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# "It's supposed to be super easy and it's not": Black and Latinx student experiences in the Doctor of Physical Therapy admissions process

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"It's supposed to be super easy and it's not": Black and Latinx student experiences in the Doctor

of Physical Therapy admissions process


A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.


by

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## Dedication

To my grandmother, who gave us all so much, but expected little in return.

I miss you every day.

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Table of Contents

Abstract

"IT'S SUPPOSED TO BE SUPER EASY AND IT'S NOT": BLACK AND LATINX STUDENT EXPERIENCES IN THE DPT ADMISSIONS PROCESS

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.

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Data provided by the Physical Therapy Central Application System (PTCAS) suggests that despite the large numbers of applicants to Doctor of Physical Therapy (DPT) programs on an annual basis, a gap remains between the number of White and Black and Latinx applicants who are offered admission to DPT programs. Efforts made by DPT programs to increase the diversity of their incoming cohorts include the use of holistic review processes and enrichment programs to recruit more diverse classes. However, research suggests that the undergraduate experiences of students of color have an impact on their aspirations to graduate and professional schools, and determine their success in the graduate application process.

The purpose of this study is to explore the experiences of Black and Latinx students as they navigate the Doctor of Physical Therapy (DPT) admissions process. This study investigates the ways Black and Latinx students navigate the DPT admissions process, to better understand the recruitment and admissions processes of DPT programs. This qualitative study examined the Black and Latinx student experience of the DPT admissions process through a Critical Race Theory (CRT) framework using phenomenological methods.

Five main themes emerged from this study that describes how Black and Latinx students experience the DPT admissions process: overcoming challenges, seeking support, race and access, program choice, and, growth and leadership. These findings are discussed in relation to existing literature and CRT. Implications and recommendations for admissions professionals are provided.

*Keywords*: Critical Race Theory, graduate admissions, DPT, equity-minded institutions

## Chapter 1: Introduction

In 2013, the American Council of Academic Physical Therapy (ACAPT) sought to promote a diverse physical therapy student population and professional workforce (Wise et al., 2017). ACAPT is part of the American Physical Therapy Association (APTA) and is responsible for ensuring that physical therapy education programs in the United States adhere to standards set by the APTA. ACAPT defines diversity in PT education as: a) students who are from educationally disadvantaged backgrounds, including first generation college students, English as a second language, and students from districts in which 50% or fewer graduates attend college; b) low socioeconomic status, c) geographically underrepresented areas such as from a medically underserved area or an area with high poverty (Wise et al., 2017).

While ACAPT's standards do not directly address the need to increase enrollment of Black and Latinx students, there is a need for Doctor of Physical Therapy (DPT) programs to do so due to their under-representation (Moerchen et al., 2018). Increasing enrollment of Black and Latinx students, however, requires that Black and Latinx students are attracted to the profession and apply to these programs in significant numbers. Applicant numbers provided by Physical Therapy Centralized Application Service (PTCAS, 2019) reflect inequities in Black and Latinx applications to DPT programs, as well as the number of students who are admitted. The application cycles of 2016 to 2018 show that more than 60% of applications to physical therapy education programs, known as Doctor of Physical Therapy (DPT) programs were White. Six percent of applicants identified as Black, and 10% identified as Latinx (PTCAS, 2019). In contrast, an average of 70% of admitted applicants identified as White, three percent identified as Black and eight percent identified as Latinx[1] (PTCAS, 2019). This suggests that there is not only

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[1] Latinx is an emerging term used to define Latino/a population. This is preferred over traditional labels as it is gender neutral and includes LGBTQ populations (Salinas Jr., 2017).

a need to decrease the gap between White, Black, and Latinx students admitted to the program, but that a gap in application numbers exist between the respective applicant pools.

The gap between applicant and admitted student numbers also suggest an issue of access to academic resources may exist for Black and Latinx students aspiring to study in physical therapy education programs. Exploring the admissions process from the perspective of Critical Race Theory provides insight into the following aspects of the DPT admissions process. First, it illuminates ways in which racism and structural discrimination within higher education has an impact on undergraduate access to academic resources and success in the DPT application process. Second, it describes how DPT admissions processes and application evaluation policies perpetuates existing racial power dynamics and marginalizes Black and Latinx students.

**Graduate Education in the United States**

Research shows that while enrollment of Black and Latinx students have increased over the years, significant gaps exist between the graduation rates of Black and Latinx students and their White peers. Appendix A reflects the change in enrollment in all graduate programs, which includes masters, doctoral and professional programs. Enrollment of Latinx students increased 7.3% and 1.1% for Black students pursuing a graduate program for the first time. Comparatively, the enrollment of White students in graduate programs increased 1.2% from the previous year. There was a general increase in the number of first time enrollments across all groups for graduate degrees in the health sciences, which includes Physical Therapy (See Appendix B).

While enrollments for Black and Latinx students remained the same, data provided by the National Center of Education Statistics (NCES) show that gaps remain in graduation rates of Black and Latinx graduate students compared to their White peers. In the academic year 2015-2016, 60% of doctoral degrees were conferred to White students, while this was 8% and 7% respectively for Black and Latinx students. This was also similar for doctoral degrees conferred

2

for health professions degrees. 6% of Black and Latinx students were awarded doctoral degrees, compared to 64% for White students (Snyder et al., 2019).

Research also shows that Black and Latinx students experience marginalization during the graduate admissions process. Black and Latinx students tend to experience higher anxiety when taking standardized tests, therefore scoring lower on the same tests (Walpole et al., 2005). Black and Latinx students also tend to have less information and knowledge about standardized testing (Walpole et al., 2005). In an analysis of GRE scores, Bleske-Rechek and Browne (2014) found that Black and Latinx students tend to achieve lower scores on the GRE test than White students. Additionally, Black and Latinx students also faced significant challenges in applying to graduate programs, such as a lack of knowledge of the admissions process and lack of support from faculty or peers who can provide advice (Hadinger, 2017; Ramirez, 2011). Since standardized tests such as the GRE is also required for admission to most DPT programs, Black and Latinx students are marginalized in the DPT admissions process because of lack of access to resources for test-taking success.

The use of the GRE during the admissions process also assumes that the DPT admissions process is based on merit. However, existing research discussed above suggests that access to resources may determine success on the GRE, and within the admissions process rather than one that is based on intellectual merit.

**Physical Therapy Education in the United States**

Physical therapy as a practice began when graduate nurses and physical educators served in World War I. These individuals served as reconstruction aides to those injured in the war, and graduated from their respective programs at Reed College and Walter Reed Hospital, laying the foundation for modern physical therapy practice (Moffat, 1996). Several changes to the field of physical therapy education between 1953 and 1993 culminated in the establishment of the DPT

degree as the minimum standard of entry-level practice in the US (Domholdt et al., 2006; Moffat, 1996). This time period also saw the establishment of the APTA and subsequently, ACAPT. These two organizations provide guidance for physical therapy education programs, such as making recommendations to changes in admissions practices for DPT programs. Notably, this included introducing the use of the holistic review in the evaluation of applications (Wise et al., 2017).

**Admissions**

The admissions process for DPT programs across the nation are similar, with some variations. Most programs require that applicants complete specific prerequisite classes to be eligible for admission to the program, such as: biology, physics and chemistry, psychology, and/or statistics (PTCAS, 2019). About 98% of programs require that applicants have taken the GRE as part of the admission requirements, and some programs have established minimum GRE scores for admission (PTCAS, 2019). In addition to academic requirements, physical therapy programs may also require that applicants have some amount of shadowing hours with a licensed physical therapist (PTCAS, 2019).

The length of time required to complete prerequisite classes, prepare and take the GRE exam, and to schedule shadowing hours, preparing to apply to a physical therapy program may take a considerable amount of time. The student's undergraduate major may also determine the number of classes they need to take. An applicant who is a Biology, Chemistry or Physics major will likely need to take less additional classes compared to a Business or Sociology major who will need to take the prerequisite classes in addition to their required coursework.

**Barriers and Support**

There are barriers that have been identified in the  DPT application process, including perceptions of  academic difficulty in gaining admission into a DPT program, a lack of diversity

of DPT faculty, and a lack of diverse physical therapists (Gabard et al., 1997). Additionally, the length of time required to complete prerequisite classes, preparation for and taking the GRE exam, and to schedule shadowing hours, preparing to apply to a physical therapy program may take a considerable amount of time. As such, depending on the academic and social environment, Black and Latinx students who do not have access to admissions knowledge, especially in a timely manner, may find themselves at a disadvantage in the application process.

Various health-related professions programs, such as medicine, dentistry and physical therapy, who offer enrichment programs for students of color have experienced some success in the recruitment and enrollment of these students (Bediako et al., 1996; Carline et al., 2006; Formicola et al., 2010; Hesser et al., 1998; Jackson & McGlinn, 1994; Parrish et al., 2008; Vela et al., 2010). The objective of these programs increased the interest of students of color in health-related professions, helped students prepare for the rigors of graduate professional school by orienting them to a rigorous academic curriculum, and provided students with other resources such as study skills, test preparation and individual coaching and mentoring (Bediako et al., 1996; Carline et al., 1998; Dumke et al., 2016; McKendall et al., 2014).

**Admissions Review**

The use of a holistic review process in the evaluation of applicants addresses the lack of diversity in a DPT cohort. Programs rely less on an applicant's GRE scores and GPA, and more on demographics and background of an applicant to introduce diversity to the classroom (Moerchen et al., 2018; Smith et al., 2009; Wise et al., 2017). The factors involved in the holistic review process could also be relevant for students applying to DPT programs.

Wise, et al. (2017) have encouraged the use of holistic review in physical therapy program admissions to increase Black and Latinx enrollment in DPT programs. Holistic review in admissions can be defined as the evaluation of an applicant based on all factors of their

application (Megginson, 2009). It is also defined as the use of non-academic metrics such as the experiences and attributes of an applicant, in combination with the use of academic metrics such as undergraduate GPA and standardized testing scores to consider if an applicant can contribute value as a student and as a practicing physical therapist (Conrad et al., 2016; Drees et al., 2015; Wise et al., 2017). The use of a holistic review process by an academic program requires the program to consider their mission and applies the review process equitably to all applicants at every stage of the admissions process (Conrad et al., 2016).

Programs that have implemented the use of holistic review processes include medical, dentistry and pharmacy programs (Drees et al., 2015). The use of the holistic review process for physical therapy programs have not been as widely documented in the literature compared to these other programs. Nonetheless, programs that have implemented the use of the holistic review process have experienced successes in increasing the diversity of their programs (Drees et al., 2015; Price & Grant-Mills, 2010; Witzburg & Sondheimer, 2013). However, they did not agree on whether the use of holistic review in admissions had a direct impact on specifically increasing Black and Latinx enrollment in medical and dental programs. While DPT programs have reported the use of non-academic metrics in their admissions process, the data related to admissions show that such efforts have not led to a significant increase in the numbers of Black and Latinx students admitted to the DPT programs (PTCAS, 2019). Consequently, there is a lack of relevant research that explores the relationship between the DPT admissions process and Black and Latinx students from the student perspective.

**Statement of the Problem**

Existing studies on the DPT admissions process suggests that researchers have an interest in admitting students who are most likely to succeed in a DPT program (Ancrum-Smalls et al., 2000; Nuciforo et al., 2014; Roman & Buman, 2019; Utzman, 2006), thus focusing on the DPT

program's perspective of the admissions process. However, there is not enough evidence to provide a complete picture of the DPT admissions process from the students' perspective. As a result, programs often make assumptions about Black and Latinx students based on stereotypes (Bersola et al., 2014) that are inaccurate and based on deficit thinking. This also includes the use of standardized testing which places Black and Latinx applicants at a disadvantage because of the assumption of meritocracy. Such assumptions do not address known challenges that students face (Hadinger, 2017; Ramirez, 2011), and do not acknowledge the support systems that students rely on through the admissions process (Ramirez, 2013; Wilcox et al., 2005).

## Purpose Statement

The purpose of this study is to explore the experiences of Black and Latinx students as they navigate the DPT admissions process.  The aim of this study is to understand the ways Black and Latinx students navigate the DPT admissions process, and to inform the recruitment and admissions processes of DPT programs. This qualitative study will examine the Black and Latinx student experience of the DPT admissions process through a Critical Race Theory (CRT) framework, using phenomenological methods.  Further, there is interest  in the ways through which Black and Latinx students first find out about the profession, how they prepare to apply to these programs, and what factors helped them be successful during the application and admissions process (Hadinger, 2017), with attention to how their racial and ethnic identities influence these experiences (Ramirez, 2011, 2013).

## Significance of the Study

This study is significant in two ways. First, the findings of this study can help further provide an understanding of the experiences of Black and Latinx students as they navigate the admissions process. This provides data to help support DPT programs align their recruitment

strategies, admissions policies and processes closer to the student experience of the admissions process.

Second, there are significant benefits to diversity within the profession of physical therapy. Diversity within this context is defined as having representation of students from various racial and ethnic backgrounds. Students who are in more diverse classrooms have an increase in understanding of different cultures and backgrounds (Pike et al., 2007), increase in cross-racial interaction (Chang, 2011; Haslerig et al., 2013), and greater intellectual ability, social ability and civic interest (Chang, 2011; Gurin et al., 2002; Ross, 2014; Tienda, 2013).

Diversity in the workforce leads to benefits for communities of color and patients of color, specifically Black and Latinx communities and patients. These communities are more likely to suffer from a lack of healthcare providers (Agency for Healthcare Research and Quality, 2017). Healthcare professionals of color are more likely to serve individuals from their own racial backgrounds and provide care to underserved populations compared to their White counterparts (Nuciforo, 2015; Walsh et al., 2000; Wise et al., 2017). Patients of color tend to spend more time with their healthcare providers from the same ethnic backgrounds, report higher levels of patient satisfaction and positive feelings with these providers (Felix et al., 2012), respond better to healthcare providers and enjoy better health outcomes (Alsan et al., 2018; Cabral & Smith, 2011; Martin et al., 2013).

Increasing diversity of the field of physical therapy also means creating a more inclusive environment for applicants and students. However, diversity does not always guarantee integration and inclusion (Tienda, 2013). Studies have also shown that students tend to self-segregate on campus, further isolating students of color (Davis et al., 2004). Black and Latinx students also experience significant racism and racial microaggression that leads to such isolation and restricts access to academic resources (Davis et al., 2004; Minikel-Lacocque, 2013). Black

and Latinx students who experience racism and racial microaggression as undergraduates also experience an increase in stress and anxiety, having a negative impact on academic access (Coleman et al., 2013; Graham et al., 2013; Solórzano et al., 2000; Szymanski & Lewis, 2016). There is a need for institutions and programs to develop strategies that increase the opportunities for cross-group interaction, making it safe for Black and Latinx students to do so (Tienda, 2013). As inclusive strategies encourage these interactions, DPT programs may re-examine their processes for race-consciousness and equity, such as considering the use of other evaluation measures that do not place Black and Latinx students at a disadvantage.

Examining the lived experiences of students in the DPT admissions processes shifts the focus of the research from the program to applicants. Understanding the structural barriers that Black and Latinx students experience when navigating the DPT admissions process also allows the examination of academic resource access and allocation within higher education. Viewing the admissions process from the student perspective involves understanding experiences of students in the admissions process. This goes beyond which students are actually applying to physical therapy education programs, and understanding resources that students receive as undergraduates in preparing their applications for these programs.

## Research Questions

Existing literature suggests that little is known about the experiences of students of color who are already enrolled in a DPT program. It is important to note that there have been studies that suggest the need to recruit and retain more students of color into a DPT program (Gabard et al., 1997; Greene & Karavatas, 2018; Moore et al., 2003; Wilcox et al., 2005; Wise et al., 2017). However, the data show that applicants of color remain a small proportion of the overall applications received by PTCAS (PTCAS, 2019). Exploring the experiences of students of color may help with understanding the experiences of students of color when applying to a DPT

program. These experiences help DPT programs improve their recruitment and admissions processes, and create a process that is more inclusive for Black and Latinx students.

The central question to this qualitative study is: What is the applicant experience of Black and Latinx students in DPT programs? Supplemental questions for this study include the following:

- What are the factors of success within the application experience for Black and Latinx students?

- What challenges exist within the application experience for Black and Latinx students?

- How do resources offered by DPT programs contribute to a Black and Latinx student's decision to enroll in that specific program?

**Theoretical Framework**

There is a value in Whiteness[2] that affords privileges that people of color do not enjoy (Harris, 1993). This leads to the creation and sustenance of inequities that put people of color at significant disadvantages compared to Whites. Even though there has been an increase in the enrollment of Black and Latinx students in higher education (Snyder et al., 2019), the structures and policies that have disenfranchised people of color throughout history permeate our society and higher education (Ladson-Billings, 2018; Ladson-Billings & Tate, 1995). These structures have a long-lasting impact on enrollment and academic success of Black and Latinx students, particularly in graduate programs (Yosso et al., 2004).

Critical Race Theory (CRT) is based on the idea that racism permeates our policies, structures and legal systems (Bell, 1989; Delgado & Stefancic, 2017; Freeman, 1978). CRT is an appropriate theoretical framework for this study because it aims to neutralize racism and

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[2] Whiteness is defined as a racial and economic and social construct. This includes individuals who possess physical properties of the Caucasian race, thus gaining access to public and private privileges (Harris, 1993).

oppression by disrupting policies and processes that are influenced by race-neutrality, the assumption of intellectual inferiority based on race and minimizing the impact of racism (Patton, 2016). CRT was created by legal scholars who were unsatisfied with classic tenets of legal theories that did not address social forces on legal change (Crenshaw et al., 1995; Delgado & Stefancic, 2017; Ladson-Billings & Tate, 1995). The main tenets of CRT are Racial Realism, Interest Convergence, Colorblindness and the Myth of Meritocracy, Whiteness as Property, Intersectionality, and Counter-Narrative. When applied to higher education, these tenets describe the ways in which Black and Latinx students are recipients of structural racism and discrimination, and how the higher education system may benefit those who are White.

The use of Critical Race Theory in this study allows the ability to address existing gaps in the understanding of Black and Latinx student experiences in higher education (Harper, 2012; Patton, 2007), specifically, in the DPT admissions process. It also allows the disruption of race neutrality and intellectual inferiority that may be assumed in the admissions process such as through the use of standardized testing, which also enforces the myth of meritocracy. Additionally, understanding the admissions process from the student perspective allows students the opportunity to share their experiences and challenge existing narratives about race and the DPT admissions process, leading to admissions and recruitment strategies that can increase access to the field.

## Overview of Research Design

This study is a phenomenological qualitative study. Phenomenology is the study of how different individuals experience a specific phenomenon (Creswell, 2007), in this case, the DPT admissions process. The purpose of a phenomenological study is to identify the essence of what individuals experience (Creswell, 2007), and how individuals interpret their experiences, which are subjective (Husserl, 1970; Van Manen, 2016). This is appropriate to identify how Black and

Latinx applicants experience the DPT admissions process, the challenges they may face, and what factors have helped them overcome these challenges and succeed in the process.

Semi-structured interviews were conducted with 11 participants who self-identify as either Black or Latinx, and are currently enrolled in DPT programs as a first year student. These students are selected as the sample because they have successfully gone through the application journey, and therefore are able to reflect on factors that have helped them be successful in applying to DPT programs.

**Definition of Terms**

For the purposes of clarification, a list of terms most commonly used in this study have been defined.

*APTA***:** The American Physical Therapy Association. The profession's national association coordinates education and national licensing standards.

*DPT*: Doctor of Physical Therapy program. As physical therapy education moved from certificate programs to baccalaureate degrees, the shift to doctoral education start in the early 2000s. The DPT degree is now a minimum requirement for entry-level physical therapy practice.

*GPA*: The Grade Point Average for students applying to a DPT program. The GPA most commonly referred to in this work is that of an undergraduate's cumulative GPA, which is a combination of all undergraduate level work undertaken by the applicant.

*GRE***:** The Graduate Record Examination. Unlike other health professions such as medicine, dentistry or pharmacy, the field of physical therapy does not have a standardized test specific to its profession. As a result, the GRE is most often used as a standardized testing measure among applicants.

*Health professions:* This refers to all professions related to healthcare such as medicine, dentistry, pharmacy, nursing, physical therapy, occupational therapy.

*Holistic review:* The whole file review of an applicant that may include one's life experiences, letters of recommendation, personal statements and personal demographics.

*Pipeline programs: E*nrichment programs typically for students of color, or students from medically underserved communities, specifically to orient them to various fields of health professions and provide them with skills to be successful in these programs.

*PTCAS*: The Physical Therapy Centralized Application Service. This service was first launched in August 2008 by the American Physical Therapy Association. The purpose of this system was to simplify the admissions process for both applicants and Doctor of Physical Therapy programs.

*Student of color*: For the purposes of this study, students of color refer to students who identify as Black or Latinx. The literature reviewed in this paper may refer to Black and Latinx students as underrepresented students, or minority students. When discussing these studies in Chapter 2, Black and Latinx students will be used in place of these terms.

