. You won't be poor. I think sometimes it can be scary when you're hearing a certain narrative repeatedly and you're not sure what to expect, especially if you don't have anybody in your family that ever went to grad school before. It can be very nerve-wracking of how I'm gonna get through this time.

While graduate school's potential price tag hampered the development of Brooklyn's aspirations for a short time, other perspectives from trusted actors helped Brooklyn feel confident that she could secure the funding needed to pursue graduate school. These perspectives also proved to be an essential facet of Brooklyn's graduate school choice story.

Similarly, Alicia opened up about their fears about financing their graduate education. As a working-class, first-generation college student, Alicia had to constantly juggle their responsibilities at home and studies at school. Alicia disclosed, “If somebody missed a paycheck in my neighborhood, they were fine, and if we missed a paycheck and at my house, we were tight.” Growing up with tight finances impacted their thought processes about affording their education as a college student. Ultimately, these feelings regarding financing their undergraduate education would transfer over as worries they considered pursuing graduate school. Alicia said, “I was scared that I was going into more student debt. I didn't know if I would be housing secure.”

As Alicia learned about graduate school, they heard messages from peers about how difficult funding graduate education would be: “They're like, ‘You're not gonna get paid anything and your health insurance is gonna be bad,’ like all of these things.” Like Brooklyn, Alicia heard many narratives about how costly graduate school would be. Their family members also shared Alicia’s fears around financing their education and life during graduate school. They disclosed, “No one in my family had gone, so they were very confused. They didn't know how it worked. They were like, ‘Are you sure?’" That doesn’t really sound like a good idea.”As the eldest child in their Latinx family, Alicia felt a responsibility to financially support their younger sibling and parents. Alicia felt a bit selfish when thinking about graduate school and worried they would not make enough money to help their family. However, through the UMBC McNair Program, Alicia learned about the “fellowships and funding that exists,” which made them feel better about pursuing graduate school.

Despite varying orientations of what graduate school entailed, each participant benefited from learning more about graduate school as a potential path after graduation. Participants

identified similar desires and motivations for their graduate school aspirations. Participants' graduate school aspirations were driven by their desire for social and economic mobility, educational attainment, employment and professional success, legitimizing their presence in the field, and commitment to uplifting their communities. While the participants discussed many of their drivers and motivators to pursue a graduate degree, they also identified anticipated challenges they would face if they sought graduate school. Participants discussed concerns regarding funding, debt, livable wages, and commitment to the field and degree.

Phase 2: Calculated Moves: The Search and Application Process

Although the question of whether to pursue graduate school at all is a key one to answer first, it is immediately and inevitably followed by another: where? When participants described their search and application process, they recounted the same calculated steps. This was in part due to their participation in the UMBC McNair Program. As described in Chapter 4, the UMBC McNair Program has a strong graduate school-going culture that is reinforced by year-round programming (e.g., boot camps, family gatherings, senior meetings, S2S pods) and writing assignments (e.g. Student Enhancement Portfolios). The program designed these required events and assignments to ensure that rising seniors are prepared to submit applications successfully each cycle.

In this study, participants followed a "traditional timeline" for searching for and applying to graduate programs. First, they searched for programs in the summer into the fall of their senior year. Simultaneously or shortly after compiling their graduate school lists, participants worked on personal statements, research statements, applications, secured letters of recommendation, and scheduled appointments to meet with graduate school representatives and potential faculty mentors. I discuss the search and application process in more detail below, as described by

participants.

The Search

In the summer and fall of their senior year, participants began formally searching for graduate programs. As highlighted in Chapter 4, the UMBC McNair Program requires that their scholars develop a graduate school list. Each list includes at least 12-13 potential graduate programs. Some participants had lists that exceeded the minimum number of programs, whereas others had a more narrow scope. As participants built their graduate school lists, they filled out information regarding location and proximity to home, faculty and research agendas, perceived program and institutional culture, and funding support (Figure 4 in Chapter 4). The graduate school list was described as a "valuable tool" to "document", "list", "organize", and "narrow down" the different programs to which participants would be interested in applying.

Participants identified potential graduate programs through visits, summer research opportunities, research conferences, campus websites, UMBC faculty, and UMBC McNair events. All participants attended virtual and/or in-person graduate school visits that helped them configure an early list of potential graduate schools they would like to attend. Graduate school visits were sponsored by the UMBC McNair Program and/or the Louis Stokes Alliances for Minority Participation (LSAMP). Graduate school visits were useful opportunities to network with prospective faculty members and gain exposure to different institutions and their cultures. Darnell, a Black continuing-generation student, curated his graduate school list based on the schools he had visited and the faculty he met during his summer research programs. Darnell also applied to several visit programs that funded his travel to tour graduate programs. He shared, " I went to a lot of visit programs. Those helped me a lot because I'd meet a lot of grad students and go to schools that I hadn't thought about. For example, I went to [university]'s visit program, and

I never wanted to go there. But I went, and I fell in love with it." Unlike Darnell, some others in the study could not attend in-person graduate schools due to the pandemic. According to Marie, a member of the program staff, many seniors attended virtual visits and tours of prospective schools to stay in accordance with pandemic-related restrictions.

Participants also searched for prospective graduate programs online. All participants used the Internet to identify top programs in their field and campus websites to learn more about programs, faculty, and their latest research projects. Specifically, participants noted using the *U.S. News & World Report* Best Graduate Education Schools Rankings to identify highly-ranked programs in their areas of interest. As Darnell and Cameron put it, respectively: "top programs have the most resources and often the best faculty and research that I am interested in" and "those people and research would be top-tier." In their eyes, top programs symbolized high-quality research, resources, and faculty. After getting a sense of potential programs, participants visited campus websites to learn more about faculty with similar research agendas and interests. Participants who found schools that fit their interests and requirements added them to their graduate school lists.

In addition to using the Internet to identify prospective programs, some participants received program recommendations from faculty mentors and older peers. Ayanna and Brooklyn noted that they had faculty in their undergraduate programs who identified potential graduate programs and faculty mentors who would be a good fit in terms of research interests and professional trajectories. In her interview, Ayanna recalled meeting with a faculty member in her department to identify potential graduate programs to apply to: "She told me about [university]. She was like. 'The professors are amazing. You can reach out to anyone.' So I literally, after I spoke to her, then I reached out to students and faculty to do mini interviews. Everything she

said was true; everyone is so helpful. I knew that I should apply there." Similarly, Brooklyn learned about potential programs from faculty and peers in her department. She searched for a program or field centered on STEM education and instruction. Through social media, she learned about a graduate program in engineering education. She recalled:

> I was on Instagram, and one of my friends who was also a chemical engineering major had a friend that just finished her Ph.D. in Engineering Education at [university]. He posted her dissertation. and I was like, 'Oh my gosh, what is engineering education?' This is everything that I wanted. So I ended up looking up the program. Found others like it and added all of them to my list.

Through her network, Brooklyn could identify a field of study and program she was interested in. She returned to her faculty mentor and asked about other engineering education graduate programs she should look into.

While completing the graduate school lists and researching prospective programs, the program encouraged participants to email faculty members with whom they were interested in working. The UMBC McNair Program provides students with email templates to contact prospective faculty to learn more about the program and their research. Brooklyn found the email templates extremely useful in her search process and in contacting faculty mentors: "The program gave us email templates to faculty. I kinda edited it to make my own, and I used it to contact professors that I was interested in working with. It really helped me to start conversations and understand what I wanted to do and talk to people who are in the field". Conversations with prospective faculty helped Brooklyn better understand what type of graduate programs would be the best fit for her.

Julian also used the email template provided by the UMBC McNair Program to reach out

to prospective faculty. When developing his graduate school list, Julian included programs that had faculty he had connected with through email or phone. Julian removed programs from his list if he did not hear from faculty members. “The faculty that would respond the fastest or in a timely matter helped me decide like, ‘Okay, this person is very attentive of their students,’ and after that, I was able to narrow down the ones that took the longest 'cause I didn't want to have that problem of, okay, if they don't reach out, they are busy or have too much on their plate.” The faculty who were able to set aside time to meet with Julian implicitly reassured him that he would be able to be supported if he were to apply and enroll in their program. After contacting faculty and staff at 20 different programs, Julian developed his final list of 12 schools.

Over eight months, Alicia also narrowed down their program options. Alicia took multiple Zoom calls with prospective faculty advisors in order to assess if they gave “good vibes.” Asked to elaborate on their meetings with prospective faculty, Alicia stated, “I literally shopped around for grad school based on who was nicest, and that sounds like to other people like the most ridiculous thing to do, but I'm like, ‘No, I need that.’ I understood who worked in the program.” By meeting with several potential faculty advisors, Alicia could assess which faculty members might be an excellent interpersonal fit. Alicia recalled a virtual meeting with a prospective faculty advisor that did not go well: “One of the professors that I really wanted to work with and I was an absolute match for her, seemed really out of breath and busy when she was having the call with me.” Alicia had made it clear to this professor that they were seeking a faculty advisor who would be attentive and supportive. This brief interaction indicated to Alicia that this professor might not have time for them in the way that they would need as a graduate student. Alicia decided to mark that program off their list.

Like Alicia, some participants interacted negatively with prospective faculty advisors

during the search phase. Jay disclosed a negative encounter when meeting with a future faculty mentor. The negative interaction with the faculty member swayed Jay's interest away from pursuing his graduate degree in a particular program. Jay disclosed:

> Even though he was a really good faculty, especially when it comes to work with students and everything, I just felt like there might be like some pre-mindset of this faculty in the way that things might go, given that he had another student from Nigeria and things didn't go too well. Made me think, "Do I want to do this?"

As a Nigerian student, Jay felt concerned about whether or not this faculty member may have held preconceived notions and judgments about his work. Due to the negative interaction, he decided not to apply to his first-choice institution. Stragetically, participants casted wide nets in their search and selection of potential graduate school options to apply to. Participants thoughtgully vetted program options by meeting with faculty and staff, engaging in graduate school visits, and researching programs via websites in order to assess fit and interest.

The Application

Participants' application materials comprised research statements, personal statements, supplemental essays, a demographic form, letters of recommendation, and a curriculum vitae (CV) or resume. The GRE, a long-standing requirement for access to graduate school, had become optional for many participants; the GRE and other forms of standardized testing for entrance into graduate school were halted or made optional due to the COVID-19 pandemic. Only half the participants decided to take the GRE. Those who took the GRE did so before the pandemic or took advantage of the fee waivers provided by the UMBC McNair Program.

According to the McNair Program's director, Malachi, staff provide seniors with a suggested timeline for when components of their applications should be completed. For example,

rising seniors attended bi-weekly senior meetings over the summer to begin working on their personal statements, email drafts to prospective faculty, and identify four faculty and mentors who can provide recommendation letters. By the beginning of the fall semester, seniors who follow this timeline will have reached out to four recommenders, scheduled meetings with prospective faculty, updated their resumes/CVs, and finalized their personal and research statements. Seniors are required to attend senior meetings, boot camps, and S2S pods in order to work on their application materials throughout the summer and fall.

Participants' accounts of their application process were consistent with Malachi's description of the timeline. As one participant indicated, “They made us start early preparing for the application process. It was pretty much during the summer before senior year that they emphasized us to network and reach out to schools, work on personal statements, all that stuff. I felt very well prepared.”

The UMBC McNair Program recommends that students apply to at least 6-9 schools. Malachi explained, “Students who apply to six to nine schools will have more opportunities, whereas those who don't either don't get into graduate school or [aren’t] fully funded, or they may get into one [school] and end up not having choices. Students who followed our path and applied to six to nine schools have at least five to six acceptances with funding.” Most participants, excepting one, applied to at least six graduate programs Despite adding 12 schools to his graduate school list, Darnell applied to only two programs. Darnell explained his reasoning for that choice:

> As I was learning more about the application process and what was needed, I would have to be very specific and proactive about things. Everything on my resume was handpicked. I had to choose a specific vision…So in my head, I'm like,”Okay, so it doesn't make

> sense for me to apply to 12 places, 'cause I'm not going to build a relationship with 12 professors. If my goal needs to be to get a professor or a particular group of professors to support me on the committee, then I need to be doing everything I can to talk to those professors and those people there, and that's going to take time that I won't have to split across 12 people."

Unlike the other participants had who cast their net widely by applying to multiple programs, Darnell believed that focusing on two programs would be the most effective use of his time and energy. Darnell identified the programs he wanted to apply for after attending summer research programs at the two schools. Given that he was able to develop a good relationship with the faculty advisors at the two universities before submitting applications, he sought them out for advice on his application materials. Darnell stated, "I was having calls with the professor who is actually going to be my PI now. I asked, hat are you looking for? Here's what I've done for my application. What do you think?' I was sending those emails, tweaking my essay based on his feedback." Darnell also met with his current faculty advisor to ensure his essay and materials were up to par and would stand out against others'. By meeting with prospective faculty advisors, Darnell strengthened his existing connections during the application cycle.

He also connected with graduate students in order to "information-gather" and "try to figure out what was needed from these kinds of students, how do you get in?" His conversations with current graduate students, potential faculty members, and graduate school reps helped him tailor his application to meet each program's standards and expectations.. Darnell's experience applying for schools was unique compared to the other participants, who did not have strong connections with their prospective faculty mentors and programs.

Most participants reported working with their McNair peers, McNair staff, and faculty

mentors at different program events to complete their application materials. Program events such as weekend boot camps, senior meetings, and McNair Mondays were critical spaces where participants could focus on and complete their application materials. In addition, the events provided an excellent opportunity to receive feedback on their materials from program staff, faculty, and their peers. For example, Ruth described attending McNair boot camps in order to complete her applications in community with others in the program: "We would start with a checklist and begin building our personal statement and a research interest statement. It was super helpful to have a space where everybody's working together and where you have resources. If I'm working on my personal statement and I'm stuck, there's two to three people in the room, plus mentors who will either read it or guide me in some way." McNair boot camps allowed Ruth to focus on her application materials with the support of her peers and McNair staff.

Like Ruth, most participants reported benefiting from attending McNair events to work on their application materials. Hamed noted that McNair Monday workshops helped him learn the mechanics of constructing his personal statements and establish deadlines by which to complete his work. He said, "The workshops really helped me avoid procrastination and create deadlines that actually work for me. I am not a great person with deadlines normally". Dante shared a similar sentiment: "Every Monday, there was an hour block of time where we could workshop different aspects of the application, and we started writing personal statements. We really used that time to focus and get the work done. I mean senior year has a lot going on, so we appreciated that time." The combination of having the structured time to work on materials and a sense of accountability was helpful for participants.

Outside of McNair events, some participants sought out their McNair Mentors' support for additional feedback on their application materials, namely their personal statements. For

instance, Darnell met with his McNair Mentor throughout the fall semester to refine his personal statement. When asked about meetings with his McNair mentor, he elaborated, “She was super instrumental in my essays. She's a history professor, so she sort of solved my gap where I was computer science, and I didn't know how to write like she does. She did a really good job of helping me. We were hacking away at those essays everyday.” Similarly, Julian met with his McNair Mentor to work through his personal statements. Julian was an engineering major, and his McNair Mentor was in the Linguistics Department. Julian believed he lucked out with a mentor “whose different academic background made him the best possible editor for his personal statements.” Julian shared the value that his McNair Mentor brought to his personal statement’s development:

> He read my personal statements and just destroyed them. I can't even tell you my revisions I've made and the time he took out of this day. Thank God I was very blessed to have him by my side. We would meet up and read the personal statement, line by line. I was very fortunate to have him. And if it wasn't for McNair and him, my personal statement would not have been as good as it was.

These experiences with their McNair Mentors positioned participants to feel supported as they moved forward, improving the quality of their application materials and helping to meet deadlines.

The programming provided by the UMBC McNair program helped participants navigate the search and application processes. Participants benefited from a variety of resources, workshops, and program events designed for them to develop their graduate school lists and complete application materials. With their community of support in the UMBC McNair program, participants submitted graduate school applications in their senior year.

Phase 3: Criteria for Selecting and Enrolling into a Graduate Program

Of the 14 participants, ten enrolled into a graduate program immediately after completing their bachelor's degree. Four participants were admitted into graduate programs but instead decided to enter the workforce immediately after completing their bachelor's degree. The criteria participants used to apply to schools also influenced their final decision-making. Participants made decisions with the support and advice of their communities. In the following section, I review the selection criteria that informed participants' decision-making. In addition, I discuss how participants leaned on others to inform their decision-making. Last, I describe the decision-making process of the four participants who chose to enter the workforce after college graduation.

Criteria for Selecting and Enrolling into a Graduate Program

Participants identified four main criteria they considered when applying for graduate programs and deciding between offers. These included: (1) interpersonal fit with faculty and quality of students interactions, (2) funding packages, (3) geographic location, and (4) perceived program and campus climate. These factors were not mutually exclusive; participants relied on multiple factors to inform their enrollment decisions. Below, I describe each factor in detail.

Interpersonal Fit with Faculty and Insights from Graduate Students

As mentioned in earlier sections, each participant discussed searching for faculty who had strong interpersonal skills and engaged in research projects that aligned with participants' interests. Most participants met with faculty and graduate students before and after the application process to get a sense of what their future advising relationships and research projects might look like. Continued conversations with faculty members during the application and choice process influenced participants' final decisions.

All participants identified interpersonal fit with faculty as the most crucial factor in their enrollment decisions. For example, Akira shared, “The advisor seemed nice, and his research interests aligned with my research interests.” Cameron also noted how “nice” his future faculty advisor was. He stated, “She seemed really friendly and nice, and they seemed like they liked me and I liked them, so there was an early chemistry there.” Having good chemistry with a faculty advisor affirmed that Cameron would have a positive relationship with his potential advisor. Once admitted into several graduate programs, Alicia continued conversing with prospective faculty advisors. When it came down to accepting an offer, Alicia chose the program with a faculty advisor who was a “better match overall”, “super sweet and caring”, and “would go to bat to find additional funding” for them.

In addition to having positive interactions and good chemistry with faculty, participants discussed meeting with current graduate students to better understand the program culture and their future advisor’s work style. Brooklyn shared an experience she had with a current graduate student who led the school tour on Admitted Students Day:

> She was very patient. She talked about the different networks that they had here. She talked about her experience. She was very transparent. Sometimes in universities, you don't get that. Like you ask a challenging questions and people give you the round-about answer. She was very straightforward with everything, even sharing her opinions and insights about my advisor that I wanted to work with, and it really lured me in.

After the tour, Brooklyn felt excited about pursuing her graduate degree at this institution. She thought the program was “very intentional about their recruitment efforts,” making her feel like “a truly wanted and valuable applicant.” This, coupled with positive interactions with faculty members in the program, led her to accept their offer.

Like Brooklyn, Alicia also visited the graduate program they would eventually enroll in. In this particular program, current graduate students volunteered to speak with prospective students to answer questions and provide insights about the program before the visit. Alicia explained, “They were sending me a fifth-year graduate. They’re sending people who are about to leave with their dissertation. These people have been in the program. They know the most. Graduate students are gonna be open and honest.” Hearing good things about the program's culture and faculty from older graduate students reassured Alicia that they would also have a positive experience.

When Alicia visited the school post-admission, they were met by other graduate students who took the time to show them around campus and the surrounding area. Alicia was picked up at the airport by the graduate student volunteer who toured them around the campus and the local community. During the tour, Alicia asked the graduate student many questions about the campus, stipend, and faculty. Alicia said, “They shared how they live on their salary, how to find providers with this okay but not terrific health insurance. One student was like, ‘It's very individualistic here. There's two really good professors, but they're booked and busy because every student uses them because all of their other advisors aren't good.’” Alicia’s narrative reveals that the “real-talk” conversations with current graduate students allowed them to get the critical contextual clues they needed to make an informed decision about which graduate program to enroll in. The investment that these current graduate students made in Alicia’s visit allowed them to feel “looked out for”, “seen,” and “supported.”

Through interactions and conversations with faculty, current graduate students, and program coordinators, participants in the study learned critical information about their future colleagues. The stronger rapport participants built with faculty members and graduate students

resulted in a stronger desire to enroll in a specific program.

Securing the Bag: Promising Funding Packages

Given that participants expressed concerns about whether or not they would be able to finance their graduate education, they often made enrollment decisions based on the availability and strength of funding packages. Seven participants discussed receiving competitive funding offers for different doctoral programs. These packages offered stipends and fellowships, graduate assistantships, and, in some cases, full financial support for housing and tuition. The participants discussed accepting offers from schools that provided them with the most funding and aligned with the other factors of their decisions, such as location, faculty, and culture in program departments. For example, Jay received several offers for doctoral programs nationwide. While comparing program location and faculty advisors, Jay found funding to be a deal-maker. He emphasized that his choice to select his current doctoral program made the most sense "money-wise"; they offered a full funding package that covered his housing and tuition. The funding package was very attractive because Jay wanted to "focus on his studies without worrying about the financial burden of pursuing a graduate degree."

Similarly, Alicia was torn between two programs. The program of Alicia's dreams did not provide enough funding to make them feel financially secure enough to go there. Alicia argued, "I was emotionally committed to [university], and they tell you not to pick a favorite, but I did. So I had to decide between a school I can't afford that I'm weirdly emotionally attached to or the one that is just as good with better funding." Alicia switched gears and decided to enroll in the program that offered more funding, "My second choice offered really good funding. It was a lot more than the other school that I got into, and better benefits as well. It all seemed to align from there." The more competitive funding package became a deal-maker for Alicia.

Given her concerns about surviving in graduate school with limited funds, Brooklyn was relieved when she received her financial aid package from her dream graduate program. She received a first-year fellowship and regular monthly funding while working a GRA position. With this funding package, she thought, “This is more feasible. I can do this. I can make it here [financially] on top of the location, which was great.”

This sense of relief in securing a suitable financial aid package was also shared with others in the study who enrolled in a master's program. While doctoral programs often provide funding to their students, master’s programs are less likely to have funding opportunities. For example, Ruth shared concerns about “whether or not they would receive funding and affordability of obtaining a master's degree.” Both Ruth and Cameron enrolled in programs that provided full support. They described fully-funded master’s programs as the “number one” and “huge” factor in their decision-making between multiple programs at the time. Regardless of enrollment into a master’s or doctoral program, participants in this study viewed their funding packages as critical dealmakers in their decision-making processes.

Geographic Location

In addition to funding packages, faculty, and student rapport, participants considered geographic location in their decision-making. Participants considered geographic location in terms of distance and proximity to family as well as the climate in different prospective regions. Eight participants described location as one of the most important factors in enrolling in their graduate program. Participants weighed the opportunity of being away from their family and loved ones against a sense of security from being closer to home and family. As a result, participants often decided to enroll in programs allowing them to travel home within a few hours or less. For example, Ruth stated, “I was looking at schools only on the East Coast, 'cause it's

where my family is. Although I had visited a lot of schools on the West Coast and they were amazing…I just knew that realistically, practically, I couldn't leave my family for that many years." Despite her interest in pursuing school on the West Coast, Ruth ultimately selected a master's program within her home state to stay close to family.

Geographic location limited Ruth and other participants' options for graduate school. For instance, Dante accepted an offer from a graduate school three hours away from his family home. In college, Dante lived relatively far from his family and missed key moments of his nieces' and nephews' upbringing. He shared, "I knew I wanted to watch them grow up. It was really very important to me, and that is what informed my decision to accept the offer at [graduate school] instead of the other school that I got into." Dante chose to enroll in a program that was closer to his family than the program he attended for his undergraduate education. Similarly, Jay considered a program out of state that would require an extensive amount of travel to see his family. Ultimately, Jay selected a school within driving distance from home because "if there was an emergency at home, I knew I wouldn't be able to get there fast enough." Jay reasoned that his decision to pursue graduate school closer to home brought him ease.

Alicia and Brooklyn's interviews also revealed the desire to stay close to family. In their interview, Alicia shared that they first looked at programs only within driving distance of family. Alicia did not consider applying to programs out of state until a faculty member asked, "'Why are you only looking at schools in-state? If this is about your family, you're not allowed to apply to schools just here.' She said, 'You can also take risks and venture out.' She really empowered me." Alicia ultimately decided to move six hours out of state, far away enough to miss their family but close enough to visit if need be. In Alicia's opinion, their decision to venture beyond their original geographic parameters allowed them to develop a "sense of independence" and

"courage" to take on a new adventure in life. Brooklyn, responded similarly when asked to expand on her reasoning for choosing her graduate program based on location. Brooklyn felt very strongly about wanting to attend a school close enough to see family but far enough for new experiences and to gain a sense of independence. In her interview, Brooklyn shared some of her excitement about attending school in a new environment, "Going to graduate school would be the first time that I was away from home. When it came down to making the decision, I really wanted to focus on gaining a new independence through my time in graduate school." Brooklyn's interest in developing a sense of independence in graduate school led her to enroll in a program far enough away but close enough to travel home to visit her mother and brother in less than a day's time.

One participant offered a vivid account of his decision-making to pursue a graduate degree away from his family. Julian struggled with selecting and enrolling in his dream doctoral program because he did not want to leave his daughter and family. The distance, coupled with displacing his family for several years to move across the country, became a heavy weight for Julian to manage. He described this decision as one of the "hardest choices he ever had to make." When asked how he navigated the decision-making process, he said:

> You talk to mentors and professors, and they are like, 'Look, you should just go for it.' Or they give you options of, 'You could stay here. You get your master's, stay close to family to do it.' Or other people say, 'Anything is possible.' It was very challenging to see how easy it is for someone to say, 'Just pick something and go for it.' … I just felt no one understood the things that I had. Of course, they have families as well and their parents. But this was new to me, as a father especially.

In the end, Julian decided to pursue a doctoral degree out of state. Despite the distance, Julian

has learned to manage his studies while visiting his family for short periods of time during the academic semester.

While being close to family and loved ones, some participants also selected schools based on population density and weather. When deciding between two programs, Brooklyn relied on location to support her decision in choosing just one to pursue. She noted, “I couldn't go wrong with either one, but just like knowing me, I needed somewhere that was kind of close to home, even though [city] is nowhere near as bustling as [city] is, but it's enough for me to feel comfortable.” Brooklyn’s decision to pursue a graduate program in an environment like home was similar to other participants’.

A few participants also strayed away from very rural and cold geographic regions. For instance, Darnell shared, “I ultimately decided on [university] because it was warmer than the other one. That's a big deal. I didn't wanna be in the [university] winter for nine months out of the year. Especially since it starts in the fall and ends in the spring. You're gonna be cold the whole time.” Jay echoed these sentiments in his interview when he also referred to location and weather as important factors in his decision-making. When visiting schools on graduate student acceptance weekends, Jay realized that one of his top schools was located in an “incredibly cold” climate. He candidly stated, “I can tolerate the cold, but there's a certain time where it should be over now. So in April, it was still cool.” After realizing that one of his graduate program options was located in a region with a cold climate, he decided to decline their offer. Geography proved to be an influence over participants' decision-making.

Perceived Program Diversity, Inclusion, and Culture

Participants pointed to their perceptions of the program and campus culture as another crucial decision-making factor. Participants specifically described the importance of diversity,

community, and representation in their prospective graduate programs. For most participants, UMBC and the McNair Program provided a space where they could be among others with shared backgrounds and lived experiences. Moving beyond their environments at UMBC, participants expressed concerns about navigating academia as graduate students in new contexts. For instance, Sandra reasoned, “The higher in academia, you got more white and rich and male. UMBC was easy for me to envision myself in. I have my community right here, but going somewhere that's super far, and potentially not having that community was also a little bit of a deterring factor.” Sandra shared that attending graduate school outside of her usual environment and community caused some angst around whether or not her future graduate program would be inclusive or supportive.

With this in mind, participants wanted to attend diverse, inclusive, and communal programs. Participants wanted to attend programs with faculty and students who shared their identities and provided them with a sense of belonging. For example, when Darnell met with graduate students in his prospective graduate programs, he needed to “envision himself” in the program. Darnell asserted, “I was looking for myself, I guess, in the applicants. Do I see people getting in that look like me? And if so, what did they do?” Darnell’s research on potential graduate programs was driven by his goal to meet and exceed the programs' requirements and ensure that the programs were representative of other individuals who shared similar salient identities, specifically a Black man in STEM. Fortunately, Darnell had applied to and been admitted into two programs with positive cultures and strong Black student communities. Finding community and others who shared his identity was significant to Darnell, who had difficulty finding pockets of Black men in academia previously.

Dante also sought out community and representation in his prospective graduate program.