## Organization of the Study

This study will explore the admissions process from the perspective of Black and Latinx students who apply to DPT programs. Current research on DPT admissions suggests that researchers have an interest in the necessity to admit students who are most likely to succeed in a DPT program (Ancrum-Smalls et al., 2000; Nuciforo et al., 2014; Roman & Buman, 2019; Utzman, 2006), while research on the experiences of Black and Latinx students suggests a focus on program choice, resources and challenges. This study seeks to align the experiences of Black and Latinx students with existing research on the undergraduate experiences of Black and Latinx students, and in the admissions experiences of students in other fields.

Chapter two of this study will explore existing literature on the undergraduate student experience and how this contributes to Black and Latinx undergraduate success and graduate aspiration. It will also explore the graduate admissions experience from the applicant perspective, outlining the sources of support and how Black and Latinx students overcome challenges. Finally, existing research on the DPT admissions process is also discussed. Chapter three of this study will further discuss the use of CRT and phenomenology as theoretical and methodological frameworks, and outline the research procedure for this study.

Chapter four of this study examines the findings based on data gathered from interviews with participants. The data gathered is organized into themes that reflection participants' experiences in the DPT admissions process. Chapter five examines the findings in the context of existing literature and CRT and provides recommendations for practical considerations.

# Chapter 2: Literature Review

This chapter draws on existing research and literature that focus on the undergraduate student experience, the graduate admission experience, and the admissions process for Doctor of Physical Therapy (DPT) programs. This chapter will first review literature that centers on the undergraduate experience. Specifically, this refers to literature centered on undergraduate student involvement, sense of belonging, and factors that influence undergraduate sense of belonging. This includes discussion about supportive relationships, and the role of race and racialized experiences for students of color. Second, this chapter will examine the graduate admissions process. This includes the factors that influence student choice in a program, factors that influence student success in the admissions process, and the admissions process from the perspective of the academic program. Finally, it will discuss extant literature on the DPT admissions process.

The literature reviewed in this work were retrieved from various databases including JStor, EBCOHost, CINAHL and PubMed. As my study draws from knowledge across different fields, the search was limited to articles that were published in the last 20 years. This reduced repetition of research outcomes. Exceptions were made when the work was considered seminal in the field, or if older work was needed to provide a clearer picture of the research that had been conducted in the area of interest. Examples of search terms used were as follows; "undergraduate experience", "undergraduate race", "undergraduate advising", "physical therapy education", "physical therapy admissions", "graduate success", "graduate race".

A total of 300 possible articles were gathered from the search terms used. Articles were then excluded from this review based on whether it addressed the following criteria. First, articles that specifically focused on the undergraduate experience were relevant to my study because of their impact on a student's decision to enroll in a DPT program. Second, studies

focused on the graduate and professional admissions process were salient, particularly ones that centered on race/ethnicity, health professional programs, and the admissions process. Finally, existing research on graduate admissions related to physical therapy education programs were also included in this review to align with the purpose of this study.

## Participation in Higher Education

According to the National Center for Education Statistics (NCES), undergraduate enrollment at degree-granting universities for all undergraduates was 3,137,000 in 2016.  Appendix C shows undergraduate enrollment in 2016 by race and ethnicity. Black undergraduate enrollment was 36% of all enrollment, while Latinx undergraduate enrollment was 40%. In contrast, undergraduate enrollment for White students was 42% of all undergraduate enrollment in 2016 (Snyder et al., 2019). Graduation rates for Black and Latinx students remained much lower than their White peers. Forty percent of Black students graduated within 6 years of enrollment, while 54% of Latinx students graduated within 6 years of enrollment (Snyder et al., 2019). This was in comparison to the 6 year graduation rate of White students at 64% . Nonetheless, the number of bachelor's degrees tripled for Latinx students between 2000 and 2016, while this increased by 75% for Black students, with White students remaining the majority of bachelor's degree recipients (Snyder et al., 2019).

Access to undergraduate education remains a challenge for Black and Latinx students at the most selective colleges in the country. Since 2000, more than 50% of these institutions experienced a decrease in Black undergraduate enrollment (Education Trust, 2020). Access to more selective colleges is important as it has the impact of having access to better paying jobs for graduates (Black et al., 2020, Witteveen & Attewell, 2016).

White students remained the majority in graduate enrollment. Sixty four percent of enrolled graduate students in 2016 were White, 14% were Black and 10% were Latinx (Okahana

& Zhou, 2019).  Participation in graduate programs for Black and Latinx students saw an increase in the period between 2000 and 2016, with an increase from 9% to 14% for Black students, and from 6% to 10% for Latinx students (Okahana & Zhou, 2019).

The gap between graduate education attainment between Black and Latinx students and their White peers was greater than that of undergraduate degree attainment (Snyder et al., 2019). In 2016, about 70% of Masters and Doctoral degrees were granted to White students, compared to 15% and 10% for Black and Latinx students in the same period (Snyder et al., 2019).

The reasons behind the gap in undergraduate degree attainment rates are beyond the scope of this paper, however, the gap in graduate degree attainment rates can be attributed to undergraduate student experiences, which influences student satisfaction and sense of belonging leading to academic success and graduate school aspiration. The sections that follow will discuss the factors contributing to undergraduate involvement, satisfaction and sense of belonging, and how these factors contribute to graduate school aspiration for Black and Latinx students.

**Undergraduate Student Experiences**

The extent of the undergraduate student experience has an impact on graduate aspiration for students (English & Umbach, 2016; Perna, 2004). Existing studies suggest that undergraduate students who have a positive experience with their peers, faculty, on-campus organizations and other resources lead to undergraduate success (Laird et al., 2007; Webber et al., 2013). Undergraduate students who are more successful academically tend to aspire towards graduate study (English & Umbach, 2016). The studies reviewed in this section will explore the undergraduate student experience in the following ways: student development theory on the relationship between a student's on-campus involvement and academic success, the relationship between student involvement and sense of belonging, factors that influence student belonging, and racialized experiences of Black and Latinx students.

17

**Student Involvement**

Student development theory allows higher education administrators a framework within which to understand how college student development takes place, how psychological and social processes cause development, and the role that the college environment plays in student development (S. Jones & Stewart, 2016). Astin's theory of student involvement (1999) is important to this discussion as it provides a framework through which the relationship between student involvement and student success can be viewed.

Astin's (1999) theory of involvement suggests that the more involved undergraduates are in college, they collect more positive experiences, and are more likely to succeed academically. Involvement refers to the physical and psychological energy that the student devotes to the academic experience. This includes engagement in the classroom, time devoted to studying, participation in campus organizations and activities, and interaction with faculty, staff and other students (Astin, 1999). Central to Astin's (1999) theory is the suggestion that a student's interest in college is based on motivation and time. A student who is more motivated will spend more time on campus activities, has positive relationships with faculty and peers, and is involved in student organizations, is less likely to drop out, and is more likely to graduate (Astin, 1999).

However, Astin (1999) did not specifically consider how the experiences of Black and Latinx students might have an impact on their campus involvement. Marginalization of Black and Latinx students, particularly at Predominantly White Institutions (PWIs) (Strayhorn, 2018), can lead to additional stress for Black and Latinx students (Booker, 2016; Nadal et al., 2014). They are therefore less likely to be involved in campus activities, and face additional challenges to their academic success (Johnson, 2007). Studies showed that an increase in student involvement led to an increase in the level of positive student experiences specifically for Black and Latinx students (Chen et al., 2014; Flowers, 2004; Kuh et al., 2008; Laird et al., 2007;

Webber et al., 2013). Black and Latinx students who have more academic involvement tend to enjoy higher GPAs and persistence levels (Flowers, 2004; Kuh et al., 2008; Laird et al., 2007; Webber et al., 2013). Taking into account the gap in higher education attainment between White and Black and Latinx students, these studies suggest that it is important to encourage more academic involvement for Black and Latinx students to increase persistence and graduation levels.

**Undergraduate Sense of Belonging**

In addition to strong involvement with campus activities, English and Umbach (2016) suggested that a deeper sense of belonging to the undergraduate experience may lead to an increase in the graduate school aspirations of students. Research showed that a symbiotic relationship exists between sense of belonging and student involvement for Black and Latinx students. Sense of belonging is defined as the student's perception of social support on campus, feeling connected, accepted and respected by their campus community (Strayhorn, 2018). Students who feel a sense of belonging to the campus community are more likely to increase campus involvement, perform well academically (Strayhorn, 2018) and persist through college (Hausmann et al., 2007; Morrow & Ackermann, 2012). Sense of belonging is therefore particularly meaningful for students who are underrepresented, marginalized or traditionally unwelcome in the campus community (Hurtado & Carter, 1997).

The studies reviewed in this chapter show that relationships with advisors and peers can have an impact on sense of belonging. Given that there is a positive relationship between sense of belonging and graduate aspiration (English & Umbach, 2016), the same factors that have an impact on sense of belonging also have an impact on graduate aspirations of Black and Latinx students. More importantly, sense of belonging for Black and Latinx students are mostly

underscored by racialized campus experiences, where racism and racial microaggression can have a negative impact on sense of belonging (Lewis et al., 2019).

*Supportive Relationships*

Faculty who foster an environment of civility, mutual respect and trust were more likely to create a positive classroom experience for Black and Latinx students, therefore increasing their sense of belonging (Booker, 2008; Case, 2013).

Black female students found that their relationships with faculty were important in their choice to remain at an institution. Faculty who made an effort to get to know them outside of the classroom, were available for office hours outside of the class, helped establish a sense of belonging to the institution (Booker, 2016; Hall, 2017). In addition, faculty who were willing to explore issues surrounding race, gender and disability in a critical manner also helped Black female students feel more comfortable in the classroom (Booker, 2016).

Black and Latinx students who had such positive relationships with their faculty outside the classroom, and had more interaction with faculty were also more likely to aspire to attend a graduate or professional program (Hanson et al., 2016). They were also more likely to find relationships with faculty as a source of support in their success in the admissions process (Hurtado et al., 2011; Ramirez, 2011; Sweeney & Villarejo, 2013).

In general, Black students tend to have less frequent interaction with faculty than White students (Hurtado et al., 2011).  However, a Black student who attended a HBCU, a more selective institution, or a larger institution interacted with faculty more than their Black peers at a PWI, less selective, and smaller institutions (Hurtado et al., 2011). By contrast, the type of institution did not have an impact on the frequency of faculty interaction for Latinx students (Hurtado et al., 2011).

Sweeney and Villarejo (2013) found that some Black and Latinx students found support in their academic advisors. The academic advisors offered close guidance to students, and when students felt over challenged in their courses, advisors were sympathetic and offered support to these students (Sweeney & Villarejo, 2013). As a result, students who received more support by their academic advisors felt more confident in pursuing graduate study (Sweeney & Villarejo, 2013). While there was not enough evidence in the studies reviewed to show that supportive advisors had an impact on the sense of belonging of Black and Latinx students, it can be inferred that since sense of belonging can be attributed to supportive relationships. Therefore, having supportive academic advisors may have a positive impact on one's sense of belonging to the campus community.

Despite the fact that some students found support in their academic advisors, studies show that dedicated advising resources for the health professions are not always accessible for Black and Latinx students (Edgoose et al., 2019; Wallace, 2019). Such supportive resources may be crucial in helping Black and Latinx students navigate the DPT admissions process.

Other sources of support that Black and Latinx students relied on were student organizations (Black & Bimper, 2017; Hall, 2017) and institutional programs (Black & Bimper, 2017) designed to help Black and Latinx students navigate the undergraduate experience. In addition, Black and Latinx students mad use of established counter-spaces where they could discuss negative experiences with others as a result of their racial identity (Harwood et al., 2018; Von Robertson et al., 2016; Warner, 2019).

Students who were in pre-medical tracks, or were considering applying to a professional program also found benefits in relationships with clinical mentors (Sweeney & Villarejo, 2013). These clinical experiences were either required for admission to a professional program, or were provided by the student's undergraduate program. Students who were successful in applying to

graduate or professional school found a source of support in clinicians who guided them through career opportunities, further education and training (Sweeney & Villarejo, 2013).

*Undergraduate Research Experience*

Mentoring provided by the undergraduate research experience had a positive impact on the sense of belonging for Black and Latinx students (Daniels et al., 2016; Holloway-Friesen, 2019; Raymond & Sheppard, 2017). It was also found to be the strongest predictor of persistence in a STEM program for Black and Latinx students  (Chang et al., 2014). Undergraduate research experiences directly influenced the decision to aspire to graduate study, where mentors in these experiences provided guidance and support to students through the admissions process (Holloway-Friesen, 2019).

Black and Latinx students who spent more time working on an undergraduate research project were more likely to interact with faculty (Hurtado et al., 2011). Higher interaction with faculty can lead to more positive undergraduate experiences (Chang et al., 2014), increasing sense of belonging (Case, 2013) and leading to aspiration to a graduate or professional program (Hadinger, 2017). Hadinger (2017) and Sweeney and Villarejo (2013) found that where Black and Latinx undergraduate pursued successful graduate study, they had developed relationships with their faculty as mentors who provided support through the research process, and encouraged students to pursue graduate study in a highly reputable program. Such encouragement from faculty also showed students that they had value and potential (Sweeney & Villarejo, 2013).

Latinx doctoral students who were involved in an undergraduate research experience were able to use support provided by these experiences to help them navigate the graduate admissions process (Ramirez, 2011). These undergraduate research programs typically encouraged students of color to pursue doctorates and careers in research. Students who participated in undergraduate research experiences found more confidence in their ability to do

well in a graduate program, gained a better understanding of the discipline, developed technical and presentation skills, and had mentors who guided them through the application process (Ramirez, 2011).

*College Debt*

The undergraduate student experience also involved the amount of financial obligation the student has to take on to complete their study. Carales & Nora (2020) found that the amount of Pell Grant funding received and higher levels of unmet financial need had a negative impact on sense of belonging for Latinx students. In addition, financial concerns were found to be negatively related to academic success (Crisp et al., 2015). The cost of education has increased over the years for undergraduate students. Such increases were caused by state defunding of higher education, decreases in financial aid, and increasing access to credit (Houle & Addo, 2019; J. Kim et al., 2017). Today, more than 70% of students take on college debt of more than $20,000 (J. Kim et al., 2017). The average student leaves school with more than $30,000 of college debt (Houle & Addo, 2019).

Studies show that Black and Latinx students were disproportionately affected by the rising costs of college through the accumulation of college debt. Recent studies on the impact of college debt showed that Black students tend to face a higher risk of defaulting on their college debt (Jackson & Reynolds, 2013), had a higher amount of debt (Grinstein-Weiss et al., 2016; Houle & Addo, 2019), and started their career with higher levels of college debt than White students (Houle & Addo, 2019).

The higher level of debt may be due to the lack of resources available to students about undergraduate financial aid. Augustine's (2015) study found that Black and Latinx students often report not knowing where to find information on applying to scholarships and find institutional resources and faculty unhelpful in providing such information. In addition, some students report

not having enough financial aid, and having to resort to student loans to cover the majority of their undergraduate education (Augustine, 2015).

The amount of college debt has an impact on graduate school aspiration for many students, specifically for students of color (Millett, 2003; Xu, 2014; Zhang, 2013). Black and Latinx students were more likely to take out loans for both undergraduate and graduate students (Pyne & Grodsky, 2020). In addition, debt inequalities between Black and Latinx students more than doubled over time compared to their White peers (Pyne & Grodsky, 2020), supporting the conclusions drawn in Houle & Addo's (2019) and Grinstein-Weiss et al.'s (2016) study.

The literature reviewed in this study did not provide sufficient evidence correlating the amount of debt and graduate school aspiration for Black and Latinx students. However, Pyne and Grodsky (2020) suggested that the increasing costs of higher education, disproportionate amount of student debt and earnings after college between Black and Latinx students and their White counterparts have an impact on Black and Latinx aspirations on graduate study (Pyne & Grodsky, 2020).

**Race and the Undergraduate Student Experience**

An examination of the undergraduate student experience shows that most students of color experience some form of racism or microaggression on campus in different ways, and tend to experience them at higher rates than White students (Ingram & Wallace, 2019; Nadal et al., 2014). Specifically, Black students tend to experience higher levels of microaggressions than Latinx, Asian-American and Multiracial students (Lewis et al., 2019). Many of these incidents stem from interaction with peers or with faculty. Campus racial climate was also shown to have an impact on student sense of belonging, particularly on female Black and Latinx students (Booker, 2016; Crisp et al., 2015; Johnson, 2012), and higher levels of racial microaggressions experienced by students of color can lead to lower sense of belonging (Lewis et al., 2019).

### *Racism and Racial Microaggression*

Overt instances of racism on college campuses, particularly at PWIs, are experienced by students of color (Davis et al., 2004; Minikel-Lacocque, 2013). These incidents often involved racist symbols being prominently displayed on campus, or the use of racial slurs and derogatory labels for students of color (Davis et al., 2004; Linley, 2018). When reporting such overt incidents of racism, Black and Latinx students found that the administration had little interest in investigating these incidents. Such incidents contributed to student's feelings of feeling unimportant (Davis et al., 2004; Strayhorn et al., 2013), thereby having a negative impact on their sense of belonging (Strayhorn, 2013; Warner, 2019).

Black and Latinx students also experienced microaggressions within the academic space, such as the classroom or the lab (Booker, 2016; Harwood et al., 2018; Solórzano et al., 2000). Students of color, by virtue of being part of a numerical minority in the classroom, felt that their concerns were either overlooked, or their experiences were undermined by faculty (Solórzano et al., 2000). Black and Latinx students were also perceived as less intelligent as White students (Augustine, 2015; Davis et al., 2004; Solórzano et al., 2000; Von Robertson et al., 2016). As a result, Black and Latinx students experienced racial segregation and isolation within in-class study or assignment groups (Davis et al., 2004; Linley, 2018) and were alienated by their peers (Minikel-Lacocque, 2013; Solórzano et al., 2000).

Black and Latinx students also experience having difficulty establishing relationships with faculty and academic advisors. They describe challenges as faculty adopting a deficit-thinking approach to students of color, taking them on as "charity cases" because it was assumed that students of color come from a low socio-economic background (Augustine, 2015), or were less intelligent (Hall, 2017). Some students experienced a general feeling about being unwelcome when approaching academic advisors for help, and that they were being steered

25

towards less competitive majors (Harwood et al., 2018). Black students who have excelled in class were accused of cheating on class assignments or assessments because faculty did not believe that a student of color could perform academically (Davis et al., 2004; Solórzano et al., 2000). These negative experiences created self-doubt in students of color, even if they have always been high achievers in the classroom. The microaggressions that were experienced described above also prevent Black and Latinx students from approaching faculty and developing meaningful relationships (Augustine, 2015; Booker, 2016). Faculty who were less supportive also led to students withdrawing from the class, or from the university (Booker, 2016).

Racial microaggressions were also experienced in on-campus housing (Harwood et al., 2012; Minikel-Lacocque, 2013). These included the use of racist jokes and verbal comments, which often became overt, even when told that the jokes were offensive. Racial slurs were also written in shared spaces (Harwood et al., 2012), or were verbalized in front of students of color (Harwood et al., 2018). Research also showed that students experience segregated living spaces and unequal treatment in on-campus housing. Housing for students of color were often less well maintained, with amenities that are in need of repair. There were also different policies for housing that perpetuated racial stereotypes (Harwood et al., 2012).

Racism and racial microaggressions on campus can have a significant impact on the student's undergraduate experience, having a negative impact on their sense of belonging on campus. Students have reported feeling frustration in attempting to navigate such experiences and strive to maintain good academic standing (Solórzano et al., 2000). In addition, the higher the level of microaggression on campus led to a lower level of self-esteem for students (Nadal et al., 2014). Microaggression and racism also led to isolation (Booker, 2016), increased stress levels for students of color (Coleman et al., 2013; Graham et al., 2013; Szymanski & Lewis,

2016), and had an impact on their ability to perform academically (Solórzano et al., 2000). Some students had been forced to drop a class or changed their major. Pressure from such microaggressions led students to make the switch from a science or math major to one in the humanities or social sciences (Solórzano et al., 2000). Students have felt the need to leave the university and enroll elsewhere, or, in some cases, felt the need to stop attending school completely (Solórzano et al., 2000; Strayhorn, 2013).

*Stereotype Threat*

Students of color experienced academic stereotype threat in the classroom (Augustine, 2015; Davis et al., 2004). Academic stereotype threat refers to the risk of confirming a negative stereotype about one's own group (Steele & Aronson, 1995). In this case, Black and Latinx students were concerned about being perceived negatively by their peers, negatively affecting their college experiences (Linley, 2018). These stereotypes include being perceived as being under-prepared for college, and being academically underprepared as a result (Augustine, 2015). They reported having to work harder to overcome preconceived notions of intellectual inferiority by faculty and their peers, and be more engaged in the classroom compared to their White and Asian peers (Davis et al., 2004).

A part of stereotype threat that students of color experience was the perception that they represented the voice of their entire race (Black & Bimper, 2017; Booker, 2016; Solórzano et al., 2000). Students felt like they were only asked to share their opinions and experiences only if it was related to the experiences of Black or Latinx people, and therefore felt marginalized and tokenized in class discussions (Booker, 2016; Linley, 2018).