Dante attended McNair Scholar visit day at a potential graduate school and grew an early interest after meeting other Black men who could be his colleagues in the program. In his eyes, the campus he visited must "value inclusion and participation" if they set aside a day to bring McNair Scholars to visit. On the visit day, he met another McNair Scholar who was a Black male from a different institution who was also applying to the same doctoral program. Dante's interest in the program increased after making a meaningful connection with a peer. He recalled, "There was another Black male from a similar background and experiences as McNair Scholars in this unfamiliar place. Another Black man who was considering enrolling in the same department, and I thought, 'Oh, we're gonna be close friends, this would be great.'" Seeing other McNair Scholars and another Black man in his department reassured Dante that he would have connections before joining the program.

A few participants also described wanting to have a sense of community and to feel "at home" in their graduate programs. Alicia provided an explanation of their desire to find community and belonging among those with shared backgrounds in their graduate school. Alicia sought schools that offered "UMBC vibes" and "those that emulate the McNair community." These characterizations were described as having a strong emphasis on community building and supporting Students of Color and other marginalized groups. Even if Alicia would not find the "ideal diversity" they were looking for in a graduate school, they connected with current graduate students, faculty members, and program coordinators to ensure they were equipped to holistically support them. After connecting with graduate students in a program, Alicia felt more confident in accepting their offer: "When I met some of the graduate students, it felt like we must have known each other in a past life. The whole cohort was mostly Hispanic. I was like, 'This is amazing, I'm really clicking with these people. All of the arrows lining up.'" Finding community

and belonging helped Alicia narrow down their decisions about what program to enroll in.

Brooklyn sought out programs that were well-established with many graduates but also specifically programs that had researchers who looked like her. She made a note of one particular program that was high on her list: “They had several graduates and researchers who looked like me who were Black and doing research…For me, representation was very big because at UMBC I literally did not have a single Black professor in engineering.” This program merged her research interests and desire to work alongside other Black students and faculty. Brooklyn enrolled in this program after continuing to meet with graduate students who were able to go in-depth about the different Black communities and student organizations on the campus. This led Brooklyn to believe that she would be able to find “the community she had been seeking” in her undergraduate program. In sum, participants enrolled in diverse and inclusive programs that had faculty and graduate students with shared backgrounds.

Consulting with Community

Participants did not make decisions to enroll in graduate school in a vacuum. The UMBC McNair Program staff urges students to be open to advice from multiple sources. Malachi, the McNair Program’s director, discussed how students consult with others: “Students should take a variety of advice from everybody, and then they can make their decision based on everything that they've heard.” Marie, the program coordinator, echoed these sentiments when asked how students navigate their decision-making. Marie shared that making decisions is an “ongoing conversation” and “often happens informally.” As the program coordinator, Marie acts as a sounding board for students to think about their decisions. Although she described being “integrated into conversations with students.” she explained that a lot of the decision-making occurs among peers in the program. She explained, “Our scholars talk to each other, often in

informal settings, whether that is via text message or on the phone, and they are able to share the conversations that they've had with other people, like their family or like their mentors."

Marie and Malachi's observations and suggestions about how students should take advice from others were evident in the alumni participants' narratives. Participants described seeking out the advice of their community of supporters, including peers inside and outside of the McNair Program as well as faculty, family, and McNair Program administrators and mentors. Through conversations with various individuals in their lives, participants could make informed decisions about their futures. The advice varied from "following the money" to "go out of state to seek new experiences" or "follow the most exciting and interesting research to you."

Most participants could describe a particular word of advice that stood out in their decision-making. Participants were often encouraged to make decisions in their best interests and do what felt right for them. As mentioned before, participants were admitted to at least one program, some being admitted into several schools. For example, Jay received different advice from peers, family, and mentors. Jay articulated, "Everybody had different advice. The best advice I got was like someone telling me, 'There's no wrong decision. Whatever you pick, you're going to do great. Do what's best for you, not what works best for the school, and don't worry about disappointing them.'" Similarly, in her interview, Ruth shared that she spent some time reviewing her options with her family. Her family recommended her to follow her gut. She said, "They told me to do what feels right. They couldn't help me decide, but it was nice to talk through it." From Jay and Ruth's perspectives, the choice of selecting which program to attend was something that they had to do on their own. However, their community encouraged and reminded them to do what felt right to them. This advice placed the power into Jay and Ruth's hands to follow their hearts and instincts.

Dante also considered the advice of McNair Program staff, peers in the program, and family and friends outside of academia. Dante had offers from several schools, including some prestigious ones. He shared, "[Program staff] helped me see clearly what my priorities were so that I could make a decision that reflected what would actually be best for me as opposed to a pressure to go somewhere prestigious." Dante's conversation with a program staff member affirmed the importance of doing what was best for him rather than relying on the pressures he received from others about following prestige when choosing a graduate program. He stated, "I talked about graduate school and the value of what I hope to gain with people who weren't in college at all. [It] really was a gut check for how valuable is this pursuit? How valuable would this actually be to the people I actually want to interact with?" Discussions with his peers outside of academia helped Dante uncouple the value of a graduate program and degree to its prestige. Leaving prestige behind, Dante would go on to pursue a doctoral program that felt authentic to him and his values. Dante and the other participants could talk through their decision-making processes with the advice and support of their academic communities and loved ones.

Deciding Not to Enroll

Of the 14 participants, four did not enroll immediately into a graduate program despite having applied to them during their senior year. The four participants decided not to enroll right away because they were seeking to gain professional experience. Two participants, Sandra and Hamed, accepted offers to join pre-doctoral programs in their respective fields. Fatima took a gap year opportunity to join a research team abroad. Darnell decided to defer his acceptance to graduate school to take on a full-time research scientist position in his industry.

Like the other participants in the study, these four participants factored in the importance of gaining more professional experience before attending graduate school. Sandra, Hamed,

Fatima, and Darnell wanted to acquire more technical skills and refine their research interests. For example, Hamed had a strong passion for conducting research but was undecided about which field he should pursue in graduate school. Hamed's decision to take a pre-doctoral position in a research lab allowed him to "have savings and work experiences before deciding the trajectory of the rest of his life." With a similar sentiment, Darnell reasoned that he deferred his acceptance into his doctoral program to gain more work experience and be in better financial standing. Darnell described the conversations he had with his doctoral advisor and his decision to defer his enrollment: "I made a good argument. I told them I actually have a lot of family that I help support. I can't just get up and leave. I also wanted to have more work experience before going back." Darnell's faculty advisor was very accepting and accommodating of his request to defer his acceptance.

Sandra's interview detailed her tough decision to accept a pre-doctoral fellowship in order to gain more research experience. In her sophomore year in college, Sandra came across a pre-doctoral fellowship program that offered her two years of funding to gain further research experience in a lab of her choice. As an economics major, Sandra disclosed that she would have to meet rigorous requirements to be a competitive applicant and successful graduate student. Despite her desire to attend graduate school, Sandra said, "I didn't have really great research experiences that really fit what econ programs are looking for, so I was like, 'Oh, great, I could just do this.' The pre-doc opportunity was 'fire resume booster.'" Later in her interview, Sandra revealed that her decision to enter a pre-doctoral program would boost her resume and her research skills to be a competitive applicant when the time came to apply to graduate school again.

Fatima also wanted to develop more research experience before entering a graduate

program. However, Fatima's reason for pursuing a research job abroad differed from her peers. Throughout her time in college, Fatima had "always wanted to study abroad and learn a new language" but "never had the opportunity" because she "worried about the money." To follow this desire, Fatima began looking for work opportunities abroad and attended research conferences to meet international scholars. She explained, "At the time, I knew I really would love to go abroad. I was already kind of unsure about the Ph.D. program that I got admitted into. So I was kind of looking to gain additional experience and to have more time to figure it out." By following her dreams of studying abroad, Fatima gained more experience and exposure to research while fleshing out her thoughts about getting a doctoral degree. Since their interviews, Hamed, Darnell, and Fatima participants have enrolled in and/or completed a graduate degree. Sandra is still in the process of completing her pre-doctoral fellowship and will pursue graduate studies at the end of her two-year commitment to the program.

Regardless of their enrollment decisions, each participant navigated their graduate school choice by weighing different factors that would impact their future. By exposing participants to different pathways, the UMBC McNair Program allowed each individual to learn about the possibility of pursuing a graduate degree. While some pursued graduate studies, others sought out the opportunity to build their professional presence and skill sets in their respective fields. Nonetheless, the UMBC McNair Program acted as a container to nurture participants' navigation of the graduate school choice process through resources, programming, and mentorship.

Part Two: The Many and Multifaceted Roles that Peers Play in the GSC Process

During the graduate school choice process, participants described their peers in the program as assets to their journey. Cohort mates, older peers, and program alumni influenced participants' navigation of the graduate school choice process. Cohort mates were sources of

comfort and socioemotional support, motivators, sounding boards, and accountability partners. Cohort mates also played a vital role in the application, search, and enrollment phases. Participants characterized older peers and alumni as possibility models and purveyors of information. Older peers and alumni helped shape participants' aspirations, application, search, and choice processes. In the following sections, I describe the different roles that peers played in participants' graduate school choice processes. In addition, I highlight how information and resources were passed and received among participants and their peers.

Shared Background Creating a Sense of Comfort Amongst Cohort Mates

Participants benefited from peers who shared similar identities and lived experiences. Some participants built strong ties with their cohort mates who shared the same racial and ethnic identities, whereas others bonded as People of Color generally and shared low-income and first-generation backgrounds. Ruth addressed how her peers in the UMBC McNair community thrived together as a result of their shared identities, backgrounds, and experiences. Ruth explained:

> This is a very impactful community for first-generation college students to be a part of. We all had the same struggle, at least one struggle that brought us together. So I think being around other students who were so ambitious, who came from families who didn't give them that one step up that a lot of my classmates had really brought us together. Again, everybody in the cohort was so ambitious, and this process was new to us, and we were just figuring it out together.

Ruth's comment reveals that shared identity and background created a sense of comfort, motivation, and drive among peers in the program as they navigated the graduate school choice process.

Generally, participants reported receiving socio-emotional support from peers to meet program expectations as well as complete their graduate school applications. With various program events hosted each month and cumulative assignments to help students prepare for the graduate school application cycle, participants described spending a lot of time with their peers to meet program expectations. As a result, participants tended to bond early and relied on one another. As Dante pointed out, "I think the cohort model was really effective. We were all inducted together. We had a great deal of time together, getting to know each other."

Like Dante, other participants shared their early experiences in the McNair Program, creating bonds with their peers to manage what was described as an "intense" and "demanding" program culture. Alicia recalled their early introduction to the McNair Program:

We just forged in the fire during the first year of McNair. It was rough.ou will struggle, and it's just hard to get used to, but you'll get used to the work and what they're asking

you to do. Because we were forged in the fire, I was absolutely dependent on them for

their validation. Their validation disproportionately means a lot.. I would not have done it [graduate school] if it was not for my McNair family.

Like many other participants, Alicia experienced some challenges balancing the program's demanding workload and expectations. Alicia built strong relationships with their cohort mates because the early days of their time together as McNair scholars were trying. As a result of Alicia bonding with their peers over difficult parts of the program, Alicia grew dependent on peer support to reach various milestones in their pursuit of graduate school.

Brooklyn joined the McNair Program later than others in her cohort. As a result, she had to spend some extra time catching up and becoming orientated to program expectations. She relied on her cohort mates to get key resources about program requirements and assignments as

she began to prepare for the graduate school application cycle. As she reflected back on her early peer relationships, Brooklyn emphasized, “They were very patient with me, which was helpful because I was new to a lot of it. The people that were in my cohort and then also in cohorts before mine were so helpful with samples of things that we did. If I was struggling with something, I would communicate that, and they would be supportive.” Brooklyn was grateful for the support she received from her cohort mates, as it was critical to her transition into the program.

As participants weathered the demanding program requirements together, some described relying on the closeness and comfort they developed with their peers to complete their graduate school applications. Participants described the graduate school application process as stressful. Prospective applicants must complete multiple components, which can be especially difficult for students who are completing undergraduate coursework at the same time. This study’s participants discussed having to balance their academic commitments, McNair coursework, and their personal lives, all the while meeting application submission deadlines.

McNair events often served as excellent opportunities for participants to seek out their peers’ comfort and support. Dante noted that his peers would frequently meet to work on their applications: “We spent many, many hours and evenings together preparing for graduate school. The application process was really crucial because it was very difficult and very stressful.” In her interview, Ayanna described her experience completing graduate school applications as stressful. At bi-weekly senior meetings, Ayanna and her peers would share their “progress” as well as challenges completing their applications while juggling other things in their lives. Ayanna said, “Just knowing that everyone was stressed with you and that you're not alone goes a long way.

You're not the only one that feels stressed or overwhelmed. It's motivating to know that despite everything that people are going through, they're still pushing through."

Cameron discussed the importance of connecting with his peers during the pod sessions. As described in Chapter 4, pod groups are peer-to-peer or "scholar-to-scholar" experiences that encourage touchpoints among students. Marie, the program coordinator, described the pod groups as "a space for students to just decompress with one another and talk about things that they might not want to talk to us a staff about." In Cameron's opinion, pod sessions were critical to navigating the application process and demands of senior year. Cameron explained, "We talked about how the semester was going. We updated a sheet for our pods, which I thought was pretty helpful because it helped us keep in touch. We talked about our goals and gave updates on our mental health during the process." Cameron's pod group specifically discussed their progress on different academic goals and completing GSC tasks (e.g., personal statements and requesting letters of recommendation). The pods reinforced the idea that students in the cohort are there to learn from one another and support one another through the GSC process.

Envisioning their Futures: Cohort Mates as Sounding Boards

Beyond shared experiences as McNair students, shared identities made it easier to connect and have critical conversations about the graduate school choice process. A consistent theme across participant interviews revealed how cohort mates were sounding boards for how individuals were thinking about their futures, graduate school options, and considerations they made about prospective programs. For instance, Cameron confided in his peers as he began searching for schools and deliberating between best fits during the choice phase:

> We talked a lot about our research interests, where we wanna go to school and geographic location, and what we would do for fun at whatever school we go to like,

> where we wanna live and the mountains, close to the beach, or a major city, or a small city, and what happiness at that would look like, and it really tied into our long-term career goals, so why would we wanna get a Ph.D.

Cameron's discussion with his peers allowed him to visualize what his future would look like as a Ph.D. student. With his peers, Cameron could deliberate between components of a prospective graduate school program, such as geographic locations, research agenda, and professional goals. Later in his interview, Cameron described these discussions as "useful" as it helped him "think more critically about what kind of school would be the best fit" for him.

Dante found that his cohort helped shape his thoughts about his graduate school lists. His peers all shared identities as first-generation, low-income college Students of Color. These identities informed some of their conversations regarding their experiences with admissions and recruitment practices and financing their next steps in graduate school. Dante shared some of what they discussed:

> As we encountered the admissions process and talked about the experience of being recruited as a person of color at predominantly white institutions and how different campuses took more or less interest in us, or whether or not we were token admissions that made them look good on a website…[and] Knowing that we didn't have a lot of money really helped us bond over some of our challenges senior year and in terms of paying for graduation and think about relocating to a new place.

Having shared identities with his peers created an opportunity for Dante to lean into discussions with his McNair peers about aspects about graduate school that "they could only understand." Dante's conversations with his peers focused on key aspects of the graduate school choice

process that people of color and those from low-income backgrounds “must grapple with” as they navigate their journeys into graduate school.

Like Dante, Brooklyn reported her peers became essential thought partners about different aspects of graduate school like funding, securing a part-time job, and what environments might be conducive to her future as a developing scholar. Brooklyn shared that most McNair Scholars were from marginalized groups and identified as first-generation college students. The majority of her peers were Black women and men. While many of them were not engineering majors, Brooklyn found commonalities in how they were thinking about navigating certain aspects of graduate school, like campus and departmental climates, faculty representation, and funding. Brooklyn articulated:

> A lot of them shared my identity, so it made it easier to talk about certain things and to just understand how they were navigating certain aspects of the whole graduate school process. We talked about how they felt about working with a white advisor or certain topics that had to do with marginalized groups. Like how did they feel about representation at their universities that they were applying to? Were there a lot of people that look like them? Were there less? What is the Black community like? Then certain financial questions, how much are they giving you? Do you think that you're gonna have to work while you do this, or is your family gonna help you? I mean, you just literally can't ask everybody these types of questions.

Brooklyn’s comment conveys that she was able to have certain conversations with her friends about what graduate school might be like for them as Black women and a person of color; particularly, navigating racialized spaces, the weight of being “first” in their families to embark

on this journey, or contemplating the price tag of pursuing a graduate degree. As soundboards to one another, participants could help to evaluate their opportunities to pursue graduate school.

Cohort Mates as Motivators and Accountability Partners

Being encouraged to complete graduate school applications was another valuable aspect of participants' relationships with their peers, specifically their cohort mates. Participants described meeting with their cohort mates to assemble different components of their graduate school applications. Program events like Family Gatherings, Saturday Academies, and Boot Camps were designed for participants and the seniors in their cohort to work together as well as independently on their graduate school applications. These program events were described as critical meeting spaces where participants could receive socio-emotional support, gain access to feedback on their application materials, and have accountability to complete their applications.

For example, Dante worked alongside six peers to complete academic, McNair, and graduate school application tasks. Dante reflected on his time working with peers on his goals during senior year at program events:

> At the time, we had to finish our last requirements for UMBC. We needed to write applications. We needed to study for the GRE. We needed to meet all these requirements. I was lucky there was a group of us. We were very disciplined and diligent because we knew that we needed to finish things in a short window. We spent hours preparing applications and talking about interviews, and really just workshopping the whole process with each other.

The support Dante received from his peers during the application process was essential to how he met all the requirements necessary for the next step in his journey.

Similarly, Ayanna appreciated the support she received from her cohort mates during the graduate school application phase. Ayanna felt overwhelmed at times with balancing her academic responsibilities as a senior and managing application deadlines. The structured support provided at McNair events helped Ayanna connect with peers experiencing the same pressures and commitments. Ayanna explained, "I felt like working with them was better than doing it alone. I was feeling overwhelmed. But I knew someone next to me was doing the same things, and it took a little bit of the burden off." Ayanna's comment reveals that working alongside others lessened the stress she experienced.

While in community, Brooklyn felt completing the applications could be a doable undertaking. Brooklyn recounted her feelings about seeking accountability from her peers to finalize her graduate school application and plans:

> I will tell anybody, 'You cannot do those graduate applications by yourself.' You need people who can one,keep you accountable, and two, keep you sane, because it can drive you crazy. I worked very diligently with my McNair peers. We kept each other accountable, and so that was very helpful and just helped me to get something on the paper, emails sent out, stuff like that.

Brooklyn benefited from working alongside her peers. Peer support did not only bring the necessary socio-emotional validation she needed to navigate this process but also the accountability to make sure she reached her goals of submitting applications. In addition, Brooklyn discussed setting up times to meet on the weekends during the summer with some of her peers in her cohort, including Jay and Julian, to work on their applications together as a form of accountability. By the end of the summer, she had meetings with prospective faculty set up for the fall semester and a strong working draft of her personal statement.

In Julian's interview, he discussed partaking in the accountability group meetings organized by Brooklyn. Like Brooklyn, Julian highlighted the importance of having a community of support to finalize his graduate school options and applications. Julian stated,

> We all had that same motivation of narrowing down some of the schools. It was just one of those things where we have each other if we had any questions or if they would see something at a particular university or a program that they were interested in and say, 'Hey look, I found this…' I guess we fed off each other.

Julian and his colleagues shared similar goals. This aspect of their relationship helped motivate them to persist in what participants consistently described as a stressful process.

Like others, Ruth thrived in the company of her cohort mates to complete her graduate school applications. Not only did Ruth tap into her peer network for accountability, but she had the motivation to navigate the entire process well. In her interview, Ruth reflected on the importance of having peer support at this time. As she said, "I mean you can definitely not do the application solo, you could capitalize DEFINITELY in the transcript. All the letters because had there not been somebody doing it with me, I don't know what I would have done." She often met with her cohort mates at weekend Boot Camps to work on her application materials. Boot Camp events helped Ruth focus on her work and become motivated by others doing their own work. She noted, "When we did those boot camps, you're sitting in a room with ten other people who are working on their application. It's really hard to get distracted. You're not gonna sit there and play computer games for eight hours. You gotta have to work on the application." While Ruth benefited from working with the seniors in her cohort, she also discussed developing a strong bond with another scholar in the program. She worked with him closely in almost every part of

her application process and eventually enrolled in the same master's program. She shared a candid reflection with me regarding her relationship with this individual:

> Having someone who was not only in the same Scholars Program, but also in the same field of work with similar research interests, who in real life technically would be my competition 'cause we're applying to most of the same programs and everything. But in reality, he was my partner. Even when we do apply to the same things, we're rooting for each other. I think when somebody who's doing it with you at your level looks at you and says, 'Dude you can do this, we can do this.' I think it meant a lot to me. I wouldn't have moved forward had I not had that support system.

Through Ruth's reflection, we gain insight into how powerful a peer relationship can be in one's journey of navigating the graduate school choice process and validating her path.

Participants' narratives were also consistent with my program event observations. Current students at a Family Gathering event and senior bi-weekly meetings asked program staff to meet in small groups to set up informal accountability sessions. During a breakout group at the Family Gathering meeting, I observed participants asking one another to schedule several dates in August to work virtually on their research and personal statements. One person told the group, "I really need accountability from y'all. I don't know where to start, but I know I have examples of things that can really help us all." The others in the group agreed with non-verbal and verbal cues. As a group, they scheduled standing meetings with agenda items set for each week.

Alumni and Older Scholars as Possibility Models

Possibility modeling with alumni and older peers impacted the first stage of the GSC process, where students typically develop a desire and the motivation to attend graduate school. As the participants learned about graduate school, they all disclosed feeling doubtful about

whether graduate school was the “right choice” for them. In spite of feelings of doubt and uncertainty, participants looked to alumni and older scholars who shared similar backgrounds to imagine what could be if they pursued a graduate degree.

As a Pre-McNair student, Ayanna was invited to several conferences and workshops where program alumni had the opportunity to speak. As she contemplated her enrollment into the McNair Program and whether or not graduate school would be the next, best step for her, she recalled hearing the alumni’s stories of navigating graduate school and where they are now in life. Ayanna said, “The more I heard people's stories, it became stronger and stronger the more that I wanted to get a Ph.D.” Interactions with program alumni provided Ayanna with the motivation she needed to enroll in the UMBC McNair Program and to receive the support necessary to pursue a doctoral degree.

Similarly, multiple participants discussed how interactions with alumni and older peers influenced their desire to attend graduate school and helped them resolve their worries about success. Alicia explained that alumni were considered sources of inspiration and what would be possible for them. Alicia attended guest speaker panels and conferences hosted by the McNair Program. At these events, Alicia listened to program alumni discuss their journeys into graduate school and where they are currently in life. Alicia shared how their impression of graduate school changed after hearing alumni stories at McNair conferences:

> I identified a lot within their journeys, their stories, and how they have their struggles, but then breakthroughs. When I saw what they achieved and how they were on a platform now, they motivated me. I knew that not only was it possible that I can do it, but with that platform, you can also give forward more or you can inspire more people just as they had inspired me.

Alicia's interactions with these alumni became an empowering and inspirational force. Not only was Alicia able to resonate with the journeys of their older peers, but they also felt affirmed that different pathways into graduate school could be within their reach. As Alicia described it, it was the "If they can do it, I can do it" mentality.

Like Ayanna and Alicia, Dante also felt validated and affirmed in his journey to graduate school when speaking with program alumni. At McNair Monday events, the program staff hosted graduate student panels of alumni who graduated within the last three years. Dante attended graduate student panels to learn more about graduate school from his older peers and build a network of support. Dante reflected on these meetings and his earliest connections with alumni on the graduate student panels:

> The conversations helped us think and imagine ourselves as graduate students. It was really helpful to see their careers develop. I think I'll always be watching them and think they're at the horizon of the sea. It really helped me visualize that people who look like me and are from places like where I'm from, can do this work and be successful while being themselves.

After meeting with alumni, Dante felt assured that he too could follow the path to graduate school and succeed in that endeavor. He was inspired by seeing older scholars bringing their whole selves to academic spaces and knowing that he could also do the same as he continued to climb the ranks of academia.

In these cases, alumni and older peers increased participants' desire and motivation to pursue graduate studies. Relationships and interactions with immediate peers also inspired one participant who was still considering graduate school at the time of the study. Sandra, who took a gap year, described a close relationship with a cohort mate who has enrolled in a graduate school

in which her predoctoral program is housed. Sandra pointed to her friend as a reference point for what graduate school will look like. She explained,

> Knowing that she came from a similar low-income background as me, and we're both from a humble UMBC going to this Ivy League school. I have her to ground me. I am excited that I'll be able to see grad school through her eyes before I have to go, because she's starting her program already.

Being able to live vicariously through her friend's first year in graduate school, Sandra disclosed that she could anticipate what it would look like for her. Given that Sandra is interested in attending the graduate school where she is employed as a pre-doc, she noted that she could ask her friend whether this program context will be a good fit for her. Participants who spoke to alumni, older scholars, and even those one step ahead in graduate school were exposed to a world of opportunities that could follow from pursuing a graduate degree.

Alumni and Older Scholars as Purveyors of Information

In addition to possibility modeling, alumni and older peers in the program were also purveyors of information on the graduate school choice process, specifically during the search and choice phases. McNair alumni would often return to support McNair conferences, volunteer to be a summer volunteer, or stay connected through the program's Discord and Band chats. Interactions with alumni and older peers of the program provided participants with knowledge different from what they received from program staff and faculty mentors. Darnell noted, "You are going to learn more about what it means to be a graduate student from people who are actually in the programs, rather than faculty or staff who may share more of the bureaucratic things like policies and procedures." Each participant pointed towards peers in the cohorts above them and program alumni as individuals that they could seek out for information regarding

preparing for application season and things to consider when selecting a graduate school. In these spaces, alumni would also assume the role of informants on life as a graduate student, sharing advice that shaped participants' expectations about life in and after graduate school. According to Darnell, "often the best guidance about graduate school came from alumni of the program." Another participant, Cameron, recalled a time when he met with program alumni to discuss his research interests, relationships with mentors, and life in graduate school. From his conversations with alumni, he learned what to expect after being accepted into different programs, how to narrow down one's choice to select a program, and what alumni experienced in the first-year of their graduate programs. Cameron noted that "alumni did not shy away from sharing their positive and negative experiences. Everything from what fun things in the area are there, or is there good food on campus to racism and sexism in the different programs." This information would be quite valuable for Cameron and others as they began to think about the transition into graduate school.

In Cameron's eyes, these realistic conversations opened his eyes to factors he would have to consider as he transitioned into the next phase of his academic career. Cameron identified several pieces of advice he received from alumni during one of the program events. He shared a piece of advice that he thought was particularly "insightful" at the time: "They emphasized on seeing yourself there in the location of the school. Do you see yourself lasting all seven or eight years for the grad program? Do you see yourself being fulfilled at the school overall?", which means that Cameron would have to be able to envision himself at graduate school to find which school would be the best fit for him.

Similarly, Alicia tapped into the program's alumni network to obtain more information regarding graduate programs that they were interested in pursuing. In their interview, Alicia

spoke very highly of the community of support they had developed over the years at UMBC and sought an institution that could offer the same degree of support. Alicia strategically spoke to alumni like Dante, who were attending graduate programs at institutions Alicia was interested in visiting and applying to, to get an insider perspective on the climate and community. Alicia asked alumni about the institution's context, department culture, climate, and different activities in the area and places to live off campus. Alicia explained the importance of speaking with alumni about prospective programs because,

> Having alumni who were at all these schools I was applying to helped. I was like, 'Okay, they're obviously thriving or surviving there. So it must be good.' Especially having a network there was like, 'I'm not just gonna go show up there like a stranger with no one who's gonna be able to defend me, or at least we'll be sitting on their couch and crying when I'm tired of dealing with administration.' Now I'm very well-networked at [university redacted], and that's part of the reason I went.

Talking with alumni was crucial for Alicia to get an insider's perspective on different institutions and affirmed their desire to have a support network once they transitioned into graduate school. Alicia wanted to attend a graduate program where there would be folx they could reach out to for emotional support and external advocacy when challenges arose . Ultimately, Alicia selected an institution where other UMBC McNair alumni had once enrolled or are currently enrolled.

In summation, peers helped shape how participants navigated the different phases of the graduate school choice process. Across participant narratives, cohort mates, near peers, and alumni of the program were characterized as critical sources of encouragement, support, motivation, and information. Each participant benefited from the community of peers in their sphere of influence.

Part Three: Facilitating Peer Relationships through Program Leadership and Design

Peer relationships are an intentional and integral part of the UMBC McNair Program. Program leadership, values, vision, and design have variously facilitated how peer relationships are cultivated in the program. In the following sections, I discuss how program leadership styles and changes impact the strength and development of peer relationships in the program. Afterward, I discuss how student-led programming facilitates stronger bonds, peer mentoring, and benefits among alumni and current students in the program.