As a result of stereotype threat and hostile campus environments created by racism and racial microaggression, Black and Latinx students understood the need to not only speak up against injustices, but worked actively to dismantle stereotypes (Hotchkins, 2017; Jones, 2017).

27

Additionally, some Black students at PWIs also found themselves having to participate in predominantly White student organizations to in order to representation fellow Black students (Jones & Reddick, 2017).

*Socialization*

Negative experiences on undergraduate campuses can have an impact on the campus socialization of students of color. In this context, campus socialization refers to forming relationships with peers, participation of students in student groups across campus and the utilization of campus resources such as advising or career services.

Students of color who experienced racism in the classroom or in a social setting with their peers were less likely to utilize other forms of campus resources (Solórzano et al., 2000), and were less likely to want to participate in on campus social activities (Augustine, 2015). Black and Latinx students also experienced microaggressions in social functions and when interacting with other institutional authorities, such as campus police (Black & Bimper, 2017; Solórzano et al., 2000). In cases where Black and Latinx students did get involved in student groups and organizations, they reported experiencing microaggression in social functions. Black student groups often experienced a stronger campus police presence at social functions, and reported more restrictions placed on their group activities compared to activities organized by other student groups (Solórzano et al., 2000).

In addition, Black and Latinx students encountered microaggressions in daily interactions and in attempting to form friendships with their White peers (Harper, 2015; Harwood et al., 2018; Von Robertson et al., 2016). They also find themselves having to take the initiative to create connections with their peers, faculty, and administrative staff who would otherwise not interact with them because of their race (Davis et al., 2004). For some students, such experiences

were discouraging, especially when combined with the effects of academic stereotype threat (Booker, 2016).

### *Intersections of Identities*

Given the multiple identities of students being considered in this study, it is also important to consider such identities have an impact on individual experiences as undergraduates. Given the multitude of intersecting identities for Black and Latinx students, this section will focus on the intersections of race, gender and immigration status.

The racism that Black women experience may depart from the racism experienced by Black men. For example, Black women who attend PWIs encounter racism and racial microaggression in the form of having to confront the "Angry Black Woman" stereotype (Domingue, 2015; Walley-Jean, 2009), objectification of their bodies as being hyper-sexualized (Awad et al., 2015; Domingue, 2015; Lewis et al., 2016) and microaggressions about their appearances. Such microaggressions include viewing natural hair as not being normative and the viewing of natural hair as having a political or social statement (Awad et al., 2015). Black women also experience colorism, where lighter skinned women were perceived as being more attractive than darker skinned women (Awad et al., 2015). Black women also experience microaggressions in assumptions about their communication styles (Lewis et al., 2016).

The intersections of race and immigration status had an impact on how Latinx student experience college and aspire to graduate study. Students who are undocumented in the country tend to be non-White, specifically, Latinx (Abrego, 2006; Enriquez et al., 2019). As Latinx students, they face racism and racial microaggression, described in the section above. However, they face additional discrimination as undocumented students because of restrictions placed on them by a combination of federal, state and local laws (Abrego, 2006; Diaz-Strong et al., 2011; Enriquez et al., 2019).

Undocumented students who do not have permission to work in the country face challenges of limited economic and future professional opportunities. With permission to work, students are able to explore future career goals and relevant opportunities. Permission to work also allows students to focus on studies and experience less economic-related stress (Abrego, 2006; Diaz-Strong et al., 2011; Enriquez et al., 2019). Being undocumented also had an impact on a student's mobility. Without the ability to require a form of identification, undocumented students are not able to obtain drivers' licenses (Enriquez et al., 2019), therefore affecting their ability to travel, whether this was for economic or education opportunity.

Being undocumented also has an impact on a student's academic opportunities. In some states, students who are undocumented do not enjoy in-state tuition, or are not allowed to enroll in a 4-year institution. The high cost of education often is a deterrent for undocumented students, who often come from poorer communities (Diaz-Strong et al., 2011).

**Summary of Undergraduate Student Experiences**

Involvement with, and sense of belonging to the undergraduate community for Black and Latinx students are examined in detail because of their impact on a student's undergraduate preparation. Black and Latinx undergraduates with a positive experience on campus were more likely to perform better academically, and aspired to graduate study (English & Umbach, 2016). Undergraduate students who performed better academically may also find themselves more likely to be admitted to a graduate program (Posselt, 2014). A positive undergraduate experience may lead to an increase in socialization on campus, where the student may be more confident in seeking out resources to help them better prepare for graduate study (Hadinger, 2017).

The examination of existing quantitative and qualitative studies on undergraduate experiences helps provide understanding on how these experiences shape the undergraduate student experience, specifically through student involvement and a sense of belonging, leading to

academic success. However, when considering Black and Latinx aspirations to graduate study, it is also important to consider the impact of race, and the intersections of race and identity on their experiences. Black and Latinx students tend to experience higher incidences of racism and racial microaggressions (Booker, 2016; Davis et al., 2004; Nadal et al., 2014). Black women and undocumented students experience an increased layer of oppression on their identity and behavior (Awad et al., 2015; Domingue, 2015; Lewis et al., 2016; Walley-Jean, 2009). Such incidents can lead to the creation of stressful environments for Black and Latinx students (Franklin et al., 2014; Ingram & Wallace, 2019; Mosley, 2014), and increased anxiety related to racism (Graham et al., 2013; Szymanski & Lewis, 2016). This may result in poor academic performance (Nadal et al., 2014) and increased the likelihood of dropping out of a course or from college altogether (Strayhorn, 2013; Warner, 2019). Research also suggests that racism and racial microaggressions led to a weaker sense of belonging to the campus community (Lewis et al., 2019) and less positive undergraduate experiences. In addition, students who were undocumented experience oppression through economic and education opportunities (Abrego, 2006; Diaz-Strong et al., 2011; Enriquez et al., 2019).

Black and Latinx students who had more positive undergraduate experience were more likely to persist, had higher academic performance, enjoyed better socialization experience with their peers, and were more likely to seek out institutional resources (Booker, 2016; Davis et al., 2004). Therefore, Black and Latinx students who could be successful as undergraduates were therefore more likely to aspire to graduate school (English & Umbach, 2016). Increasing Black and Latinx enrollment in graduate programs may therefore be predicated on the institution's ability to create a positive campus environment that is supportive towards Black and Latinx students.

The findings from quantitative and qualitative studies seem mutually complementary, where data from both types of methodologies confirm each other's findings. Quantitative data showed that Black and Latinx students who had more contact with faculty had a higher probability of pursuing graduate study (Sweeney & Villarejo, 2013), qualitative data from interviews with students recounting their experiences seem to confirm this (Augustine, 2015; Booker, 2016; Hurtado et al., 2011; Ramirez, 2011). The use of qualitative methods in these studies provides a more in depth perspective of the student experience through the voices of the students. For example, Davis et al. (2004) interviewed a participant who used the term "fly in the buttermilk" (Davis et al., 2004) to describe their experiences of feeling out of place and being hypervisible as the only student of color in a sea of White faces. Such hypervisibility can hinder the education experience caused by peer isolation or negative perceptions of academic performance by professors (Davis et al., 2004).

It is also important to consider a student's pre-college experience and how this has an impact on a student's aspirations to graduate and professional school. A study by Chang et al. (2014) showed that Black and Latinx students who had positive high school experiences and academic preparation were as likely to persist in a STEM major than their White and Asian peers. In addition, the authors also found that SAT scores were significantly associated with STEM persistence for students of color. For every 100 point increase in SAT score, the authors found that students of color were 6.88 percent more likely to persist in a STEM degree (Chang et al., 2014).

Students who enrolled in college intending to pursue a professional degree in the field of medicine, pharmacy or dentistry were 11.5 percentage points less likely to persist in a STEM degree than those who only intended to obtain a bachelor's degree (Chang et al., 2014). The authors found no difference in students who aspired to pursue a master's or a doctoral degree

32

compared to those who only intended to obtain a bachelor's degree (Chang et al., 2014). While the studies discussed in the previous sections show that one's undergraduate experience had a direct impact on their graduate and professional school aspirations, the high school experience and academic preparation may contribute to their persistence as undergraduates. More research is needed in this area to confirm Chang et al.'s (2014) findings.

<div align="center">**Graduate Admissions Experience**</div>

While much literature is available on the student undergraduate experience, less has been said about how this experience leads to graduate school choice. Existing studies (Heller, 2001; Millet, 2003; Perna, 2004; Zhang, 2005) that have attempted to make sense of this phenomenon made use of data from the 1992-1993 Baccalaureate and Beyond study. However, significant changes have occurred within higher education and graduate studies since (English & Umbach, 2016). This included an increase in the undergraduate enrollment and baccalaureate attainment of Black and Latinx students (Snyder et al., 2019). There is therefore a need to investigate the relationship between student undergraduate experience and how this leads to graduate school aspiration and choice.

English and Umbach (2016) attempted to provide an updated conceptual model for graduate school choice. Using data from the 2000-2001 Baccalaureate and Beyond study, the authors found that undergraduate major and amount of college debt had a significant impact on graduate aspiration and enrollment. Undergraduate achievement, measured by grade-point average, had a significant relation to graduate school enrollment. Black students were consistently and significantly more likely to aspire, apply for and enroll in graduate programs compared to their White peers. Latinx students were significantly more likely to aspire to and apply for, but less likely to enroll (English & Umbach, 2016).

While this model provided a framework to help understand the graduate school process, it relied on data from 2000-2001. Again, considering the significant changes that have taken place within higher education in the last 20 years, especially with regard to Black and Latinx enrollment (Snyder et al., 2019), the data and model may be irrelevant to current discussion. In addition, other variables that were influenced by race were not accounted for. Since race plays an important role in establishing involvement, sense of belonging and academic excellence with Black and Latinx undergraduate students (Case, 2013), this may be the case for graduate aspiration. English and Umbach's (2016) model does not consider the role of racism and microaggressions in the graduate school aspiration, application and enrollment of Black and Latinx students.

Extant studies on the graduate school admissions process focused on the factors behind graduate school choice for Black and Latinx students (Alexander & Bodenhorn, 2015; Bersola et al., 2014; Mertz & Strayhorn, 2012; Mullen et al., 2003; Ramirez, 2013; Strayhorn et al., 2013; Wilcox et al., 2005). Few studies focused on how Black and Latinx students navigate the graduate admissions process. These experiences included knowledge of the admissions process, standardized testing, understanding the cost of application and other enrichment programs that can help strengthen one's application.

Existing research on the graduate admissions process can be viewed in the following ways: the factors influence a student's choice to pursue graduate study, the admissions experience of students, and the institutional experience. The focus of this section is on doctoral programs and professional programs because, they tend to be similar in nature.

This section focuses on the discussion on studies conducted by Ramirez (2011) and Hadinger (2017). These studies were not only found to be most useful because of its relevance to this study, but also focused on how Black and Latinx students navigated the admissions process

of researching suitable graduate programs, taking standardized tests, and how students obtained advice and knowledge on being successful applicants to graduate programs. Other studies that discussed the admissions process from the student perspective tend to focus on the factors that led to student choice in a graduate program, rather than directly address how Black and Latinx students overcame challenges as they navigated the graduate admissions process.

Ramirez's (2011) study focused on Latinx student experiences in navigating the admissions process. A total of 24 participants were interviewed. They were either enrolled, or had already completed their graduate doctoral programs across one university. The participation of students who had completed their programs long before being interviewed may have an impact on the data collected by the author. The author was interested in the experiences of Latinx students specifically, and did not include any students enrolled in professional programs such as medicine or physical therapy. Hadinger (2017) interviewed 33 Black and Latinx students who enrolled at various medical education programs across the US. These interviews took place at a national conference specifically for students enrolled in medical education programs.

Both Hadinger's (2017) and Ramirez's (2011) studies highlighted how race can determine one's success in the graduate school application process, not only through the racialized experiences of students, but also through social and cultural capital of their families (Ramirez, 2011). Other studies that focused on the graduate school aspiration and choice are also included in this section to support Ramirez (2011) and Hadinger's (2017) findings.

**Family and Social Support**

Studies have shown that family and social support structures were important in the academic successes of Black and Latinx students (Pearson & Bieschke, 2001; Sáenz et al., 2018). In some cases, familial support were the motivators for Black and Latinx students in pursuing graduate education (McCallum, 2015). The importance of family and familial support meant that

Black and Latinx students relied heavily on these support systems for guidance, advice and motivation through the graduate admissions process (Hadinger, 2017; McCallum, 2015; Ramirez, 2011). However, the extent of support depended on the education attainment of a student's parents or family members. Students who did not have family members with graduate school experience found that they could not rely on them for advice on the admissions process (Gonzalez, 2015; Ramirez, 2011), but were otherwise able to rely on them for encouragement and motivation (Hadinger, 2017; Ramirez, 2013).

Black and Latinx students who could not seek advice from family attempted to turn to their social networks and institutional resources for guidance with some success (Hadinger, 2017; Ramirez, 2011). Latinx students who attended an undergraduate campus with no graduate school-going culture did not have access to advisors for graduate study. They also could not turn to former students for guidance (Ramirez, 2011). Black and Latinx students who attended an undergraduate campus with graduate school-going culture were able to approach peers and upper classmen for advice and information that was not available through formal channels (Gonzalez, 2015; Hadinger, 2017).

**Faculty and Advisor Support**

As discussed above, faculty can play a supportive role for Black and Latinx students in promoting their sense of belonging and increasing academic excellence as undergraduates (Booker, 2016; Case, 2013; Hanson et al., 2016). Similarly, Black and Latinx students who had more interactions with faculty tend to have an increase in graduate school aspirations (Cuellar & Gonzalez, 2019; Trolian & Parker, 2017). These interactions included research experiences with faculty, mentoring opportunities, and whether students had personal discussions with faculty (Trolian & Parker, 2017). In some cases, the support of faculty of color was instrumental in providing support for Black and Latinx students through the graduate admissions process

(Cuellar & Gonzalez, 2019). Latinx students who experienced a lack of faculty support through the admissions process were unable to relate to faculty, or that there were few faculty they felt comfortable enough to go to for advice (Ramirez, 2011). This also led to difficulties in getting faculty to write letters of recommendation, which are often a requirement in the graduate school application process. In addition, some faculty of color were unsupportive of student attempts to seek guidance. Latinx students were often viewed as poor performers, even by Latinx faculty. As a result, some participants experience Latinx faculty being unsupportive of the students' efforts to navigate the graduate school application process (Ramirez, 2011).Faculty were also a factor in Latinx student choice to enroll in a graduate program. Students either enrolled in a specific program because of familiarity or an intellectual affinity with a faculty member (Ramirez, 2013).

Undergraduate academic advisors were influential in the student's experience in the medical school application process (Hadinger, 2017). Some students reported having supportive academic advisors who encouraged them to submit an application, even if the student was not confident in their ability. Other students, however, described their advisors as unhelpful. One student also experienced racism from a pre-health advisor during the process (Hadinger, 2017).

**Financial Support**

As discussed above, college debt has become an important part of college education. As more students incur high levels of college debt (Kim et al., 2017), they may re-consider taking on additional debt by enrolling in a graduate program (Berg & Tollefson, 2014). This led to a consideration on the level of financial support given by a graduate program when making enrollment decisions (Berg & Tollefson, 2014). Students who were given financial support tend to enroll at higher rates than their peers who were not offered financial support (Bersola et al.,

2014). In some cases, students who had multiple admission offers enrolled in the program with the superior financial aid package (Ramirez, 2013).

As with Black and Latinx undergraduates, Black and Latinx students enrolled in graduate programs tend to accumulate more debt than they did at the undergraduate level (Kim et al., 2020). Race and ethnicity, as well as parent education background also had an impact on the level of debt incurred by graduate students. Black and first generation students were more likely to incur debt than their White and Asian peers (Kim et al., 2020). Consequently, Black and Latinx graduate students who had significantly higher loan amounts, and those who received some kind of financial support took less time to complete their graduate degrees (Kim et al., 2020).

The accumulation of debt has several implications for Black and Latinx students who pursue graduate study. First, Black and Latinx students who were more likely to incur undergraduate debt at higher levels would also begin their graduate education with higher levels of debt than their White peers. This meant that they were also more likely to accumulate more debt as graduate students. Second, some studies have demonstrated that Black and Latinx graduate students who were offered financial aid were more likely to enroll (Bersola et al., 2014; Ramirez, 2013) in that specific program. Finally, since graduate students who had higher college debt but also received financial aid were more likely to take less time to complete their degrees, it is also likely that Black and Latinx students who were offered financial aid would take less time to complete their degrees. However, this does not consider the impact of racism and racial microaggression that Black and Latinx students might experience as graduate students.

**Admissions Experiences of Students**

As discussed above, existing studies that focused on the admissions experiences of students often focused on the factors that led students to pursue graduate study, and the factors

that led students to enroll in a specific major or university for graduate study. However, based on my professional experience, the experiences of students while preparing for the admissions process may also influence how students eventually enroll in a graduate or professional program. This includes a student's knowledge of the admissions process, their ability to succeed at standardized tests, costs of applying to programs, and the availability of enrichment programs.

### *Knowledge of the Graduate Admissions Process*

Knowledge of the admissions process included knowing how to apply to graduate programs, what the admissions process entailed, or that applicants needed to know how to research programs for the best fit. Black and Latinx students generally found that the graduate school application process was difficult to navigate (Hadinger, 2017; Ramirez, 2011). They had no knowledge of the actual process, did not know how to submit an application, or that they needed to research programs to find the best fit (Ramirez, 2011). Most applicants applied to doctoral programs because of their proximity to family (Ramirez, 2013; Strayhorn et al., 2013). In addition, they experienced a lack of strategy and preparation when it came to submitting their applications. Some students did not realize that they should have applied to more than one program to increase their probability of being accepted, or how to write a personal statement (Ramirez, 2011). The lack of knowledge about the process, and the lack of preparation also meant they missed important application deadlines (Hadinger, 2017; Ramirez, 2011).

Some Black and Latinx students also did not understand the extent of the financial expense of applications, and were unclear about the availability of financial aid (Hadinger, 2017). Since Black and Latinx students experienced a lack of access to institutional resources such as graduate school advisors or financial aid advisors either because of a lack of such resources, or because of racism and racial microaggression (Solórzano et al., 2000), it is likely that Black and Latinx students were not able to seek out such information.

*Standardized Tests*

Ramirez (2011) found that Latinx students saw the requirement of the GRE as a barrier in the graduate school application process. Participants experienced difficulty taking the GRE exam, with many describing it as "hard", "dehumanizing", and "intimidating" (Ramirez, 2011). In addition, they did not know how to adequately prepare for the test, or did not have the economic means to enroll in commercial preparation courses which were often available to students of higher socioeconomic status (Ramirez, 2011). As a result, most participants relied on free courses on the internet, or utilized study guides. Some participants therefore reported receiving lower scores on the test (Ramirez, 2011).

*Costs of Application*

Black and Latinx students also found that the cost of applying to multiple programs and the cost of taking standardized tests such as the GRE and MCAT were a challenge they needed to overcome (Hadinger, 2017; Ramirez, 2011). The costs of application meant that students had to limit the number of programs they applied to. In some cases, students were prevented from re-taking standardized tests because of the prohibitive cost (Fenton et al., 2016). This meant that if they did not do well on their first attempt, they could not retake the test for a better score (Ramirez, 2013). While the American Association of Medical Colleges (AAMC) offered financial assistance to those who were eligible, it only helped to partially cover the costs involved in the medical admissions process (Hadinger, 2017).

*Enrichment Programs*

Participants in previous research reported that increased interaction with faculty led to more interest in graduate study. This included being able to interact with faculty mentors on research programs (Cuellar & Gonzalez, 2019; Hanson et al., 2016; Hurtado et al., 2008; Ramirez, 2011; Sweeney & Villarejo, 2013) and participation in enrichment programs that led to

increased contact time with faculty (Hadinger, 2017). It is perhaps for that reason that professional programs such as medicine, pharmacy, dentistry and physical therapy make use of enrichment programs to recruit more students of color to their programs (Bailit & Formicola, 2010; Dumke et al., 2016; A. Patel et al., 2017; Smith et al., 2009).

Enrichment programs were created to target Black and Latinx students, with the intention of creating a pipeline through which these students can be exposed to the respective fields (Carline et al., 1998; Formicola et al., 2010; Hesser et al., 1998; A. Patel et al., 2017; Soto-Greene et al., 1999). These programs include those for high school students, and others that were for undergraduate students (Derck et al., 2016; A. Patel et al., 2017; Rashied-Henry et al., 2012).

The outcomes for these programs tend to be positive. However, more recent empirical studies are needed to determine further success. Quantitative survey results of those who had attended the University of Michigan's summer enrichment program show that more than 50% had either gone on to obtain a graduate degree, or were considering post-baccalaureate education (Lichtenstein, 2013). Bediako et al. (1996) surveyed alumni of the Ventures in Education program in New York and found that 7% of those who participated in the program between 1985 to 1989 were accepted to medical school, and 7% were already matriculated. Jackson and McGlinn (1994) conducted a survey of alumni to the Medical/Dental Education Preparatory Program (MEDREP) of the Southern Illinois University School of Medicine. The authors found that over a 20 year period between 1972 and 1992, more than 86% of participants had graduated or were still enrolled in medical school (Jackson & McGlinn, 1994).

***Summary of Student Perspectives in the Graduate Admissions Process***

Existing research that explores the perspectives of students in the graduate admissions process suggest that several limitations exist for explorations of the student experience. First, these explorations are embedded within discussions of choice in the enrollment process.

Researchers were mostly interested in why Black and Latinx students decided to attend graduate school (English & Umbach, 2016; Gonzalez, 2015; McCallum, 2015; Mertz et al., 2012; Perna, 2004; Ramirez, 2013; Strayhorn et al., 2013; Trolian & Parker, 2017).

Second, of the research reviewed in this study, only two studies were identified as specifically focusing on how Black and Latinx students navigate the graduate admissions process and how they overcome challenges during this process (Hadinger, 2017; Ramirez, 2011). These two studies, combined with the data provided by studies that focused on graduate and enrollment choice suggests that family and social support (Cuellar & Gonzalez, 2019; McCallum, 2015), faculty interaction (Cuellar & Gonzalez, 2019; Gonzalez, 2015; Trolian & Parker, 2017), and financial support (Berg & Tollefson, 2014; Bersola et al., 2014; Ramirez, 2013) were important in the graduate school aspirations of Black and Latinx students. In addition, Black and Latinx students had to overcome the challenges of finding information on the admissions process, understanding the cost of application and taking standardized tests (Hadinger, 2017; Ramirez, 2011). In some cases, Latinx students acknowledge that lower scores on the GRE may have prevented them from being admitted to their graduate program of choice (Ramirez, 2013).

Despite their limitations, existing studies show that the use of qualitative methodologies are appropriate in exploring the challenges that Black and Latinx students overcome during the graduate admissions process. Data collected from these studies allowed the authors to show how racism experienced by Black and Latinx students as undergraduates had an impact on their graduate school aspirations (Hadinger, 2017; Ramirez, 2011, 2013), confirming previously discussed research on how racial microaggressions and racism experienced by students of color can lead to negative outcomes (Augustine, 2015; Booker, 2016; Nadal et al., 2014).

Based on Astin's (1999) theory of student involvement, students with higher levels of involvement with student organizations tend to report more positive college experience. It is not

clear if the participants' racial identity had an influence on their experiences. However, research discussed earlier in this chapter suggests that it is likely that students who had the time and interest in being involved in student organizations and national conferences may have had positive experiences as undergraduates and in the admissions process. Ramirez's (2011) and Hadinger's (2017) study confirm some aspects of the student applicant experiences, but more research is also needed to explore the racialized experiences of students in the admissions process for professional programs such as physical therapy education programs.

**Institutional Perspective**

The institutional perspective refers to the admissions process from the perspective of graduate admissions committees and degree programs. This includes the process of applicant selection, the application evaluation criteria and the decision making-process. Understanding the institutional perspective of the admissions process is important because it provides an understanding of the ideal candidate for graduate admissions committees. As a result, the factors that admissions committees chose to focus on in the decision-making process should have an impact on the experiences of the applicant.

This section will discuss the factors that go into the admissions process from the perspective of graduate admissions committees. This includes the factors that admissions committees consider when evaluating an applicant, the factors that drive the decision-making process of graduate admissions committees, and diversity priorities of graduate admissions committees.

*Quantifying Factors in Admissions*

Quantifying factors in admissions refer to the use of grade-point averages and standardized test scores, most commonly the GRE exam. Standardized test scores and grade-point averages are used by graduate programs for various reasons. These include the use of these

factors as for convenience (Bersola et al., 2014), as indicators of merit and intelligence (Posselt, 2014; Scherr et al., 2017), and of future success in the program (Posselt, 2014).

Some graduate programs recognized the use of a cutoff for grade-point averages and GRE scores (Potvin et al., 2017). While there is insufficient evidence that explains why this is the case, grade-point averages and GRE scores were used by some programs because of convenience (Bersola et al., 2014). These programs receive so many applications that it might be unrealistic to expect the admissions committee to review all applications. As a result, admissions committees therefore implement cut-offs of grade-point averages and GRE scores to bring the number of applications down to a manageable amount (Bersola et al., 2014). Standardized test scores such as the GRE test was also used as a perception of fairness and reduces variability between applicant files. Since there may be variability between applicants' grade-point averages, faculty perceived that GRE scores was one thing all applicants have in common, and reduced ambiguity in the application (Posselt, 2014).

Grade-point averages and GRE scores were used by graduate programs as an indicator of merit. This is because faculty tend to view standardized test scores as an indicator of future success in the program (Posselt, 2014), intelligence (Scherr et al., 2017), and academic preparation (Posselt, 2014). Faculty on admissions committees associated applicants with higher grade-point averages and GRE scores with intelligence (Posselt, 2014; Scherr et al., 2017). Some perceived their fields as requiring innate talent to be successful (Scherr et al., 2017). A higher grade-point average and GRE scores signaled higher levels of intelligence, and intelligence signaled belonging to the academic community. As intelligence is central to academic culture and to the self-identity of faculty, the intellectual legitimacy of departments hinged on the applicants they admit (Posselt, 2014).

Faculty also viewed GRE scores and grade-point averages as a reflection of an applicant's academic preparation and ability to do well in the doctoral program (Posselt, 2014). This was important because faculty perceived the time taken to teach and mentor a doctoral student to be an investment. Therefore, admissions committees were more likely to make an offer of admission to an applicant who they perceive would be most likely to complete the program, justifying the investment on the applicant (Posselt, 2014).

Despite these findings, Bersola et al. (2014) found that applicants who had higher grade-point averages and GRE scores tend to have a lower probability of enrolling. However, this study focused on the enrollment of students at one institution. It is therefore likely that students who had higher grade-point averages and GRE scores had more offers of admissions and therefore less likely to enroll.

Faculty's perception of standardized test scores as a reflection of intelligence and ability to succeed in a graduate program is problematic. The use of standardized test scores tend to disadvantage students of color, who tend to score lower on them (Bleske-Rechek & Browne, 2014). As discussed above, Black and Latinx students often report difficulty when taking standardized tests required of graduate and professional programs, specifically, the GRE and the MCAT tests (Hadinger, 2017; Ramirez, 2011). The perception that these tests are a reflection of intelligence and indicator of future success is also deficit thinking because Black and Latinx students did not always have access to resources such as preparation tests, and the ability to complete multiple attempts of these tests, compared to their White peers (Ramirez, 2013). In addition, the use of standardized testing is rooted in traditions of eugenics (Perdew, 2001; Stoskopf, 2002) and racism (Au, 2016). The perception that standardized test scores were a reflection of intelligence (Scherr et al., 2017) continue to perpetuate such racism and further racial inequalities (Knoester & Au, 2017). The reliance on standardized testing by admissions

committees disadvantages Black and Latinx students who often do not do well on them for the reasons mentioned above. This perpetuates the graduate enrollment gap between White and students of color.

*Disciplinary Norms*

Posselt (2015) found that the type of doctoral program had an impact on how admissions files are reviewed. The norms of each discipline defines the risk-taking behavior of graduate admissions committees (Posselt, 2015). For example, in fields such as physics and economics, norms of these disciplines encouraged risk aversion and emphasized a foundation in quantification. As a result, admissions committees focused on quantifiable aspects of the application such as grade-point averages and standardized test scores (Posselt, 2015; Scherr et al., 2017). These were reflected in the decisions of admissions committees, where a high score on the quantitative section of the GRE exam was perceived as an indicator of how successful the student would be in doctoral coursework (Posselt, 2015).

Posselt (2014, 2015) was able to make use of an ethnographic case study to observe and examine the decision-making behavior of admissions committees. In the same way, she was able to observe admissions committees as they worked through applicant files and the decision-making process, and was able to reinforce or clarify her observations through interviews with faculty and department chairs. However, Posselt's (2014, 2015) studies were eventually limited to two departments, which may not be representative of the decision-making behaviors and preferences of faculty in other departments. Similarly, as the field of physical therapy has different norms from an economics or philosophy department, the decision-making behavior and applicant preferences of admissions committees may be different. A review of existing literature on the admissions processes of DPT programs, however, may provide an insight into the norms and preferences of admissions committees in DPT programs.

*Focus on Diversity and Merit*

While admissions committees considered diversity to be important, this was a lesser priority than an applicant's GRE scores or grade-point average (Posselt, 2014). In some cases, faculty considered diversity to be important only if they had met the qualifying criteria, or that diversity was considered only because other programs applied the same standards (Posselt, 2014). When evaluating Black and Latinx students of color in the graduate admissions process, admissions committees showed a limited understanding of cultural diversity (Boske et al., 2018). In addition, applicants were either objectified as an organizational asset (Posselt, 2014), or were evaluated based on a deficit criteria (Boske & Elue, 2017) in an environment where there was an absence of counter narratives from Black and Latinx faculty (Boske et al., 2018). This was not observed with White applicants (Posselt, 2014).

*Holistic Review Processes*

Implementation of a holistic review process may help admissions committees reduce their reliance on grade-point averages and GRE scores to evaluate and make admissions decisions. A holistic review process is defined by the use of factors other than an applicant's grade-point average and standardized test score to make an admissions decision (Megginson, 2009). These factors are otherwise known as non-cognitive factors and include the consideration of an applicant's personality, attitudes, communication skills, knowledge of the profession, and other aspects that a graduate program may find to be useful (Megginson, 2009). The use of the holistic review process in graduate admissions has largely been spearheaded by medical education (Glazer, 2014), driven by a diversifying patient population, thus leading to a need to diversify provider demographics. Reducing reliance on the use of GRE scores and grade-point averages allows admissions committees to consider applicants who do not necessarily have high GRE scores or grade-point averages for reasons discussed above. A reliance on the use of GRE

scores and grade-point averages tends to lead to a bias towards applicants from more privileged

backgrounds in the admissions process (Chaviano-Moran et al., 2019).

The use of holistic review in the admissions process in medical,  dental and some

doctoral programs show that programs who also considered non-cognitive factors such as the

applicant's knowledge of the profession (Wilson et al., 2014), personal characteristics and

significant life experiences (Harrison, 2019) in their evaluation of applicants show a significant

increase in the number of Black and Latinx students admitted to their programs (Aibana et al.,

2019; Price & Grant-Mills, 2010; Wilson et al., 2019; Wilson et al., 2014). This suggests that the

implementation of a holistic review process for doctoral and professional programs may help

increase the number of Black and Latinx applicants admitted to these programs.

### *Summary of Institutional Perspectives*

Research exploring the institutional perspective in the graduate admissions process shows

that Black and Latinx students are disadvantaged in two ways. First, Posselt's (2014, 2015)

examination of decision-making behavior of different doctoral programs showed that some

doctoral programs share risk-avoidance behavior in the decision-making process. This meant that

faculty committee members relied heavily on the use of grade point averages and GRE scores to

rank and rate applicants because admissions committees seek to maximize the value of

applicants by admitting students who are most likely to succeed in the program with little

academic intervention. However, the reliance on standardized tests to make admissions decisions

are problematic. Research suggests that faculty relied on standardized test scores to make

admissions decisions because the scores were peceived as an indication of intelligence (Scherr et

al., 2017), academic preparation (Posselt, 2015), and future success in the program (Posselt,

2014). Given that Black and Latinx students don't always have access to the same academic

resources as their White counterparts, such assumptions of standardized testing may be inaccurate (Billings-Ladson, 2006).

Second, while some admissions committees may claim a commitment to diversity, this is not always the case. Admissions committees only considered an applicant's race and ethnicity after accounting for their standardized test score (Posselt, 2015). In addition, admissions committees objectified an applicant's race and considered them to be an organizational asset (Posselt, 2015), rather than consider that an applicant's race and ethnicity contributes to the classroom diversity and education experience of the cohort. As a result of such objectification, applicants were sometimes evaluated from a deficit perspective (Boske & Elue, 2017). Existing studies therefore suggest that the heavy reliance on standardized tests and the lack of commitment to diversity perpetuates existing enrollment and graduation gaps of Black and Latinx students in graduate programs.

A comparison of the applicant and institutional perspective of the admissions process also showed that there is an inherent mismatch in the perceptions of the applicant and admissions committee. The applicant perspective of the admissions process showed that Black and Latinx students tend to be concerned with access to resources that can provide advice and knowledge to help them be successful in the application process (Gonzalez, 2015; Hadinger, 2017; Ramirez, 2011; Trolian & Parker, 2017). Admissions committees focus on admitted applicants who have higher grade-point averages and standardized test scores, academic preparation and their ability to succeed in a graduate program (Miller et al., 2019; Posselt, 2014, 2015). This suggests that admissions committees who prioritize diversity of their programs may consider making information more accessible to applicants in the recruitment process.

**Admissions in DPT Programs**

Research on the admissions process in physical therapy education programs reflect the same focus as with graduate programs. They focused on how student admissions data such as the Graduate Record Examination (GRE) and GPA could be used to determine student success in the program (Andrews et al., 2006; Shiyko & Pappas, 2009; Utzman et al., 2007). The prevalence of literature on the predictability of the GRE scores and grade-point average suggests that DPT admissions committees placed the same importance on quantifying factors when evaluating applicants as most doctoral programs referenced in studies discussed above (Posselt, 2014).

The studies reviewed in this section focus on quantifying predictors of student success. Specifically, there was a focus on whether GRE scores and grade-point averages could be used to predict whether an applicant would be successful in a DPT program, or whether the quantifying factors could be used to predict whether an admitted student would experience academic difficulty in a DPT program. In addition, academic difficulty experienced by a student may help predict if a student was able to pass the national licensing examination after graduation.

The focus on these factors suggest that DPT admissions committees also relied heavily on these quantifying factors to make admissions decisions. Based on my professional experience, this was likely also due to convenience. As DPT programs receive a large number of applications, there was a need to reduce the number of applications to one that the admissions committee viewed as manageable. In addition, since DPT classes were generally small, DPT admissions committees are likely to reduce risk by only admitting students who were more likely to succeed.

### *The Quantifying Factors in DPT Admissions*

A study of admissions criteria in DPT programs, found that more than half of these programs reported a heavy reliance on the use of GRE scores and undergraduate GPA in the admissions process (Mitchell et al., 2019). Programs with a higher percentage of national

licensure examination pass rate also placed more emphasis on the GRE and undergraduate GPA in the admissions process (Mitchell et al., 2019). In addition, research recommends that the use of GRE scores in the admissions process should continue because of its correlation with passing rates on the national licensure examination (Kume et al., 2019).

Studies also found that an applicant's undergraduate GPA and GRE scores were the strongest predictor of student withdrawal and dismissal in a DPT program (Andrews et al., 2006; Shiyko & Pappas, 2009; Utzman, 2006). Students who had lower undergraduate GPA and GRE scores were also more likely to experience academic difficulty in the program, requiring either remedial coursework or leading to academic dismissal (Coleman-Salgado, 2019; Utzman et al., 2007). In addition, non-White students were more likely to experience academic difficulty while enrolled in a DPT program (Utzman et al., 2007). Applicants who were older than 26 years of age at enrollment, non-White applicants with an undergraduate GPA of 3.15 or lower, and GRE quantitative scores below the 50ᵗʰ percentile were also more likely to experience academic difficulty while enrolled in a DPT program (Utzman et al., 2007). It is important to note, however, the majority of these studies relied on data from 2000 to 2004 and therefore may reflect outdated trends. Additionally, more recent studies show that applicant grade-point averages were only predictive of first-semester grade-point average in the program (Coleman-Salgado, 2019). These studies also do not consider other variables that have an impact on academic success in a DPT program. These variables included the ability to cope with stress and anxiety from coursework (Macauley & Plummer, 2017; Waite et al., 2019), study skills (Waite et al., 2019), the availability of a retention program (Owens et al., 2018) and other teaching strategies (Cherry & Blackinton, 2017; Huitt et al., 2015).

These discussions ignore the structural disparities that have an impact on students of color to achieve higher GRE scores. Studies have shown that students of color tend to score

lower on the GRE exam (Bleske-Rechek & Browne, 2014), or had less access to resources that help them improve their test scores (Fenton et al., 2016). The previous section also showed that students of color tend to experience more barriers as undergraduates which had an impact on their ability to excel academically or receive access to institutional support such as academic advising (Harwood et al., 2018). Racism from peers and faculty also prevented some high-achieving students of color to do well in classes where the faculty might have biases towards students of color (Augustine, 2015; Booker, 2016; Davis et al., 2004; Gildersleeve et al., 2011; Nadal et al., 2014; Ramirez, 2013). With these experiences, Black and Latinx students may be less likely to be admitted by DPT programs.

*DPT Program Choice*

Existing studies available at the time of this study were focused on the institutional perspective of recruiting more DPT students. In some cases, these studies focused on the recruitment of students of color, although most studies were focused on recruitment of students in general. They also took into account the application behavior of students who were interested in DPT programs.

White applicants to DPT programs tend to achieve a higher grade point average and GRE scores, compared to Black and Latinx students. Black and Latinx students also submitted less applications than White students in the two application cycles that were studied. Latinx students were more likely to apply to in-state programs, and Black and Latinx applicants were also more likely to apply to programs with Black and Latinx faculty (Nuciforo, 2015). The gap in GRE scores and grade point averages was consistent with the applicant data published by PTCAS (2019) and previous research on graduate applicant choice.

The focus on undergraduate GPA and GRE scores in the admissions process may account for the disparity in application and admissions numbers of students from data provided by

PTCAS. As discussed, while White applicants account for about 68% of all applicants to DPT programs. More than 80% of admitted students were White (PTCAS, 2019). If White students tend to have higher undergraduate GPAs and GRE scores, and if DPT programs demonstrated a strong reliance on the use of these factors to make admissions decisions, then it would follow that more White students are admitted to DPT programs.

Studies that focus on the factors influencing the choice of applicants to apply or enroll to a specific program also include the accreditation status (Ancrum-Smalls et al., 2000), program reputation (Moore et al., 2003), perceptions of the overall atmosphere of the program, percentage of students who pass the national licensure examination, and perceptions of faculty concern for students. (Ancrum-Smalls et al., 2000). Applicants to DPT programs were less influenced by student body diversity and location of the program (Ancrum-Smalls et al., 2000). Black and Latinx students placed a higher priority on the program location (Moore et al., 2003), availability of financial aid (Johanson, 2007), the cost of attendance, program diversity, personal relationships with faculty (Wilcox et al., 2005), and the number of prerequisite classes required to apply to the program (Johanson, 2007). These findings are again consistent with research on the graduate choice behavior of Black and Latinx applicants.

Programs that make specific efforts to recruit and enroll students of color focused on creating resources to provide academic support to students of color already enrolled in the program (Wise et al., 2017). Less resources were directed towards other aspects such as providing cultural competency training to faculty and staff, involving student's families in the process, and organizations that support the experiences of students of color (Wise et al., 2017). Such emphasis on providing academic support to students of color without cultural competency training implies a deficit perspective from DPT programs. An assumption is made about students of color that they require more academic support compared to their White peers.

Enrolled DPT students also reported that strong relationships with faculty and family support were the strongest support to their success in the program (Moore et al., 2003). However, they also reported that academic issues and time management issues were the strongest barriers to their success in the program (Moore et al., 2003). While students experienced racism and racial microaggression while enrolled in the DPT program, the methodology used by the Moore et al. (2003) on the student experience may explain why this is the case. The authors utilized a survey to participants that had structured questions and answers, rather than an open ended form such as a qualitative survey or interviews and case studies. As a result, even if students of color did experience racism and racial microaggression in the program, there may not have been an available response for it. Since studies have shown that racism and racial microaggression can create academic challenges for some students (Augustine, 2015; Booker, 2016; Davis et al., 2004; Nadal et al., 2014; Solórzano et al., 2000), it is plausible that racism and racial microaggression may have been the cause for students who reported that academic issues were the biggest barriers to their success.

*Summary of DPT Admissions*

A review of admissions related literature for DPT admissions found a focus on the predictability of GRE scores in the admissions process. This suggests that the admissions process is focused on the institutional perspective, rather than on the experiences of students in the DPT admissions process. The use of these quantifying factors to predict who would be most successful to DPT programs and require less academic interventions means programs would use less institutional resources for student success. There were also similarities between the programs observed by Posselt (2015). The focus on using GRE scores and grade point averages to admit students suggests that DPT programs tend to be low-risk takers like economic and

physics doctoral programs. Where race is discussed, it is to point out the disparities in scoring on the GRE (Utzman et al., 2007).

While there was research to suggest that there was some interest in the recruitment of more students of color, there was less evidence to suggest that this had an impact on the recruitment or admissions practices of DPT programs. In addition, there was an assumption that students of color tend to need more academic interventions, as evidenced by programs who create specific academic support programs for them (Wise et al., 2017). Academic issues were reported as a barrier to student success, but there was not enough evidence to suggest that this was due to a lack of academic preparation for Black and Latinx students. While this is beyond the scope of this study, more research exploring the experiences of students is needed to understand the barriers and challenges they face as enrolled DPT students.