Leadership Vision and Values Influencing the Collective Experience

At UMBC, the cohort design strengthens peer relationships and interactions over time. The UMBC McNair Scholars Program offers several events throughout the course of an academic year that create opportunities for students to work alongside one another on their graduate school applications. The program's vision and design were very intentional and developed to center the student/scholar and peer-to-peer experience. Like other McNair Programs, the UMBC McNair Program can serve a cohort of up to 30 students per academic year. The cohort-based design of the program allows students to work in small, collaborative groups in their pursuits to graduate school. In cohorts, students can compare their progress through the GSC experience amongst their peers. Participants described looking to their peers to gauge their progress towards meeting different goals along the graduate school choice process, including completing personal statements, contacting faculty, submitting applications, and accepting graduate program offers.

In addition, the program staff intentionally designed program events to help cohorts create a shared sense of investment and belonging in the UMBC McNair community. Among program staff, there was a shared commitment to creating a "collective experience" among

students that placed peer relationships at the center of the GSC process. The "collective experience" was articulated through interviews and program event observations as principles of support, vulnerability, accountability, reciprocity, and community. Using these principles, the program staff creates program events to curate spaces for students to work both collaboratively and independently on their graduate school application materials. Program staff facilitate and design events where students are brought together in community and guided to invest in one another's success.

Program staff rationalized their decision to create program events that center on the peer-to-peer experience to create synergy among students around their drive and commitment to pursue graduate school and find community with one another. In his interview, Malachi discussed the format and expectations of program events, particularly the monthly boot camps. At each boot camp, Malachi and other program staff provide students with a form to identify their goals and what they hope to accomplish during the event. At the end of the boot camp, the students share what they have accomplished and what support they need from the community. Malachi shared:

> We give them the chance to say verbally what they need help on. Are they willing to help other people? We do believe in the collective experience and that you're there to assist each other and not just take... And so what are you willing to help people and how are you helping people? And so they are reading each other's statements, they are talking through the challenges, et cetera, in those spaces as well."

Malachi's comment demonstrates that students are encouraged to be in relationships with each other and reciprocate support.

In a follow-up response, Malachi further highlighted the importance of students being open to sharing their progress and where they are in their GSC journey with the community. At monthly family gatherings, Malachi reported, “We spent the first 15 minutes trying to figure out what people were doing... That's our accountability. If you aren’t telling folks where you are, are you really a part of this family?.. They know we won't start until we at least get a handle on most of the people and know where people are and what's going on with them.” There is a clear expectation that each community member must share the bright spots and challenges they are experiencing. Malachi’s comment reinforces that the students are part of a community built upon support, vulnerability, accountability, and reciprocity. Malachi continued, “Once you create this community and they feel that connectedness, the students really do value the community.” Malachi’s observation regarding the connectedness among members of the UMBC McNair Program community was consistent with the themes in alumni participants' narratives described in the previous section.

Rashad, the graduate program ssistant, also described how the program creates and maintains bonds among peers. He reported that peers often connect formally at program events or informally on their own accord. Specifically, at program events, Rashad noted:

> I see peer interactions really show up when we have big discussion-based activities. There's a lot of respect for where people are coming from, whether it's talking about what was going on in their research or what's going on in their world. The scholars have the ability to hold space for one another in a way that just makes the whole thing really work just very well. And I've been in the room when it's like students have opened up, andthe love there is really phenomenal.

Rashad's statement validates Malachi's claims that the program encourages students to show up for one another by offering support or a listening ear. The connections students develop during program events create a solid foundation for relationships they can tap into when navigating the GSC process. Through discussions and time spent in program events, students become invested in one another's journeys, stories, and lived experiences.

Strong peer relationships have not always been present in the UMBC McNair Program. The emphasis on strong peer relationships and peer mentoring has only recently been intentionally cultivated by program leadership and staff. Program staff and alumni interviews revealed fragmented experiences in the program that were attributed to a shift of leadership. Alumni participants who graduated in 2018 and 2019 reported joining the McNair Program when the culture had been "very individualistic". For example, Akira and Hamed recalled their earliest McNair experiences as underwhelming and quite isolating.

Akira joined the program relatively early in her undergraduate career. As the youngest in her cohort, Akira did not have the opportunity to bond with her older peers. When a new program director joined during Akira's last year, she noted changes in the program. Akira reported:

> Malachi has instituted a lot of things that made it more, in my opinion, has made the program a little more prestigious than it was before at UMBC. There's like a big orientation stuff that he does in the beginning, now there is like Pre-McNair people, Friends of McNair. There's all these workshops that they do to get people like opportunities to apply to grad school, to help each other to do their resume, apply to internships, mentoring and all that. He made them a big deal.

Akira notes how leadership changed the program by increasing the number of peer-to-peer activities and interactions through prioritizing the Pre-McNair Program, Friends of McNair Program, and graduate school preparation workshops. When the program changes were implemented, Akira could not benefit from the many changes as she had already moved off a semester before graduation. Thus, Akira's experience connecting with her peers in the McNair Program was limited on campus.

Like Akira, Hamed also encountered a lack of community while in the McNair Program. Hamed's cohort was on the smaller side, and there were few to no program events available for peers to connect with one another. There was also an absence of alumni support. In his interview, he offered several critiques from his time in the McNair Program that emphasized his desire to have connected with alumni of the UMBC Program and other McNair programs in the country. He voiced,

> I would have a network, especially in the smaller McNair programs. :There would be a stronger alumni network or people from other schools that have McNair Programs. I would make sure there's a broader connection there, so people can connect with people of similar age, similar application cycle, which I didn't have.

Hamed's critiques reveal that his experience in the program was limited because there were not many peers with whom he could connect at the time. Over the years, Hamed's desires were actualized by the current program leadership and staff.

Under new leadership, community and peers became central to the program's vision, design, and mission. Marie and Malachi's interviews provided insights into how the change in administration altered the function and utility of peers in the program's design. Marie disclosed that nearly all program events have a peer-to-peer component and have been newly implemented

in the last three years. When he first worked with the program, Malachi argued, “There was a lot of uncertainty and students didn't really have a clear path of what the program was doing. Under my administration, as a collective cohort support system, a community has been created …even when I was a student and as a cohort, we didn’t know each other, we came in and did the classes and that was it. It was never really more than that.” Now with this new vision and program direction, the program staff have been able to create more buy-in and participation among students to engage in program events as well as with one another.

Changes in leadership fostered different experiences among participants, and more recent alumni reported strong friendships and relationships with their peers. Ultimately, leadership style and vision can become a a huge contributor in facilitating the utility of peer relationships in the GSC process.

Program Design: The Role of Student Workers in Encouraging Peer Support and Mentorship

Another unique facet of the UMBC program that helps contribute to the collective experience is the infusion of student staff and alumni into program leadership roles. The program calls for current students and alumni to hold leadership positions that encourage peer mentoring and frequent peer interactions. Through student-led programming, participants described leadership positions allowing them to mentor younger peers on academic challenges and graduate school preparation.

By incorporating students into various leadership roles, students can help shape the program activities and contribute to the peer-mentoring culture. As ambassadors, pod leaders, student workers, and alumni mentors, students are encouraged to support their peers in several ways, including sharing information and resources about the GSC process and graduate school,

creating and leading program events, and socializing incoming students into the McNair community. Current students and alumni not only learn more about the GSC process in these roles, they also guide those who follow behind them in what to expect for program requirements and graduate school life. By involving students and alumni into other students' development, the McNair Program is able to create a strong peer mentoring culture as well as enhance students' peer-mentoring skills.

Several participants discussed their experiences as student ambassadors, orientation leaders, and alumni mentors and how they benefited and learned from these roles. Commenting on his role as an alumni mentor, Dante said,"For the last two summers now, there has been an opportunity for alumni to serve as mentors over the summer term to help McNair Scholars prepare for the academic year to come and also for the folx who are gonna be in an application cycle to try to kick start that process." Dante's experiences as an alumni mentor assisted younger peers in the McNair Program through their GSC process. He elaborated further on his experience as an alumni mentor: "I try as often as I can to be involved where I can and in ways that are reasonable to be part of the pipeline. I can be that person who is a familiar person in the [region] if they [McNair peer] end up nearby, but also I navigate this process and deal with a lot of the challenges that I anticipate fellow students will face, so really trying to be a resource to them." As someone who has navigated through the process and is a current doctoral student, Dante shares his knowledge and experience with those coming through the pipeline.

Similarly, Ayanna chose to mentor younger peers. Ayanna explained, "I became an alumni mentor to give forward. I always appreciated when the alumni came, so it's just an opportunity to give forward, and then I always say, 'God willing, I want to be some sort of professor one day.' So I liked that experience of mentoring students or being in that position to

help my peers." Ayanna's interest and intentionality of being involved in the McNair Program as an alumni mentor was rooted in her passion for mentoring and her commitment to giving back to the community that had helped her when she was navigating the GSC process. She has benefited from working with students by learning how to mentor her near-peers.

Like Dante and Ayanna, other participants held McNair student leadership positions as ambassadors and orientation leaders. For instance, Sandra always wanted to find ways to give back to her community of support. When the opportunity to become an orientation leader came about, Sandra leaped at the chance. Sandra elaborated, "It wasn't until I became an orientation leader that I helped the incoming McNair Scholars, or at least I felt like I did something impactful. I did not get to have an in-person orientation when I started the program because of the pandemic, so I really wanted to know what that was like." Sandraalso reflected on the support she provided to peers as an orientation leader,

> My time as an orientation leader was a bit almost like an academic therapy session where you're talking about how your class is going. Is there anything you're struggling with? What are your thoughts and your professors? That sort of thing, I got deep and personal with the scholars..I was able to help them and give them those academic and graduate school preparation resources.

As an orientation leader, Sandra welcomed her peers to ask personal questions to help them think about pursuing graduate studies and navigating academic challenges. Others like Sandra who held leadership positions working directly with younger peers reinforce the strong peer mentoring environment within the UMBC McNair Program.

As leaders and alumni of the program, participants engaged in sensemaking and sense giving about graduate school with their peers inside and outside of their immediate cohorts.

While there are nuances in their experiences as ambassadors, orientation leaders, or alumni mentors, each participant's narrative reflects their individual commitment to being involved in the program in order to help mentor others. Rashad also observed these sentiments: “A lot of the scholars who have been in the program always wanna reach back, and it's like, when I succeed and you succeed and vice versa. That's been kind of the energy… it's like we all have room to succeed and improve here, and we can pour into one another.” The desire to pour into others as others have poured into them was a deep-rooted sentiment and part of the participatory nature of the program. Several students at the end of their interviews disclosed that they wanted to participate in the study to ensure “that someone heard their story” as it “could help others.” In this case study, it was evident that program leadership and administrators have designed student-led roles within the program to support scholar-to-scholar connections, care, and investment among participants and their peers.

Summary of Chapter

The analysis of participants' interviews, program observations, and document analysis revealed how Students of Color in the UMBC McNair Program navigated the graduate school choice process and how peers in the program influenced their process. While participants came to the UMBC McNair Program with varying degrees of knowledge about graduate school, they shared similar motivations and concerns about pursuing a graduate degree. I discovered that while a graduate degree signified a tool for professional mobility, academic exploration, and professional power, participants were concerned about committing more time to higher education and funding. In addition, participants described their application and choice process systematically as ascribed by the UMBC McNair Program.

Participants highlighted several factors that contributed to how they searched, applied, and enrolled in graduate programs. Common factors included interpersonal fit with potential faculty advisors, quality of graduate student interactions, funding packages, geographic location, campus, and program climate. In addition to highlighting the enrollment factors that participants shared in common, this study's findings illuminate four participants' decisions to explore other opportunities before attending graduate school immediately after completing college. These participants sought out gap-year opportunities to enhance their professional skillsets, refine their research interests, and be more financially comfortable before returning to their academic studies.

Additionally, this analysis demonstrated that participants benefited from peers who shared similar identities and lived experiences in their graduate school choice journeys. Peers in their immediate cohort proved to be effective sounding boards, motivators, and accountability partners during the search, application, and enrollment phases. Near-peers and program alumni served as possibility models and key informants about graduate school during the aspiration and enrollment phases.

The analysis also uncovered that peer relationships are an intentional and integral part of the UMBC McNair Program. I found that current program leadership has incorporated and reinforced peer relationships in the McNair Program through programming efforts and rhetoric. Although programming and leadership have not always incorporated scholar-to-scholar learning opportunities, newer staff have designed programming that encourages scholar-to-scholar connections. As a result, the program has created a strong sense of community and solidarity amongst participants.

Chapter 6: Study Overview, Discussion, and Implications

With a growing interest in broadening participation and access in graduate education, federally funded interventions have been established to increase the number of historically marginalized students going to and through graduate education (Council of Graduate Schools, 2008). Interventions, like the McNair Scholars program, are designed to support and prepare historically marginalized students in their pursuit of graduate school through scholarly activities, research, and advising (Council of Graduate Schools, 2008; McNair Scholars Program, 2020). While access to graduate education has been traditionally centered around equipping students through these mechanisms, less attention has been paid to how the social networks student establish within these programs, namely their peers, assist in their progress towards graduate education (Adedokun et al., 2013; Bowman & Holmes, 2018; Cuellar & Gonzalez, 2019; Hanson et al., 2016; Lindholm, 2004; Luedke et al., 2019; Ramirez, 2013; Rodriguez Amaya et al., 2018; Strayhorn, 2010; Trolian & Parker, 2017).

Hence, the purpose of this study was to examine whether and how peer interactions and relationships developed within a McNair Program influence the graduate school choice processes of Students of Color. Graduate school choice is defined as a process in which an individual decides to pursue any post-baccalaureate degree program at the master's or doctoral level (English & Umbach, 2016). More specifically, the study sought to address three central questions:

1. How do Students of Color who have participated in a McNair Program describe their graduate school choice process?
2. How, if at all, do students' McNair Program peers influence the ways they engage in the graduate school choice process?

a. How do they provide and receive information about post-baccalaureate plans?

3. How do McNair Programs facilitate or inhibit the influence that peer relationships play in the graduate school choice processes of Students of Color?

Through their responses to demographic questions, three program observations, document analysis, and 17 semi-structured interviews, participants shared their understanding of the graduate school choice process and the role that their peers and the McNair program played in their navigation of it.

This final chapter will provide a summary of the study and major conclusions drawn from the analysis of the findings. In the first section of the chapter, I summarize the background and context of the study, frameworks, and methodology. In the second section, I offer a summary of the findings, followed by a discussion of this work in the relationship to extant research. I conclude the chapter with implications for future research, theory, practice, and policy as well as final thoughts.

Summary of Context and Problem

People of Color comprise a significant portion of the United States population, yet their presence in graduate education is not representative of this.[18] In fact, only 24.1% of the graduate student population identifies as domestic Students of Color[19] (Okahana & Zhou, 2019; Walsh et al., 2021). Students of Color are most disproportionately underrepresented in STEM graduate programs and fields of study that are associated with the most lucrative job prospects and earning potentials (American Council on Education, 2019; Council of Graduate Schools, 2021; Walsh et

[18] In this study, People of Color and Students of Color are individuals who identify as Black, African-American, Latinx, Afro-Latinx, Chicanx, Asian, Asian American, South Asian, Middle-Eastern, Pacific Islander, Native American, bi-racial, and multiracial.

[19] In this dissertation, the primary population under study are domestic Students of Color.

al., 2021). The McNair Program has been recognized as a valuable intervention to increase graduate school access for Students of Color. The McNair Program is a federally funded TRIO Program designed to encourage high-achieving students from low-income, first-generation, and racially minoritized students to pursue doctoral degrees (McNair Scholars Program, 2020). Existing studies on the McNair Program have examined how programmatic elements (such as faculty mentoring, exposure to undergraduate research and scholarly activities, and targeted advising) shape graduate school enrollments (Fifolt et al., 2014; Gittens, 2014; Posselt & Black, 2012; Restad, 2013; Scholars, 2020; Smell, 2019; Waiters Martinez, 2014). However, there are aspects of the McNair Program experience that are unique to its participants and have not been fully explored. For example, the McNair Program provides graduate school preparation to a cohort of undergraduate students and a network of peers from partner institutions. Little is known about these relationships or their impact. Higher education scholars have found that peer relationships have positive effects on the development of college aspirations and enrollment (Cabrera & La Nasa, 2000; Cox, 2017; Deo & Griffin, 2012; Palmer & Gasman, 2008; Stanton-Salazar, 2011; Villalpando & Solórzano, 2004; William & Kristan, 2006). This study fills in an important gap in the literature by exploring if and how peer relationships affect graduate school access and choice, with Students of Color in mind.

Although preparation for and barriers to graduate education have been intimately studied, few researchers have examined how Students of Color navigate these issues or how they make decisions about attending graduate school. Existing literature focusing on graduate school choice for Students of Color is limited; scholars have argued that extant literature often assumes that the choice and decision-making process is the same across racial and ethnic groups (Cuellar & Gonzalez, 2019; English & Umbach, 2016; Lindholm, 2004; Ramirez, 2013; Strayhorn, 2010).

However, Students of Color are impacted by their social and political worlds in nuanced ways that white students are not, which may influence how Students of Color navigate the graduate school choice process. With this in mind, this dissertation explored how Students of Color within a McNair Program navigated the graduate school choice process and how their peer relationships in the program influenced their journeys. This study builds on existing scholarly work and knowledge about graduate school access by centering the voices and experiences of Students of Color, who have gone unidentified and underrepresented in this field of research (Cuellar & Gonzalez, 2019; Ramirez, 2013).

Overview of Guiding Frameworks

English and Umbach's (2016) Graduate School Choice (GSC) Model and Social Capital Theory served as the guiding frameworks for this study. The frameworks informed the development of research questions, interview protocol, and data collection and analysis. The English and Umbach's (2016) GSC Model was chosen because it is the most recent and comprehensive graduate school choice framework available. The GSC model suggests that a student's decision manifests in a three-phase process nested within four layers of a student's background, experience, and context. The phases of the model are (1) the development of graduate school aspirations, (2) application to graduate schools, and (3) matriculation into a graduate program. The four layers consist of (1) habitus, 2) the context of the undergraduate institution, 3) the graduate school context, and 4) the social, economic, and policy context.

To date, the GSC model has not yet been applied to studies on graduate school access and choice and is grounded in quantitative research. Since the model was created on the basis of a literature review and then tested empirically to evaluate the applicability of the model, my work had the opportunity to further validate and expand the existing model. In the study, the GSC

model helped to map out participants' graduate school choice journeys and their ultimate decision of whether or not to enroll in a graduate program immediately after college graduation. While the framework was the guiding tool to think about the graduate school choice process, I remained open to how alumni participants defined the process for themselves.

Social capital was the second framework that guided this study. In the GSC, social capital is a part of the habitus layer, influencing graduate school choice. Social capital refers to the resources and information individuals acquire throughout their lives from their interpersonal relationships and networks (Bourdieu, 1986; Coleman, 1990; Crawley et al., 2019; Lin, 2001). The social capital theory was chosen as a supporting framework in this study because it emphasizes the role of social networks on life outcomes like graduate school enrollment. Social capital provided a lens to identify how peer relationships in the UMBC McNair Program influenced the graduate school choice processes of Students of Color as well as how information and knowledge were transferred among peer groups. Utilizing these frameworks, this dissertation explored how Students of Color within a McNair Program navigated their graduate school choice processes and the extent to which their peers in the program shaped their journeys.

Summary of Methods and Data Analysis

I employed an exploratory case study methodology to better understand whether and how peers influence how Students of Color within a McNair Program make decisions about attending graduate school. In this study, the case was a McNair Scholars program housed within a minority-serving institution, the University of Maryland Baltimore County (UMBC). Utilizing case study methodology allowed me to examine the nature of complex social processes using an exploratory lens; in this case, the extent to which peers influence Students of Color in a McNair Program's decision to attend graduate school (Merriam, 1998).

Consistent with case methodology, I relied on various sources of data to inform this study. I collected participant data from demographic questionnaires and individual semi-structured interviews. Each interview lasted approximately between 45 and 60 minutes. Two interview protocols were developed for meetings with alumni and program staff participants. The interview protocol for alumni consisted of questions related to relationships with peers within the McNair Program and decision-making processes about attending graduate school. The interview protocol for program staff captured program characteristics, as well as how the program context does or does not help cultivate peer relationships among Students of Color. The sample consisted of 3 program staff and 14 Students of Color who were alumni of the UMBC McNair Scholars program. The alumni participants were either enrolled in a graduate program, preparing to enroll, or taking a gap year to work at the time of the study.

Additional data included event observations and program documents and artifacts. I conducted three McNair program event observations: one Family Gathering/Saturday Academy meeting and two bi-weekly senior meetings. Program documents and artifacts included program guides, graduate school preparation toolkits, and curriculum maps. Observations and program documents provided key contextual information about how the UMBC McNair Program fosters peer interactions and relationships during graduate preparation activities. Each data source assisted in the development of a rich and thick description of the case profile, findings, and overall triangulation of data points.

Participants were selected through purposeful sampling, followed by snowball sampling (Merriam, 1998; Yin, 2014). Alumni participants met the following criteria: (1) identify as Black, African-American, Latinx, Afro-Latinx, Chicanx, Asian, Asian-American, South Asian, Middle-Eastern, Pacific Islander, Native American, bi-racial, or multiracial; (2) Recent alumni

from the UMBC McNair Program; (3) at least 18 years of age and have graduated with a bachelor's degree between 2018 and 2022. Alumni that did or did not enroll in a graduate program were selected as participants. Additionally, I interviewed three staff members that fulfilled various administrative and leadership duties of the UMBC program.

After each interview, I wrote a one-page memo to reflect on the interview experience and identify patterns within the data. This memoing allowed me to engage in initial sensemaking that later informed the design of the codebook used for this study (Saldaña, 2021). The data was analyzed through thematic analysis in three phases. To begin the analysis process, I reviewed all data and memos completed during the collection phase of this study. After reviewing the data, I developed an initial codebook. The initial codes were developed using an inductive and deductive approach (Merriam, 1998).

In iterations, the codebook was then applied to each participant's transcripts, followed by program documents and observation notes in Dedoose. In the second phase of analysis, I engaged in multiple rounds of axial coding. During axial coding, I refined emerging themes and concepts that I developed during my initial coding process (Creswell, 2018; Mertens, 2019). Through axial coding, I grouped codes into categories that were refined into themes that were reported in the findings chapter of my dissertation (Saldaña, 2016). During phase one and two, I engaged in peer-debriefing and member-checking to assess my preliminary interpretations of the findings and emerging themes. In the last phase, I then wrote a comprehensive case profile of the UMBC McNair Program that included institutional characteristics, program design and mission, and an overview of program activities and curriculum (Merriam, 1998; Yin, 2014).

Summary of Findings

In this section, I summarize the study's key findings by each research question. The findings were informed by several data sources including semi-structured interviews, observations, and analysis of program documents and artifacts.

Research Question 1: How do Students of Color who have participated in a McNair Program describe their graduate school choice process?

Participants described their graduate school choice process in ways consistent with extant English and Umbach's (2016) GSC stages. To reiterate, the three phases include: (1) the development of graduate school aspirations, (2) application to graduate schools, and (3) matriculation into a graduate program. This may have been in part due to the mission, design, and model of the UMBC McNair Scholars Program. The UMBC McNair program was designed to encourage graduate school attendance; thus, the program naturally provided a structured process supporting students in their interest, search, application, and enrollment into graduate school.

In this study, participants were asked to share their earliest memories of their aspirations about graduate school. Overall, students were not aspiring to attend graduate school before starting college due to the lack of exposure to information about graduate school. Most first-generation participants shared learning about graduate school from faculty, peers, and members of the McNair Scholars Program in college.

Each participant discussed what motivated them to pursue a graduate degree. Most participants were motivated to pursue graduate studies for two core reasons. First, many participants discussed the need to obtain an advanced degree in order to have career mobility, reach their professional goals, and legitimize their presence in their respective fields. Obtaining a

graduate degree was described as a necessary tool to enhance their prospects of getting competitive jobs and salaries. Secondly, several participants explained that a graduate degree was important because it would allow them to use their skills to uplift their communities. Being from a marginalized and/or first-generation background, participants developed a desire to uplift their communities and the generations that followed them. Some wanted to use their future graduate degrees to do research that would transform societal systems. Others wanted to become role models and mentors to teach others about accessing graduate school.

Participants also anticipated challenges if they attended graduate school. Nearly all of the participants identified finances as a worry that factored into the development of their graduate school aspirations and later influenced their decision-making. Participants were concerned about financing their education, incurring student loan debt, and being able to financially assist family members and loved ones during graduate studies. In addition, participants expressed concerns about remaining in school for additional time and committing to one discipline. They also shared fears about delaying work experience, being bound to a singular career path, committing to one discipline, and managing workload expectations and personal commitments.

After sharing their perspectives on graduate school aspirations and anticipated challenges, participants described their search and application process. Participants followed a "traditional timeline," which was established and reinforced by McNair programming, which helped participants navigate the search and application process. First, they searched for programs in the summer into the fall of their senior year. Simultaneously or shortly after compiling their graduate school lists, participants worked on personal statements, research statements, applications, letters of recommendation, and scheduling appointments to meet with graduate school representatives and potential faculty mentors. Then, participants selected schools to apply

to based on various factors including: location and proximity to home, faculty and research agendas, rapport with faculty and undergraduate students, perceived program and institutional culture, and funding support.

Regardless of their enrollment decisions, each participant navigated their graduate school choice by weighing different factors that would impact their future. Participants who attended graduate school immediately after college identified four main criteria they considered when applying for graduate programs and deciding between offers: (1) interpersonal fit with faculty and students, (2) funding packages, (3) geographic location, and (4) perceived program and campus climate. These factors were not mutually exclusive; participants relied on multiple factors to inform their enrollment decisions. Of the 14 participants, four did not enroll immediately into a graduate program, despite having applied to graduate school during their senior year. The four participants decided not to enroll right away because they wanted to gain more professional experience, research skills, and save money before attending graduate school. Since their interviews, the four participants have enrolled, completed or intend to pursue a graduate degree.

Research Question 2: How, if at all, do students' McNair Program peers influence the ways they engage in the graduate school choice process? Sub-question: How do they provide and receive information about post-baccalaureate plans?

Participants' final decision to enroll into a graduate program were made with the support and advice of each participant's community. The UMBC McNair program staff urged participants to be open to advice from their academic communities and loved ones. Participants described seeking out the advice of their community of supporters, including peers inside and outside of the McNair Program as well as faculty, family, and McNair Program administrators

and mentors. Through conversations with various individuals in their lives, participants could make informed decisions about their future.

Across participant interviews, peers in the program were highlighted as assets throughout their graduate school choice processes (See Figure 5). Participants obtained information and resources about graduate school from their peers at informal and formal events supported by the program.

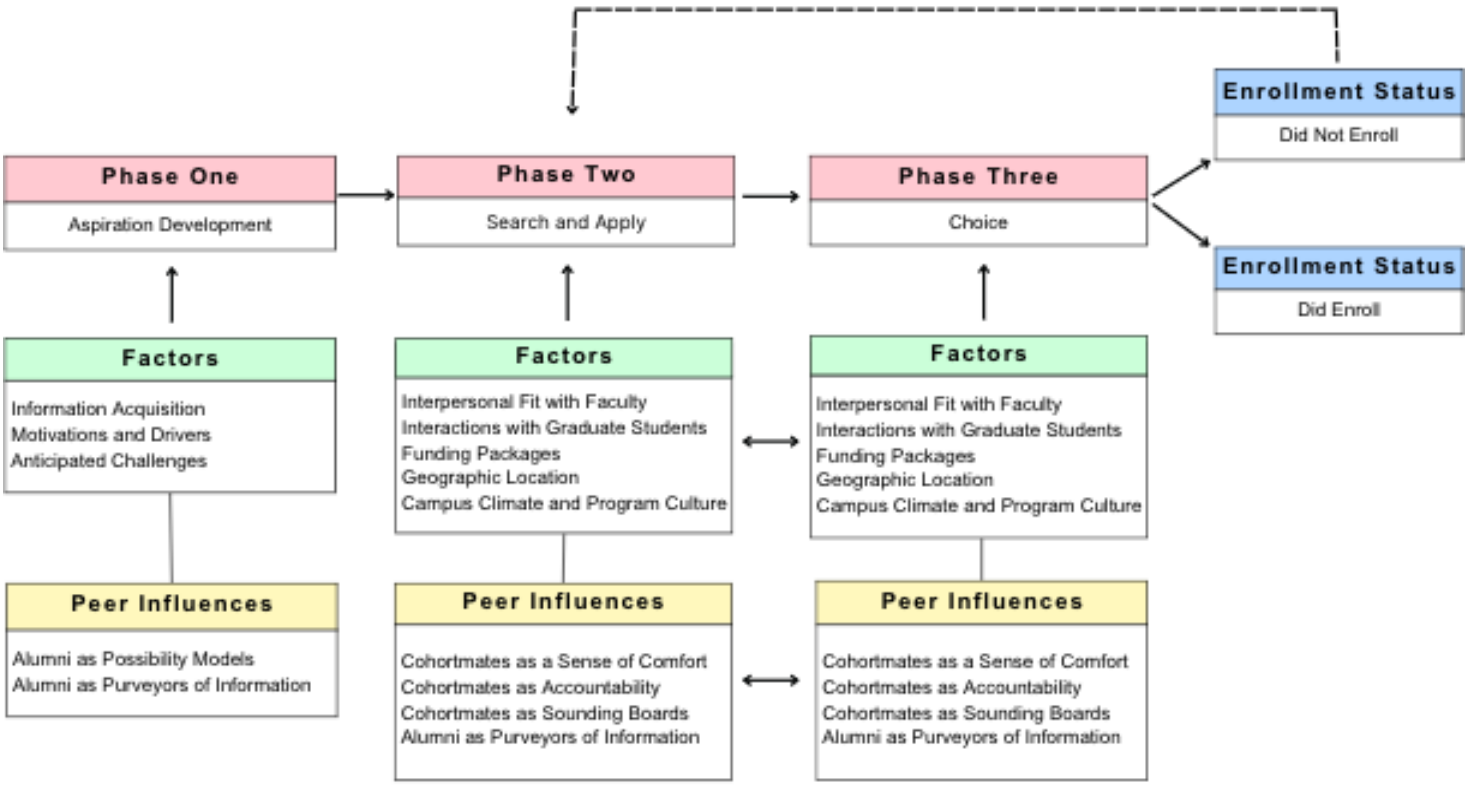
Generally, the study participants benefited from peers who shared similar identities and lived experiences (e.g. racial and ethnic identity, socioeconomic status, and generation status). Shared identities made it easier to connect and have critical conversations about the graduate school choice process. Grounded by their shared backgrounds, cohortmates, older peers, and alumni of the program influenced participants' navigation of the graduate school choice process. However, cohort mates, near peers, and alumni played distinct roles.

Cohortmates were considered (a) sources of comfort and socioemotional support, (b) motivators and accountability partners, and (c) sounding boards. Interactions with cohortmates were of particular importance when participants were searching, applying, and making enrollment decisions. For example, participants discussed spending a lot of time with their cohortmates at UMBC McNair events to complete various parts of their graduate school applications, McNair assignments and other academic projects.These program events were described as critical meeting spaces where participants could receive socio-emotional support from others, gain access to feedback on their application materials, and most importantly have accountability to complete their applications. In addition, cohortmates served as sounding boards for how individuals were thinking about their futures and graduate school options.With shared backgrounds and lived experiences, participants engaged in critical dialogue with cohortmates

about the intersectionality of their identities in relationship to their experiences with faculty, admissions, recruitment, and funding.

Figure 5.

Summary Map of Findings



In addition to the many roles that cohortmates played, participants identified alumni and older peers as (a) possibility models and (b) purveyors of information. Older peers and alumni helped shape participants' aspirations, search/application, and choice phases. As the participants learned about graduate school, all disclosed feeling doubtful about whether graduate school was the “right choice” for them. In spite of feelings of doubt and uncertainty, participants looked to

older peers and alumni who shared similar backgrounds to imagine what could be if they pursued a graduate degree. Furthermore, alumni and older peers in the program were also purveyors of information on the graduate school choice process. Interactions with alumni and older peers of the program provided participants with knowledge distinctly different from what they received from program staff and faculty mentors. Older peers and alumni provided insights on how to prepare for the application season, things to consider when selecting a graduate school, inside perspectives of different graduate programs and institutions, and life as a graduate student.

Research Question 3: How do McNair Programs facilitate or inhibit the influence that peer relationships play in the graduate school choice processes of Students of Color?

Peer relationships were identified as an intentional and integral part of the UMBC McNair Program. Program leadership has facilitated and, at times, hindered how peer relationships were cultivated for alumni participants in the study. Through their interviews, program staff participants shared a commitment to creating a "collective experience" among students that placed peer relationships at the center of the GSC process. The "collective experience" was grounded in principles of support, vulnerability, accountability, reciprocity, and community. Using these principles, the program staff created programs and events that encouraged students to work both collaboratively and independently on their graduate school application materials.

In addition, program staff created opportunities for peer-mentoring and peer connections across cohorts. Alumni participants described holding leadership positions in the program that allowed them to mentor younger peers on graduate school preparation and access. The connections students developed during program events create a solid foundation for relationships they tapped into when navigating the GSC process. Through discussions and time spent in

program events, it was evident that participants became invested in one another's journeys, stories, and lived experiences.

However, strong peer relationships have not always been present in the UMBC McNair Program. Prior program leadership did not emphasize building peer relationships. As a result, two participants reported feeling a lack of community while in the McNair program. Under new leadership, the remaining twelve participants reported having strong relationships with their peers during their time in the program and GSC process. Ultimately, leadership style and vision were found to be a double-edged sword for facilitating and inhibiting the utility of peer relationships during the GSC process in the UMBC McNair Program.

Discussion

The current study advances research on access to graduate education by providing an in-depth analysis of how Students of Color navigate their graduate school choice processes and the roles that their peers in relationship to their peers and community of supporters. In addition, this study extends current knowledge of how peers and McNair Programs can shape the educational journeys of Students of Color. In this section, I juxtapose the findings of this case study against extant research on graduate school choice and the influence of peer networks in the McNair Program, with Students of Color at the forefront of each contribution.

Scholarly Support and Aspirational Development

Participants in this study highlighted particular undergraduate experiences that informed the development of their graduate school aspirations. According to Woodward and Howard (2015), pre-collegiate and undergraduate experiences often help inform and enhance students' aspirations to attend graduate school. Particularly for Students of Color, engagement with faculty, exposure to mentoring relationships, and involvement in graduate preparation programs

can influence graduate school aspirations (Cuellar & Gonzalez, 2019; Gibbs & Griffin, 2013; Hanson et al., 2016; Inkelas, 2011; Ramirez, 2013; Strayhorn, 2010; Trolian & Parker, 2017; Winkle-Wagner & McCoy, 2016; Woodward & Howard, 2015).

According to DeAnglo et al. (2021), faculty play crucial roles in mentoring undergraduate students toward graduate level education. Several scholars have documented faculty mentors as institutional guides, networks of information regarding disciplines and academic hierarchies, and aids in boosting students' confidence and sense of fit about attending graduate school (DeAnglo et al. 2021; DeAngelo, 2009, 2010; Fuentes et al., 2014; Seymour et al., 2004). Consistent with the literature, study participants noted participation in undergraduate research activities and interactions with faculty advisors and mentors contributed to their interest in graduate school. Through interactions with faculty mentors in their departments and summer research activities through McNair, participants developed interest in a career in research and learned about graduate school as a means to get there.

In addition, graduate school aspirations were developed through participants' engagement in the McNair Program and their interactions. The UMBC McNair Program served as a gateway for many participants' post-baccalaureate possibilities. This finding supports extant research on the role that graduate preparation programs play in shaping graduate school aspirations of Students of Color (Carpi et al., 2017; Gittens, 2014; Humphrey et al., 2002; Ishiyama & Hopkins, 2003; MacPhee, 2013; Restad, 2013; Seburn et al., 2005; Stolle-McAllister et al., 2010; Strayhorn, 2010; Winkle-Wagner & McCoy 2016). As Winkle-Wagner and McCoy (2016) observed, Students of Color who engaged in graduate preparation programs acquired knowledge and skills from their program and peers that facilitated their learning about graduate school as a possibility. Workshops and events about pathways into graduate school contribute to student's

knowledge and interest in graduate education (Fifolt et al., 2014; Gittens, 2014; Posselt & Black, 2012; Restad, 2013; Scholars, 2020; Smell, 2019; Waiters Martinez, 2014). For example, participants reported obtaining valuable information and insights about graduate school from Family Gathering/Saturday Academies, boot camps, alumni guest speaker panels, and funding workshops. These spaces also operated as a space for participants to acquire information, resources, and support to their navigation through the other phases of the GSC process.

Furthermore, it is valuable to acknowledge that the UMBC McNair Program operates within a unique context that influences these programming opportunities available to students. High expectations for graduate school enrollment and competitive programming coexist on UMBC's campus. This particular McNair Program is embedded within a larger ecosystem that houses other esteemed programs such as the Meyerhoff Scholars Program and LSAMP. As a result, the UMBC McNair Program faces pressure to position themselves as a valuable resource to students. In order to do so, the program has provided intensive graduate school preparation and activities (as mentioned above) as well as tailored advising supports and mentorship for students. By focusing on empowering students through their community and comprehensive programming, the UMBC McNair Program can maximize their contributions to their students, campus community, and beyond. Moreover, students within this context may be more focused on pursuing graduate school than others generally would within different institutional contexts.

Graduate Degree Attainment = Empowerment and Social Change

Many researchers have studied the career aspirations of students, some turning their attention to what motivates historically marginalized students to pursue higher education and beyond. Scholars have explored the academic and career aspirations of Students of Color at the undergraduate, graduate, and post-doctoral level (Cabrera & La Nasa, 2000; Cuellar & Gonzales,

2019; Gibbs & Griffin, 2013; Garibay, 2015; Linder & Simmons, 2015). These studies have suggested that Students of Color emphasize social justice, advancing equity, and disrupting societal inequities in their occupational aspirations and intentions (Cuellar & Gonzales,2019, Solórzano & Delgado Bernal, 2001; Espinosa, 2011; Garibay, 2015; Garibay, 2018; Thomanet al., 2015; Yosso, 2000). In this study, interviewees' narratives revealed that obtaining a graduate degree could be perceived as a tool for empowering their communities and other marginalized groups (Cherwitz & Hartelius 2007; Cuellar & Gonzales, 2019; Linder & Simmons, 2015). Looking beyond the benefit of professional and economic mobility (English & Umbach, 2016), participants felt social responsibility to utilize their degrees as opportunities to be agents of change as faculty members, researchers, scientists, and mentors to other students (Cuellar & Gonzales, 2019; McGee et al, 2022).

These findings parallel the work of McGee and Bentley (2017) and Naphan-Kingery et al. (2019) on the career aspirations of Black and Latinx students in STEM. In a qualitative study of 38 Black and Latinx students, McGee and Bentley (2017) discovered that undergraduate students were motivated to pursue an occupation in STEM, not for the lucrative benefits, instead, as a means to help individuals within and outside of higher education. In their work, several students exhibited an “equity ethic.” “Equity ethic” refers to an individual’s desire to reduce societal inequalities and achieve social justice through their occupation (McGee & Bentley, 2017). Individuals from historically marginalized backgrounds are more likely to develop an equity ethic as a result of their navigation of oppression, discrimination, and recognition of others social struggles (McGee & Bentley, 2017). For example, Black and Latinx students typically come from cultures and backgrounds that are deeply entrenched with the values of collectivism. Collectivist cultures tend to place more value on investing in the group’s goals,

values, needs, and fate (Cox et al. 1991; McGee & Bentley, 2017; Oyserman & Harrison 1998; Triandis et al. 1988). Thus, enhancing the likelihood that Black, Latinx and other racially marginalized students' display interests in using their occupation as a means for effecting change.

In McGee and Bentley's (2017) study, equity ethic was conceptualized as a student's interest in helping racialized communities through mentoring, teaching, and role-modeling in academia through their future occupations. In addition, students who displayed "equity ethic" were interested in using their skill sets in the STEM workforce to affect innovation and change for the global society. Similarly, Naphan-Kingery et al. (2019) found that STEM doctoral students also expressed concerns for helping others and reducing inequalities in society through their occupation in order to achieve a more equitable society. As a result, those with equity ethics sync their occupational aspirations with their passions for social justice. Much like the students in McGee and Bentley (2017) and Naphan-Kingery et al. (2019), the participants in this study displayed an equity ethic and acknowledged that a graduate degree was a means to get there. The concept of equity ethic extends beyond the lines of STEM discipline for Students of Color. Findings from this study demonstrated that equity ethic was embodied by participants across various disciplines.

Search = More Than a Set of Steps: Sensemaking and Sensegiving

Graduate school choice research has explored how Students of Color develop aspirations to attend graduate school and factors they consider important in their enrollment decisions (Cuellar & Gonzalez, 2019; English & Umbach, 2016; Gibbs & Griffin, 2013; Hanson et al., 2016; Inkelas, 2011; Linder & Simmons, 2015; Ramirez, 2013; Rodriguez Amaya et al., 2018; Strayhorn, 2010; Trolian & Parker, 2017; Winkle-Wagner & McCoy, 2016; Woodward &

Howard, 2015). Less attention has been given to how students navigate the search and application process for graduate school. According to English and Umach (2016), the search and application process is typically characterized as a time when students search for academic programs based on different institutional attributes and characteristics. After that they compile a list of potential schools, engage in outreach to prospective faculty and programs, and complete application materials (e.g., personal statements, research statements, resumes) (Sanders & Landrum, 2012).

Participants in this study described their search and application process in ways consistent with previous research. Programs such as McNair often develop their programming around the different tasks to be completed in the timeline for admissions into graduate programs. The UMBC McNair Program provided participants with an overview of the different steps, tools, and resources that they may need when searching for prospective graduate schools. Participants described the program's tool-kits of resources (e.g., graduate school lists, email templates, personal statement examples) effective in their search and application processes.

This study also addresses how students made sense of the resources available and factors they considered when searching for schools. Participants consulted their cohort mates as they considered and weighed geography, faculty research, and funding opportunities. As an act of sensemaking, participants discussed the pros and cons of potential programs with one another as they searched for programs. These findings demonstrate that the search process is not only systematic, it can also be relational and interactive.

The findings of this study also illuminate how older peers and the alumni of the program engaged in sensegiving to participants in the study. Unlike sensemaking, which refers to how individuals or collectives think, sensegiving is a process in which an individual disseminates new

information and understandings to others in order to influence their sense of self or perspective on an issue (Foldy et al., 2008; Gioia & Chittipedi, 1991; Robert, 2021; Smerek, 2009; Will & Pies, 2018). Older peers and alumni of the program often provided participants with advice regarding how to search for programs, what factors to consider, and what questions to ask when meeting with prospective programs.

By having already navigated the GSC process, these individuals symbolized what could be possible for participants if they sought out graduate school as the next steps in their higher education journeys. By leaning into older peers and alumni as possibility models, participants may have developed more confidence and self-efficacy in their ability to get to and through graduate school. While cohortmates could engage in sensemaking around the different elements of the graduate school choice process, older peers and alumni helped validate their interest and presence in graduate education through sensegiving. The act of sensemaking and sensegiving with peers provide a more holistic lens to the search and application process for Students of color than what has been articulated by extant work.

The Role of Debt, Finances, and Funding in the GSC Process

Higher education researchers have long documented the extent to which college affordability and student loans influence and create barriers for students' navigation to and through college (AAUW, 2021; Bostick et al. 2022; Bostick, 2021; Carlton, 2015; English & Umbach, 2016; Griffin et al, 2012; Kerby, 2012; Ramirez, 2013; Scott-Clayton & Jing Li, 2016; Strayhorn et al., 2013). Scholars have paid special attention to how financial aid and perceptions of additive student debt play a major role in whether or not Students of Color enroll into graduate programs (Bostick et al. 2022; Bostick, 2021; Ramirez, 2013; Strayhorn et al., 2013). Students of Color, and Black women in particular, are more likely to borrow, default on loans, and carry

higher debt loads to pursue higher education than their white counterparts (Bostick, 2021; Scott-Clayton & Jing Li, 2016). Student debt and repayments have implications for the social and economic mobility for Communities of Color such as exacerbated inequalities in home buying, employment, income stability, and generational wealth (Bostick, 2021).

In the context of graduate education, several studies have demonstrated that Black and Latinx students expressed concerns financing their graduate education (Bostick et al. 2022; Bostick, 2021; Kerby, 2012; Ramirez, 2013; Strayhorn et al., 2013). For example, in her study of Latino/a doctoral students, Ramirez (2013) found that Latino/a doctoral students picked doctoral programs that were well-funded with competitive financial aid packages. Comparably, research by Strayhorn et al. (2013) showed that Black students' graduate school enrollment choices were affected by access to financial aid, cost of attendance, and existing student loan debt. In this study, participants also weighed concerns of debt, finances, and funding availability during the GSC process. Like the participants in the work of Ramirez (2013) and Strayhorn et al. (2013), the participants in this study enrolled into graduate programs that offered comprehensive funding packages that eliminated any need to obtain student loans. This data suggests that finances were a strong factor associated with graduate program choice and enrollment outcomes.

The study participants discussed the role of debt and how it informed each phase of the GSC process (e.g. aspiration development, search, application, and enrollment decisions). Participants overwhelmingly shared concerns of whether or not graduate education would be financially feasible as early as they expressed interest in pursuing a graduate degree (Kerby, 2012). Concerns around funding also shaped how participants searched and applied for the program. In many ways, perceptions of debt and finances acted as deal-makers and deal-breakers for the participants. Comprehensive funding packages increased the likelihood of their interest to

enroll in a particular program over another, whereas less competitive funding packages completely eliminated the likelihood of their enrollment, even from their top program choice. Participants utilized funding package offers to deliberate between programs that they were accepted into. In fact, several participants met with current graduate students in prospective programs to assess the availability of funding packages and cost of attendance. These findings expand previous research studies by demonstrating that Students of Color consider finances across all the phases of the graduate school choice process. Given this information, pursuing a graduate degree without adequate financial support and means can become a hurdle and deterrent for Students of Color as they aspire, apply, and enroll into graduate programs.

The Role of Climate, Representation, and Fit in the GSC Process

In addition to funding, perceptions of campus climate and representation in graduate programs shaped participants' search, application, and enrollment decisions. Participants specifically described the importance of diversity, community, and representation in their prospective graduate programs. This finding is consistent with existing literature, and previous studies have documented the impact of perceptions of campus climate on access, enrollment, and overall experiences in higher education (Griffin et al., 2012; Hubain et al., 2014 ; Koo, 2021; Linder & Simmons, 2015; Quaye et al., 2014; Rankin & Reason, 2005; Slay, 2017; Slay et al., 2019; Telles & Mitchell, 2018; Turner, 1994). For example, Slay (2017) found that Black undergraduate students' perceptions of race and diversity from campus recruiters provided them with key cues of the campus context. Comparably, Ramirez's (2013) study on Latino/a students' graduate school choice decisions revealed that participants expressed concerns regarding campus climate and the extent to which they felt “welcomed " as prospective students. Both studies emphasize the role that campus climate plays in Black and Latinx students enrollment decisions.

Findings from this study confirm that students, across various racial and ethnic backgrounds, factor campus climate into their enrollment decisions as well as how they searched for programs.

Furthermore, some studies have examined how graduate program directors, diversity officers, faculty, and students perceive departmental and campus climate (Griffin et al 2012; Griffin & Muniz, 2015; Posselt et al., 2017; Slay, 2017; Slay et al., 2019). These studies explored how campus leaders assess issues of campus climate in their recruitment efforts as well as how Students of Color experience the culture once they have enrolled. My study contributes to this existing research by highlighting how Students of Color interact with campus climate through their recruitment processes prior to their enrollment.Study participants were persistent about connecting with current graduate students, faculty and staff to assess fit, culture, and climate at their prospective programs. Participants highlighted the importance of meeting with current graduate students in order to make informed decisions about their graduate school contexts.

Conversations with current graduate students were the vehicle for participants' understanding of climate and making assessments about their interpersonal fit in relation to their identities as Students of Color (e.g. faculty availability, financial and emotional support, racial/ethnic representation, and inclusion) (Brunsma et al., 2017; Levin et al.,2013; Trent et al., 2021). Most literature about “fit” is reflective of the college-going student experience (Bowen et al., 2009; Cabrera and La Nasa, 2000; Dillon & Smith, 2020; Glass, 2023; Handel, 2014; McDonough et al., 1998). This literature suggests that fit matters as students are making decisions about undergraduate programs, and this study suggests that fit is also important for graduate school decision making as well. This information allowed them to make informed decisions between programs they were admitted into. Furthermore, participants coordinated

opportunities to meet with faculty and staff throughout the search and application process to ensure they would find "the right graduate program for them." Without the sense that a program would be the right fit, participants discontinued their application or candidacy for prospective graduate programs.

Declining Admission: Redefining the "Right Choice"

This study also included the experiences and sensemaking of students who navigated the GSC process, but decided not to immediately enroll into a graduate program. English and Umbach (2016) posited that individuals complete the graduate school process after navigating each phase and enrolling in a graduate program. The GSC Model and existing research have not captured the experiences of individuals that navigate the graduate school choice process, but ultimately decide not to attend. Data from four participants revealed that they declined admission into graduate school in order to acquire further work experience, enhance their research skills, and build a professional presence in their respective fields. These findings suggest that the phases of the GSC process may not be linear and static for all students. Instead, the phases may be more complex as participants can move between or repeat phases. For example, the participants who declined admission have since enrolled and/or completed a graduate degree. One participant is still completing her pre-doctoral fellowship and will pursue graduate studies at the end of her pre-doctoral program.

In addition, these findings expand our understanding of why some students chose not to go to graduate school. Limited research has examined the reasons why students chose not to enroll in graduate programs, with some work hinting that finances and perceived debt burden as a plausible hinderance (Bostick et al. 2022; Strayhorn et al., 2013). The study found that participants' decisions to not enroll in graduate school were primarily motivated by a desire to

gain more professional experience and establish a stronger footing in their fields, rather than financial concerns or perceived debt. As a result of these findings, McNair Programs may need to broaden their approach to supporting students by providing opportunities for them to build practical skills and gain experience in their chosen fields before pursuing graduate education through internships or other hands-on learning experiences that will assist students in networking with individuals in their professional communities. This may help students make informed decisions about their career paths, and ultimately whether or not they return to higher education to complete a graduate degree.

Findings from this study reveal that finances and perceived debt were not at the center of participants' decisions to not enroll in graduate school, rather they reported having stronger desires to gain more professional experience and footing in their fields. Despite being prepared and eligible to enroll in graduate school, participants' decision to not enroll may heed implications for how McNair Programs think about broadening their approach to supporting students in their transition into the workforce and/or gap year programs.

The findings also contribute to existing research on the graduate school outcomes of Students of Color who participate in McNair Programs. According to Renbarger (2019), the majority of studies examining the effectiveness of the McNair Program identified positive outcomes for students such as increased graduate school enrollment rates in comparison to their counterparts of similar backgrounds and levels of academic achievement (e.g., Gittens, 2014; Humphrey et al., 2002; Ishiyama & Hopkins, 2003; MacPhee, 2013; Nnadozie et al., 2001; Seburn et al., 2005; Strayhorn, 2010). Across these studies, researchers have looked closely at the impact of the McNair Scholars program and graduate school enrollment outcomes for Students of Color. While the studies have explored student outcomes, none of the studies

emphasized the perspectives and narratives of Students of Color in the McNair Program who did not enroll into graduate school.

In contrast, this study provides insights into how and why Students of Color in a McNair Program "diverge" from the program expectations of immediate graduate school enrollment. The participants' narratives call attention to the question of "is graduate school the right choice?" For the participants who declined admission, they pursued a pathway that "felt right to them" and aligned with their career aspirations and interests. The participants put a pin on graduate school enrollment in order to pursue opportunities that allowed them to develop key skill sets and meaningful professional experiences that would be transferable to their next job or pursuit of a graduate degree. While the participants in this study felt some support from the program to decline admission to graduate school, their narratives challenge what "success" may look like in the McNair context for administrators and staff members. To what extent do McNair practitioners and programs support Students of Color whose aspirations and degree intentions evolve over time? How may they honor "the right" next steps for a Student of Color?

Social Capital in a New Context

Social capital has been used widely in studies to explore student access, persistence, and success in higher education (e.g., Brooms, 2018; Crawley et al., 2019; Deo & Griffin, 2011; Farmer-Hinton, 2008; Gasman & Palmer, 2008; Kelly et al., 2021; Missaghian, 2021; Pérez & McDonough, 2008). For instance, Pérez and McDonough (2008) employed social capital to examine the college choice processes of Latinx students. The results of their study indicated that school counselors, family members, and peers were a valuable source of social capital in how Latinx students acquired information about the college. Similarly, Brooms (2018) explored the role of a Black Male Initiative program in promoting social and cultural capital for Black

undergraduate men. Black males in the study found that they gained a strong community and social network through the program that enhanced their academic experiences and sense of self and belonging.

In these examples, researchers used social capital to explore how interpersonal relationships in different contexts shape and inform a student's ability to access and navigate in higher education spaces. Up until now, social capital has not been examined in the graduate school choice processes of Students of Color. This study contributes to the existing body of research on social capital in access literature by providing insights on how Students of Color tap into their social networks to access graduate school. Through their strong ties with cohort mates, older peers, and alumni of the program, study participants acquired information, resources, and knowledge about the GSC process that informed their sensemaking at each stage of the process. Participants acquired and offered information, resources, and opportunities to one another through program events, conferences, and informal meeting opportunities.

Furthermore, social capital theorist Bourdieu (1986), articulated that exchanges across members of a network are an investment in an individual's or collective's success (Bourdieu, 1986). Networks are often grounded in trust, collaboration, empathy, reciprocity, and belonging that support the cultivation of social capital amongst individuals (Bourdieu, 1986; Coleman, 1988; Crawley et al., 2019; Plagens, 2011). Consistent with these values, participants in this study displayed a strong commitment to one another's success as a result of shared experiences and backgrounds. Participants spent many hours together working through their graduate school applications and navigating the choice process. As a result, they developed a sense of trust and empathy with one another through the struggles and challenges of their pursuit of graduate school. These findings validate that peers can offer social capital that facilitates the GSC process.

Peers Networks and the McNair Program

Findings from this study are generally consistent with extant research that suggest the McNair program is effective in supporting students in their preparation and access to graduate school. Several studies have documented the positive impact of participation in the McNair Program for Students of Color in their pursuit of graduate studies (Gittens, 2014; Humphrey et al., 2002; Ishiyama & Hopkins, 2003; MacPhee, 2013; Posselt & Black, 2012; Restad, 2013; Seburn et al., 2005; Strayhorn, 2010). The McNair Program is well-recognized for offering comprehensive services, resources, and support to facilitate its participants interest, preparation, and entry into graduate studies (Renbarger, 2019). Students who are engaged in McNair benefit from their engagement in scholarly activities (e.g., undergraduate research opportunities, publishing, conference presentations) and faculty mentoring (Renbarger, 2019). In these studies, participation and engagement in these aspects of the program attributed to their early socialization to graduate school, development of aspirations, and enrollment outcomes.

While the findings of these studies reflect the broader literature on access to graduate school, limited research has explored the peer networks and cohort-model of the program. Gittens (2014) as well as Posselt and Black (2012) concluded that Students of Color and first-generation students benefit from the support of their peer networks as they develop graduate school aspirations and exchange information and resources about graduate education. Similarly, students in this study discussed connecting with cohort mates, older peers, and alumni at program events (e.g., networking sessions and conferences) to learn about the landscape of graduate education, funding, and the application process. In addition, participants articulated their commitment to pay it forward by disseminating information to younger scholars. This finding extends previous work that suggests Students of Color not only gather information about

the GSC process from peers, but pay it forward to younger peers in the McNair Programs. This finding reinforces scholars' claims that Students of Color who have access to information and resources about higher education will often bring back knowledge and resources to their communities to aid others' awareness (e.g., Brooms, 2018; Crawley et al., 2019; Deo & Griffin, 2011; Farmer-Hinton, 2008; Gasman & Palmer, 2008; Missaghian, 2021; Pérez & McDonough, 2008; Yosso, 2005).

Furthermore, this study captured the nature and complexities of peer interactions within different networks of the UMBC McNair Program. Study participants differentiated peer groups that they sought information and support from. Different types of peers (e.g., cohort mates, older peers, alumni) embodied distinct roles (e.g., motivators, sounding boards, purveyors of information, possibility models), which shaped participants' navigation of the GSC process. The program provided opportunities for participants to connect with older peers and alumni, who served as role models and sources of information and support, as well as developed programming to foster a strong sense of community and collaboration amongst cohortmates.

This distinction of peer roles and types sheds light on the dynamic nature of social ties within peer networks of the McNair Program. The dynamic nature of these social ties refers to how participants' engagement with different types of peers evolved over time and were highly dependent on the individual needs and where a participant was during their GSC process. For example, participants may have initially looked to older peers or alumni as possibility models in the early stages of their aspirational development, but as they navigated through the graduate school application process, they may have relied more on their cohortmates for motivation to complete their applications. This means that the types and roles of peers that are most valuable to

participants may change over time, and underscores the importance of fostering a supportive and collaborative environment that cultivates strong and diverse social ties amongst students.