More importantly, most of existing research in DPT programs is focused on the institutional perspective in the admissions process. There was not enough evidence to understand the experiences of students who have gone through the DPT admissions process. These experiences included the challenges that Black and Latinx students had to overcome when going through the admissions process, and the sources of support that have helped them succeed in the process. Literature about the experiences of Black and Latinx graduate students in other doctoral programs suggests that the racism and racial microaggressions experienced by undergraduate students transfer into graduate study (Apugo, 2017; Gasman et al., 2008; Gildersleeve et al., 2011; Harper, 2009, 2010; Lilly et al., 2018). As a result, more research is needed to examine the impact of these racialized experiences at the undergraduate level, and how these experiences have an impact on the admissions experiences of these students.

**Chapter Summary**

A review of the literature on the undergraduate experience, student and institutional perspectives of the graduate admissions process suggest that there is a gap in the understanding of how Black and Latinx students experience the DPT admissions process. The interaction of racialized undergraduate experiences and the institutional perspective on graduate admissions has several implications for this study. First, research suggests that one's undergraduate experience and sense of belonging has an impact on their aspirations to, and successes in applying to graduate school (Astin, 1999; English & Umbach, 2016; Perna, 2004; Strayhorn et al., 2013). Black and Latinx students who experience racism and racial microaggression may have a negative undergraduate experience (Nadal et al., 2014). This leads to less involvement on campus activities, and interaction with peers and faculty. Students who are less involved on campus may experience a lesser sense of belonging to the undergraduate community (English & Umbach, 2016; Hausmann et al., 2007; Johnson et al., 2007; Lewis et al., 2019), thereby having less aspiration to graduate study.

Research also suggests that students of color tend to face barriers in the admissions process in the form of support from faculty, academic advisors, and having an understanding of the admissions process (Ramirez, 2011). If students who aspire to attend DPT programs undergo the same racialized experiences, these experiences may either discourage them from going through the application process, or they may not receive enough support to do so. More research is therefore needed to understand if DPT students who go through the admissions process face the same racialized experiences as undergraduates, the barriers and challenges they face in the admissions process, and whether these experiences are similar to data reported by existing research.

Second, existing research established that graduate programs tend to rely heavily on the use of GRE scores and grade point averages to make offers of admissions (Posselt, 2014, 2015).

In a review of literature on the DPT admissions process, several quantitative studies showed a focus on the predictability of GRE scores and grade point averages on the success of a student enrolled in the program (Utzman et al., 2007). This suggests that, like doctoral programs in the sciences (Posselt, 2015), DPT programs followed the same risk-averse behavior when making admissions decisions and focused on whether an applicant was more likely to succeed in a DPT program, and valued such applicant attributes over diversity. In addition, the studies reviewed in this chapter also showed that graduate and DPT admissions committees tend to prioritize a student's academic preparation and future success (Kume et al., 2019; Mitchell et al., 2019; Utzman et al., 2007) over class diversity. The focus on grade-point averages and GRE scores as a predictor of academic success does not consider the effect of other factors influencing academic success post enrollment (Cherry & Blackinton, 2017; Huitt et al., 2015; Macauley & Plummer, 2017; Owens et al., 2018; Waite et al., 2019).

Finally, the focus on the use of GRE and grade point averages in the admissions process do not take into account the fact that students of color tend to obtain lower scores on the GRE (Bleske-Rechek & Browne, 2014). This is due to structural inequities in the K-12 system that lead to students of color entering college being less prepared than their White peers (Ladson-Billings & Tate, 1995) and, as discussed earlier, students not knowing how to study for the GRE, or having resources to prepare for it compared to their White peers (Ramirez, 2011). The lack of access to resources such as academic advising and the barriers posed by the GRE also suggest that students of color tend to be disadvantaged in the DPT admissions process.

While institutional efforts such as the holistic review process is meant to mitigate these issues by considering the entire application instead of the GRE and grade point averages (Black et al., 2015; Conrad et al., 2016; Drees et al., 2015), evidence provided by Posselt (2014) suggests that admissions committees still use the GRE and grade point average to reduce the

number of applications that are read. While there is evidence to show that enrichment programs have helped more Black and Latinx students gain admission to graduate and professional programs (Dumke et al., 2016; Lichtenstein, 2013), these programs may not be available to all applicants. In addition, applicants also need to be able to know where to find information about these programs, again relying on institutional and social support networks which may not always be accessible to all students (Fenton et al., 2016). More research is therefore needed to understand how successful applicants to DPT programs may have overcome barriers in the process, how their undergraduate experience may have prepared them for the process, and if their racial identities have had an impact on their undergraduate experience.

Existing studies that explore the experiences of Black and Latinx undergraduates entering the graduate admissions process demonstrate that their racial identities have an influence over their undergraduate experiences. Against this backdrop, existing research on the DPT admissions process shows a strong focus on quantitative studies that examine the predictability of an applicant's GRE and grade-point averages. However, there is not enough evidence to show how the racial identities of Black and Latinx students have an impact on their success in the admissions process to DPT programs. Specifically, more evidence is needed to reflect how Black and Latinx students overcome challenges experienced as applicants in the DPT admissions process.

## Chapter 3: Methods

The purpose of this study is to explore the experiences of Black and Latinx students as they navigate the Doctor of Physical Therapy (DPT) admissions process. Their experiences are explored through the use of Critical Race Theory (CRT) and phenomenology. I am interested in how structural racism and discrimination have had an impact on the experiences of students, and how they overcame challenges they have faced. CRT challenges traditional means of viewing race within our society. It requires the development of theories that address and mitigate oppression and deprivation (Solórzano & Yosso, 2002). Phenomenology was selected as an appropriate methodology as this study investigated the lived experiences of students of color in the DPT admissions process. The use of CRT in this study also facilitated a critical perspective in addition to phenomenology and allowed us a way to examine the experiences of Black and Latinx students as they navigated the educational system. A CRT lens provided an opportunity to view the oppressive nature and structures of systems and gave a voice to marginalized student experiences in higher education (Solórzano & Yosso, 2002).

### Researcher's Position

My experiences with Black and Latinx students in physical therapy education programs come from my professional work experiences as an admissions coordinator at a physical therapy education program. I have come to learn about the field of physical therapy, the challenges that physical therapy educators face when increasing the diversity of their field, and consequently, the challenges that educators face when recruiting more diverse faculty to educate more physical therapists.

My professional research also led to the understanding that a lack of Black and Latinx in the classroom was a result of a lack of Black and Latinx students applying to physical therapy education programs. There were a variety of reasons why this was the case. Some of these

reasons were beyond my professional control, but I realized that implementing a holistic review process may help increase Black and Latinx who would enroll in our program. There was some success in the implementation of the holistic review process. However, there was more that physical therapy education programs could do. One was to increase contact with undergraduate advisors at four-year and two-year colleges so they had the best information to pass on to their students.

My interest in this study was motivated by the research I have done professionally. After learning more about the various processes and recruitment strategies involved in increasing students of color enrolment, this has become personal. In the course of my career, I learned firsthand the implicit biases, and occasionally, the explicit racism that my students have had to experience from faculty and fellow classmates, in addition to the structural biases and racism they experience on a daily basis throughout their lives. Their experiences were supported by existing literature that discusses how Black and Latinx students enrolled in graduate programs experience racism, microaggression, and isolation resulting from such incidents (Gasman et al., 2008; Tuitt, 2012; Walkington, 2017). Such experiences had a profound influence on the way my students saw and experienced the world around them. I was motivated by the injustices that my students have to experience because of the color of their skin.

As an Asian researcher who is also an immigrant, I was conscious of my positionality in this study. Twine (2000) cautions that the researcher should understand their racial identity when considering positionality of the researcher in a study. I was aware of my identity as a racial outsider (Bhattacharya, 2009; Twine, 2000) to my participants. I do not have the same racialized experiences as study participants. Having spent my formative years outside of the United States in a former British colony, oppression is normalized through the Western narrative. My identification with structures of oppression, resistance and liberation is different from my

participants (Bhattacharya, 2009). I was therefore cognizant of essentializing notions of oppression and liberation against my own experiences (Bhattacharya, 2009).

There is a belief that Asians in the US are the "new Whites", and therefore do not experience discrimination (Museus, 2008). As a student who attended a PWI, I have experienced racial microaggressions when others ask where I am *really* from, and that I speak really good English (English is my first language). Asian-Americans also tend to be subject to the model minority myth, where Asians are expected to be successful, particularly in areas of Science and Mathematics (Museus & Park, 2015). The model-minority myth, created by the dominant group, Whites, is particularly harmful as it divides communities of color and perpetuates the myths created by this group (Delgado & Stefancic, 2017).

I see my position in this study as a researcher of color to create a space that highlights individual stories while offering solidarity to others in similar situations. In a space where Black and Latinx students are objectified in various ways (Posselt, 2014; Solórzano et al., 2000), I hoped to provide a safe space through which Black and Latinx students can neutralize micro-aggression and oppression (Bhattacharya, 2015) in a world where race is operationalized as oppressive for persons of color.

## Critical Race Theory

Existing research shows that the undergraduate experiences of Black and Latinx students are defined by racism and racial microaggressions. In addition, admissions policies of graduate and DPT programs rely on the idea of merit, ignoring structural racism that places Black and Latinx students at a disadvantage. Critical Race Theory (CRT) was therefore appropriate for the goals of my study as it aims to neutralize racism and oppression by disrupting racist knowledge of race-neutrality, intellectual inferiority and minimizing the impact of racism (Patton, 2016).

Originating from the legal system, CRT was created by legal scholars who were

dissatisfied with how classic tenets of general legal theories did not address social forces on legal

change (Crenshaw et al., 1995; Delgado & Stefancic, 2017; Ladson-Billings & Tate, 1995). A

CRT  critique of the system suggests that the existing system legitimizes structural

discrimination (Bell, 1989; Freeman, 1978). One of CRT's most prominent scholars, Derrick

Bell, suggested that civil rights policies in the 1970s served the political interests of the elite

liberals rather than Black communities (Crenshaw, et al., 1995). Bell, a professor at Harvard at

that time, eventually left to become dean of the University of Oregon Law School. When the

Harvard administration refused to fill his position with another scholar of color to teach his

courses, Bell's students eventually organized "The Alternative Course", a continuation of Bell's

course that focused on American law through racial perspectives (Crenshaw, et al., 1995).  The

participants and student organizers of the course eventually came together to hold their first

workshop in 1989, starting a series of workshops that would define the movement (Delgado &

Stefancic, 2017).

CRT suggests that Black and Latinx students are recipients of structural racism, which

has an impact on their school experiences (Ladson-Billings, 2017), including their college

experiences. Despite the pervasiveness of racism in higher education (Patton, 2016), Harper

(2012) and Patton (2007) suggest that there is a gap in the understanding of how the experiences

of Black and Latinx undergraduates through the CRT framework. While there have been

discussions and studies on how racism and racial microaggression have an impact on Black and

Latinx undergraduates (Booker, 2016; Harwood et al., 2018; Nadal et al., 2014; Yosso & Ceja,

2009), viewing these experiences through a CRT lens is less prevalent (Harper, 2012; Patton,

2007). This also reflects the racelessness of research in higher education. Using CRT to examine

the experiences of Black and Latinx applicants and their undergraduate experiences therefore

allows the disruption of racist knowledge such as race-neutrality, intellectual inferiority and

minimizing the impact of racism (Patton, 2016). The tenets of CRT can be summarized as

follows:

- **Racial realism:** Racial realism suggests that racism controls all aspects of our

  society (Bell, 1980; Freeman, 1978) and permeates our social, economic and

  political structures, privileged Whites (Bell, 1980, 1992; Dixson & DeCuir,

  2004). Since Whites are privileged in all aspects, there is little incentive for them

  to support the liberation of the oppressed.

- **Interest convergence:** In situations where Whites provide an opportunity for

  liberation, the interest convergence principle suggests that this is only because it

  was beneficial to their own agendas. Examples of these are the Brown (1954)

  decision, where the US felt pressure to maintain moral superiority over the Soviet

  Union (Dudziak, 1988; Ladson-Billings, 2007).

- **Colorblindness and the myth of meritocracy:** Colorblindness emerged as the

  preferred response to racism in policy and in higher education admissions

  (Lipsitz, 2019). It perpetuates the myth of meritocracy by ignoring the fact that

  education inequality exists because of structural discrimination and inequities in

  schooling (Lipsitz, 2019; Zamudio et al., 2011).

- **Property of Whiteness:** Whiteness bestows legal, social and economic privileges

  to the individual, allowing them to enjoy access to greater political, social and

  economic security in the long run (Harris, 1993).

- **Intersectionality:** When discussing race and racism, it is also important to

  consider how one's race intersects with other aspects of their identity, such as

one's gender. In some cases, intra-group differences may be ignored, allowing the

needs of a specific sub-group to remain dominant over others (Crenshaw, 1989).

- **Counter-narrative and intersectionality.** Developing a counter-narrative allows

the oppressed to tell their stories and share their experiences (Solórzano & Yosso,

2002). It counters the master-narrative that reinforces racism, White privilege and

supremacy, allowing the subjugation of minority race groups (Solórzano &

Yosso, 2002). Counter-story telling therefore allows people of color to challenge

and neutralize the dominant discourse on race and racism.

The tenets of CRT that were most applicable to this study were racial realism, the myth

of meritocracy, Whiteness as property and counter-narrative, discussed in more detail in the next

section.

**Racial Realism**

Racial realism suggests that racism controls all aspects of American society (Bell, 1980,

1992; Freeman, 1978), permeating our social, economic and political structures and privileging

Whites (Bell, 1980, 1992; Dixson & DeCuir, 2004). Courts act as instruments for preserving the

status quo and rarely act in favor of the oppressed (Bell, 1980; Freeman, 1978). The belief in the

"rule of law" is therefore an abstract principle that led to legal outcomes that oppresses the Black

community and perpetuate their inferiority (Bell, 1992). By recognizing that racism is inevitable,

people of color should not rely on existing structures and legal processes to seek relief from

discrimination and inequitable opportunities (Bell, 1980, 1992).

Higher education institutions are perceived as sites of power, where oppression of

students of color are reflected through policies and actions of institutional agents such as faculty

and staff (Pusser, 2015). In addition, Black and Latinx students encounter racism and racial

microaggression in their interactions with peers, advisors and faculty. Higher education

institutions, particularly Predominantly White Institutions (PWIs) continue to enforce Whiteness and oppression by choosing not to act on racist incidents when they are reported (Harwood et. al, 2012; Pusser, 2015), further perpetuating an environment of exclusion for students of color.

**Colorblindness and the Myth of Meritocracy**

CRT offers a critique of colorblindness and, consequently, of meritocracy in our society. Colorblindness has emerged as the preferred response to racism in public policy, and in higher education admissions (Lipsitz, 2019). As a result, since affirmative action policies are race-conscious, they are therefore undesirable. Colorblindness prevents exposure to the inequitable opportunities to people of color because of structural discrimination. Society fails to realize that inequitable access to opportunities exist, and that it exists for people of color because of discriminatory policies and history (Lipsitz, 2019).

Colorblindness and the myth of meritocracy suggest that education inequality is because of one's education choices rather than discrimination in schools, or the systemic discrimination that led to inequities in schooling (Lipsitz, 2019; Crenshaw, 2019; Zamudio, et al., 2011). The myth of meritocracy also suggests that affirmative action does a disservice to people of color rather than a way of remediating past discrimination (Lipsitz, 2019; Zamudio, et al., 2011).

This is pervasive in admissions policies, where merit is determined by institutional agents, admissions professionals and faculty, who hold power over students. The institution defines both undergraduate and graduate admissions through a merit-based process, where White students tend to be beneficiaries of such processes (Patton, et al., 2015). Studies that examine admissions policies of graduate and DPT programs (Andrews et al, 2006; Bersola et al., 2014; Mitchell et al., 2019; Posselt, 2014; Potvin et al., 2017; Scherr et al., 2017; Shiyko & Pappas, 2009; Utzman, 2006) suggest that stronger considerations to merit based on one's GPA and GRE scores are given to applicants rather than their race and ethnicity. Black and Latinx students who

tend to have lower GPAs and GRE scores do so because of structural racism that disadvantages them from being as well prepared for undergraduate study compared to their White peers (Ladson-Billings, 2017) . Black and Latinx students who experience racism and racial microaggression may receive lower grades due to stress, lack of equitable access to advising, or fair grading practices from faculty because of racism (Booker, 2016; Davis, et al., 2004). Graduate and DPT admissions policies that rely on GPA and GRE scores ignore the disparities of students because of structural racism and discrimination.

**Whiteness as Property**

Whiteness as property describes material discrepancies between White and racially minoritized people. Harris (1993) describes the rights to Whiteness as property as being inalienable because of its perceived enhanced value. Where Whiteness is exercised as privilege and as advantage, it is also protected by the law. Whiteness provides the individual with status and recognition, and allows the individual or group of people to exclude others who are perceived as not being White. In this case, Whiteness is a privilege that can be conferred to others only by those who are White (Harris, 1993). Whiteness also produces frameworks that govern social norms and the operation of economic and education systems (Hode & Meisenbach, 2017).

Whiteness as property and privilege is reflected in the ability of students to access academic resources. Okun (2010) describes Whiteness as being driven by the right to profit. Such right manifests in one's ability to perpetuate White dominance through culture, politics and economics. This is synonymous with self-reliance and individual merit. Whiteness defines success as the ability of the individual to achieve success on their own merit. This has several implications on access to higher education. First, access to higher education is defined as merit-based. Students are admitted to colleges and graduate programs based on their ability to achieve

high scores on standardized tests or grade point averages. This ignores existing racial inequities, and that such objective measures of success are inherently tied to wealth and privilege that are enjoyed by White student applicants (Garces, 2020). Second, Whiteness dictates access to resources. Studies have shown that Black and Latinx students tend to experience racism and racial microaggression particularly at Predominantly White Institutions (PWIs), effectively excluding them from campus resources (Davis et al., 2004; Solorzano et al., 2000; Strayhorn, 2013).

**Intersectionality**

Intersectionality focuses on the need to acknowledge differences between groups (Crenshaw, 1991). It gained prominence in attempting to explain the differences in how racism was experienced differently between Black men and women (Crenshaw, 1989). More recently, intersectionality has also expanded to include the intersections of race, gender identity, sexual identity and immigration status (Anzaldua, 1987; Harris & Patton, 2019). Intersectionality is most applicable to this study when considering how different identities of individuals intersect in a way that such experiences cannot be subsumed under traditional boundaries of race or gender discrimination (Crenshaw, 1991). The significance of intersectionality is not just that multiple identities have an impact on how individuals experience racism, but that it examines multiple inequalities (Collins, 2015) within the contexts of power and oppression.

Within the contexts of higher education, intersectionality can be applied to how Black and Latinx students navigate their undergraduate, graduate admission, and graduate school experiences. When viewed through the perspectives of race, it may seem that the experiences of all Black and Latinx students are homogenous. However, as described in Chapter 2, specific groups of students, such as Black women, Latinx women, and undocumented Latinx immigrants may experience racism in ways that signal a departure from group experiences (Awad et al.,

2015; Domingue, 2015; Enriquez et al., 2019; Walley-Jean, 2009). This is significant to the study as it allows us to consider how intersecting systems of power, such as race and gender, or race and immigration status, are interrelated and oppress individuals in different ways. An understanding of how race, gender and immigration status intersects with each other can allow us to better understand how different groups of students navigate the DPT admissions process.

**Counter-narrative**

Solórzano and Yosso (2002) describe counter-narrative as a means to tell the stories, and share experiences of those who are often overlooked in history or in policy (Solórzano & Yosso, 2002). Counter-narrative is based on the belief that racism is reinforced through the use of a "master narrative" (Solórzano & Yosso, 2002). White privilege and supremacy is reflected through stories told by the majority, reflecting assumptions and stereotypes of the oppressed class. In addition, the master narrative also seeks to reinforce subjugation of minority race groups by minority majoritarian storytellers who seek buy-in to the master narrative (Solórzano & Yosso, 2002). Counter-story telling therefore allows people of color to share marginalized experiences, and challenge the dominant discourse on race (Solórzano & Yosso, 2002).

In the experiences of Black and Latinx undergraduate students, the use of a master narrative is reflected in the racism and racial-microaggression encountered by Black and Latinx students, where assumptions and stereotypes of them are reinforced (Booker, 2016; Davis et al., 2004; Hurtado et al., 2011). In graduate admissions, the master narrative, where standardized test scores are a measure of intelligence and success in a graduate program, further subjugates and oppresses Black and Latinx applicants, benefiting privileged White applicants. The use of counter-narrative has allowed Black and Latinx undergraduate students and applicants to graduate school to share their marginalized experiences (Hadinger, 2017; Ramirez, 2011). Since there is not enough evidence to suggest that Black and Latinx applicants are similarly oppressed

and disadvantaged in the DPT admissions process, the use of counter-narrative in this study would provide an avenue through which Black and Latinx participants can share their experiences.

## Phenomenology

Phenomenology allowed participants to share their experiences participating in the DPT admissions process, providing a space within which Black and Latinx students can offer a counter-narrative. This is especially salient within the DPT admissions process, where the dominant narrative remains that of the program's perspective. Phenomenology examines the lived experiences of participants, and focuses on what they have in common as they experience it (Creswell, 2007). Husserl (1970) posited that phenomenology explores and interprets the lived experiences, challenging the "naive" presumptions of objectivity. He presented a perspective that would validate knowledge that is independent of all experiences (Husserl, 1970). Influenced by Husserl, Van Manen ( 2016) suggested that an individual's experience of a phenomenon allowed the researcher to understand the core of the experience for the individual or group, even though it is independent of other social, political, cultural or economic influences. Hermeneutic phenomenology therefore relates to the process of negotiating understanding between individuals through the medium of written texts (Morgan, 2011).

Hermeneutic phenomenology considers daily intersubjective experiences as natural. (Morgan, 2011). Foundational knowledge of our experiences are formed through direct experiences that we can see. Hermeneutic phenomenology is interested in the interaction of direct and reflective consciousness. However, such experiences can be complex, and therefore, a direct experience for an individual can be an indirect experience for another (Morgan, 2011).

Hermeneutic phenomenology is often considered from the perspective of the White man. The perceived interaction of experiences between individuals can be limited to the perspective of

Whites and does not consider the presence of racism and how it might prejudice one's experience (Weiss, 2017). Frantz Fanon (1952) suggested that phenomenological methods should directly address the social, political, psychological, economic, historical and cultural dimensions of the phenomena under investigation. As such, Fanon's work seeks to address the first-person experience of racial oppression (Weiss, 2017). Yancy (2008) furthers Fanon's work by deconstructing the White gaze and demonstrates how it further oppresses Black bodies through racism. The solution, Yancy (2008) suggests, is to use the Black body as a site of resistance against racism, subverting the power of the White gaze.

Black and Latinx undergraduates experience racism and racial microaggression in interaction with their peers and faculty. Admissions policies set by graduate and DPT programs aim to be color-blind and based on merit, which does not consider the impact of structural discrimination and racism on Black and Latinx students (Nuciforo et al., 2014; Posselt, 2014, 2015; Utzman et al., 2007). By examining the lived experience of Black and Latinx students in the DPT admissions process, it is important to consider the racialized experiences that provide intersubjectivity and meaning to these experiences. Frantz Fanon's (1952) and George Yancy's (2008) phenomenological approaches that consider the impact of racism on bodies of color is therefore appropriate to my study.

The use of Critical Race Phenomenology (Weiss, 2017) and CRT allowed a critical perspective in this study to view the experiences of Black and Latinx students through the DPT admissions process. Denzin (2016) suggests that the use of a critical perspective in phenomenology can create an ethically responsible agenda that would place the voices of the oppressed at the center of the inquiry, reveal sites for change and activism, use change and activism to help people, affect policy change, and affect change in the inquirer's life. Additionally, exploring the lived experiences of Black and Latinx students through Critical Race

70

Theory also exposes structural oppression. Cannella and Lincoln (2016) suggest that the central questions to such critical work involves the foundational questions of who are being helped, privileged, or legitimized, and who are the people being harmed or oppressed.

## Research Questions

The challenges that DPT programs face in recruiting and enrolling more Black and Latinx students formed the focus of this study. Further research showed that these challenges may have been brought on by student advising experiences at the undergraduate level, and the lack of exposure to the profession. More importantly, current research showed that racialized experiences of Black and Latinx at the undergraduate level can have a negative impact on their graduate school aspirations and their academic performance (Nadal et al., 2014; Ramirez, 2011). Understanding the experiences of Black and Latinx students was useful in discovering what other barriers and challenges may exist for Black and Latinx students in applying to DPT programs. It also provided an understanding on how existing structures have helped or impeded the successes of participants in this study.

The central question to this study was: What is the applicant experience of Black and Latinx students in DPT programs? Supplemental questions for this study included the following,

- What are the indicators of success within the application experience for Black and Latinx students?

- What are the challenges within the application experience for Black and Latinx students?

- How do resources offered by physical therapy education programs contribute to a Black and Latinx student's decision to enroll in that specific program?

## Data Sources

Phenomenological research is most often conducted through the use of interviews (Creswell, 2007); interviews were used in this study to explore Black and Latinx participant

experiences in the DPT admissions process. Specifically, I was interested in how Black and Latinx students prepared to meet the admissions requirements for programs in a majority White field. I was also interested in the support structures and other factors that have helped Black and Latinx students be successful in the admissions process.

**Participants and Sampling**

Existing studies that are similar in focus to mine, or make use of phenomenology and a Critical Race framework had between 5 to 33 participants (Hadinger, 2017; Ramirez, 2011; Ruiz, 2013; Thorn, 2014; Westbrook, 2015).The studies conducted by Hadinger (2017) and Ramirez (2011) were most similar as they focused on graduate students and their admissions experiences to graduate and medical school. Hadinger (2017) interviewed 33 students, while Ramirez (2011) interviewed 24 students. My study had a sample size of 11 students, for two reasons. First, the number of Black and Latinx DPT students tend to be much lower than students enrolled in other graduate and professional programs. Second, I used a three-interview method to provide depth to participant experiences (Seidman, 2006). This method will be discussed in more detail below.

Sampling in a qualitative study must be guided by the purpose of the study, methodological approach, and research questions (Jones et al., 2013). This allows researchers to focus on participants who can provide rich data and provide sufficient coverage of the phenomenon being studied (Jones et al., 2013). In addition, Denzin and Lincoln (2011) also suggest that researchers seek out groups and individuals where the process or experience is most likely to occur. Purposeful sampling was therefore appropriate to the study as the participants were selected based on their potential to provide rich information (McMillan, 2012), in a setting where the experience is most likely to occur. Participants were recruited from various physical therapy education programs within the US. These participants self-identified as Black or Latinx students, and were currently enrolled in a DPT program.

Snowball sampling was employed in this study to complement purposeful sampling. Snowball sampling refers to the use of established networks to gain access to a specific group of participants (McMillan, 2012; Jones et al., 2013). The use of snowball sampling allowed me to gain access to participants through trusted peer and mentor networks. Two out of the 11 participants were recruited through snowball sampling.

A recruitment letter was sent to national organizations for Black and Latinx DPT students. Existing participants were asked to suggest other students who met the sampling criteria. A copy of the recruitment letter is attached in Appendix D. In some cases, a follow-up to my initial invitation was required. A copy of the follow-up letter is attached in Appendix E.

Participants who were currently enrolled in the first year of their program were selected as participants. They were more likely recall their experiences accurately because of how recent the admissions experience was. While most DPT programs are three year programs, students in their second and final year were not included in this study as they may be too far removed from their admissions experience to make meaningful recollection.

**Site**

Participants from across the country were invited to participate in my study. I initiated a nationwide recruitment for two reasons. First, as the enrolment numbers of Black and Latinx students tend to be lower than White students, recruiting students from across the country would increase the likelihood of obtaining more participants. Second, since the study was focused on exploring the admissions experiences of Black and Latinx students, increasing the scope of recruitment will likely increase variability of participants in terms of geographic location. In this case, variability was desirable as it allowed me to capture applicant experiences from across the country, and not just from a specific geographic area. This allows me to confirm that the

phenomena experienced is not limited to a group of participants within a specific geographic location.

## Data Collection and Analysis

In a phenomenological study, Creswell (2007) recommends the use of interviews to allow participants to explore their experiences. Van Manen (2016) suggests that interviewing serves two purposes in phenomenology. First, it allows the participant and researcher to explore and develop a rich understanding of the phenomenon. Second, it allows a conversation to develop of around the meaning of the experience (van Manen, 2016). In addition, an interview allows the participant to tell their own story in their own space without the possibility of being influenced by someone else's narrative (Forsey, 2012).

This study included three interviews for each participant. The purpose was to allow participants to give context and reconstruct their experiences within the focus of this study (Seidman, 2006), and provide depth to the participant experience that a single interview does not provide (Lauterbach, 2018). The purpose of the first interview allowed the participant to establish context, and allowed participants to explore previous experiences that may be related to the admissions process. In this case, the first interview focused on participants' experiences as undergraduates and allowed me to explore how it may have contributed to their successes and experiences in the DPT admissions process. The first interview also allowed me to establish trust and rapport for the duration of the study. The second interview concentrated on the specific experiences of the DPT admissions process, as is the focus of the study. The final interview allowed the participant to make meaning of their combined experiences, reflect on the role that race and ethnicity played in these experiences, and what it meant for their ability to be successful in the DPT admissions process (Seidman, 2006).

Open-ended, semi-structured interviews were the primary method of data collection for this study. This is supported by van Manen (2016), who suggests that the interview be conversational. In addition, a semi-structured interview allowed each interview to be focused on its specific purpose (Seidman, 2006). For this study, each interview lasted between 20-30 minutes. As the study was conducted at a time where many individuals were in quarantine due to restrictions created by the COVID-19 virus, all interviews were conducted online, through Zoom, a web-based conferencing tool. The interviews were video-recorded with permission from the participants.

Prior to the interview, I distributed a demographic survey through email to participants. This survey requested information such as a pseudonym, year enrolled in a physical therapy education program, location of the physical therapy education program, gender, race, education of parents, type of undergraduate institution attended – whether it was a PWI, Hispanic Serving Institution (HSI), or HBCU, undergraduate major, and whether the participant enrolled in a physical therapy education program immediately after graduating from college. Requesting students to identify their race helped confirm their racial identity. The data provided in the demographic survey provided context to the experiences of students, and requesting them before the interview saved time during the interview asking these questions. In addition, allowing participants to share their background and history with me before the interview helped establish a relationship and trust. A copy of the demographic survey is attached in Appendix F.

The interview protocol is attached in Appendix G. Interviews were transcribed by a third-party provider, Temi.com. The transcribed interviews were then coded through ATLAS.ti to help manage codes and themes.

A combination of both inductive and deductive coding was used for this study. Deductive coding refers to creating a predefined list of codes in a coding frame before the data is coded

(Linneberg & Korsgaard, 2019). These codes were drawn from existing literature that suggests that the Black and Latinx graduate application experience is racialized, and the relevant tenets of CRT. Thereafter, inductive coding, where codes were developed based on phrases and terms used by participants (Bhattacharya, 2007; Linneberg & Korsgaard, 2019) was used. A blended approach to coding allowed me to create structure and relevance with deductive coding, but also allowed me to stay true to the data through the inductive process (Linneberg & Korsgaard, 2019).

I also used Linneberg and Korsgaard's (2019) suggestion of using two cycles in coding. The first cycle included both descriptive coding. Descriptive codes were assigned to segments of data based on what they are about, in relation to the topic. The second cycle allowed me to classify, prioritize, synthesize and conceptualize the data, building them into a thematic structure (Linnberg & Korsgaard, 2019). Themes were formed based on similar patterns between codes. Consistent with the philosophy of hermeneutic phenomenology, I searched the data for themes that were consistent with ideas that are important to the participants (Kuckartz, 2014). Once the codes and themes were developed, I combined them with analytic memos I developed during the interview process. I also paid attention to what was not said by participants (Kvale, 1996; van Manen, 1997) as significant patterns and themes emerged. These were used to write a description of what the participants experienced, and from them, developed a description that captures the essence of the experience (Cresswell, 2007).

**Pilot Study**

A pilot study was conducted with a Black DPT student who was in their 1st year of the program. The purpose of the study was to ensure that the interview protocol was easily understood by potential participants. It also helped me test the interview questions to ensure that they were easy to understand. The pilot study helped with assessing whether the participant felt

comfortable with sharing their experiences, and whether they felt hesitant doing so. It also helped

evaluate if the participant can be honest and open with their experiences. The pilot study

provided an opportunity to obtain feedback about the procedure and interview questions, and was

conducted through video conference to test the medium and connection.

The participant identified for the pilot study was a DPT student who was already known

to me and with whom I have an existing relationship. After the pilot was conducted, I held a

debriefing session with the pilot participant to solicit feedback on the procedure and interview

questions. I also asked the pilot participant if they had any other experiences that could be

included in the study. No major revisions were made to the protocol from the pilot study.

## Institutional Review Process

A proposal was made through the institution's review board (IRB) and the study was

approved. Prior to each interview, an information sheet was distributed to each participant

describing the purpose of the study, the interview process, and notifying them of any possible

risks to their participation in this study. They were reminded that their participation in the study

is voluntary, and they could end their participation at any point in the study. A sample of the

information sheet is attached in Appendix H.

## Establishing Trustworthiness

In order to establish trustworthiness of my data, I used a reflexive journal to document

my experiences. Flick (2002) suggests that the reliability of the data and the research process will

be better if more details of the research process is documented. The use of a reflexive journal

allowed me to document the research process, and my personal reflections (Linneberg &

Korsgarrd, 2019) in relation to my own experiences, and allowed me to keep in mind the

personal biases I may bring to this process. The reflexive journal also allowed me to take notes

and make observations during the interview process, which ultimately contributed to the data

77

analysis stage. This helped enrich the counter-narrative and provide more context to the participant's narrative (Ortlipp, 2008).

I also used a peer debriefer to establish the reliability of my study. The use of a peer establishes objectivity in the research process, both during the data collection and the data analysis stage (Amankwaa, 2016). I worked with the peer debriefer to discuss interviews, my feelings of the interviews, and the actions of subjects and ideas. While Amankwaa (2016) recommended that the peer debriefing session took place every after interview, the disruption to the peer debriefer's daily routines caused by COVID-19 did not allow for this to happen. As a result, each peer debriefing session often included more than 1 interview.

The peer debriefer was someone who is not involved in the research process and provided support during this process. I was able to talk to the peer debriefer about my reflections of the interviews, including how I felt about the actions and body language of participants. They also challenged my assumptions by questioning my initial interpretations of the data (Cresswell & Miller, 2000), my interpretations of the participant's body language, or my personal reflections on the interviews. On occasion, the peer debriefer also pointed out alternative interpretations and perspectives. As the peer debriefer was someone who had knowledge of my positionality in this study, they were able to help me identify how my personal experiences and biases may have influenced interpretations of the data.

Flick (2002) describes the use of communicative validation in ensuring the trustworthiness of the data. The process involves research participants at a deeper level with the research process. Upon transcription of the interviews, I shared a copy of the interview and asked participants to confirm the accuracy of the transcription (Morgan, 2011). Participants were encouraged to provide feedback, and any reservations were discussed until both participant and myself were satisfied with the themes and structure (Morgan, 2011). A deeper involvement of

the participant in the research process engaged the participant in the creation of their own counter-narrative, and allowed me to confirm the reliability of the data collected. A copy of the letter providing the transcribed interview and a request for the participant to confirm the transcription is provided in Appendix I.

As there were many steps involved in the data collection process, I created a timeline to ensure that I was able to keep track of participants and multiple interviews. I also used this timeline to ensure that I had the opportunity to debrief every interview session with the peer debriefer. This allowed me to not only stay on track with data collection, but ensuring that trustworthiness of the study was met.

## Limitations

This study posited the following limitations that should be addressed and considered when reviewing the findings. First, the study had a sample size of 11 and is small compared to the number of Black and Latinx students. Therefore, their experiences are not representative of all Black and Latinx DPT students. Second, the data aggregates all participants into one category. As Black and Latinx communities experience racism and access to resources differently, the findings of this study is not descriptive of all Black and Latinx students. Third, the participants of this study were limited to those who had matriculated into DPT programs. It is likely that the challenges experienced by participants in this study may be exacerbated for applicants who were unsuccessful in their attempt.

## Participants

As described above, a total of 11 participants from across the United States were recruited for this study. All participants were currently enrolled 1st year students in a DPT program. Three participants identified as Latinx, while the remaining 8 participants identified as Black. All participants, with the exception of one, were enrolled in a Predominantly White

Institution (PWI) as undergraduates. Jackson was the only participant who enrolled at an Historically Black College and University (HBCU). The following sections describe each participant and provide an overview of their background and experiences as they relate to the study.

**Frank**

Frank was a current 1ˢᵗ year student enrolled in a private DPT program located in an urban area. He identifies as a Black male, and was the first in his family to enroll in a doctoral level program. Frank's family was not a strong influence in his decision to apply to, and subsequently, matriculate into a DPT program. While they did not want him to be too far away from home, they ultimately left the decision up to him. Frank's family lives in a state that is located in the Northwest extremity of the country, and he attended his undergraduate institution in the same state. As a result, location and the need for independence factored into his DPT program choices. He describes deliberately attending a school located in the Northeastern United States (US) so he could "do a little growing up".

Frank found out about the field of physical therapy through a friend who was also pursuing a DPT degree at that time. As his undergraduate institution did not have advisors for students interested in the health professions, Frank had to do research on his own and made use of external resources during the application process. Frank described his relationships with undergraduate faculty and peers as generally positive and did not perceive his racial identity to be a factor in their interactions. However, Frank has experienced racism and microaggression in his daily life with strangers.

**Marcella**

At the time of the study, Marcella was a first year student whose DPT program is part of an urban, public university. Marcella identifies as both Haitian American, and Black American.

Marcella's parents are immigrants to this country. To that end, while she still experiences racism as a Black woman, she also recognizes that her background and perspectives may be different from students who identify as African-American. Nonetheless, Marcella recognizes the existence of structural racism and discrimination and is aware that she is often judged based on the color of her skin, and not her immigrant background.

Unlike Frank, Marcella chose to stay close to home to attend a DPT program, so she could keep the cost of attendance low. However, while Marcella is close with her family, they were not an influence in her choice of program. Marcella generally felt isolated as an undergraduate student. She completed dual enrollment credits while enrolled in high school, and transferred to her undergraduate institution as a junior. As a result, she felt like she had missed out on socialization experiences that her peers would have as freshman students.

Marcella was introduced to the field of physical therapy in high school by a family member who was a physical therapist's assistant. She also describes how her chosen field was, in part, influenced by her mother's career as a nurse. Marcella first aspired to go into the medical field before making the decision to pursue physical therapy.

**Alicia**

Alicia identifies as Biracial. Her father is Black, and her mother is Cuban. At the time of the study, she was enrolled as a first year student in a private, suburban university in the Southeastern United States. Having completed her undergraduate studies at a Predominantly White Institution (PWI) in the Southern US, Alicia made her DPT enrolment decisions based on location and program diversity.

Alicia's undergraduate experiences also had a profound influence on her decision to attend a DPT program outside of the state she was originally from. She made application and enrollment decisions based on her racial identity and location of family members. Alicia wanted

to take the opportunity to explore Cuban culture and take the opportunity to learn Spanish. As a result, the provision of Spanish classes for students in healthcare factored into her decision-making process.

Alicia was the only participant who mentioned getting help from a pre-health advisor as an undergraduate student. The advisor helped her with understanding the prerequisite classes and admissions requirements for physical therapy. As a result, Alicia felt very prepared and supported during the admissions process. She also discusses how other physical therapists also provided support for her through the process.

**Ola**

At the time of the study, Ola was enrolled as a first year student at a suburban, private institution located in the Northeastern US. Unlike most other participants of this study, Ola enrolled in a DPT program immediately after graduation. As a former student-athlete, Ola decided to go into physical therapy as a career after various interactions with physical therapists and athletic trainers on his undergraduate basketball team. Ola's status as a student-athlete also provided them with support as an undergraduate. He felt that faculty and peers perceived him first as a student-athlete rather than a Black student, and therefore may have facilitated his access to support and resources.

Ola enrolled in a DPT program that was close to home, citing cost as his main reason for doing so. However, he completed his undergraduate studies in an institution further away from home as he wanted to experience some independence. Incidentally, one of his parents lived in the same state where he completed his undergraduate studies, and he was able to get in-state tuition as a result. Despite that, Ola made it clear that he did not want to go to an undergraduate institution close to where his parents lived as he "wanted to be somewhere alone..start my own thing." While Ola was generally conscious of his identity as a Black man, he used his racial

identity as an opportunity to stand out among his White peers in his interactions with faculty and other physical therapy mentors.

Ola's experiences in the DPT admissions process varied from the other participants in this study in his decision-making process. He made the decision to apply to 15 DPT programs. Other participants in this study applied to 2-4 DPT programs. He received letters of rejection from 13 programs, and an offer of admission to 1 program. Ultimately, Ola turned down the admission offer in the hopes that he would be offered admission to the last program on the list. He admitted that it was not the best decision, but finally received an offer of admission from the program he currently attends.

**Victoria**

Victoria identifies as Latinx, and is enrolled in a DPT program as a first year student at the time of this study. Access remained a recurring theme in Victoria's background. As a previously undocumented immigrant, Victoria's access to higher education was defined by her ability to access financial resources, which was constrained by her immigration status in the US. As an undocumented immigrant, Victoria would have had to pay out-of-state or international tuition rates even if she attended an institution that was in the same state she lived in. She was also restricted to location as her family was undergoing a legal process to obtain residency in the US. As a result, Victoria considered not obtaining her undergraduate education due to cost. However, familial connections allowed Victoria to gain admission to a public institution within her home state and was able to pay tuition at the in-state resident rate.