An examination of peer networks in the UMBC McNair Program also revealed the unique connections between participants with shared identities. Like the Students of Color in Gittens's (2014) study, participants in this study described feeling a strong "sense of connectedness" to their peers as well as staff and faculty of the program. This "connectedness" was the result of their continued engagement in the program over a prolonged period of time. However, participants in this study disclosed that their "connectedness" was not only the result of their participation in the same program, but was also attributed to having gone through the McNair experience together as well as having shared backgrounds and lived experiences. Shared backgrounds and lived experiences were at the core of many participants' relationships with their peers and shaped their interactions about the GSC process. Shared backgrounds allowed participants to share their thought processes and feelings (e.g., excitement, hesitation, indecision) in a deeper way and talk about navigating graduate education as a racialized person and/or first-generation, low-income student.

In summation, peer networks within the McNair Program can offer a sense of community and solidarity, as well as a forum for sharing experiences, advice, challenges, and successes as they navigate through the graduate school choice process. Peers who are applying or have already gone through the graduate school choice process bring valuable insights to their discussions with others about their entry to graduate school. Peers who have shared backgrounds and identities are likely to provide a sense of validation and emotional support during this pivotal time in their professional and academic trajectories.

Leaders, Peer Culture, and the McNair Program

Organizational theorists and education scholars have long documented the importance of culture within schooling contexts (Peterson & Deal, 1998; Warrick, 2017). Organizational culture is shaped by shared values, norms, histories, behaviors, and traditions within a given context (Kezar & Eckel, 2002; Peterson & Deal, 1998; Warrick, 2017). In higher education, studies examining organizational culture have demonstrated that leadership influences school cultures and climates (Daniëls et al., 2019; Teasley, 2017; Kezar, 2012; Kezar, 2019; Kuh et al., 2010; Warrick, 2017). Leaders reflect and assess their capacity to shape their organization's culture and often communicate its core values through their missions, visions, and actions (Peterson & Deal, 1998; Warrick, 2017). Leaders can reinforce or adopt new beliefs as the organization evolves (Teasely, 2017).

This study showed how program leadership can shape peer culture within a McNair Program, largely through intentional programming practices and establishing shared values (Kezar, 2019; Peterson & Deal, 1998). At the time of the study, program leadership and staff centered peer relationships in their program culture. Peer networks were perceived as invaluable assets to leaders' work. Staff believed that students brought valuable knowledge and wisdom to their program spaces that should be capitalized on and shared. Staff intentionally designed opportunities for students to be in community with one another as they navigated the graduate school choice process. With the heavy emphasis on peer-to-peer programming, and leadership, staff could generate synergy among students to support one anotherIn addition to collaborative work, ceremonies and rituals were designed to build community and ties across peer groups in the program. This example is consistent with Warrick's (2017) conclusion that leaders develop ceremonies or student rituals to help reinforce cultural values.

Furthermore, this study's findings revealed that a strong peer culture in the UMBC McNair Program was not always existent. Data demonstrated that prior leadership did not center peer-to-peer connections in programming, which resulted in the isolated experiences of two participants in the study. The two participants reported an absence of a strong peer culture during their time in the program. Through the participant interviews, it was evident that there was a shift in the culture of the UMBC McNair Program after a leadership turnover. Thus, this case study offers an example of cultural change within higher education organizations. Kezar and Eckel (2002) contend that leadership turnover impacts the vision and mission of an organization, ultimately shaping and influencing the existing culture.

Consistent with these claims, the changes in program leadership at UMBC McNair Program did result in a cultural change. McNair Programs, like any other higher education program or organization, are influenced by its culture and the cultural changes that occur within them. Culture and cultural changes have an impact on program structures, values, and design that influence how students experience the program. In this case study, cultural changes within the UMBC McNair Program had a significant impact on how peer culture and connections were fostered over several cohorts of participants.

Implications

While case study research is not intended for generalizability, the results of this work offer rich and transferable insights to practice, policy, theory, and research centered on the experiences of Students of Color and their pursuit of graduate studies (Yin, 2014). In the following section, I provide implications for practice, policy, and theory. I conclude with directions for future research.

Practical Implications for McNair Programs

There are six major implications that this study has for McNair Program administrators and professionals. First, the UMBC McNair Program has a strong graduate school-going culture that is centered around scholar-to-scholar interactions. Administrators in the case study intentionally tapped into peer networks within the program to promote a culture of support, transparency, accountability, and care. As a result, the alumni participants in the study benefited tremendously from the support, guidance, and mentorship of their cohort mates and older peers in the program. McNair Program administrators should incorporate informal and formal opportunities at program events for students to engage in community-building activities with one another. Doing so would create synergy and connections among students within a cohort.

Furthermore, McNair Program administrators should host events that urge students to be in community with one another while working towards their academic goals and graduate school applications. Study participants thrived in community with their cohortmates as they worked towards completing components of their graduate school applications. At program events, cohortmates embodied sources of motivation, sounding boards, as well as accountability partners that were essential to participants' navigation of the graduate school choice process. McNair Program alumni should also be encouraged to participate as volunteers, mentors, and guest speakers during program events as a way to build networks across cohorts. Alumni provided invaluable information about the graduate school choice process for many of the participants in this study. There is a wealth of information, knowledge, and experience that alumni hold that can have a direct impact on the sensemaking of students.

Third, program administrators should develop a plan to support students who may be unsure about graduate school as their next best step. In this case study, the UMBC McNair

Program created an extension of their programming, referred to as the Friends of McNair Program, to support students who changed their minds about pursuing graduate studies after college graduation. This extended programming was designed to ensure that no student was left behind and they would still have access to their McNair peers and community of supporters. While the McNair Program is designed to support students in their pursuit of graduate education, there is merit in building supporting students who are seeking to gain work experience before diving back into their education. This will also help (re)imagine how success is defined in McNair Programs and the narrative that suggests graduate school is the *best* option. Obtaining work experience is just as important and valuable as pursuing a graduate degree. By supporting students regardless of their graduate school enrollment decisions, program administrators will be better able to serve the *whole* student. In addition, this extended programming can serve as a feeder for McNair Scholars in future application seasons to give students early exposure to post-baccalaureate pathways and the network of support that could be available to them.

As discussed in Chapter 4, the administrators in this study adopted a holistic critical mentoring framework to their program model and design. This framework allowed administrators to foster a community of actors to support their students (Hunt, 2019). Adopting this framework in other McNair Program models can have implications for how students find and seek out support. For instance, the UMBC McNair Program strongly relied on the support of undergraduate faculty to provide mentorship to students in their graduate school choice journeys. Study participants highlighted the value of working with their McNair mentors, who were UMBC faculty and staff affiliates. In this case study, participants in this study benefited from working with McNair faculty mentors in their discipline to help identify which schools and programs may be the best fit for them. Other participants received support from faculty outside

of their disciplines, which allowed them to gain new writing skills that were invaluable to their application processes. McNair Program administrators should take steps to recruit a diverse network of faculty and staff on their campuses who can serve as mentors and guides to students as they navigate their graduate school choice journeys, particularly as they search and apply for potential programs. There is merit in building a community of supporters consisting of faculty from various disciplines and non-academic departments across the campus.

In addition, program administrators should consider building partnerships with graduate programs nationwide. Study participants identified the importance of connecting with graduate program representatives prior to their enrollment decisions. Participants were urged to meet with graduate programs and prospective faculty in order to get a sense of interpersonal and institutional fit. This may position McNair Programs to build trusting relationships with prospective graduate programs that may be a good fit for their students. Similarly, program administrators should also expand their partnership networks with community organizations and pre-doctoral programs that may be of interest to participants seeking to gain further work experience before enrolling into graduate school. Four participants disclosed declining admission into graduate school in order to obtain more experience in their desired career fields. Building connections with pre-doctoral or internship programs may assist students in their professional development needs and desires. Moreover, McNair administrators can also connect with other program staff in other regions to learn more about how they are supporting their Students of Color and exchange best practices. The findings of this study highlight the "what's working" for this program and some programming may have be scalable and applicable to other McNair Programs with similar culture and interest in building peer to peer connections.

Lastly, the context of today's political climate and the ongoing Supreme Court review of affirmative action has implications for how higher education and McNair Program account for the racial identities of their students (Doherty, 2023; Park, 2022). The potential outcome of this review may lead to expansive restrictions on whether and how race is considered in educational access and opportunity programs, potentially leading to less racially diverse campuses (Park, 2018) and changes to the student populations that McNair Programs serve. Excluding race and ethnicity from the criteria utilized to recruit students to McNair Programs would narrow the scope of the program and the pool of eligible students to those who are first-generation and from low-income backgrounds. These restricted criteria may hinder McNair Programs from fully maximizing their impact and potential to support racially diverse students in their pursuit of graduate education. Without the continued consideration of race, students may miss out on valuable connections, resources, and information that have an impact on their degree outcomes and attainment. As articulated through this case study, the role of race was central to participants experiences in McNair in order to develop influential connections with faculty, staff, and peers that contributed to their sensemaking and ambition to pursue graduate school. Racialized students benefitted from engaging within the McNair community by having access to resources and opportunities to develop their professional and academic skill sets.

Thus, McNair professionals may consider expanding their efforts through affiliate programs (e.g., Friends of McNair) within this unique sociopolitical context. Affiliate programs have the potential to offer tailored support and resources to racially diverse student groups in their pursuit of graduate education and desired career goals. To ensure a smooth expansion of affiliate programs, McNair professionals may need to consult with institutional leaders regarding the framing of affiliate programs and making requests for private dollars to create these parallel

programs. This framing and request for funding support may need to be approached with caution and mindfulness of institutional constraints and legislative actions at play. In addition, McNair Programs may want consider partnering with community-based organizations doing similar work. Such partnerships may offer a channel through which McNair Programs can direct affected students seeking resources, information, and opportunities about graduate school. Leading with collaboration and intention, this approach may help secure the McNair Program's legacy of supporting historically marginalized students in higher education.

Practical Implications for Graduate Programs and Higher Education

There are two relevant practical implications for higher education leaders, graduate programs, and faculty. One of the most profound aspects of the UMBC McNair Program is the strong peer-mentoring culture that has been developed through the cohort design of the program and the intentionality of program leaders to cultivate those connections. Being community with others who have shared identities and lived experiences proved to be an essential component of participants' journeys through their graduate school choice process, which is a major junction of their academic and professional lives. Higher education leaders should consider expanding peer-mentoring models that are cohort-based at various junctures of a Student of Color's entrance to college, through graduate education, and into their early career prospects. For instance, higher education professionals working in the college access space should design cohort-based programming that will feature opportunities for peer to peer interactions and connections among students at different grade levels in high school and in college. This approach may assist in student's acquisition of knowledge and resources to make an informed decision about college access journeys.

Similarly, the cohort-based or near-peer mentoring models may also be effective in graduate programs. Most graduate programs, particularly those at the doctoral level, admit students on a cohort basis. Linking students to near peers who are further along in their graduate journeys may help them pilot the landscape of graduate education which includes academic milestones like completing a thesis or dissertation as well as making decisions about next steps in career choices. Additionally, a peer to peer focused mentoring model may also be effective for post-docs seeking to pursue a faculty career and early career faculty. Studies have shown that mentorship is an effective way to engage and retain early career Faculty of Color. Creating a cohort-model program to bring early career faculty and post-docs with one another may help advance their professional skill sets as well as provide a network of support as they transition through different stages of their professional lives in academia (Boud & Cohen, 2014; Teitel, 1997). It is also essential to note that relationships within these cohort programs must be intentionally cultivated in order to ensure that meaningful connections are occurring.

Second, interpersonal and cultural fit matter. In this case study, participants' perceptions of interpersonal fit with faculty and campus climate were deal-makers in their graduate school choice processes. Participants were adamant about working with faculty, graduate students, and departments that honored inclusion and diversity. They highlighted instances where they felt connected to their prospective graduate programs when attending recruitment events, meeting with faculty one on one, and speaking with graduate students. Recruitment efforts alone were not enough to attract Students of Color to graduate programs. The participants deeply cared about working with folx of a similar background as well as feeling that they mattered and belonged on the campus.

Thus, faculty, graduate programs, and institutional leaders must work towards creating inclusive, diverse, and welcoming campus environments in order to attract and recruit prospective students, particularly Students of Color. Several scholars have documented inclusive recruitment practices in graduate admissions and graduate education as a whole that can be applied in graduate programs seeking to recruit and retain Students of Color (Griffin & Muniz, 2015; Posselt et al, 2017; Slay et al, 2019). For example, Slay et al. (2019) suggest that department leaders must attend to the quality of their relationships with students, not only during the recruitment season, but beyond in order to stray from the classic "bait and switch". Campus leaders must continuously work towards eliminating issues of climate that contribute to this "bait and switch" phenomenon.

For example, one method to enhance climate and culture within programs may begin with how departments foster initial connections and conversations between prospective and current students. Establishing early connections between these student groups can assist with recruiting while also allowing new students to cultivate early relationships that will assist in their sense of belonging, socialization into the department, retention, and overall success.

In addition, departments should provide further professional development opportunities to department leaders and faculty on equity-minded mentoring and culturally-sensitive advising practices (Carnaje, 2016; Fries-Britt & Snider, 2015; Fries-Britt & White-Lewis, 2020; Griffin, 2019; Noddings, 2008; O'Leary et al.,2020). Professional development in this area may improve mentoring and advising experiences with Students of Color once they have been admitted and enrolled into these graduate programs as this was an influential piece of participants' graduate school choice stories.

In addition, departments must engage in critical exploration, dialogue, and action to improve and enhance their culture and climates. Departmental-level change and improvement alone will not suffice in recruiting and retaining the whole student. Institutions at large must reflect on their culture and climate. Prospective graduate students, like the participants in this study, highlighted the importance of assessing campus climate and culture from current students before making their application and enrollment decisions. If campus climates and cultures remain unwelcoming to current students, it is unlikely that the continued recruitment of diverse students will come to succeed. Beyond recruitment, retaining students also requires that a positive campus climate has accessible resources and support available for those who hold multiple marginalized identities, particularly first-generation and low-income such as the participants in this study. Participants in this study emphasized their desire to join programs that were equipped with effectively trained advisors and resources to support their enrollment, retention, and success in graduate school. These elements will contribute to a more inclusive and supportive environment that will foster the academic success and well-being of diverse students in graduate education.

Policy Implications

The findings of this study also have major implications for policy at the federal-level and within TRIO. Across narratives, participants in this study shared concerns regarding funding their graduate education. Many students worry about college costs and are often placed in challenging financial situations due to their lack of knowledge about funding options, financial aid, and scholarships (Adams et al., 2016; Maake, 2016; Raup, 2018). Specifically, for low-income first-generation college students, finances play a significant role in whether a student will attend college (Jehangir, 2010). Pursuing a graduate degree becomes an additive financial burden

once a student completes their undergraduate education. Students of Color, and Black women in particular, have to make critical decisions about financing their education while accounting for how additional student loan debt will impact their navigation of graduate school as well as life beyond academia (Bostick, 2021; Bostick et al. 2022). Black women carry the largest amount of student loan debt in comparison to all racial and ethnic and gender groups (AAUW, 2021). As a result, pursuing a graduate degree without adequate financial support and means can become a hurdle in aspiring, applying, enrolling, and matriculating into a master's or doctoral program.

Federal policymakers should consider expanding aid and funding to graduate students who were Pell recipients as undergraduate students. According to the Council of Graduate Schools (CGS) (2021), Pell-eligible students face greater financial barriers and debt in their pursuit of graduate education in comparison to non-Pell recipients. Additionally, the CGS reported that about one-third of pell-eligible students do not exhaust their full support during their undergraduate tenure (Council of Graduate Schools, 2021). The CGS has advocated that unused pell grant funds should rollover to fund the first semesters of a low-income graduate student's post-baccalaureate degree. As highlighted by the Council of Graduate Schools, policy makers should work towards committing their efforts to support the Expanding Access to Graduate Education Act (H.R.4002), which will allow for the rollover of these funds to qualifying graduate students.

In addition to this implication for federal policy, the findings of this study also have policy implications for McNair Programs and the Department of Education. As a federally funded program by the Department of Education, the McNair Program's funding structure is tied to performance metrics based on four student outcomes. Department of Education policies hold McNair Programs accountable by ensuring that a particular percentage of students enroll into

graduate programs immediately after graduation, as well as obtain their doctoral degrees within a ten-year period. These benchmarks are proposed by programs and then later approved by the Department of Education each grant cycle.

This study calls these metrics into question and supports advocacy for a reimagining of what success looks like for students in McNair. If success is measured within these constraints, what aspects of a student's development and achievements do we miss? Current metrics that measure success based on immediate enrollment in graduate programs do no not account for valuable professional experiences and skills that students can acquire when they postpone enrollment in graduate school through gap-year programs, work experiences, and pre-doctoral programs. Moreover, current metrics do not account for disciplinary norms regarding career readiness and varying requirements for credentials of different fields. For instance, in some disciplines, students may not be required to obtain a graduate degree immediately after college in order to enter their intended career field. Instead, students may be encouraged to obtain further professional experience and exposure to career pathways before returning to higher education for graduate school.

Rather than solely focusing on immediate graduate school attendance, McNair Programs and the federal funding agencies that support them could explore alternative metrics to more accurately and holistically assess program impact. A revised Department of Education policy may extend the timeline in which a student's enrollment to graduate school can be considered in grant reporting. The metric may be revised to capturing enrollment in graduate education within 2-3 years of undergraduate degree completion. Such revisions and updated metrics will better reflect the experiences of today's students as *whole* individuals as they navigate various disciplinary fields.

Theoretical Implications

The findings of this study yield three implications for theory on graduate school choice. In this study, English and Umbach's (2016) Graduate School Choice (GSC) framework offered a strong foundation for exploring the multidimensional decision-making process that Students of Color experience when evaluating their options for post-baccalaureate education. While the broadness of this model can be used to prompt generalizations about the decision-making processes students engage in during their graduate school access journeys, it did not fully capture the experiences of participants in this study.

Each element of the GSC model was created to broadly address the graduate school choice processes of all students. English and Umbach (2016) proposed that individuals through a linear process by completing each phase of the process to eventually enroll in a graduate program. While the three-phases model provides a useful framework for understanding the decision-making process, it is important to recognize and honor that individuals may not always experience these phases in a linear or uniform way. Rather, the participants in this study discussed navigating a much more complex process, repeating certain steps or moving back and forth between phases as they considered graduate school. Students' narratives also suggested some degree of overlap between the phases, alluding to the inference that some phases may not have been as discrete or clearly distinctive from eachother as proposed by the model. Therefore, future applications of this framework should account for non-linear nature of this decision-making process. The three phases can continue to serve as a guide to facilitate conversations with future participants and provide a common language for discussing the graduate school choice process. Nevertheless, a flexible and open approach to using this framework may yield invaluable insights into how individuals access graduate education.

In addition, the GSC model contends that social and cultural capital plays a significant role in shaping individuals' decisions to pursue graduate education. In the model, variables for social and cultural capital include English as a primary language, attending college out of state, parent education, SES, dependency status, high school designation, and 1st-year parent/relative paying tuition (English & Umbach, 2016).While the model includes social capital, a theory used to help identify connections amongst study participant, it is captured through measurements of parental higher education level, family income, and primary language spoken in the home. This application of social capital in the model privileges Bourdieu's perspective on social capital that is based on the premises of whiteness, classism, and meritocracy. This application of social capital reflects Bourdieu's perspective on social capital, which is based on the assumptions of whiteness, classism, and meritocracy (Yosso, 2005). The current definition of social capital in this model does not account for the ways that social capital can be developed through interactions with peers and other institutional actors on college campuses.

The results of this study support and extend Yosso's (2005) argument that Students of Color can act as agents of social capital as they acquire knowledge for navigating the entry into graduate education. Specifically, the study highlights how peer relationships and networks among Students of Color serve as sources of empowerment, information, and support throughout the graduate school choice process. It is important for future applications of the model to adopt a more critical and inclusive perspective to the various types of social capital that can shape an individual's decision to pursue graduate education. This will involve broadening the definition of social capital beyond its traditional associations, and considering the diverse that individuals can leverage social capital to access information and resources in their pursuit of graduate education.

Lastly, the model vaguely names the extent to which the graduate school context plays in influencing decisions about what graduate programs to attend. In their articulation of the model, the graduate school context includes institutional characteristics (e.g., classification, prestige, resources, structural supports), location, and recruitment and marketing strategies. Although the model incorporates institutional characteristics as an element of graduate school enrollment decisions, it does not fully account for the influence of other factors, such as campus climate and race, on these decisions. Students of Color in this research and other studies (e.g., Linder & Simmons, 2015; Ramirez, 2013) have underscored the significance of campus climate in shaping their search, application, recruitment, and enrollment experiences. This finding suggests that future iterations and applications of this model could benefit by integrating a more nuanced understanding of how campus climate shapes graduate school choice. By doing so, future researchers may develop a more holistic contextualization of how historically marginalized individuals navigate different spaces within a highly racialized system, namely graduate education.

Future Directions for Research

The results of this dissertation elicit five new directions for future research. First, future research studies should disaggregate the racial/ethnic backgrounds when studying how Students of Color navigate the graduate school choice process. While this work did not uncover significant differences in participant experiences, the sample did not racially or ethnically represent all Students of Color. Future studies should consider the monoracial and monoethnic differences amongst Students of Color and the extent to which they may have varying perspectives or nuanced differences in navigating the graduate school choice processes. The results of these studies may have further implications for practice and policy. Similarly, future

researchers should explore how Students of Color with multiple intersecting identities (e.g., sexuality, gender, religion, disability, immigration status) shape their navigation, the graduate school choice process and the extent to which their interactions with peers may vary.

Third, future studies should explore how Students of Color at different institutional types navigate the graduate school choice process. The participants in this case study attended a recently distinguished Minority Serving institution with high research productivity. As a result, this may have influenced the findings of this study. Institutional context may shape students' access to resources, opportunities, and support systems in their pursuit of graduate school. Thus, Students of Color experiences in the graduate school choice process may vary depending on the institutional context and type (e.g., PWI, HBCU, HSI, TCU, ANNAPSI) and research classification (e.g., R1, R2, R3). Fourth, future research should further explore the experiences of Students of Color who decline admission into graduate education. Further research in this area can inform practitioners on what structures and support systems may be needed to assist Students of Color who decide not to enroll in graduate school after college and help facilitate their transition into the workforce. Lastly, exploring staff and leadership's impact on program culture and the development of peer networks proved to be an informative and valuable addition to the field. Future research could employ a similar case study methodology to explore how leadership impacts different aspects of the graduate school choice process at other McNair Programs and graduate preparation programs.

Conclusion of Dissertation

I was compelled to conduct this research by witnessing the growing interest in broadening participation and access to graduate education for People of Color. I was also drawn to this research because of my own experience as a McNair Scholar. While in the program, I

thrived with the support of my peers in the program. My journey into and through graduate education strongly reflects the values, lessons, and peer encouragement I acquired as a McNair Scholar. This research endeavor was indicative of my passion for contributing knowledge and practice in the field of higher education as well as the broader TRIO community.

This study makes several important contributions to the field of higher education. Research on access to graduate school often highlights the barriers students encounter, preparing students for graduate education through research experiences, dissemination of information and resources about graduate school, and cultivating a student's disciplinary and scholarly identity (e.g., Adedokun et al., 2013; Bowman & Holmes, 2018; Carlton, 2015; Cuellar & Gonzalez, 2019; Griffin et al, 2012; Griffin & Muñiz, 2011; Hanson et al., 2016; Lindholm, 2004; Luedke et al., 2019; Posselt, 2015; Posselt et al., 2017; Ramirez, 2013; Rodriguez Amaya et al., 2018; Strayhorn, 2010; Trolian & Parker, 2017). Prior work has not rigorously examined how Students of Color conceptualize and make sense of the graduate school choice experience at each phase of the process. This study contributes to existing research by providing a holistic, in-depth analysis of how Students of Color navigate each stage of the graduate school choice process. By exploring how Students of Color manage their motivations, fears, expectations, and decisions about enrolling in graduate education, this study provides valuable insights that can inform efforts to support students in their pursuit of graduate education. In addition, this research underscores the importance of understanding graduate school access and choice as a relational process that involves accessing social capital. As a result, this study provides insights that can inform the development of McNair programs, related programs, and resources that facilitate the sharing of information and support networks among students and their peers, thereby helping to reduce barriers and increase access to graduate education.

Furthermore, this work enabled an exploration into why some Students of Color opt not to pursue graduate education, going beyond the notion that graduate school enrollment is always the "right choice." As a result, this study calls for graduate school access advocates to (re)consider the premise that graduate school is the optimal choice for all Students of Color. Higher education leaders, programs, and faculty should (re)imagine their approach to degree attainment and consider the diverse range of factors and circumstances that shape students' aspirations and decisions about their academic and professional paths. By doing so, we can create a more student-centered and equitable higher education system that supports students and honors what success may look like for them.

Second, this study is one of the first to explore the role of peer networks in the graduate school choice process, particularly for Students of Color in the McNair Program. By highlighting the collaborative and community-oriented approach these students take, this research underscores the importance of fostering supportive networks among peers with shared backgrounds. Shared backgrounds allowed Students of Color to engage in sensemaking that shaped their conceptualization of the graduate school choice process. The methods and approaches used in this research offer new insights into how such networks can help to provide valuable information and support, as well as motivate and inspire students of similar backgrounds. By promoting and supporting these networks, we can help to reduce barriers and increase access to graduate education for Students of Color.

Third, this study serves as an example of what is working within one program. Peer debriefing during this study allowed me to recognize the contribution of this research to intervention programs like McNair. Often, the focus is on identifying the shortcomings of programs or the failures of our systems. However, this study revealed that the UMBC McNair

Program has successfully cultivated valuable peer relationships. Recognizing the strength of peer connections in the program, the leadership adjusted the mission, vision, and design to place students and their peers at the center of programming. Respectively, this study provides an advantageous example for other McNair programs. By acknowledging and building on the strengths of these programs, we can create more effective programming interventions for Students of Color in their pursuit of graduate studies.

Fourthly, this study offers crucial insights into how identity influences the graduate school choice process for Students of Color. This research delved into the role of identity in the graduate school choice process, drawing on the racialized narratives of students in higher education and their access to graduate education. It revealed that race and ethnicity were not the only significant identities shaping students' access and decision-making regarding graduate school. By shedding light on the salience of various identities, including race, ethnicity, socioeconomic status, and generation status, this research underscores the importance of taking a holistic and inclusive approach to supporting these students. Having multiple, intersectional identities shape students' relationship to higher education and degree attainment (Duran & Jones, 2019). As higher education professionals and leaders, we are responsible for recognizing and addressing the various challenges and barriers that students face in pursuing graduate education, as a result of systems built on the principles of white supremacy, classism, and normalcy (Patton, 2016). By centering the voices and experiences of Students of Color in research and practice, we can uncover new ways to advance degree attainment. In the context of this study, degree attainment was not an individualistic pursuit, but rather the result of collectivist ideals and efforts amongst Students of Color.

Appendices

Appendix A: Recruitment Email for Alumni

SUBJECT LINE: Graduate School Choice for Students of Color - Research Study Recruitment

Dear [Alumni Name],
My name is Stephanie Breen, and I am a doctoral candidate in the College of Education at the University of Maryland. Under the supervision of my dissertation chair, Dr. Kimberly Griffin, I am conducting research that seeks to explore the graduate school processes of Students of Color.

More specifically, I am examining how Students of Color within a McNair Program make decisions about attending graduate school and the extent to which their peers in the program played a role in their decision-making processes. As an alum of the UMBC McNair Program, I hope you consider participating in this study.

To participate in this study, an individual must meet the following criteria:

- Must self-identify as Black, African-American, Latinx, Afro-Latinx, Chicanx, Asian, Asian-American, South Asian, Middle-Eastern, Pacific Islander, Native American, bi-racial, or multiracial.
- Recent alumni from the UMBC McNair Program.
- Be at least 0-4 years out of their undergraduate programs.

Eligible participants did not have to attend graduate school after their undergraduate studies.

Interested individuals will be provided a consent form to review, a short demographic questionnaire to complete, and participate in one interview with me. The interview will be conducted in person or by Zoom. The interview will be about 60-90 minutes and will be recorded with the participants' consent. In addition, participants will be able to choose a pseudonym to protect their identity. Each study participant will receive a $25 Amazon gift card after completing their interview.