Similarly, Victoria's experience in the DPT admissions process was defined by her immigration status. At that time, Victoria was unable to travel as she did not have a driver's license. She faced constraints in her ability to access GRE testing and shadowing locations.

Additionally, she was still undergoing the residency process, and was severely limited to choice of DPT institution.

Victoria did not experience negative interactions with faculty, and described how her faculty advisor was very patient with her when she was figuring out her career choice. Ultimately, Victoria's decision to pursue physical therapy was based on her family's experiences with immigration. She wanted a career where she was able to move out of the country and still be able to practice.

**Carla**

Carla was enrolled in a DPT program as a first year student at the time of the study. She identifies as a first-generation, Latinx student. Carla generally did not experience racism or racial microaggression in her interactions with faculty and peers as an undergraduate. However, she was aware that her racial identity and socio-economic background may have had an impact on her ability to access academic resources. Carla had always been a high achiever in school until she started her undergraduate studies and realized that she did not have appropriate study skills to help her with the rigor of her classes.

As a first-generation student, Carla describes her childhood as one where she did not have access to other academic resources and activities that other students may have enjoyed. One parent worked in the family, while her mother was unable to drive. As a result, Carla and her siblings relied on school and public transportation if they needed to travel. This restricted her ability to access academic resources after school hours, which Carla only realized when she attended her undergraduate institution.

Carla participated in the DPT admissions process three times before she was admitted to her program. During this time, she described feelings of isolation as she did not have peers or resources that supported her in the process. Her identity as a first-generation, Latinx student

continues to influence her experiences and interactions as a student enrolled in a DPT program, where she developed imposter syndrome due to her racial identity and status as the minority in her program.

**Ashley**

At the time of the study, Ashley was enrolled in a DPT program as a first-year student. She identifies as Black, and was a student-athlete as an undergraduate. Her experiences as a student-athlete defined her interactions with faculty and peers during that time. Ashley attended two different undergraduate institutions, having to transfer to another institution during her sophomore year. The transfer was facilitated by coaching changes on her athletic team, and Ashley's desire to move to an institution in a more diverse location.

Ashley perceived her status as a student-athlete as being more influential in the way she received help, rather than her racial identity. She felt that, as a student-athlete, she was given more resources to succeed, and faculty seemed more willing to help her as they "didn't want the athletes to fail". Ashley received help during the DPT application process from other physical therapists and peers who encouraged her to consider the field. She also received support from family who helped her with reviewing personal statements and the information she provided on the application.

Ashley applied to two different institutions, and eventually interviewed and enrolled at the same institution she completed her undergraduate education. Despite the familiarity with the institution, she felt intimidated by the interview process. Ashley was the "only black person in the whole program, like staff, students, or applicants, anybody." As a result, she felt uncomfortable throughout the interview process. Despite the experience, Ashley decided to enroll in the program so she could be a role model to other Black female students.

**Olivia**

Olivia identifies as Black, and attended a PWI as an undergraduate in rural Southwestern US. Unlike other participants, Olivia's undergraduate institution was more conservative, and had a history of being hostile to Black students and visitors. Compared to other participants, Olivia's undergraduate experiences were more heavily influenced by her racial identity. Olivia's parents are immigrants, and grew up in a diverse city located in the same state where she completed her undergraduate institution. She attended high school in a district with a higher proportion of low to middle income families.

Olivia's undergraduate experiences had an influence on her access to resources on campus, and her enrollment decision when it came to attending physical therapy school. At the time of the study, Olivia was a first year student attending an out of state DPT program. She chose the program for its location in a rural Southern US, where she felt that she would not be distracted by social activities.

As an undergraduate, Olivia felt that she had trouble fitting in with her peers because of her racial identity. Reflecting on her undergraduate experiences during the interview, Olivia came to the realization that she "only really hung around black people and it's just because it's comfortable". As she felt out of place on campus, Olivia relied heavily on the resources provided by her undergraduate institution's office of multicultural services for support. She perceived that to be a safe space where other Black and Latinx students could share ideas, "or just relax". She also perceived that her access to academic resources in high school and as an undergraduate had an impact on her ability to succeed in the DPT admissions process.

**Margot**

At the time of the study, Margot was a first year student enrolled in a DPT program. Margot considered herself White-passing, and described associating more with her Latinx identity only after enrolling in the DPT program. Throughout the interview sessions, Margot

described being able to move between her Latinx and White identities because she was able to pass as a White person. For example, she contemplated indicating on her PTCAS application that she is White instead of Latinx as she was concerned she may be discriminated against.

Even though being White-passing may have granted Margot privileges that other Latinx students do not enjoy, Margot encountered microaggressions from other Latinx students she interacted with as an undergraduate. When accessing resources that were dedicated to students of color, Margot perceived that other students would question her presence as she did not seem like she belonged. She also describes being told by peers that she was accepted to her undergraduate institution only because of her last name. Nonetheless, Margot was grateful for the academic support she received from the dedicated academic resources provided by her undergraduate institution.

Margot made the decision to go into physical therapy as a freshman in college. She describes her shadowing experiences as having an influence over such aspirations. While Margot enjoyed academic resources provided by her undergraduate institution, she felt that she was not able to receive any guidance with regards to the DPT admissions. As a result, she felt lost in the DPT admissions process, and relied on her own research. The cost of application and undergraduate GPA were seen as challenges she needed to overcome in the admissions process.

**Kamryn**

Kamryn identifies as Black, and was enrolled as a first year student at the time of the study. She describes having attended an academic enrichment program, which she credited as having an influence over her successes in the DPT admissions process. As a result of her participation in the program, Kamryn applied, and was accepted to the school that provided the opportunity.

Kamryn shared similar experiences with other participants who attended a PWI. Kamryn's undergraduate institution provided resources for students of color, which were located in a center for multicultural students. The center allowed students to connect with faculty and provided a space for discussion. Kamryn made use of those resources to help her succeed academically, but there were no resources for students pursuing a career in healthcare. Kamryn described feeling disconnected with faculty and peers because of her racial identity. She experienced difficulty creating connections with peers as there were very few Black students. As a result, she did not form close relationships with many of her peers in her undergraduate institution.

Kamryn's participation with the academic enrichment program features prominently when reflecting on her experience navigating the DPT admissions process. While she felt that her undergraduate institution did not provide her with the resources to succeed within the DPT admissions process, the academic enrichment program filled the gap. The program not only provided her with support during the admissions process, but also helped her prepare for the rigor of a DPT curriculum.

**Jackson**

Jackson was the only participant who attended a Historically Black College or University (HBCU). Jackson identifies as Black, and at the time of the student, was enrolled as a first-year student in a DPT program. While his parents were alumni of his undergraduate institution, Jackson's decision was based on the fact that he felt comfortable in the environment, and recognized that it might be his only opportunity to experience being part of a HBCU. Jackson's undergraduate experiences stood in stark contrast with other participants. As an undergraduate, Jackson felt that he had access to academic and extracurricular resources. Jackson described working closely with his faculty advisors who have helped him throughout his time as an

undergraduate. Jackson was also involved in a student leadership program, and also served as President of the institution's student governing association.

Jackson's decision to become a physical therapist came out of high school, which was specifically for students interested in a career in the health professions. He was paired with a physical therapist to complete shadowing requirements for graduation and became interested in the profession. As a result, Jackson had already done some research on admissions requirements even before entering as a college freshman.

Jackson also attended an academic enrichment program designed for students pursuing a career in the health professions. While he had done his research in high school, and enjoyed access to a variety of resources as an undergraduate, Jackson credited his participation in the enrichment program as having the greatest influence in his success in the DPT admissions process. His participation also led to his decision to enroll at the same institution that provided the opportunity.

### Chapter Summary

The purpose of this study is to explore the experiences of Black and Latinx students as they navigated the Doctor of Physical Therapy (DPT) admissions process through the use of Critical Race Theory (CRT) and phenomenology. A total of 11 participants from various DPT programs were recruited for this study. The participants participated in a series of three interviews which allowed them to reflect on their experiences within the DPT admissions process, and how their undergraduate experience and racial identity has had an influence on these experiences.

## Chapter 4: Findings

## Introduction

In this study, Black and Latinx students reflect how their experiences as undergraduates were influenced by their racial identity. This had an impact on their successes in the DPT admissions process. The findings of this study provide an understanding on what it means to be a Black or Latinx applicant navigating the admissions process to a Doctor of Physical Therapy (DPT) program. Additionally, it provides an understanding on what it means to be a Black or Latinx applicant accessing resources as undergraduates preparing for a career in physical therapy.

I used hermeneutic phenomenology through the lens of Critical Race Theory (CRT) to interpret the data and create a narrative of the DPT admissions process for Black and Latinx students. The use of the three-interview approach was appropriate to gather 11 participants' stories. The first interview allowed the participant to establish context and provide background narrative on their experiences in preparing for the admissions process as undergraduates. The second interview allowed the participant to discuss their experiences within the admissions process. This included their sources of support and areas in which they found challenging. The third interview allowed participants to reflect on their experiences within the CRT context. Within the context of CRT, the findings show that participant experiences could be described through the perspectives of racial realism, intersectionality, colorblindness and the myth of meritocracy and property of Whiteness.

This chapter details the findings from interviews with the participants. Most of the participants believed that their race and ethnicity influenced their interactions with faculty and advisors, and in how they were able to access academic resources on campus. This had an impact on the extent of their success within the DPT admissions process. Findings of this study provided

DPT program perspectives on how students navigate academic resources as undergraduates, and how they find support in navigating the DPT admissions process.

## Participant Summary

With the exception of Jackson, ten participants attended a PWI as undergraduates. Eight participants are currently attending DPT programs located in an urban location, with one participant deciding to attend a rural institution. Two participants are attending DPT programs located in a suburban environment. The participants interviewed in this study are located across various regions in the country, including the Midwest, Pacific Northwest, Northeastern, Southern and Western United States. All participants in this study describe a DPT program's diversity, or demonstration of a commitment to diversity as having an influence over their decision-making in enrollment. Of the 11 participants in this study, one participant considered themselves a first-generation college student, and 3 participants considered themselves first in their family to attend a graduate program.

## Themes

This phenomenological study presents the shared lived experiences of Black and Latinx students who are enrolled in a DPT program. Specifically, this study was focused on their experiences in the DPT admissions process, how their undergraduate experiences and experiences with race may have had an influence over their success in the process. The central question to this study was: What is the applicant experience of Black and Latinx students in DPT programs? Supplemental questions for this study included the following:

- What are the factors of success within the application experience for Black and Latinx students?

- What challenges exist within the application experience for Black and Latinx students?

- How do resources offered by DPT programs contribute to a Black and Latinx student's decision to enroll in that specific program?

These research questions, along with other interview questions in Appendix F supplied responses, which were gathered in interviews with 11 participants. I gathered these responses, translated them into themes, and organized them into categories. I clustered them based on coded trends and recurring patterns. I also paid attention to what was not said (van Manen, 1997) by participants as they became relevant to the study.

The analysis of the data indicated that the essence of participant experiences is of access. This included access to support as undergraduates and through the admissions process, as well as access into the field. Support is defined by the ability of participants to access resources, which are influenced by the interaction between their racial identity and availability of resources to students. Participants experienced and discussed the essence of their experiences in five distinct themes: 1) Overcoming challenges, 2) Seeking support, 3) Race and access, 4) Program choice, 5) Growth and leadership. Table 1 below lists the summary of themes, sub-themes and indicators.

**Table 1**

*Summary of Themes and Indicators*

| Theme | Sub-Theme | Indicators |
|---|---|---|
| | Isolation | Lack of sufficient advising |
| Overcoming Challenges | | Overwhelmed and lost |
| | | Supportive experiences |
| | Costs of Application | Application Fees |
| | | Distribution of Financial Resources |
| | GRE | Logistical Challenges |

| Theme | Sub-Theme | Indicators |
|-------|-----------|------------|
| | | Alignment with DPT requirements |
| Seeking Support | Self-Support | Web resources |
| | | Online communities |
| | Support from DPT programs | Interaction with DPT programs |
| | | Impact on choice |
| | Support from Other Sources | Faculty |
| | | Physical Therapists |
| | Academic Enrichment Program | Supportive network |
| | | Rigor |
| | | Resources |
| Race and Access | Access to Resources | Racial and racial/ethnic microaggression |
| | | Supportive resources |
| | Community with Non-White Students | Shared experiences |
| | Stereotype Threat | Unwillingness to seek help |
| | | Pressure to be successful |
| | | Admissions statistics |
| | Whiteness and Privilege | White peers having more academic resources |
| Program Choice | No Sub-Theme | Prioritizing cost |
| | | Proximity to support systems |
| Growth and Leadership | Taking the Lead | Mentorship |
| | | Leadership |
| | Experiencing Personal Growth | Developing self-confidence |
| | | Identity development |

**Overcoming Challenges**

In the first theme, participants discussed the challenges they overcame within the admissions process. This theme assisted in the understanding of the research question regarding the challenges that applicants faced within the DPT admissions process. The ability to access resources at the undergraduate level, and challenges encountered within the application process had an impact on the applicant experience during the admissions process. Overcoming challenges has three sub-themes, which emerged within the analysis of the data. These were the feelings of isolation, the costs of application and challenges with taking the Graduate Record Examination (GRE).

***Isolation***

Participants in this study described feeling isolation in navigating the admissions process. This manifested in three different ways; accessing sufficient advising, within the application process, and navigating undergraduate experiences. Participants felt that they were unable to access advising resources. With the exception of two participants, most did not discuss the presence of an advisor, or advising resources that contributed to their success in the admissions process. Rather, most participants described the lack of access to sufficient advising, leading to feelings of isolation when navigating the admissions process. This was a departure from themes in existing literature that described how Black and Latinx students pursuing graduate or medical education found support in their advisors (Hadinger, 2017; Ramirez, 2011).

The lack of access to sufficient advising applied to most participants regardless of institution size. Frank describes how the undergraduate institution he attended, which was a small, rural institution, did not have "a pre-physical therapy track where I'm from. We don't have PT school as an option." Large PWIs had resources for students who were interested in medicine or dentistry. However, there were no similar groups or access to advising resources for students interested in physical therapy. Marcella attended a large, PWI that provided access to advising

94

and groups for students who were interested in medicine and dentistry, but not for physical therapy, "There weren't many clubs about PT. Like you had your pre-med, your pre-dentistry, like, but there wasn't very much those communities (for physical therapy)."

Student or advising resources for students interested in medicine and dentistry serve two purposes. First, they provide students with access to resources either through a faculty or staff advisor. Second, they provide a supportive network for students who can share similar experiences (Schwebel et al., 2012). The importance of both will be discussed further below.

When institutions did provide resources for students, they were often perceived as insufficient. The institution Margot attended had a pre-health and pre-Physical Therapy club for students, but she felt that the resources they provided were insufficient:

> I still didn't get really any resources from my college in terms of, like pre-health or pre-PT. I mean, they had clubs, but it was like info night, maybe like once a quarter (semester). And I didn't really find that sufficient enough.

While the information session may have provided Margot with an overview of the admissions requirements or what the career field is like, it did not provide customized advising, or serve as a supportive factor through the DPT admissions process.

Second, the lack of access to advising resources meant that participants generally felt lost in the application process. Margot found herself having to navigate the DPT admissions process on her own. When asked about her experience in the DPT admissions process, she described feeling lost, and overwhelmed:

> Lost. Just something I never had to navigate before. And it was so time consuming and hard and frustrating at the same time. Like at some points throughout it, mostly frustrating to be honest. And it was just like one thing after another, after another. And

they don't really tell you what to do. You're just expected to go on to PTCAS and be able

to kind of figure it out. Cause it's supposed to be super easy and it's not.

Margot describes how the process is perceived to be "super easy, but it's not." The PTCAS website provides information on each program, admission requirements, including prerequisite requirements, and the average accepted GPA and GRE scores of accepted applicants. However, as the website is so comprehensive, the amount of information can be overwhelming for participants. Margot describes feeling lost in the process not because there was not enough information, but that there was too much for her to navigate.

Participants described how the lack of support as undergraduates led to feeling overwhelmed when it was time to apply to various DPT programs. The undergraduate institution that Marcella attended did not have resources for students interested in the profession, she was also intimidated by the application process and did not know where to begin. She attempted to seek help from current physical therapists but was unsuccessful:

And I had no idea about the process of the application. Like I was so nervous. I was so scared. I didn't, I didn't even know anybody to talk to who to speak to...I just felt totally lost about the application process about what to do…I shadowed many people at the hospital…And of course I got even more intimidated because again really weren't therapists that looked like me.

It is important to note that Marcella's feelings of isolation also stemmed from the reality that she was not comfortable seeking help from non-Black physical therapists. I will address this in a later section as it applies to participant access to resources as influenced by their racial identity.

Participants also described a sense of helplessness in overcoming challenges. Carla described being overwhelmed when she had applied to DPT programs twice and remained unsuccessful, "I'm not really sure if I should like, I feel kind of discouraged and I'm not really

96

sure what I should be doing by now." Ultimately, Carla found support through an external resource that focused on helping applicants. The use of such resources allowed Carla to feel a sense of community with other applicants and supported her through the process:

> That program was meant for pre-PT students to kind of get just additional help in applying to PT school, by having that community of people that are also applying to PT school, we would get on weekly calls. And I felt like that's what I needed at the time.. even though I had already done everything that I thought I could, I ended up signing up. And then I felt like just joining that program changed my mentality a lot. Because like one, I had the support system that I needed…so they gave me another perspective of things that I could do in order to improve my application.

Carla credited her success in being accepted to a DPT program, to her participation in the community provided by this online platform. This reflects the importance of having a support system through the admissions process and having access to appropriate advising resources. However, such online platforms require a fee for participation, and may be prohibitive for participants who are already facing financial constraints from the costs of submitting applications and taking standardized tests.

Finally, participants described feeling isolated as undergraduates navigating the college experience. As many of them attended large regional universities that were also PWIs, they found the class sizes intimidating. Margot described how large class sizes made it difficult for her to approach faculty for help:

> I mean, the classes were so big. I didn't really have the opportunity to get that one on one experience…in terms of professors and whatnot, like there was probably no interaction with them for, until at least my senior year when I had smaller classes.

Such large classes also created the perception that they were meant to weed out weaker students because it was perceived that faculty did not have resources for teaching outside of the classroom. This led to participants feeling discouraged as they felt that they did not have the resources to help them succeed with their prerequisite coursework. Marcella described her experiences attending a large class for one of her prerequisite classes. She also described having the perception that professors did not have time for students in a larger classroom:

So they do those really big classes. Like, I didn't feel like I could succeed there…Like I did feel like the classes were like, weed-out, like there was no question about it because the professor does not have the one on one time to actually teach it to you.

Participants who felt that they could not create meaningful relationships with faculty attempted to seek support through their peers. However, they continued to feel isolated during the process. As Carla was the only person amongst her peers to apply to a DPT program, she described how her friends seemed to have moved on with their own lives without her. She felt that it was "almost impossible" for her to continue to work towards getting into a physical therapy program:

And so I had this really close group of friends that like, we helped each other out and try to just get by and complete the classes and try to do as well as we could. The thing is that once we graduated a lot of them kind of changed their mind about going into PT school...It was just really hard to kind of see everybody kind of go different directions…I felt like I didn't really have that support system. And then it almost, it almost felt impossible.

Having support during the admissions process was important in creating a sense of community. Jackson was the only participant who experienced receiving support from faculty,

advisors, and his peers. He described how a supportive network of peers and advisors played an important role within the application process:

> I was definitely working with my advisors and then throughout, you know, all my four years, I definitely kept a good rapport with professors who I still call on now. Some who were able to either write recommendation letters on my behalf for different opportunities and different things that I did…And they're definitely a big part on me being able to succeed... Also had some peers that are in the process with me…and that was good as well, just to be able to talk...So I think it's important to not do it alone if possible, because sometimes when you're alone, you can kind of get overwhelmed versus if you have other people that are, you know, doing it with you or around you that can help support you and give you advice.

As mentioned earlier, Jackson was the only participant in the study who attended a Historically Black College and University (HBCU). His responses to questions about having support within the DPT admissions process were a significant departure from those of other participants. Even though Jackson did not describe having access to resources such as advising specifically for the DPT admissions process, he felt that having resources within his support system made an impact on his ability to succeed. This aligned with previously mentioned studies on Black students who attended HBCU having a strong support system compared to Black students who attended a PWI (Hurtado, 2011).

The feelings of isolation that participants felt had an influence on their ability to be successful in the admissions process. Isolation from support meant that students had restricted access to resources that could otherwise create a more positive experience of the DPT admissions process.