If interested in participating, folx can click here [insert hyperlink] to access the research consent form and a secure demographic questionnaire. If you have any questions or concerns about this study, please reach out to me at smbreen@umd.edu or my dissertation chair, Dr. Kimberly Griffin, at
kgriff29@umd.edu.

Kindest Regards,
Stephanie M. Breen, Doctoral Candidate

College of Education
University of Maryland

Appendix B: Recruitment Emails to McNair Program Director and Staff

SUBJECT LINE: Graduate School Choice for Students of Color - Research Study Recruitment

Dear [Staff Member Name],
My name is Stephanie Breen, and I am a doctoral candidate in the College of Education at the University of Maryland. Under the supervision of my dissertation chair, Dr. Kimberly Griffin, I am conducting research that seeks to explore the graduate school processes of Students of Color.

More specifically, I am examining how Students of Color within a McNair Program make decisions about attending graduate school and the extent to which their peers in the program played a role in their decision-making processes. As a current staff member of the UMBC McNair Program, I hope you might be willing to assist me in identifying participants for this research study. Participants should be recent alumni from UMBC who have graduated within the last four years.

Eligible participants did not have to attend graduate school after their undergraduate studies. Interested individuals will be provided a consent form to review, a short demographic questionnaire to complete, and participate in one interview with me. The interview will be conducted in person or by Zoom. The interview will be about 60-90 minutes and will be recorded with the participants' consent. In addition, participants will be able to choose a pseudonym to protect their identity. Each study participant will receive a $25 Amazon gift card after completing their interview.

If you know anyone who is interested in participating, they can click here [insert hyperlink] to access the research consent form and a secure demographic questionnaire. If you have any questions or concerns about this study, please reach out to me at smbreen@umd.edu or my dissertation chair, Dr. Kimberly Griffin, at kgriff29@umd.edu.

Kindest Regards,
Stephanie M. Breen, Doctoral Candidate
College of Education
University of Maryland

Appendix C. Alumni Consent Form

Institutional Review Board
1204 Marie Mount Hall ● 7814 Regents Drive ● College Park, MD 20742 ● 301-405-4212 ● irb@umd.edu

CONSENT TO PARTICIPATE

Alumni Consent From

Project Title	***PEER INFLUENCES AND GRADUATE SCHOOL CHOICE FOR STUDENTS OF COLOR: AN EXPLORATORY CASE STUDY OF MCNAIR SCHOLARS***
Purpose of the Study	This research is being conducted by Dr. Kimberly A. Griffin, Full Professor at the University of Maryland, College Park and Ms. Stephanie M. Breen, doctoral student at the University of Maryland, College Park. We are inviting you to participate in this research project because 1) you are a McNair alum and Student of Color or 3) you are a McNair program staff member. The purpose of this research project is to examine whether and how peer interactions and relationships within a McNair Program influence the graduate school choice processes of Students of Color.
Procedures	This consent form must be completed before we begin data collection. I will ask that you sign this consent form and email it back to me. Please keep the signed copy of this consent form for your own records. There will be one data collection session. The procedure for this one data collection session will involve reviewing the consent form, background information regarding this study, and interview questions. Your individual interview will include questions regarding your relationships with peers within the McNair Program, decision-making processes about attending graduate school, and, if relevant, your transition into a graduate program

	and your feelings about the program, and the extent to which you have continued to keep in touch with your peers. The total duration of the interview will be approximately 60-90 minutes. The interview will occur through Zoom or in-person at an agreed upon location on the UMBC campus. If you agree to participate, I will ask that the interview will be recorded and later transcribed. If you do not wish that the interview will be recorded, I will take extensive notes instead. If there are particular details you would like to keep off the record, please notify me during or after the interview.
Potential Risks and Discomforts	There are minimal risks associated with this study. If you do not feel comfortable sharing personal information regarding your graduate school choice process or experience with the McNair Program, I will understand. You will be able to withdraw from the study at any time for any reason or skip over questions during the interview. In addition, this study will protect your anonymity by use of a pseudonym and I will mask any identifiable information that could trace back to you.
Potential Benefits	There are no direct benefits to participating in this study. However, a broader benefit of this study is developing a better understanding of how Students of Color tap into their peer networks as they navigate the graduate school choice process and the extent to which McNair Programs help facilitate that process for them. This study may also benefit program staff as they may learn how to adjust and enhance their existing programming to support their current students and alumni.

Confidentiality	Any potential loss of confidentiality will be minimized by storing data in a password protected computer. To protect your identity, you will be given the opportunity to select a pseudonym (if desired), and all private details will be masked. Your true name will not be connected to any audio files or transcripts. Your contact information will only be stored in a password protected computer for compensation purposes. All interview audio files and transcripts will be stored within 24 hours to the principal investigator's personal and password-protected computer. Any access to participant contact information, audio files, and transcripts will be limited to Ms. Stephanie M. Breen. All data will be destroyed once it is no longer needed or after a maximum storage period of 2 years. Data will be destroyed by deleting the folder where information is saved and emptying the trash for it to be permanently deleted. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.
Compensation	You will receive a $25 e-gift card for your participation in this research project. I will collect your name and email address so that you will be able to receive compensation for your participation.

Right to Withdraw and Questions	Your participation in this study is completely voluntary. If at any time you change your mind and would like to withdraw from the study, you may do so. During our interview, you reserve the right to decline any question that you do not wish to answer. You can also stop participating at any time. If you are an employee or student, your grades, standing or employability at your institution will not be positively or negatively affected by your participation or non-participation in this study. If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the principal investigator: Stephanie M. Breen 6445 America Blvd Hyattsville, MD 20782 E-mail: smbreen@umd.edu Telephone: (978) 806-6061
Participant Rights	If you have questions or concerns about the following: your role and rights as a research participant, would like to obtain information or offer input or would like to register an anonymous complaint about this study, you may contact: University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678 *For more information regarding participant rights, please visit:* https://research.umd.edu/research-resources/research-compliance/institutional-review-board-irb/research-participants This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.

Statement of Consent	Your signature indicates that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You may wish to save/print a copy of this consent form for your records. If you agree to participate, please sign your name below.	
Signature and Date	NAME OF PARTICIPANT	
Signature and Date	SIGNATURE OF PARTICIPANT	
	DATE	

Appendix D. Program Staff Consent Form

Institutional Review Board
1204 Marie Mount Hall ● 7814 Regents Drive ● College Park, MD 20742 ● 301-405-4212 ● irb@umd.edu

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CONSENT TO PARTICIPATE

Program Staff Consent From

Project Title	***PEER INFLUENCES AND GRADUATE SCHOOL CHOICE FOR STUDENTS OF COLOR: AN EXPLORATORY CASE STUDY OF MCNAIR SCHOLARS***
Purpose of the Study	This research is being conducted by Ms. Stephanie M. Breen, a doctoral student at the University of Maryland, College Park. I am inviting you to participate in this research project because you are a current UMBC McNair program staff member. The purpose of this research project is to examine whether and how peer interactions and relationships within a McNair Program influence the graduate school choice processes of Students of Color.
Procedures	This consent form must be completed before we begin data collection. I will ask that you sign this consent form and email it back to me. Please keep the signed copy of this consent form for your own records. There will be one data collection session. The procedure for this one data collection session will involve reviewing the consent form, background information regarding this study, and interview questions. Your individual interview will include questions regarding program characteristics and aspects of how the program does or does not cultivate peer relationships among Students of Color.

	The total duration of the interview will be approximately 60-90 minutes. The interview will occur through Zoom or in-person at an agreed upon location on the UMBC campus. If you agree to participate, I will ask that the interview will be recorded and later transcribed. If you do not wish that the interview will be recorded, I will take extensive notes instead. If there are particular details you would like to keep off the record, please notify me during or after the interview.
Potential Risks and Discomforts	There are minimal risks associated with this study. If you do not feel comfortable sharing personal information regarding your experience with the McNair Program, I will understand. You will be able to withdraw from the study at any time for any reason or skip over questions during the interview. In addition, this study will protect your anonymity by use of a pseudonym and I will mask any identifiable information that could trace back to you.
Potential Benefits	There are no direct benefits to participating in this study. However, a broader benefit of this study is developing a better understanding of how Students of Color tap into their peer networks as they navigate the graduate school choice process and the extent to which McNair Programs help facilitate that process for them. This study may also benefit program staff as they may learn how to adjust and enhance their existing programming to support their current students and alumni.

Confidentiality	Any potential loss of confidentiality will be minimized by storing data in a password protected computer. To protect your identity, you will be given the opportunity to select a pseudonym (if desired), and all private details will be masked. Your true name will not be connected to any audio files or transcripts. All interview audio files and transcripts will be stored within 24 hours to the principal investigator's personal and password-protected computer. Any access to participant contact information, audio files, and transcripts will be limited to Ms. Stephanie M. Breen. All data will be destroyed once it is no longer needed or after a maximum storage period of 2 years. Data will be destroyed by deleting the folder where information is saved and emptying the trash for it to be permanently deleted. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.
Right to Withdraw and Questions	Your participation in this study is completely voluntary. If at any time you change your mind and would like to withdraw from the study, you may do so. During our interview, you reserve the right to decline any question that you do not wish to answer. You can also stop participating at any time. If you are an employee or student, your grades, standing or employability at your institution will not be positively or negatively affected by your participation or non-participation in this study. If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the principal investigator: Stephanie M. Breen 6445 America Blvd Hyattsville, MD 20782 E-mail: smbreen@umd.edu

	Telephone: (978) 806-6061
Participant Rights	If you have questions or concerns about the following: your role and rights as a research participant, would like to obtain information or offer input or would like to register an anonymous complaint about this study, you may contact: University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678 *For more information regarding participant rights, please visit:* https://research.umd.edu/research-resources/research-compliance/institutional-review-board-irb/research-participants This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.

Statement of Consent	Your signature indicates that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You may wish to save/print a copy of this consent form for your records. If you agree to participate, please sign your name below.	
Signature and Date	NAME OF PARTICIPANT	
Signature and Date	SIGNATURE OF PARTICIPANT	
	DATE	

Appendix E: Demographic Questionnaire

Instructions: Thank you for your interest in participating in this study. To determine if you are eligible for the study, please complete the following questionnaire with preliminary information regarding you and your background.

- First and Last Name:
- Email:
- Age:
- Gender:
- How would you describe your race?
- How would you describe your ethnicity?
- Are you a first-generation college student? Yes, No
- In what month and year did you complete your undergraduate training?
- How many years did you participate in the UMBC McNair Program?
- During your participation in the UMBC McNair Program, did you apply to graduate schools? If so, how many?
- At any point after completing your undergraduate training, did you enroll in graduate school? If yes, what program did you enroll in?
- Are you currently in a graduate program? If so, what is the program?
- Are you willing to participate in one interview via in-person or video conference? Yes, No, Maybe
- If selected for the study, your name will be masked by a pseudonym in order to ensure your confidentiality and privacy. Would you like to select a pseudonym or would you like the researcher to select one for you? 1. Select my own. My pseudonym will be ___. 2. Researcher can select one.

Appendix F. Recruitment Flyer



Appendix G: Alumni Interview Script

Hello [name],

I am so thankful for your time and eager to learn more about your experience in the McNair Program and graduate school choice process.

To get started, I will tell you a little about my research project and what I hope to learn.

The goal of this project is to explore how Students of Color make decisions about whether or not to attend graduate school and the extent to which their peers in a McNair Program play a role in that decision-making process.

Our interview today will consist of 3 parts. I will ask questions about your graduate school choice process and the extent to which your peers in the McNair Program were involved in some of your thinking about your plans for graduate school.

1. In the first part of the interview, we will talk a little bit about what interested you in wanting to attend graduate school. (RQ #1 and #2; Aspiration Development)
2. In the second part of the interview, I will ask a few questions about your search and application process. (RQ #1 and #2; Search and Application)
3. In the third part of the interview, I will ask you to share a little about how you ultimately made a decision about whether or not to attend, and where you are now. (RQ #1 and #2; Choice and Matriculation)

And here are a few other logistical details:

- The interview will last approximately 60-90 minutes.
- With your permission, I would like to record our exchange. Can you confirm permission to record our exchange? [Wait for verbal confirmation].
- During our interview, you may notice that I will be asking questions and will mute myself to take notes. I may also pause in between your responses to take notes.
- As previously indicated in the invitation to this study, I will treat your identity with the strictest confidence. I will use a pseudonym in place of your name. You will have the option of choosing your own pseudonym, if not, I can assign you one at random at the end of our interview today.
- Please know that your participation in this study is completely free and voluntary. I want you to share only what you feel comfortable sharing and you may refuse to respond to any questions during our interview. You may also discontinue the study at any time.

Do you have any questions before we dive in?

Part 1: Aspiration Development (~30 minutes)

1. Describe what your most salient identities are.
    a. How do you think that these identities shaped your college experience?

b. How do you think that these identities shaped your ideas about pursuing graduate school?

2. Tell me a bit about when you first started thinking about graduate school as an option for you?
    a. If any, what advantages did you see in pursuing a graduate degree?
    b. If any, what challenges did you see in pursuing a graduate degree?
    c. How did your identities shape your interest in pursuing a graduate degree?
3. At that time, what made you start thinking about graduate school?
    a. Probe, if necessary: What were some of your motivating factors in wanting to attend graduate school or obtain a graduate degree?
    b. [If enrolled/attended in a graduate program] Have those motivating factors changed at all over time?
4. Where did you get information about graduate school in general?
5. As you reflect back on your experiences in college, what were some of the experiences you may have shaped your thinking?
6. Tell me a little bit about your experiences in the McNair Program.
    a. What were some of the things you did while in the program?
    b. Probe if necessary: What were some of the expectations that the McNair Program shared with you in regards to attending graduate school?
        i. Do you feel like these expectations aligned with your goals after college?
7. Aside from the staff, what messages or information did you receive from your peers in the McNair Program about attending graduate school?
    a. Probe if necessary. What were some of the things that they discussed with you about pursuing a graduate degree?
8. How did these messages you received from McNair staff and peers make you feel about attending graduate school?
        i. What messages did you receive from McNair staff or peers about what it would take to do well in a particular field, graduate program, or institution?
        ii. How did you feel about these messages?

Part 2: Search & Application (~30 minutes)

1. Once you had the sense that you wanted to go to graduate school, how did you start thinking about identifying the programs you were interested in
    a. What kinds of programs were you looking into?
    b. How did you decide which schools you would apply to?
2. Some students rely on support from others when searching for graduate programs and applying to schools. Who was the most helpful to you?
    a. Probe if necessary. *[Peers in McNair, McNair staff, faculty, family, etc].*

        i. *Ex. Reflecting back on your relationships with your peers in the McNair Program, were there particular individuals that you found helpful or had the greatest influence on you during this process?*
            1. *What were some of their most salient identities?*
3. Was there anyone outside of the McNair Program that may have been helpful in identifying and deciding between programs?
    a. Probe if necessary (i.e. people, organizations, or offices/programs)
4. Can you tell me a little about what your application process looked like?
    a. How many programs did you apply to?
    b. What were some parts of the application process that you found easy or difficult?
5. What types of resources and information were the most useful to you during your application process? Where did you get this information from?
    a. What types of resources and information did you feel like you needed to know more about before or after applying to graduate schools? And why?
6. How did the McNair Program help you with the search and application process?
7. Probe if necessary. Tell me about some of the McNair workshops, meetings, or events that were about searching and applying for schools?
    a. What did you learn from these moments?
8. How were the members of your cohort thinking about or involved in your application process?

Part 3: Choice & Matriculation (~30 minutes)

1. *[Attended/enrolled in graduate school]* When you had to make a choice about where you were going to enroll in your graduate program – what were the three most important or influential factors?
    a. *[If the participant did not attend or enroll in graduate school, skip to questions #2 and #3]*
    b. Who did you talk to or consult about this decision?
2. *[never attended or enrolled in graduate school]* When you had to make a choice about where you were going to enroll in your graduate program – what were the three most important or influential factors of why you did not attend?
    a. Who did you talk to or consult about this decision?
3. What do your relationships with your McNair peers look like now?
    a. … with your McNair Program staff?
4. *[for both]* If you could go back in time and change anything about your graduate school access, would you have it differently?

Closing

We have reached the end of the interview questions I have prepared for you. Before we close out, is there anything else that you would like to share that I have not asked you in today's interview about your graduate school choice experience and peers.

[pause for a response, take notes if applicable]

Thank you again for participating in this research study. I will send you a copy of the transcript from today's interview so that you can have the opportunity to clarify or elaborate on any of the statements you have made today. I may follow up with additional questions if I need further clarification on your responses. In addition, I am actively recruiting other alumni participants from the McNair Program. If you know anyone who may be interested in participating, please have them contact me directly by email. Are there any questions or concerns that you have for me?

Appendix H: Program Staff Interview Script

Hello [name],

I am so thankful for your time and eager to learn more about your McNair Program. To get started, I will remind you a little bit about my research project and what I hope to learn.

The goal of this project is to explore how Students of Color make decisions about whether or not to attend graduate school and the extent to which their peers in a McNair Program play a role in that decision-making process.

Our interview today will consist of 2 parts. I will ask questions to learn a little more about the culture of your McNair Program and if and how peer relationships are incorporated into programming.

1. In the first part of the interview, we will talk a little bit about the expectations that the program has for its scholars in regard to post-baccalaureate pathways and planning. (RQ #3; Graduate School Choice Process)
2. In the second part of the interview, I will ask a few questions about what opportunities are available for the scholars to work with one another as they prepare for and engage in the graduate school choice process. (RQ #3; Social Capital & Graduate School Choice Process)

And here are a few other logistical details:

- The interview will last approximately 60-90 minutes.
- With your permission, I would like to record our exchange. Can you confirm permission to record our exchange? [Wait for verbal confirmation].
- During our interview, you may notice that I will be asking questions and will mute myself to take notes. I may also pause in between your responses to take notes.
- As previously indicated in the invitation to this study, I will treat your identity with the strictest confidence. I will use a pseudonym in place of your name. You will have the option of choosing your own pseudonym, if not, I can assign you one at random at the end of our interview today.
- Please know that your participation in this study is completely free and voluntary. I want you to share only what you feel comfortable sharing and you may refuse to respond to any questions during our interview. You may also discontinue the study at any time.

Do you have any questions before we dive in?

Part 1: Culture and Expectations (30 minutes)

1. Can you tell me a little about your role within the McNair Program?
    a. When did you begin with the program?
    b. Why did you decide to work with the McNair Program?
2. Tell me a little about what programming looks like year-round.
3. Each McNair Program has its own unique context. What do you think makes your

McNair Program different from others?

4. What are some of the expectations that you and the program have for each of your students in regards to preparation for applying to and succeeding in graduate school?
    a. Prove if necessary: …applying to graduate school?…enrolling in graduate school?
5. What do you think that the students think about program expectations?
    a. Probe if necessary: Do you think that program expectations match or do not match students' expectations for themselves?
6. From your perspective, what would you say have been some of the most effective workshops, events, or activities for students?

Part 2: Opportunities for Peer Engagement and Connection (30 minutes)

1. On the program's website, I observed that the program leads with a holistic mentoring model. Can you tell me a little bit more about that model? How do you think about peer relationships within the context of holistic mentoring?
2. How do you think about peers in the context of McNair?
    a. How do you encourage peers to engage with each other?
    b. Probe if necessary: Tell me about some workshops, events, or activities that allow students to work in community with one another.
3. Tell me more about how you think about peer relationships within the context of McNair and how you encourage peers to engage with each other.
4. Do you think peers have an influence on the decisions that students make when thinking about pursuing graduate school?
    a. If so, what's part of the process particularly do you see peers being helpful to one another?

Closing

We have reached the end of the interview questions I have prepared for you. Before we close out, is there anything else that you would like to share that I have not asked you in today's interview about the McNair Program and programming centered around peers and community.

[pause for a response, take notes if applicable]

Thank you again for participating in this research study. I will send you a copy of the transcript from today's interview so that you can have the opportunity to clarify or elaborate on any of the statements you have made today. I may follow up with additional questions if I need further clarification on your responses. In addition, I am still actively recruiting other alumni participants from the McNair Program. If you know anyone who may be interested in participating, please have them contact me directly by email. Are there any questions or concerns that you have for me?

Appendix I: Observation Guide

Date:	**Time:**
Duration of Meeting:	**Location:**
Topic of Meeting:	
Description of Participants:	
Description of Activities:	
Theoretical Observations I (GSC)	
Theoretical Observations II (Social Capital):	
Personal Reflection:	

Adapted from Johnson (2017) cited by Genkova (2020).

Appendix J: Document Analysis Guide

Date of Analysis:	**Type of Document:**
Document Date:	**Document Title:**
Purpose of Document:	**Author of Document:**
Intended Audience:	
Summary of Document:	
Major Connections to Framework I (GSC):	
Major Connections to Framework II (Social Capital):	
Personal Reflection:	

Adapted from Johnson (2017) cited by Genkova (2020).

Appendix K: Examples of Initial Codes and Definitions

Codes	When code was applied
Aspiration Factors	Describes who, when, and what motivated participants to become interest in graduate school.
Challenges	Describes percieved challenges and concerns of attending graduate school.
Steps to Search and Apply	Refers to how the participant searched and applied to schools.
Weight of Program Expectations	Refers to how a participant describes the weight that the program's expectations/workload placed on their shoulders.
LSAMP/Meyerhoff Affiliation	This code should be assigned to a participant who was involved in LSAMP or Meyerhoff while attending UMBC.
Program Staff or Faculty Support	Describes an institutional agent who played a role in shaping a participant's journey to graduate school. This includes McNair Staff, UMBC faculty/mentors, UMBC faculty/staff, or URE faculty/staff.
Alumni Support	Describes an instance when a participant received advice/support from an alumni of the program.
Shared Backgrounds	Describes an instance where a participant shares an identity or sense of struggle with their peers. The participant will say things along the line of "we were in the same position", " we were in it together", or "they were like me".
Peers as Accountability	Describes an instance when a participant refers to their peers as accountability partners (i.e. applications, personal statements).
Peers as Sounding boards	Describes an instance where a participant leaned into their peers for advice/guidance around making decisions about graduate school and/or personal things.
Peers as Motivation	Describes how a participant views their peers as a motivating force to persist in college and then apply/enter graduate school.
Peers as Validation	Describes an instance when a participant refers to their peers as a source of confidence and validation in their ability to be successful and enter graduate school.
Program Events	Describes different McNair events, workshops, or programing that was seen as valuable to participants.
Isolated Program Experiences	Describes a participant who was disconnected from peers during their time in McNair. This application should also highlight how and why they were disconnected from the larger cohort.

References

AAUW. (2017). *Deeper in Debt: Women and Student Loans Report.* Retrieved from https://www.aauw.org/app/uploads/2020/03/DeeperinDebt-nsa.pdf

Acevedo-Gil, N. (2017). College conocimiento: Towards an interdisciplinary non-linear Latinx college choice framework. *Race, Ethnicity, and Education*, 18*(2),* 107-125.

Adedokun, O. A., Parker, L. C., Childress, A., Burgess, W., Adams, R., Agnew, C. R., Leary, J., Knapp, D., Shields, C., Lelievre, S., Teegarden, D., &; Hatfull, G. F. (2014). Effect of time on perceived gains from an undergraduate research program. *Cbe Life Sciences Education*, 13(1), 139–148. https://doi.org/10.1187/cbe.13-03-0045

Ahn, J. (2010). The role of social network locations in the college access mentoring of urban youth. Education and Urban Society, 42(7), 839–859.

American Council on Education. (2019). Race and Ethnicity in Higher Education: A Status Report. The Andrew W. Mellon Foundation.

Anguiano, V. & Navarro , M. A.(December 8, 2020). *Hispanic-Serving Institutions Need $1 Billion More in Federal Funding*. Center for American Progress, Retrieved from https://www.americanprogress.org/issues/education-postsecondary/news/2020/12/08/492883/hispanic-serving-institutions-need-1-billion-federal-funding/

Antonio, A. L., Chang, M. J., Hakuta, K., Kenny, D. A., Levin, S., & Milem, J. F. (2004). Effects of racial diversity on complex thinking in college students. *Psychological science*, *15*(8), 507-510.

Ash, A.N., Hill, R., Risdon, S.N., Jun, A. (2020). Anti-Racism in Higher Education: A Model for Change. *Race and Pedagogy Journal*, 4(3), pp. 1-34

Association of Public and Lab Grant Universities. (2020). How does a college degree improve

graduates' employment and earnings potential? *Public Univesity Values*.

Baca Zinn, M., & Zambrana, R. E. (2019). Chicanas/Latinas advance intersectional thought and practice. *Gender & Society*, *33*(5), 677-701.

Bancroft, S. F., Benson, S. K., & Johnson-Whitt, E. (2016). McNair scholars' science, technology, engineering, and mathematics (STEM) graduate experience: A pilot study. Mid-Western Educational Researcher, 28(1).

Banks, T. & Dohy, J. (2019). Mitigating Barriers to Persistence: A Review of Efforts to Improve Retention and Graduation Rates for Students of Color in Higher Education. *Higher Education Studies, 9*(1), 118-131.

Baness King, D. (2011). "Journey to the Doctorate: Motivating Factors for Persistence and Completion of Doctoral Programs Among McNair Scholars." *University of New Mexico*. Electronic Theses and Dissertations.

Bancroft, S. F., Benson, S. K., & Johnson-Whitt, E. (2016). McNair scholars' science, technology, engineering, and mathematics (STEM) graduate experience: A pilot study. Mid-Western Educational Researcher, 28(1).

Bastedo, M. N., Bowman, N. A., Glasener, K. M., & Kelly, J. L. (2018). What are we talking about when we talk about holistic review? selective college admissions and its effects on low-ses students. *The Journal of Higher Education*, *89*(5), 782–805. https://doi.org/10.1080/00221546.2018.1442633

Benitez, M., James, M., Joshua, K., Perfetti, L., & Vick, S. B. (2017). " Someone Who Looks Like Me": Promoting the Success of Students of Color by Promoting the Success of Faculty of Color. *Liberal Education*, *103*(2), n2.

Berelson, B. (1960). *Graduate education in the United states* (Ser. [carnegie series in american

education.]). McGraw-Hill.

Birks, M., Chapman, Y., & Francis, K. (2008). Memoing in qualitative research: Probing data and processes. *Journal of Research in Nursing*, 13(1), 68-75.

Blagg, K. (2018). *The Rise of Master's Degrees Master's Programs Are Increasingly Diverse and Online*. Urban Institute.

Blosser, E. (2020). An examination of black women's experiences in undergraduate engineering on a primarily white campus: considering institutional strategies for change. *Journal of Engineering Education*, *109*(1), 52–71. https://doi.org/10.1002/jee.20304

Bostick, D. N., (2021). The individual and shared narratives of black women repaying student loan debt (dissertation). *ProQuest Dissertations & Theses*. University of Georgia. College of Education.

Bostick, D. & Henry, C. & Brown, L. (2021). Exploring Black graduate women's perceptions of student loan debt. *Journal of Diversity in Higher Education.* 10.1037/dhe0000341.

Boud, D., & Cohen, R. (2014). *Peer learning in higher education: Learning from and with each other*. Routledge.

Bourdieu, P. (1977). Cultural reproduction and social reproduction. In J. Karabel & A. H. Halsey (Eds.), *Power and ideology in education* Oxford University Press, 487–511.

Bourdieu, P. (1986). The Forms of Capital. In J. G. Richardson H*andbook of Theory and Research for the Sociology of Education*. Greenwood Press. 241-258.

Bowen, W., M. Chingos, and M. McPherson. 2009. Crossing the Finish Line: Completing College at America's Public Universities. Princeton, NJ: Princeton University Press.

Bowman, N. A. (2010). College diversity experiences and cognitive development: A

meta-analysis. *Review of Educational Research*, *80*(1), 4-33.

Bowman, N. A., & Holmes, J. M. (2018). Getting off to a good start? first-year undergraduate research experiences and student outcomes. *Higher Education : The International Journal of Higher Education Research*, 76(1), 17–33. https://doi.org/10.1007/s10734-017-0191-4

Bryk, A., & Schneider, B. (2002). *Trust in Schools: A Core Resource for Improvement*. New York: Russell Sage Foundation.

Brooms, D. R. (2018). Exploring black male initiative programs: potential and possibilities for supporting black male success in college. Journal of Negro Education, 87(1), 59–72. https://doi.org/10.7709/jnegroeducation.87.1.0059

Brooms, D. R. (2019). Not in this alone: black men's bonding, learning, and sense of belonging in Black male initiative programs. Urban Review: *Issues and Ideas in Public Education*, 51(5), 748–767.

Brooms, D. R., Clark, J. S., & Druery, J. E. (2020). "We Can Redefine Ourselves": Enhancing Black College Men's Persistence Through Counterspaces. Journal of Black Studies.

Brooms, D. R., & Davis, A. R. (2017). Staying focused on the goal: peer bonding and faculty mentors supporting black males' persistence in college. *Journal of Black Studies*, 48(3), 305–326.

Brunsma, D. L., Embrick, D. G., & Shin, J. H. (2017). Graduate students of color: Race, racism, and mentoring in the white waters of academia. *Sociology of Race and Ethnicity,* 3(1), 1-13.

Bryan, J., Moore-Thomas, C., Day-Vines, N., & Holcomb-McCoy, C. (2011). School counselors as social capital: The effects of high school college counseling on college application

rates. *Journal of Counseling & Development, 89*(2), 190-199.

Byrd-Johnson, L. (2017). Applications for new awards: Ronald E. McNair Postbaccalaureate Achievement Program. Retrieved from: https://www.federalregister.gov/documents/2017/02/21/2017- 03366/applications-for-new-awards-ronald-e-mcnair-postbaccalaureateachievement-program

Burr, V. (2015). *Social constructionism* (3rd ed.). Routledge/Taylor & Francis Group.

Cabrera, A. F. & La Nasa, S. M. (2000). Understanding the college choice of disadvantaged students. *New Directions for Institutional Research*. San Francisco: Jossey-Bass.

Carlton, M. T. (2015). First-generation students and post-undergraduate aspirations. *Sage Open*, *5*(4). https://doi.org/10.1177/2158244015618433

Carnaje, E. G. (2016). Advising across race: Providing culturally-sensitive academic advising at predominantly White institutions. *The Vermont Connection*, *37*(1), 4.

Carnevale, A. P., Jayasundera, T., & Gulish, A. (2016). America's Divided Recovery: College Haves and Have-Nots. *Georgetown University Center on Education and the Workforce*.

Carpi, A., Ronan, D. M., Falconer, H. M., & Lents, N. H. (2017). Cultivating minority scientists: undergraduate research increases self-efficacy and career ambitions for underrepresented students in STEM. *Journal of Research in Science Teaching*, *54*(2), 169–194. https://doi.org/10.1002/tea.21341

Center on Education and the Workforce. (2020). Recovery Report: Projections of Jobs and Education Requirements Through 2020. *Georgetown University, Retrieved at https://1gyhoq479ufd3yna29x7ubjn-wpengine.netdna-ssl.com/wp-content/uploads/2014/11/Recovery2020.FR_.Web_.pdf*

Chamorro-Premuzic, T. (2020, January 07). *Should You Go to Graduate School?*. Harvard

Business Review. https://hbr.org/2020/01/should-you-go-to-graduate-school

Chari, D., & Potvin, G. (2019). Admissions practices in terminal master's degree-granting physics departments: a comparative analysis. P*hysical Review Physics Education Research*, 15(1).

Chavez, C. (2018). Conceptualizing from the inside: advantages, complications, and demands on insider positionality. *The Qualitative Report*, *13*(3), 474-494.

Cherwitz, R. A., & Hartelius, E. J. (2007). Making a great 'engaged university requires rhetoric. *Fixing the fragmented university: Decentralization with direction*, 265-88.

Cochran, T., & Coles, A. (2012). Maximizing the College Choice Process to Increase Fit & Match for Underserved Students. Research to Practice Brief. *Pathways to College Network*.

Cohn, E., & Geske, T. (1990). *The economics of education*. New York: The Free Press, 159-210.

Cole, D., & Griffin, K. A. (2013). Advancing the study of student-faculty interaction: A focus on diverse students and faculty. In *Higher education: Handbook of theory and research* (pp. 561-611). Springer, Dordrecht.

Coleman, J. S. (1990). *The Foundations of Social Theory*. Cambridge, Mass: Harvard University Press.

Council of Graduate School. (2008). *Graduate Education and The Public Good.* https://cgsnet.org/sites/default/files/GradEduPublicGood.pdf

Council of Graduate Schools. (2021). *Graduate Enrollment and Degrees: 2010 to 2020*. The CGS/GRE Survey of Graduate Enrollment and Degrees.

Council of Graduate Schools. (2021). Maximizing Pell Grants to Support Graduate Students. Policy Brief.

https://cgsnet.org/wp-content/uploads/2021/12/Maximizing-Pell-Grants-to-Support-Graduate-Students.pdf

Cox, A. B. (2017). Cohorts, "siblings," and mentors: organizational structures and the creation of social capital. Sociology of Education, 90(1), 47–63.

Cox, T. H., Lobel, S. A., & McLeod, P. L. (1991). Effects of ethnic group cultural differences on cooperative and competitive behavior on a group task. *Academy of management journal*, *34*(4), 827-847.

Crawley, J.K., Cheuk, T.C., Mansoor, A., Perez, M.S., & Park, E. (2019). A proposal for building social capital to ıncrease college access for low-ıncome students. *Journal of Educational Leadership and Policy Studies, 1*(3).

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: choosing among five approaches*. Los Angeles, CA: Sage.

Crisp, G., Baker, V. L., Griffin, K. A., Lunsford, L. G., & Pifer, M. J. (2017). *Mentoring Undergraduate Students: ASHE Higher Education Report, Volume 43, Number 1*. John Wiley & Sons.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Sydney, Allen&Uwin.

Cuellar, M. G., & Gonzalez, A. M. (2019). Beyond the baccalaureate: Factors shaping Latina/o graduate degree aspirations. *Journal of Hispanic Higher Education*, *(201902)*.

Daly, K. J. (2007). *Qualitative methods for family studies & human development*. Sage Publications.

Daniëls, E., Hondeghem, A., & Dochy, F. (2019). A review on leadership and leadership

development in educational settings. *Educational research review*, *27*, 110-125.

Davidson, M. N., & Foster-Johnson, L. (2001). Mentoring in the preparation of graduate researchers of color. *Review of Educational Research*, 71(4), 549–574.

DeAngelo, L. (2009). Can I go?: An exploration of the influence of attending a less selective institution on students' aspirations and preparation for the Ph.D. In M. F. Howard-Hamilton, C. L. Morelon-Quainoo, S. D. Johnson, R. Winkle-Wagner, & L. Santiague (Eds.), *Standing on the outside looking in: Underrepresented students' experiences in advanced degree programs* (pp. 25–44). Sterling, VA: Stylus.

DeAngelo, L. (2010). Preparing for the PhD at a comprehensive institution: Perceptions of the ''barriers.'' *Journal of the Professoriate*, 3(2), 17–49.

DeAngelo, L., Schuster, M. T., & Lachaud, Q. A. (2021). The faculty role in grooming and gatekeeping students' of color potential along the professoriate pipeline. *Review of Higher Education*, 44(4), 493–521.

Denson, N. (2009). Do curricular and cocurricular diversity activities influence racial bias? A meta-analysis. *Review of Educational Research*, *79*(2), 805-838.

Denzin, N. K. (1989). *Interpretive biography*. Newbury Park, CA: Sage. Higher Education Act of 1965. Washington, D.C.:U.S. Department of Health, Education, and Welfare, Office of Education.

Deo, M. D. & Griffin, K. A. (2011). More than friends: The social capital benefits of peer mentoring relationships in law school. *Ohio Northern University Law Review*, 38, 306-332.

Deo, M. E. & Griffin, K.A. (2013). The Social Capital Benefits of Peer-Mentoring Relationships. *Northern University Law Review*, 38(1).

Dever, E. C. (2020). "We have ground to cover for each other": a case study of mentoring across Black sorority alumni in north central west virginia (*dissertation*). West Virginia University.

Dillon, E. W., & Smith, J. A. (2020). The consequences of academic match between students and colleges. *Journal of Human Resources*, *55*(3), 767-808.

Doan, J. (2011). The Impact of Campus Climate and Student Involvement on Students of Color. *The Vermont Connection, 32*, 32-39.

Doherty, E. (February 24th, 2023). Colleges brace for the end of affirmative action. Axios-Politics & Policy. https://www.axios.com/2023/02/24/affirmative-action-scotus-college-diversity

Druery, J. E., & Brooms, D. R. (2019). “It lit up the campus”: Engaging Black males in culturally enriching environments. *Journal of Diversity in Higher Education, 12*(4), 330–340. https://doi.org/10.1037/dhe0000087

Duran, A., & Jones, S. R. (2019). Using intersectionality in qualitative research on college student identity development: Considerations, tensions, and possibilities. *Journal of College Student Development*, *60*(4), 455-471.

Eagan Jr, M. K., & Garvey, J. C. (2015). Stressing out: Connecting race, gender, and stress with faculty productivity. *The Journal of Higher Education*, *86*(6), 923-954.

Emerson, R., Fretz, R., & Shaw, L. (2001). Participant observation and fieldnotes. In P. Atkinson, A. Coffey, S. Delamont, J. Lofland & L. Lofland (Eds.) *Handbook of ethnography*, 352-368. Thousand Oaks, CA: Sage.

English, D., & Umbach, P.D. (2016). Graduate school choice: An examination of individual and institutional effects. *The Review of Higher Education 39*(2), 173-211. doi:10.1353/rhe.20

16.0001.

Espino, M. M. (2014). Exploring the role of community cultural wealth in graduate school access and persistence for Mexican American PhDs. *American Journal of Education*, *120*(4), 545-574.

Fann, A. (2004). Forgotten students: American Indian high school students' narratives on college going. Berkeley, CA: *UC Berkeley Center for the Study of Higher Education Research*.

Farmer-Hinton, R. L., & Adams, T. L. (2006). Social Capital and College Preparation: Exploring the Role of Counselors in a College Prep School for Black Students. *Negro Educational Review*, 57(1/2), 101–116.

Felder, P. (2010). On Doctoral Student Development: Exploring Faculty Mentoring in the Shaping of African American Doctoral Student Success. *The Qualitative Report*, *15*(3), 455-474. https://doi.org/10.46743/2160-3715/2010.1160

Fifolt, M., Engler, J., & Abbott, G. (2014). Bridging STEM professions for McNair Scholars through faculty mentoring and academic preparation. College and University, 89(3), 24–33.

Finkelstein, M. J., Conley, V. M., & Schuster, J. H. (2016). *The faculty factor: Reassessing the American academy in a turbulent era*. JHU Press.

First Generation Network. (n.d.). *Home.* UMBC. https://firstgen.umbc.edu/

Foldy, E. G., Goldman, L., & Ospina, S. (2008). Sensegiving and the role of cognitive shifts in the work of leadership. *The Leadership Quarterly*, *19*(5), 514-529.

Fowler, F. (2006). "Struggling with theory: A beginning scholar's experience with Mazzoni's arena models," In V. A. Anfara & N. T. Mertz (Eds.), *Theoretical frameworks in qualitative research,* pp, 39-58. Thousand Oaks, CA: Sage Publications.

Fox, M. (December 8th, 2020). *Pandemic is leaving students of color behind, creating long-term impact on their earnings and health.* CBS News, Retrieved from https://www.cnbc.com/2020/12/08/covid-pandemic-leaving-students-of-color-behind.html

Fries-Britt, S., & Kelly, B. (2005). Retaining each other: Narratives of two African American women in the academy. *The Urban Review*, 37(3), 221-242.

George Mwangi, Ch. A. (2015). (Re) Examining the role of family and community in college access and choice: A metasynthesis. *Review of Higher Education*, 39(1), 123-151.

Fries-Britt, S., & Snider, J. (2015). Mentoring outside the line: The importance of authenticity, transparency, and vulnerability in effective mentoring relationships. *New Directions for Higher Education*, *2015*(171), 3-11.

Fries-Britt, S., & White-Lewis, D. (2020). In pursuit of meaningful relationships: How Black males perceive faculty interactions in STEM. *The Urban Review,* 54(3), 521–540. https://doi.org/10.1007/s11256-020-00559-x

Fuentes, M. V., Alvarado, A. R., Berdan, J., & DeAngelo, L. (2014). Mentorship matters: does early faculty contact lead to quality faculty interaction? *Research in Higher Education*, 55(3), 288–307.

Garcia, E. (2014). "The Effects of Cultural and Social Capital on College Choice: An Examination of the Differences Between Latino Students and Their Racial/Ethnic Peers" (2014). *Seton Hall University Dissertations and Theses*.

Gasman, M., Abiola, U., & Travers, C. (2015). Diversity and senior leadership at elite institutions of higher education. *Journal of diversity in higher education*, *8*(1), 1.

Gazley, J. L., Remich, R., Naffziger-Hirsch, M. E., Keller, J., Campbell, P. B., & McGee, R.

(2014). Beyond preparation: identity, cultural capital, and readiness for graduate school in the biomedical sciences. *Journal of Research in Science Teaching*, *51*(8), 1021–1048.

Genkova, A. (2020). *A guide to conducting field observations*. Illinois Criminal Justice Information Authority.

George Mwangi, C. A., Thelamour, B., Ezeofor, I., & Carpenter, A. (2018). "black elephant in the room": black students contextualizing campus racial climate within us racial climate. *Journal of College Student Development*, *59*(4), 456–474.

Gibbs, K. D., &; Griffin, K. A. (2013). What do i want to be with my phd? the roles of personal values and structural dynamics in shaping the career interests of recent biomedical science phd graduates. *Cbe Life Sciences Education*, 12(4), 711–23. https://doi.org/10.1187/cbe.13-02-0021

Gildersleeve, R., Croom, N., & Vasquez, P. (2011). "Am I going crazy?!": A critical race analysis of doctoral education. *Equity and Excellence in Education, 44*(1), 93-114.

Gioia, D. A., & Chittipeddi, K. (1991). Sensemaking and sensegiving in strategic change initiation. *Strategic management journal*, *12*(6), 433-448.

Gittens, C. B. (2014). The McNair program as a socializing influence on doctoral degree attainment. Peabody Journal of Education, 89(3), 368–379.

Glass, L. E. (2023). Social capital and first-generation college students: examining the relationship between mentoring and college enrollment. *Education and Urban Society*, *55*(2), 143-174.

Glesne, C. (2011) *Becoming Qualitative Researchers: An Introduction*. (4th ed.), Pearson, Upper Saddle River, NJ.

Gonzales, S. M., Brammer, E. C., & Sawilowsky, S. (2015). Belonging in the academy:

building a "casa away from casa" for latino/a undergraduate students. *Journal of Hispanic Higher Education*, 14(3), 223–239.

González, K., Stoner, C., & Jovel, J. (2003). Examining the role of social capital in access to college for Latinas: Toward a college opportunity framework. *Journal of Hispanic Higher Education*, 2(1), 246-170.

Grier-Reed, T., Ehlert, J., & Dade, S. (2011). Profiling the african american student network. *Learning Assistance Review*, 16(1), 21–30.

Griffin, K.A. (2019a). Redoubling Our Efforts: How Institutions Can Affect Faculty Diversity (Race and Ethnicity in Higher Education: A Status Report). American Council in Education. Retrieved from: https://ace.e-wd.org/resources/ideas-and-insights/redoubling-our-efforts-how-institutions-can-affect-faculty-diversity/

Griffin, K. A. (2019b). Rethinking mentoring: Integrating equity-minded practice in promoting access to and outcomes of developmental relationships. In *Higher education administration for social justice and equity* (pp. 93-110). Routledge.

Griffin, K., del Pilar, W., McIntosh, K., & Griffin, A. (2012). "oh, of course i'm going to go to college": understanding how habitus shapes the college choice process of black immigrant students. *Journal of Diversity in Higher Education*, *5*(2), 96–111.

Griffin, K. A.& Muniz, M. (2011). The strategies, struggles, and successes of graduate diversity officers (GDOs) in the recruitment of students of color. Equity and Excellence in Education, 44(1), 57-76.

Griffin, K. A., & Muñiz, M. (2015). Rethinking the structure of student recruitment and efforts to increase racial and ethnic diversity in doctoral education. *International Journal of Doctoral Studies*, 10, 199-216. Retrieved from http://ijds.org/Volume10/IJDSv10p199-216Griffin0749.pdf

Griffin, K. A., Muñiz, M. M., & Espinosa, L. (2012). The influence of campus racial climate on diversity in graduate education. *The Review of Higher Education*, *35*(4), 535-566.

Griffin, K. A., Pérez David, Holmes, A. P. E., & Mayo, C. E. P. (2010). Investing in the future: the importance of faculty mentoring in the development of students of color in stem. *New Directions for Institutional Research*, 2010(148), 95–103. https://doi.org/10.1002/ir.365

Griffin, K.A., & Reddick, R.J. (2011). Surveillance and sacrifice: Gender differences in The mentoring patterns of Black professors at predominantly White research universities.*American Educational Research Journal, 48*(5), 1032-1057.

Guiffrida, D. A. (2003). African american student organizations as agents of social integration. *Journal of College Student Development*, 44(3), 304–19.

Gurin, P., Nagda, B. R. A., & Lopez, G. E. (2004). The benefits of diversity in education for democratic citizenship. *Journal of social issues*, *60*(1), 17-34.

Handel, S. J. (2014). Under match and the community college student. *Change: The Magazine of Higher Learning*, *46*(1), 35-39.

Harper, S. R. (2015). Black male college achievers and resistant responses to racist stereotypes at predominantly white colleges and universities. *Harvard Educational Review*, 85(4), 646–674.

Harper, S. R., & Newman, C. B. (2016). Surprise, sensemaking, and success in the first

college year: black undergraduate men's academic adjustment experiences. *Teachers College Record*, 118(6).

Harper, S. R., Patton, L. D., & Wooden, O. S. (2009). Access and equity for African American students in higher education: A critical race historical analysis of policy efforts. *The Journal of Higher Education*, 80(4), 389-414.

Harper, S. R., & Quaye, S. J. (2007). Student organizations as venues for black identity expression and development among african american male student leaders. *Journal of College Student Development*, 48(2), 127–144.

Harwood, S. A., Mendenhall, R., Lee, S. S., Riopelle, C., & Huntt, M. B. (2018). Everyday racism in integrated spaces: mapping the experiences of students of color at a diversifying predominantly white institution. *Annals of the American Association of Geographers*, *108*(5), 1245–1259. https://doi.org/10.1080/24694452.2017.1419122

Hanson, J. M., Paulsen, M. B., & Pascarella, E. T. (2016). Understanding graduate school aspirations: The effect of good teaching practices. Higher Education : The International Journal of Higher Education Research, 71(5), 735–752. https://doi.org/10.1007/s10734-015-9934-2.

Harvey, C., & Allard, M. J. (2011). *Understanding and managing diversity.* Pearson Higher Ed.

Hearn, J. C. (1987). Impacts of undergraduate experiences on aspirations and plans for graduate and professional education. *Research in Higher Education* , 27 , 119–141.

Hernandez, M. D. (2008). Sisterhood beyond the ivory tower: An exploration of black sorority alumnae membership. In G. S. Parks, Jr. (Eds.), *Black Greek Letter Organizations in the Twenty First Century: Our Fight Has Just Begun* (253–272).

Hicklin, A. (2007). The effect of race-based admissions in public universities: debunking the myths about hopwood and proposition 209. *Public Administration Review*, *67*(2), 331–340.

Holland, N. E. (2011). The power of peers: influences on postsecondary education planning and experiences of African American students. Urban Education, 46(5), 1029–1055.

Hossler, D. & Gallagher, K.S. (1987). Studying Student College Choice: A Three-Phase Model and the Implications for Policymakers. *The Journal of the American Association of Collegiate Registrars and Admissions Officers*. 62*(3),* 201-227.

Hu, S., & Kuh, G. D. (2003). Diversity experiences and college student learning and personal development. *Journal of college student development*, *44*(3), 320-334.

Hubain, B. S., Allen, E. L., Harris, J. C., & Linder, C. (2016). Counter-stories as representations of the racialized experiences of students of color in higher education and student affairs graduate preparation programs. *International Journal of Qualitative Studies in Education*, *29*(7), 946-963.

Hudspeth Blackburn, P & Ma, A. (October 5, 2021). B*lack colleges' funding hopes dim amid federal budget battle*. The Associated PRess. Retrieved from https://apnews.com/article/coronavirus-pandemic-business-endowments-health-race-and-ethnicity-2d55eda3e946f809a9b7315b364a355f

Humphrey, J., Carey, N., & Mansfield, W. (2002). A profile of the Ronald E. McNair Post-baccalaureate Achievement Program: 1999-2000. Mathematica Policy Research. Retrieved fromhttps://ideas.repec.org/p/mpr/mprres/bae10815e27d4033aa413b9e31d0eac0.html

Hunt, M.A. (2021). *Understanding Holistic Critical Mentoring Model.* Unpublished manuscript.

Hurtado, S., Alvarado, A. R., & Guillermo-Wann, C. (2015). Thinking about race: the salience of racial identity at two-and four-year colleges and the climate for diversity. *Journal of Higher Education*, *V86 N1 P127-155 Jan-feb 2015*.

Ilo, C. (2018). Toward a new model of college "choice" for a twenty-first-century context. *Harvard Educational Review,* 88(2), 227–244. https://doi.org/10.17763/1943-5045-88.2.227

Inkelas, K. K. (2011). The role of living-learning programs in women's plans to attend graduate school in stem fields. *Research in Higher Education*, *52*(4), 349–369.

Institution Data Dashboard for University System of Maryland. (2022). Ethnicity of Students Enrolled [University of Maryland, Baltimore County – Fall 2022]. https://www.usmd.edu/IRIS/

Ishiyama, J. T., & Hopkins, V. M. (2003). Assessing the impact of the McNair Program on students at a public liberal arts university. Opportunity Outlook, 20–24

Jarsky, K., McDonough, P., & Nunez, A. (2009). Establishing a college culture in secondary schools through p-20 collaboration: A case study. *Journal of Hispanic Higher Education*, 8(4), 357-373.

Jayne, M. E., & Dipboye, R. L. (2004). Leveraging diversity to improve business performance: Research findings and recommendations for organizations. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management*, *43*(4), 409-424.

Johnson, L. R. (2016). *Community-based qualitative research: Approaches for education and the*

social sciences. Sage Publications.

Jones T., & Nicolas, A. H. (2020, January 15). *Hard truths: Why only race-conscious policies can fix racism in higher education.* The Education Trust. Retrieved at https://edtrust.org/resource/hard-truths/

Julie J. Park, interview by *NBC4 Washington* on the Supreme Court Hears Race in College Admissions Case. November 2nd, 2022.

Kelly, B. T., Raines, A., Brown, R., French, A., &Stone, J. (2021). Critical validation: black women's retention at predominantly white institutions. *Journal of College Student Retention: Research, Theory & Practice*, 23(2), 434–456.

Kendi, I. X. (2019). *How to be an anti-racist*. One World.

Kerby, A. (April 26, 2012). *How Student Debt Impacts Students of Color*. Center For American Progress. Retrieved from https://www.americanprogress.org/article/how-student-debt-impacts-students-of-color/

Kezar, A. (2019). Creating a Diverse Student Success Infrastructure: The Key to Catalyzing Cultural Change for Today's Student. *Pullias Center for Higher Education*.

Kezar, A., & Eckel, P. D. (2002). The effect of institutional culture on change strategies in higher education: Universal principles or culturally responsive concepts?. *The Journal of Higher Education*, *73*(4), 435-460.

Kim, J. K., & Gasman, M. (2011). In search of a "good college": Decisions and determinations behind Asian American students' college choice. *Journal of College Student Development, 52*(6), 706–728. https://doi.org/10.1353/csd.2011.0073

Kiger, M.E. & Varpi, L. (2020). Thematic analysis of qualitative data: *AMEE Guide Medical Teacher*, 131, 1-9.

Koo, K. K. (2021). Am I welcome here? Campus climate and psychological well-being among students of color. *Journal of Student Affairs Research and Practice*, *58*(2), 196-213.

Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2010). *Student Success in College: Creating Conditions That Matter.* San Francisco, CA: Jossey-Bass.

Labaree, R. V. (2002). The risk of "going observationalist:" Negotiating the hidden dilemmas of being an insider participant observer. *Qualitative Research* , 2 (1), 97- 122.

LaPidus, J.B. (2001). Graduate Education and Research. In Altbach, P. G., Gumport, P. J., & Johnstone, D. B. (Eds.). (2001). *In defense of american higher education* (pp. 249-276). Johns Hopkins University Press.

Levin, J. S., Jaeger, A. J., & Haley, K. J. (2013). Graduate student dissonance: Graduate students of color in a US research university. Journal of Diversity in Higher Education, 6(4), 231.

Light, A., & Strayer, W. (2002). From bakke to hopwood: does race affect college attendance and completion? *The Review of Economics and Statistics*, *84*(1), 34–44.

Lin, N. (2001). *Social capital. A theory of social structure and action*. Cambridge: Cambridge University Press.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage Publications, Inc.

Linder, C., & Winston Simmons, C. (2015). Career and program choice of students of color in student affairs programs. *Journal of Student Affairs Research and Practice*, *52*(4), 414-426.

Lindholm, J. (2004). Pathways to the professoriate: The role of self, others, and environment in shaping academic career aspirations. *The Journal of Higher Education, 75*(6), 603-635. Retrieved from: http://www.jstor.org/stable/3838770

Lopez, A. E., & Gaëtane, J.M. (2021). Challenging anti-black racism in everyday teaching, learning, and leading: from theory to practice. *Journal of School Leadership*, *31*(1-2), 50–65. https://doi.org/10.1177/1052684621993115

Luedke, C. L., Collom, G. D., McCoy, D. L., Lee-Johnson, J., & Winkle-Wagner, R. (2019). Connecting identity with research: socializing students of color towards seeing themselves as scholars. *Review of Higher Education*, *42*(4), 1527–1547.

MacPhee, D., Farro, S., & Canetto, S. S. (2013). Academic self-efficacy and performance of underrepresented STEM majors: Gender, ethnic, and social class patterns. *Analyses of Social Issues and Public Policy*, 13(1), 347-369. http://dx.doi.org/10.1111/asap.12033

Madyun, N. I., Williams, S. M., McGee, E. O., & Milner IV, H. R. (2013). On the Importance of African-American Faculty in Higher Education: Implications and Recommendations. *Educational Foundations*, *27*, 65-84.

Marion, R., & Gonzales, L. D. (2013). *Leadership in education: Organizational theory for the practitioner*. Waveland press.

Martinez, L. R., O'Brien, K. R., & Hebl, M. R. (2017). Fleeing the ivory tower: gender d differences in the turnover experiences of women faculty. *Journal of Women's Health*, *26*(5), 580-586.

Maton, K. I., & Hrabowski, F. A. (2004). Increasing the number of African American phds in the sciences and engineering: a strengths-based approach. *The American Psychologist*, 59(6), 547–56.

McGee, E. O., Jett, C. C., & White, D. T. (2022). Factors contributing to Black engineering and computing faculty's pathways toward university administration and leadership. *Journal of Diversity in Higher Education, 15*(5), 643–656. https://doi.org/10.1037/dhe0000407

McGee, E. O., & Bentley, L. (2017). The troubled success of Black women in STEM. *Cognition and Instruction*, *35*(4), 265-289.

McClain, Kevin S. and Perry, April (2017) "Where Did They Go: Retention Rates for Students of Color at Predominantly White Institutions," College Student Affairs Leadership, 4(1).

McCoy, D. L., Winkle-Wagner, R., & Luedke, C. L. (2015). Colorblind mentoring? Exploring white faculty mentoring of students of color. *Journal of Diversity in Higher Education, 8*(4), 225–242. https://doi.org/10.1037/a0038676

McDonough, P.M. (1996). College Choice as Capital Conversion and Investment: A New Model.

ASHE Annual Meeting Paper.

McDonough, P. M. (2005). Counseling and College Counseling In America's High Schools. *National Association for College Admission Counseling,* 1-40.

McDonough, P. M. & Calderone, S. (2010). The meaning of money: Perceptual differences between college counselors and low-income families about college costs and financial aid. *American Behavioral Scientist, 12,* 1703-1718.

McDonough, P. M. & Fann, A. J. (2007). The study of inequality. In Patricia Gumport (Ed.). *Sociology of higher education: Contributions and their contexts* (pp. 53-93). Maryland, Baltimore: Johns Hopkins Press.

McDonough, P., A. Lising Antonio, M.B. Walpole, and L. Xochitl Perez. (1998). "College Rankings: Democratized College Knowledge for Whom?" Research in Higher Education. 39.5: 513 –537.

McLellan, E., MacQueen, K. M., & Neidig, J. L. (2003). Beyond the qualitative interview: Data preparation and transcription. *Field Methods*, *15*(1), 63-84.

McNair Scholars (2020). *About.* Retrieved from https://mcnairscholars.com/about/

McNair Scholars Program. (2021a). Mission & Vision. UMBC. Retrieved from, https://mcnair.umbc.edu/about/mission-vision/

McNair Scholars Program. (2021b). Mentors in McNair. UMBC. Retrieved from, https://mcnair.umbc.edu/mentors/information-for-mentors/

McNair Scholars Program. (2021C). McNair Advisory Council. UMBC. Retrieved from, https://mcnair.umbc.edu/mcnair-advisory-council/

McNair Scholars. (2021d). Application Information. Retrieved from https://umbc.app.box.com/v/McNairAppInformational2022

McNair, T. B., Bensimon, E. M., & Malcom-Piqueux, L. (2020). *From equity talk to equity walk: Expanding practitioner knowledge for racial justice in higher education*. John Wiley & Sons.

Merriam, S. B. (1988). Case study research in education: A qualitative approach. San Francisco: Jossey-Bass.

Mertens, D. M. (2019). *Research and evaluation in education and psychology: Integrating Diversity with quantitative, qualitative, and mixed methods*. Sage publications, 2019.

Mertz, N., Eckman, E., & Strayhorn, T. (2012). Entering student affairs: a comparative study of graduate school choice. *College Student Affairs Journal*, *30*(2), 1–14.

Meyerhoff Scholars Program. (n.d.). *History.* UMBC. https://meyerhoff.umbc.edu/about/history/

Milem, J. F. (2003). The educational benefits of diversity: Evidence from multiple sectors. *Compelling interest: Examining the evidence on racial dynamics in higher education*, 126-169.

Millett, C. M. (2003). How undergraduate loan debt affects application and enrollment in graduate or first professional school. *The Journal of Higher Education*, *74*(4), 386–427.

Mills, A.J., Durepos,G. & Wiebe, D. (2010). Depth of Data. *Encyclopedia of Case Study Research*, https://dx.doi.org/10.4135/9781412957397.n107.

Miranda, M., Salinas Jr, C. & Real, M. (2020). Latino/a Fraternity and Sororities: Historia y Familia. In *Supporting fraternity and sorority in the contemporary era: Advancements in practice*, (pp.177-187).

Mishra, S. (2020). Social networks, social capital, social support and academic success in higher education: a systematic review with a special focus on 'underrepresented' students. *Educational Research Review*, 29. https://doi.org/10.1016/j.edurev.2019.100307

Missaghian, R. (2021). Social capital and post-secondary decision-making alignment for low-income students. *Social Sciences,* 10(3), 83–83. https://doi.org/10.3390/socsci10030083

Mitchall, A. M., & Jaeger, A. J. (2018). Parental influences on low-income, first-generation students' motivation on the path to college. *Journal of Higher Education, 89*(4), 582–609. https://doi-org.proxy-um.researchport.umd.edu/10.1080/00221546.2018.1437664

Moore, M. (2017). Women of color in the academy: Navigating multiple intersections And multiple hierarchies. *Social Problems -New York-, 64*(2), 200-205.

Muhammad, C. G. (2008). African american students and college choice: a consideration of the role of school counselors. *NASSP Bulletin*, 92(2), 81–94.

Muhammad, M., Wallerstein, N., Sussman, A. L., Avila, M., Belone, L., & Duran, B. (2015).

Reflections on researcher identity and power: the impact of positionality on community based participatory research (cbpr) processes and outcomes. *Critical Sociology,* 41(7-8), 1045–1063.

Mullen, A. L., Goyette, K. A., & Soares, J. A. (2003). Who goes to graduate school? Social and academic correlates of educational continuation. Sociology of Education. 76(2), 143–169. Retrieved from http://www.jstor.org/stable/3090274.

Museus, S. D. (2008). The role of ethnic student organizations in fostering African American and Asian American students' cultural adjustment and membership at predominantly White institutions. *Journal of College Student Development*, 49 (6), 568–586.

Mustaffa, J.B. (2017) Mapping violence, naming life: a history of anti- Black oppression in the higher education system, *International Journal of Qualitative Studies in Education*, 30:8, 711-727.

Nair, L., & Adetayo, O. A. (2019). Cultural competence and ethnic diversity in healthcare. *Plastic and Reconstructive Surgery Global Open*, *7*(5).

Naphan-Kingery, D. E., Miles, M., Brockman, A., McKane, R., Botchway, P., & McGee, E. (2019). Investigation of an equity ethic in engineering and computing doctoral students. *Journal of Engineering Education*, *108*(3), 337-354.

National Center for Education Statistics. (2018). *Race/ethnicity of college faculty*. Fast Facts. Retrieved from https://nces.ed.gov/fastfacts/display.asp?id=61

National Science Board (2022). Invention, Knowledge Transfer, and Innovation. *Science & Engineering Indicators Report*, https://ncses.nsf.gov/pubs/nsb20224/assets/nsb20224.pdf

Nettles, M. T., & Millett, C. M. (2006). *Three magic letters: Getting to Ph.D.* The Johns Hopkins

University Press.

Newman, P.& Newman, B.(1976). Early Adolescence and Its Conflict: Group Identity Versus Alienation. *Adolescence*, 11, 261-274.

Noddings, N. (2008). *Caring and moral education.* In L. P. Nucci & D. Narvaez (Eds.), Handbook of Moral and Character Education (pp. 161-174). New York, NY: Routledge.

Nora, A. (2004). The role of habitus and cultural capital in choosing a college, transitioning from high school to higher education, and persisting in college among minority and nonminority students. *The Journal of Hispanic Higher Education.* 3 (2), 180–208.

Nnadozie, E., Ishiyama, J., & Chon, J. (2001). Undergraduate research internships and graduate school success. Journal of College Student Development, 42(2), 145.

Núñez, A. M., & Bowers, A. J. (2011). Exploring what leads high school students to enroll in Hispanic-serving institutions: A multilevel analysis. *American Educational Research Journal*, *48*(6), 1286-1313.

Office of Academic Opportunity Programs (n.d.) Welcome. UMBC. Retrieved from, https://aop.umbc.edu/

O'Grady, J. (November 9, 2020.) *First in Class.* UMBC Magazine, https://magazine.umbc.edu/first-in-class/

Okahana, H., & Zhou, E. (2019). *Graduate enrollment and degrees: 2008 to 2018*. Council of Graduate Schools.

O'Meara, K. A., A. Griffin, K., Kuvaeva, A., Nyunt, G., & N Robinson, T. (2017). Sense of belonging and its contributing factors in graduate education. *International Journal of Doctoral Studies*, 12, 251–279. https://doi.org/10.28945/3903

O'Leary, E. S., Shapiro, C., Toma, S., Sayson, H. W., Levis-Fitzgerald, M., Johnson, T., & Sork,

V. L. (2020). Creating inclusive classrooms by engaging STEM faculty in culturally responsive teaching workshops. *International Journal of STEM education*, 7, 1-15.

O'Shea, S. (2016). Avoiding the manufacture of 'sameness': First-in-family students, cultural capital and the higher education environment. *Higher Education: The International Journal of Higher Education Research,72*(1), 59-78. doi:10.1007/s10734-015-9938-y

Oyserman, D., & Harrison, K. (1998). Implications of cultural context: African American identity and possible selves. In *Prejudice* (pp. 281-300). Academic Press.

Palmer, R. T., Maramba, D. C., & Dancy, T. E. (2011). A qualitative investigation of factors promoting the retention and persistence of students of color in stem. *The Journal of Negro Education*, 80(4), 491–504.

Park, J. J. (2018). *Race on campus : debunking myths with data*. Harvard Education Press.

Pascarella, E. T., & Terenzini, P. T. (2005). How college affects students: A third decade of research. Jossey-Bass.

Patel, L. (2016). *Decolonizing educational research*: From ownership to answerability. Routledge.

Patton, L. D. (2006). Black culture centers: still central to student learning. *About Campus*, 11(2), 2–8.

Patton, L. (2016). Disrupting postsecondary prose: Toward a critical race theory of higher education. *Urban Education, 51*(3), 315-342.

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Sage Publications, Inc.

Peng, S. S., & Wright, D. (1994). Explanation of academic achievement of Asian American

students. *Journal of Educational Research,* 87(6), 346-352.

Patton, L. D., & Catching, C. (2009). 'Teaching while Black': Narratives of African American student affairs faculty. *International Journal of Qualitative Studies in Education*, *22*(6), 713-728.

Pérez II, D. (2014). Exploring the nexus between community cultural wealth and the academic and social experiences of Latino male achievers. *International Journal of Qualitative Studies in Education, 27*(6), 747–767.

Perez-Felkner, L. (2015). Perceptions and Resilience in Underrepresented Students' Pathways to College. *Teachers College Record*, 117(8), 1-60.

Perez, V. H., & Gong, Y. (2005). Increasing minority students' access to graduate schools. *Interactions: Ucla Journal of Education and Information Studies*, *1*(2). https://doi.org/10.5070/D412000545

Perna, L.W. (2004). The key to college access: Rigorous academic preparation. In W. G. Tierney,

Z. B. Corwin & J. E. Colyar (Eds.). *Preparing for College*: *Nine elements of effective outreach.* (pp. 113-134). Albany, NY: SUNY Press.

Perna, L. (2006). Studying college access and choice: A proposed conceptual model. In J.C. Smart (Ed.), *Higher Education: Handbook of Theory and Research.* (Vol. XX, pp. 157-197.) Springer.

Perez, P. A., & McDonough, P. M. (2008). Understanding latina and latino college choice: a social capital and chain migration analysis. *Journal of Hispanic Higher Education*, 7(3), 249–265.

Peterson, Kent D., and Terrence E. Deal. "How leaders influence the culture of schools."

Educational leadership 56 (1998): 28-31.

Piaget, J. (1932). *The moral judgment of the child.* Harcourt, Brace.

Plagens, G. K. (2011) "Social Capital and Education: Implications for Student and School Performance," *Education and Culture, 27*(1), 40-64.

Poock, M. C., & Love, P. G. (2001). Factors influencing the program choice of doctoral students in higher education administration. *NASPA Journal, 38*(2), 203-223.

Posselt, J. R. (2014). Toward inclusive excellence in graduate education: constructing merit and diversity in phd admissions. *American Journal of Education*, 120(4), 481–514. https://doi.org/10.1086/676910

Posselt, J. R. (2015). Disciplinary logics in doctoral admissions: understanding patterns of faculty evaluation. *Journal of Higher Education*, 86(6), 807–833.

Posselt, J, R. & Black, K.R. (2012), "Developing the research identities and aspirations o First-generation college students: Evidence from the McNair scholars program", *International Journal for Researcher Development*, 3(1), 26-48.

Posselt, J. R., & Grodsky, E. (2017). Graduate Education and Social Stratification. *Annual review of sociology*, *43*, 353–378. https://doi.org/10.1146/annurev-soc-081715-074324

Posselt, J., Reyes, K. A., Slay, K. E., Kamimura, A., & Porter, K. B. (2017). Equity efforts as boundary work: How symbolic and social boundaries shape access and inclusion in graduate education. *Teachers College Record*, *119*(10), 1-38.

Quaye, S. J., Griffin, K. A., & Museus, S. D. (2015). Engaging students of color. *Student engagement in higher education: Theoretical perspectives and practical approaches for diverse populations*, *2*, 15-35.

Ramirez, E. (2011). “no one taught me the steps”: latinos' experiences applying to graduate

school. *Journal of Latinos and Education*, *10*(3), 204–222. https://doi.org/10.1080/15348431.2011.581105

Ramirez, E. (2013). Examining Latinos/as' graduate school choice process: An intersectionality perspective. *Journal of Hispanic Higher Education*, *12*(1), 23–36. https://doi.org/10.1177/1538192712452147

Rankin, S. R., & Reason, R. D. (2005). Differing perceptions: How students of color and white students perceive campus climate for underrepresented groups. *Journal of college student development*, *46*(1), 43-61.

Rankin, Y.A. & Thomas, J.O. (2020). The Intersectional Experiences of Black Women in Computing. Proceedings of the 51st ACM Technical Symposium on Computer Science Education. A*ssociation for Computing Machinery*, New York, NY, USA, 199–205. DOI:https://doi.org/10.1145/3328778.3366873

Renbarger, R. (2019). Graduate school preparation from the ronald e. mcnair post-baccalaureate achievement program: a systematic review. *Higher Education Politics & Economics*, *5*(1), 33–53.

Restad, C. (2013). Beyond the Program Year: Graduates Students' Understanding of How McNair Scholars Program Participation Impacts Their Experiences in Graduate School. *Portland State University McNair Scholars Online.* 7, 1-31.

Reitz, A. K., Zimmermann, J., Hutteman, R., Specht, J., & Neyer, F. J. (2014). How peers make a difference: the role of peer groups and peer relationships in personality development. *European Journal of Personality*, *28*(3), 279–288.

Renbarger, R. (2019). Graduate school preparation from the ronald e. mcnair

post-baccalaureate achievement program: a systematic review. *Higher Education Politics & Economics*, *5*(1), 33–53. https://doi.org/10.1177/1538192712452147

Richard, O. C. (2000). Racial diversity, business strategy, and firm performance: A resource-based view. *Academy of management journal*, *43*(2), 164-177.

Rios-Aguilar, C., & Kiyama, J. (2012). Funds of knowledge: A proposed approach to study Latina/o students' transition to college. Journal of Latinos and Education, 11(1), 2-16.

Scholars, M. (n.d.). About. Retrieved December 06, 2020, from https://mcnairscholars.com/about/

Robinson, K. J., & Roksa, J. (2016). Counselors, information, and high school college-going culture: inequalities in the college application process. *Research in Higher Education*, *57*(7), 845–868.

Roberson, Q. M. (2019). Diversity in the workplace: A review, synthesis, and future research agenda. *Annual Review of Organizational Psychology and Organizational Behavior*, *6*, 69-88.

Robert, K., & Ola, L. (2021). Reflexive sensegiving: An open-ended process of influencing the sensemaking of others during organizational change. *European Management Journal*, *39*(4), 476-486.

Rodríguez A.L., Betancourt, T., Collins, K. H., Hinojosa, O., &; Corona, C. (2018). Undergraduate research experiences: mentoring, awareness, and perceptions—a case study at a hispanic-serving institution. *International Journal of Stem Education*, 5(1), 1–13. https://doi.org/10.1186/s40594-018-0105-8

https://doi.org/10.1177/1538192712452147

Rodriguez, S. L., & Blaney, J. M. (2021). "We're the unicorns in STEM": Understanding how academic and social experiences influence sense of belonging for Latina undergraduate students. *Journal of Diversity in Higher Education, 14*(3), 441–455. https://doi.org/10.1037/dhe0000176

Rogers, M. R., & Molina, L. E. (2006). Exemplary efforts in psychology to recruit and retain graduate students of color. *Am*

Rondini, A. (2012). "I thought I was so dumb...": Low-income first-generation college students, Inequities in Academic Preparation and Reference Group Theory. In T. Hicks & A. Pitre (Eds.), *Research Studies in Higher Education: Educating Multicultural College Students* (pp. 161-187).

Roksa, J. & Kinsley, P. (2019). The role of family support in facilitating academic success of low-income students. *Research in Higher Education*. 60, 415-436.

Sadler, T. D., & Fowler, S. R. (2006). A threshold model of content knowledge transfer for socioscientific argumentation. *Science education*, *90*(6), 986-1004.

Saldaña, J. (2021). The coding manual for qualitative researchers. *The coding manual for qualitative researchers*, 1-440.

Saldaña, J. (2016). The coding manual for qualitative researchers (3rd ed.). SAGE.

Sanders, C. E., & Landrum, R. E. (2012). The graduate school application process: what our students report they know. *Teaching of Psychology*, *39*(2), 128–132. https://doi.org/10.1177/0098628312437697

Savitz-Romer, M., & Bouffard, S. M. (2012). *Ready, willing, and able : a developmental approach to college access and success.* Harvard Education Press.

Schwandt, T.A. (2007). *The Sage dictionary of qualitative inquiry*. Thousand Oaks, CA: Sage Publications.

Scott-Clayton, J & Jing Li, J. (2016). Black-white disparity in student loan debt more than triples after graduation. *Evidence Speaks Reports 2*(3), Economic Studies: Brookings Insitute.

Seburn, M., Chan, T., Kirshstein, R. (2005). A profile of the Ronald E. McNair Postbaccalaureate Achievement Program, 1997-1998 through 2001-2002. *US Department of Education, Office of Postsecondary Education*. Retrieved from: https://www2.ed.gov/programs/triomcnair/mcnairprofile1997-2002.pd

Seymour, E., Hunter, A.-B., Laursen, S. L., & DeAntoni, T. (2007). Establishing the benefits of research experiences for undergraduates in the sciences: first findings from a three-year study. *Science Education,* 88(4), 493–534.

Settles, I. H., Jones, M. K., Buchanan, N. T., & Brassel, S. T. (2022). Epistemic exclusion of women faculty and faculty of color: Understanding scholar (ly) devaluation as a predictor of turnover intentions. *The Journal of Higher Education*, *93*(1), 31-55.

Slay, K. (2017). *Choosing colleges in a post-affirmative action era: Black students' perceptions of institutional diversity and campus climate* (Doctoral dissertation).

Slay, K. E., Reyes, K. A., & Posselt, J. R. (2019). Bait and switch: Representation, climate, and tensions of diversity work in graduate education. *The Review of Higher Education*, *42*(5), 255-286.

Sokatch, A. (2006). Peer influences on the college-going decisions of low socioeconomic status of urban youth. *Education and Urban Society,* 39(1). 128-146.

Solórzano, D. G., Ceja, M., & Yosso, T. (2000). Critical race theory, racial microaggressions, and campus racial climate: The experiences of African American college students. *The Journal of Negro Education*, 69(1–2), 60–73.

Solorzano, D., Villalpando, O., Oseguera, L. (2005). Educational inequities and latina/o undergraduate students in the united states: a critical race analysis of their educational progress. *Journal of Hispanic Higher Education*, 4(3), 272–294.

Smell, A.(2019) "McNair Scholars: Identifying and Overcoming the Obstacles in Academia Faced by Underrepresented Populations," *Ursidae: The Undergraduate Research Journal at the University of Northern Colorado*, *5*(2), 1-14.

Smerek, R. E. (2009). *Sensemaking and sensegiving: Leadership processes of new college presidents*. University of Michigan.

Stanton-Salazar, R. D. (1997). A social capital framework for understanding the socialization of racial minority children and youth. *Harvard Educational Review*, 67, 1-40.

Stanton-Salazar, R. D. (2011). A social capital framework for the study of institutional agents and their role in the empowerment of low-status students and youth. Youth & Society, 43(3), 1066–1109.

Strayhorn, T. (2010). Undergraduate research participation and stem graduate degree aspirations among students of color. *New Directions for Institutional Research*, (148), 85–93.

Strayhorn, T. L., Hurtado, S., & Harris, Q. (2012). *College students' sense of belonging : a key to educational success for all students*. Routledge.

Strada Education Network (2020). Nearly Half of Americans Say They've Already Lost Income

as a Result of COVID-19; One-Third Anticipate Needing Additional Education or Training. *Report from Strada Center for Consumer Insights*. Retrieved at https://stradaeducation.org/press-release/nearly-half-of-americans-say-theyve-already-lost-income-as-a-result-of-covid-19-one-third-anticipate-needing-additional-education-or-training/

Strayhorn, T. (2010). Undergraduate research participation and stem graduate degree aspirations among students of color. *New Directions for Institutional Research*, (148), 85–93.

Strayhorn, T. L., Hurtado, S., & Harris, Q. (2012). *College students' sense of belonging : a key to educational success for all students*. Routledge.

Strayhorn, T. L., & Saddler, T. N. (2009). Gender differences in the influence of faculty-student mentoring relationships on satisfaction with college among African Americans. *Journal of African American Studies*, 13(4), 476–493.

Strayhorn, T. L., Williams, M. S., Tillman-Kelly, D., & Suddeth, T. (2013). Sex differences in graduate school choice for Black hbcu bachelor's degree recipients: a national analysis. *Journal of African American Studies*, *17*(2), 174–188.

Stewart, S. & Haynes, C. (2015). An Alternative Approach to Standardized Testing: A Model That Promotes Racial Equity and College Access. *Journal of Critical Scholarship on Higher Education and Student Affairs*. 2(1), pp. 123-136.

Stolle-McAllister, K., Domingo, M. R. S., & Carrillo, A. (2011). The Meyerhoff way: how the Meyerhoff scholarship program helps black students succeed in the sciences. *Journal of Science Education and Technology*, 20(1), 5–16.

Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: Norton.

Tate, K. A., Fouad, N. A., Young, G., Marks, L. R., Guzman, E., & Williams, E. G. (2015). Underrepresented first-generation, low-income college students' pursuit of a graduate education: investigating the influence of self-efficacy, coping efficacy, and family influence. *Journal of Career Assessment*, *23*(3), 427–441.

Teitel, L. (1997). Understanding and harnessing the power of the cohort model in preparing educational leaders. *Peabody Journal of Education*, *72*(2), 66-85.

Telles, A. B., & Mitchell, T. D. (2018). Much discussion, not much change: Perceptions of campus climate continue to differ along racial lines. *Evaluating campus climate at US research universities: Opportunities for diversity and inclusion*, 395-408.

Teranishi, R., & Briscoe, K. (2006). Social capital and the racial statification of college opportunity. *Higher Education -New York-*, *21*, 591–614.

Teranishi, R., Ceja, M., Antonio, A., Allen, W., & McDonough, P. (2004). The college-choice process for Asian Pacific Americans: Ethnicity and socioeconomic class in context. Review of Higher Education, 27(4), 527-551.

Terrell, S. R. (2016). *Writing a proposal for your dissertation: guidelines and examples*. Guilford Press.

Tierney, W. G., & Venegas, K. M. (2006). Fictive kin and social capital: the role of peer groups in applying and paying for college. *American Behavioral Scientist*, 49(12), 1687–1702. https://doi.org/10.1177/0002764206289145

Trent, F., Dwiwardani, C., & Page, C. (2021). Factors impacting the retention of students of color in graduate programs: A qualitative study. *Training and Education in Professional*

Psychology, 15(3), 219.

Triandis, H. C., Bontempo, R., Villareal, M. J., Asai, M., & Lucca, N. (1988). Individualism and collectivism: Cross-cultural perspectives on self-ingroup relationships. *Journal of personality and Social Psychology*, *54*(2), 323.

Trolian, T. L., & Parker, E. T. III. (2017). Moderating influences of student-faculty interactions on students' graduate and professional school aspirations. *Journal of College Student Development*, *58*(8), 1261–1267.

Turner, C. S. V. (1994). Guests in someone else's house: Students of color. *The Review of Higher Education*, *17*(4), 355-370.

Turner, C. S. V. (2002). Women of color in academe: Living with multiple marginality. *The Journal of Higher Education*, *73*(1), 74-93.

Umbach, P. D. (2006). The contribution of faculty of color to undergraduate education. *Research in higher education*, *47*(3), 317-345.

University of Maryland, Baltimore County. (2022). *UMBC Research & Creative Achievement Fast Facts.* https://research.umbc.edu/fast-facts/#:~:text=UMBC's%20faculty%20submitted%20over%20%24363,million%20from%20federal%20funding%20sources.

University of Maryland, Baltimore County (2021). Fast Facts. Retrieved from https://about.umbc.edu/

Urrieta Jr, L., & Méndez Benavidez, L. R. (2007). Community commitment and activist scholarship: Chicana/o professors and the practice of consciousness. *Journal of Hispanic Higher Education*, *6*(3), 222-236.

U.S. Census Bureau. (2020). 2020 ACS 1-Year Experimental Data Release. Retrieved at

https://data.census.gov/cedsci/table?t=Educational%20Attainment&y=2019&tid=ACSST1Y2019.S1501

U.S. Department of Education. (2023) *Federal TRIO Programs.* Office of Postsecondary Education. https://www2.ed.gov/about/offices/list/ope/trio/index.html

U.S. Department of Education. (2021). *Ronald E. McNair Postbaccalaureate Achievement Program.* Retrieved from https://www2.ed.gov/programs/triomcnair/index.html

UW-Madison's Multicultural Student Center. (2021) *Racial category terms*. Retrieved from, https://raceandpedagogy.ssc.wisc.edu/getting-started/terminology/

Villalpando, O. & Solorzano, D. G. (2004). The role of culture in college preparatory programs: A review of the research literature. In W. G. Tierney, Z. B. Corwin & J. E. Colyar (Eds.). Preparing for College: Nine elements of effective outreach (pg. 13-28). Albany, NY: SUNY Press. Textbook.

Waiters Martinez, M. (2014). Preparing First-Generation College Students for Doctoral Persistence: A Formative Evaluation of the McNair Scholars Program. *Doctoral dissertation*. Nova Southeastern University. Retrieved from NSUWorks, Abraham S. Fischler School of Education. (53)

Wallace, W.L. (1965) Peer Influences and Undergraduates' Aspirations for Graduate Study. *Sociology of Education*, *35*(5), 375-392.

Walsh, B. A., Woodliff, T. A., Lucero, J., Harvey, S., Burnham, M. M., Bowser, T. L., Aguirre, M., & Zeh, D. W. (2021). Historically Underrepresented Graduate Students' Experiences During the COVID-19 Pandemic. *Family relations*, https://doi.org/10.1111/fare.12574

Warren, C.A. & Coles, J.A. (2020) Trading Spaces: Antiblackness and Reflections on Black Education Futures, *Equity & Excellence in Education*, 53:3, 382-398.

Warrick, D. D. (2017). What leaders need to know about organizational culture. *Business Horizons*, *60*(3), 395-404.

Webb, S. (2022). Higher vocational education and the matter of equity. In *Equity and Access to High Skills through Higher Vocational Education* (pp. 9-35). Palgrave Macmillan, Cham.

Weidman, J. C., &; Stein, E. L. (2003). Socialization of doctoral students to academic norms. *Research in Higher Education*, 44(6), 641–656.

Weidman, J.C., Twale, D. J., & Stein, E.L. (2001) *Socialization of graduate and professional students in higher education: A perilous passage?* Jossey-Bass.

Whittaker, J. A., Montgomery, B. L., & Acosta, V. G. M. (2015). Retention of underrepresented minority faculty: strategic initiatives for institutional value proposition based on perspectives from a range of academic institutions. *Journal of Undergraduate Neuroscience Education*, *13*(3), A136.

Whitford, E. (May 14, 2020*). Graduate Degrees Boost Job Prospects During Pandemic More Than Others.* Inside HigherEd, Retrieved at https://www.insidehighered.com/news/2020/05/14/graduate-degree-holders-starting-new jobs-higher-rates-all-other-americans-survey

Will, M. G., & Pies, I. (2018). Sensemaking and sensegiving: A concept for successful change management that brings together moral foundations theory and the ordonomic approach. *Journal of Accounting & Organizational Change*.

Williams, S. (August 25, 2020). *Why Your Bachelor's Degree Won't Get You a Job.* Pearson Accelerated Pathways.

William, G. T., & Kristan, M. V. (2006). Fictive kin and social capital : the role of peer groups in

applying and paying for college. American Behavioral Scientist, 49(12), 1687–1702. https://doi.org/10.1177/0002764206289145

Williams, M. & Moster, T. (2019). The Art of Coding and Thematic Exploration in Qualitative Research. International Management Review, *15*(1), 45-55.

Wisdom Institute: UMBC's Association for Retirees (2023). *Welcome*. UMBC. https://wisdom.umbc.edu/

Winkle-Wagner, R., &; McCoy, D. L. (2016). Entering the (postgraduate) field: underrepresented students' acquisition of cultural and social capital in graduate school preparation programs. *Journal of Higher Education*, 87(2), 179–205.

Winnick, Dinah. (2021, August 25). UMBC President Freeman Hrabowski to retire in spring 2022 after three decades of transformational leadership. University of Maryland, Baltimore County. https://umbc.edu/stories/hrabowski-retirement/

Woodward, B., & Howard, T. C. (2015). Creating educational excellence in the pipeline: Undergraduate African American males' perceptions of educational research and participation in the Black male project. *Spectrum: A Journal on Black Men*, *4*(1), 99–125.

Yakushko, O., Badiee, M., Mallory, A., & Wang, S. (2011). Insider outsider: reflections on working with one's own communities. *Women & Therapy*, 34(3), 279–292. https://doi.org/10.1080/02703149.2011.580685

Yin, R. K. (2014). *Case study research: design and methods*. (5th ed.). SAGE.

Yosso, T. J., Smith, W. A., Ceja, M., & Solórzano, D. G. (2009). Critical race theory, racial microaggressions, and campus racial climate for Latina/o undergraduates. Harvard Educational Review, 79, 659-690.

Yosso, T.J. (2005). Whose culture has capital? A critical race theory discussion of community

cultural wealth, *Race Ethnicity and Education, 8*(1), 69-91.

Zhang, L. (2005). Advance to graduate education: the effect of college quality and undergraduate majors. *Review of Higher Education*, *28*(3), 313–338.