*Costs of Application*

When describing the DPT admissions process, the costs of application were often discussed together with concerns about how participants might pay for it. These included application fees submitted for each program they were applying to and the cost of taking the GRE. Almost all participants who were interviewed described a consideration of the costs of applying to different schools. Marcella described how she felt she had to apply to more schools to increase her chances of admission, even as she faced financial constraints:

> And I remember looking at that graph, looking at that chart on their website and being like, well. I feel like I now have to apply to 10 schools, even though I cannot afford it because I need to get in.

This perspective was shared by Frank, who felt like he needed to be careful about the schools he was applying to because cost was a concern. He describes needing to ensure that his GPA and GRE scores fell within the average for each school as he did not want to "waste my money to find a place where if I don't meet the minimum, then I probably don't advance in the next bracket of (the) admissions process."

Marcella and Frank's concerns of the costs of application was also a reflection of participants' perception of the admissions process. They both perceived that they needed to make strategic decisions regarding their applications as they had limited financial resources. Marcella felt that she needed to apply to as many schools as she could to improve her chances of getting in. Frank, on the other hand, perceived the need to only apply to schools where he met the minimum GPA and GRE scores for admission. Such variance in perception could be attributed to the lack of sufficient advising at the institutional level for undergraduate students. With advising, guidance and support, participants would feel less overwhelmed by the admissions process, but may also receive better guidance as to the kind of institutions they should apply to based on other factors such as program cultural fit and diversity, rather than on minimum scores and GPA.

Marcella's frustration with the high costs of application was apparent when discussing how she could not get application fee waivers. The pressure of having to apply to more schools added to her financial stress and anxiety. While she had saved up to pay for the costs of applying to different physical therapy programs, she wished it was not such a huge burden on her family:

Basically you're paying them to look at your application. I was like, what was the $60? It's $60 to send it off. So I believe it's $200 to take the GRE, I think it's another 245 to just have the application in the APTA system. Then it's $60 or $30 per school. And then you have to go to that school on their website and then pay the fee…I'm barely working, asking my mom for help. Like, it just got really stressed when I felt like I shouldn't cost this much. Like it shouldn't be this much to go to school.

Marcella's reflection on the application fees, saying that "it shouldn't be this much to go to school" is of particular importance. The field of physical therapy is perceived as a career that provides upward economic mobility or stability for some participants, particularly for those who come from poor communities. The affordability of application fees can be a significant barrier for applicants into a field that can provide economic stability.

For some participants, financial constraints meant that they had to make application decisions based on the availability of finances. Margot describes how she felt that she was unable to apply to too many schools because of the financial constraints. She had applied to six schools, and had planned to apply to two more but "it was way too expensive". These anxieties were also reflected within existing studies (Fenton et al., 2016), where students felt they had to limit their opportunities by limiting the number of graduate programs they were able to apply to.

Marcella and Margot's anxieties about applying to multiple programs to increase their success in the admissions process were not shared by all participants. Most participants applied to a significantly lower number of programs, although cost of application was not the main

reason for the decision. Instead, most participants describe the cost of tuition and location of the program as having priority over their decision-making process. This is discussed further below.

Financial constraints within the admissions process also meant participants had to make difficult decisions on having to give up access to certain resources. This reflected similar experiences by Black and Latinx students in existing research who were financially limited in their ability to improve their scores by retaking a test (Fenton et al., 2016), or did not have the economic means to enroll in commercial preparation courses (Ramirez, 2011). Olivia describes how she had to make a choice between spending her money on submitting applications to schools or on GRE preparation resources:

I just used free resources because I couldn't afford the outside prep. I just knew that because apps were so expensive, I had to give something, you know, [to] make a sacrifice with that.

While Olivia was able to take the GRE multiple times, she did not experience a significant improvement in scores. She perceived this as a result of lack of access to GRE preparation resources because of limited financial ability.

The cost of taking the GRE also emerged as a concern for other participants. Carla became visibly frustrated when describing how she had to take the GRE five times and its financial impact. She felt that having to take the GRE was "annoying" because "that's a thousand dollars. And that's my money. That's the money that I'm spending, you know?" Frank also described how he was only able to take the GRE once because he could not afford to spend money on additional testing, "cause that test is expensive and I'm not trying to waste $200 multiple times just to take a test."

The costs involved in applying to DPT programs emerged as a concern for almost all applicants. In some cases, participants had to take the GRE multiple times, or apply to DPT

programs multiple times before they were offered admission. For participants who had budget constraints, finding ways to fund their application became a challenge that they needed to overcome. Applicants like Olivia eventually had to make decisions that restricted their access to resources by choosing to focus their financial resources on application fees, therefore giving up access to GRE preparation tools. Other participants were prevented from submitting applications to more programs for the same reason.

*GRE*

Participants in this study also described challenges with accessing GRE test schedules and locations, and not having an understanding of how the GRE reflected their abilities as a DPT student. It is important to note that the most significant barrier to the GRE for participants was the logistics of travelling to a testing location. This was a departure from existing literature that describes how Black and Latinx students found the test to be academically challenging, intimidating and dehumanizing (Ramirez, 2011).

The GRE became a challenge because of availability of test locations. Kamryn lived in a more rural region at the time, and experienced difficulties in getting to a test location because there were not too many available where she lived:

And then also like they ...didn't really have a lot of testing centers available in my area. I think I had to go about 40 minutes away to take my test. Yeah, so it was pretty far so I feel like they could probably have more testing centers you know, in the state of [state] at least.

Victoria, who has undocumented at the time, was unable to get to a test center on her own because she was not entitled to a driving license. She not only had to rely on someone else to get to the test center, but that it was also some distance away:

So the location where I took it was one hour away from me. And we drove there. And I did not know how to drive back then. And I couldn't because, no residency, no driver's license. So I couldn't even drive.

Victoria's situation is aligned with existing literature on how broader federal, state and local policies (Enriquez et al., 2011) may have an impact on one's experience within the graduate or professional school application process. Victoria not only faced similar challenges of access as other participants in this study, she also faced an additional challenge of limited mobility because of her immigration status. As an undocumented immigrant, she was not allowed to obtain a driver's license. In addition to the fact that the GRE testing location was one hour away from where she lived, she also had to depend on someone else for transportation.

Participants thought of the GRE as a requirement that needed to be fulfilled. Jackson describes how he perceived the GRE as something that he "still have to do it (sic) because it's the requirement." This perspective was shared by Frank, who describes how he did not see the connection between the GRE and his physical therapy education, but that it was a requirement, and that it may be a reflection of how students might do well on the licensing examinations:

I think it was trying to switch the mindset of what am I going to use this in PT school for? Because it's a lot of …stuff that I won't necessarily use in PT school. But I understand that it's a correlation to see how you're going to do on the, on the board exams and how you'll do on that.

Participants described the GRE as a source of stress within the admissions experience, though it was due to the physical availability of the location. They saw it as an admissions requirement that needed to be completed, even though they did not necessarily see the connection between doing well on the GRE and doing well in a DPT program.

**Seeking Support**

Participants described seeking out alternative sources of support during the admissions process. Seeking support therefore emerged as a common theme among all participants in this study. This theme assisted in understanding of the factors of support that helped participants through the admissions process. This included self-support in seeking out resources, support from physical therapists and faculty, support from DPT programs, and academic enrichment programs.

*Self-support*

Participants described how they made the decision as high school seniors, or college freshmen, to pursue physical therapy as a career. However, as undergraduate advising and academic resources were not readily accessible, participants in this study described their process of seeking out such information to fill the gap in knowledge that would have been provided by an advisor. They relied on resources such as the websites of each individual program, and resources provided by the APTA.  Alicia describes doing her own research to find information on admissions requirements for the programs she was interested in attending, including each program's GPA requirements:

> I went to each school's website and I looked at it, they would have like prerequisite information or prospective students or, you know, if you're looking to apply, they would have a page and list, like what GRE they expected, what grade point average they want, like for your science courses, overall GPA, how many hours of observation that they wanted? I think those were like the main things that they had, but I found it pretty easily by just going to each university's website.

Despite not having access to resources at her undergraduate institution, Carla describes a similar process in researching DPT programs, by first looking at institutions within the

geographic location she wanted to be, and then whether specific schools had DPT programs, or looking where DPT programs were located:

> I just looked up physical therapy programs and then would go to the actual website, the school website and then see what like, Oh, this is a requirements that you need…I knew that I had to accomplish certain courses and get certain grades for that. And then and I knew I had to take the GRE and get a certain number of experiences.

It is important to note that because of the scope and breadth of information that was required to understand the admissions process, researching programs was often time consuming. Margot describes the amount of time she spent on researching different DPT programs:

> Yeah, I mean, it was like, I mean, I don't even know how many hours, I mean, a lot of hours being spent through that whole process, just trying to even figure out where I want to go, what programs would even be the best fit for me? Do I have the minimum GPA? Do I have the minimum scores? Like all of that was just like, so time consuming and yeah, like I think took years off my life.

Participants in this study describe how they were able to make use of web resources to support them in providing information on admissions requirements for the programs they were interested in applying. Again, this was a time-consuming process. Without guidance, participants generally had to start without knowledge of programs, admissions requirements, or admissions timelines. The amount of time involved for participants to research requirements contributed to feelings of being overwhelmed by the admissions process.

### *Support from DPT programs*

A result of participants' self-support in the admissions process is the exposure to DPT programs. Positive experiences with DPT programs during the admissions process became a significant theme. Where participants were unable to seek support from their undergraduate

106

institutions, direct communication with DPT programs helped participants with clarifying their questions about the admissions process. Participants describe the majority of their interactions with DPT programs as positive, where advisors were willing to help address concerns, and supportive of applicants during the process.

For some participants, interactions with DPT programs began in high school. Alicia was being recruited by several undergraduate institutions as a student-athlete. After researching DPT programs on her own, she took the opportunity to visit undergraduate institutions that offered direct admission opportunities to a DPT program, which factored into her decision-making for undergraduate studies. Alicia described the process she used to visit different programs as high school student:

> As far as requirements, I just looked them up on Google and then I went on a visit to a school. I would, you know, ask to meet up with academic (admissions) advisors or they'd set up a meeting with people in the department who can kind of explain it more to me.

Ashley's status as a student-athlete who was actively being recruited by various colleges gave her the opportunity to visit schools that not only had a DPT program, but also gave her the opportunity to speak with admissions advisors for programs that had offered direct admission from a Bachelor's program. Ashley's decision to matriculate at her first undergraduate institution was a result of her experiences meeting with admissions advisors from these programs as a high school student.

While Frank only made the decision to be a physical therapist after graduating from high school, he had started looking into the admissions process as an undergraduate sophomore. He got most of the information from the websites of programs he was interested in attending, but also had additional questions that were not addressed by information on the websites. Frank

described his general interactions as positive when communicating with DPT programs through email:

> More so the emails that I sent where it's mostly things that I couldn't find on the website, cause I felt like they got a lot of those…So it would be stuff like, Hey, have you seen students from my state where I'm from? Like, do you see a lot of students that come through to your program? Do you know why? Like, what is their experience? Like things like that, just to try and get an idea. And for the most part I get genuine responses.

Participants' interaction with DPT programs filled a gap in their access to resources as undergraduates. In some cases, their interactions with DPT programs fulfilled the role of an undergraduate advisor, providing guidance on improving their application and giving additional information. Carla describes her interaction with the DPT program's admission advisors as a positive experience, they were able to guide on improving her application:

> If you really want to be a better applicant, you should do this. Or like, things like that. So I just took everything that they were telling me and try to implement those suggestions. And then like one of the schools that I really wanted to apply to for DPT I actually went to, I was able to contact them and then went to kind of like an info session, but I sat in a classroom which that like also really helped with my experience and like kind of seeing what the school was about.

Faculty or admissions advisors at DPT programs were also willing to walk participants through the admissions process and answer questions. This helped them navigate the admissions process, mediating participants' feelings of being overwhelmed. Margot describes her interaction with a recruiter from a program:

The program I'm in now had like exceptional communication, the person who runs all of like the, like prospective students was just amazing and like told me everything I really wanted to know, which was awesome. And a lot of the other schools kept updating me about my application and what not, which I found really helpful.

Programs that were willing to be supportive with the admissions process and admissions requirement contributed to participants' positive experiences. Victoria described how the admissions coordinator was supportive during the application process by being flexible with accepting supporting documents outside of the application service:

And I remember that I wrote my essay and that I copied and pasted it, and there was not enough space. And I called her to let her know. And she just said, you know, just email it over, I'll print it and also attach with your application. So things like that were very useful. So in that sense, she was very helpful with that.

Such positive interactions with DPT programs made participants feel supported and had an influence over their enrollment decisions. Marcella describes how her communication with the program she is currently enrolled in made her feel valued. She felt that "they really did care about their students and they were nice enough to follow up with me". Ola describes the same experience, where the willingness of the admissions advisor to speak to students made him feel supported during the process. Such support made him feel comfortable about enrolling in the program:

Yeah, the email that I sent to the school that I'm in now I basically asked him like, you know, did he (admissions advisor) do my application, whatever. And we ended up having good dialogue then. And he, you know, the admission guy at our school, he's probably now he's probably one of the greatest people I've known since obviously he accepted me and now he helps me more than any of the other professors.

As mentioned above, participants did not have the same experiences with all programs. Feelings of being supported by specific DPT programs stood in contrast with the negative experiences that some participants had in their interactions with some programs. Victoria describes how her questions about the program were not seriously addressed by a program she visited in person. As a result of the poor communication, Victoria later decided not to apply to that program:

> She brushed me off really quickly. Every time that I had any general question about classes, she would say, Oh, it's on the pamphlet. You can look at it in the pamphlet, you, everything that you need to know is on the pamphlet, read the pamphlet and then contact us.

While negative experiences were uncommon among participants in this study, Jackson described how he made sure to take note of such negative interactions, which he took into consideration when submitting applications to DPT programs:

> I understand they have a lot of applicants, but I definitely made note of, you know, schools that really seem generally interested as well. And me as a student and that really factored into my decision making process.

Positive interaction with DPT programs, even as participants were prospective applicants, made an impact on participant experiences during the process. They were able to provide support to participants where their undergraduate institutions did not. In addition, the effort of admissions advisors to make participants feel valued also had an impact on their eventual decision to enroll in specific programs. This also addressed the feelings of isolation that participants may have felt early in the process.

***Support from Other Resources***

As discussed above, having support through the DPT admissions process helped students manage their feelings of frustration and being overwhelmed. Participants received varying levels of support from different sources. Such support included advisors, faculty and physical therapists. Participants perceived that such support had an influence on their success in the DPT admissions process. The importance of institutional support is discussed by Alicia, who was the only participant who had access to pre-health advising resources on campus. Alicia described how her pre-health advisor was able to help provide information on admissions requirements:

> I had an advisor who helped me work through the process of like figuring out where to apply and how to get hours and how important it is to have different (clinical) settings and things like that. I feel like she was very helpful…she knew a lot about what like things that I didn't even know to ask, she knew a lot about like, she gave me so much information and she just would always like have resources to share and things like that, like, which was really great.

Alicia's experiences with a pre-health advisor highlighted the importance of readily accessible advising resources to meet the needs of students interested in the health professions. Where participants were unable to obtain help from similar undergraduate academic advising resources, they found themselves turning to faculty for support. However, such support was limited to providing recommendations for their applications. Participants who were able to seek out faculty for such support had established an existing relationship. Ola described the extent of the positive relationship with one of his professors that they continued to maintain it after his graduation. The existing relationship helped him feel comfortable in approaching her to write him a letter of recommendation:

There's one, actually, she was one of my teachers for a geriatric class. And she actually

just contacted me on Facebook and she was, she's great. So I was able to ask her for my

letter of recommendation.

A close relationship with faculty allowed Frank, who had experienced trouble with

locating shadowing opportunities, to create connections with a physical therapist to begin his

shadowing experience:

The shadowing was kind of tough honestly, to figure out because I was kind of just cold

calling people and emailing to see, Hey, can you take a student in for some hours in a

certain setting? I didn't catch a break until my professor actually he was like, Hey, I know

this PTA (Physical Therapist's Assistant), they're organizing this run. And then they're

looking for volunteers and that's how I got my foot in the door.

When participants were able to create close relationships with faculty, these relationships

began outside of the classroom. Carla describes how an existing relationship with a faculty,

whom she had gotten to know through basketball, continued to strengthen after he became her

professor:

Like one of the teachers that I had was actually he became a friend of mine because I had

signed up for his course without even knowing that he was a professor. And I, like, after I

signed up for the course, I like noticed that he was my teacher and he was like an English

teacher. So like I knew that I was good at writing too. So like I had asked him and we had

developed like a good relationship. So he like helped me with my letters of

recommendation.

Because participants had established strong relationships with faculty who provided letters of

recommendation, they believed that such support contributed to their successes in the DPT

admissions process.

112

Participants also sought out other physical therapists for guidance and support as they navigated the DPT admissions process. Physical therapists provided support in different ways. Marcella found a mentor in a physical therapist she worked with after graduation. The physical therapist fulfilled the role of an undergraduate advisor who would have provided Marcella with similar support:

I worked with someone who was already at [clinic]. And I would ask her about the program. I would, she was like my mentor, like my first mentor in a sense, like I was, I would just ask her for advice. Like everything I wish I had in her (as an advisor) at [undergraduate institution].

Physical therapists also provided support to participants by providing access to opportunities with other physical therapists. As described above, Frank initially experienced difficulties with accessing shadowing opportunities with physical therapists. Through his initial contact with a physical therapist, they were able to connect him with other physical therapists, who offered him a job opportunity:

And then once I got that foot in, then he was able to connect me with other PTs so I could be a (physical therapy) technician and get hours that way. So once I found that and then it was, it was super easy to get that, but trying to do it by myself without knowing anybody was, that was probably the hardest part.

Even though Alicia had received the support of an academic advisor as an undergraduate, working for a physical therapist provided her with opportunities through other physical therapists. These physical therapists supported her through the admissions process by providing guidance and advice on being successful, and wrote her letters of recommendation.

So during that time, my boss, she knew that I was interested in going to PT school. So she was very helpful with me just applying. She gave me advice on that. She was willing

to write me (a) recommendation and she introduced me to a lot of other therapists in the company because they had a lot of other clinics in the area. So she was very, just so supportive from the start from when she met me.

Physical therapists also provided mental and emotional support by being a source of motivation. Ola described working with a physical therapist with whom he had established a close connection with because they were from the same city. The physical therapist was able to encourage Ola and provide him with moral support, and support him with the application:

The recommendation that I had a PT, right…. He was from where I'm from in [city]. And he just, he really kind of gave me a confidence if you will, like you said, you'll do it. You know, he was probably one of the first to tell me. Like, you know, you can do it. And it meant a lot. No one's really like coached me through it, but a lot of like, I guess moral support, you know just saying, you know, you're going to be a PT.

While Alicia had decided early in high school that she wanted to pursue physical therapy, she did not have the self-confidence that she would be successful. She describes how encouragement from a physical therapist she worked with motivated her to move on with her plans:

And he was just like, you know, this is what you always been working for. Why don't you just, you know, at least try. There's no point in going for something that's less than what you've been preparing for. And you're more than qualified to do it, you know? So he kind of just put it back in my head, like I can actually apply and have a good chance of getting in and everything.

Participants were able to seek support outside of their undergraduate institution as they navigated the admissions process. Such resources for support provided participants with a sense of self-confidence, and provided further opportunities for shadowing. In many ways, physical therapists serve as gatekeepers to the profession. Participants come into contact with physical

114

therapists through their shadowing experiences even before applying to physical therapy school. A negative experience with a physical therapist may turn a prospective applicant away from the profession. Supportive physical therapists have the impact of motivating and supporting participants through the admissions process. Additionally, by providing letters of recommendation for participants, physical therapists contributed in tangible ways to participants' success in the admissions process.

### *Academic Enrichment Programs*

Two participants in this study attended an academic enrichment program designed to guide them through the admissions process. The academic enrichment program is included here as a supportive factor as it demonstrates the importance of having a structured program or resource to guide applicants through an admissions process that was perceived as overwhelming by the participants in this study. Participation in the academic enrichment program allowed participants access to an immersion into graduate school, access to information on the admissions process, and was a source of support for participants during the admissions process. Kamryn describes how the program provided a structure within which she was able to experience graduate school:

> I think really just, well, number one, getting kind of like my foot in the door into grad school. Cause we took some (classes) that were pretty challenging. And then, so just like getting that my foot, like getting my feet wet to grad school cause we're busy, like from eight to five every day, taking grad school level classes had a bunch of other activities to do.

The ability to be immersed in an experience that mimics the routine of a physical therapy student was important to both participants. It allowed participants to reflect on their undergraduate experiences and gave them an opportunity to prepare for life as a physical therapy student.

Kamryn describes how participating in the enrichment program allowed her to think about the academic skills she learned as an undergraduate, and how to adapt it to graduate school:

It was a real learning experience for me. Cause I was able to like tailor, like see what I could take from undergrad, like my study skills and everything. So kind of like made me learn what I can and can't do in grad school.

In other words, Kamryn's experiences in the academic enrichment program likely provided her with the opportunity to prepare for graduate school even before she was officially admitted into a program. An understanding of the routine of being in a physical therapy program, and the expectations of students allowed Kamryn to pre-emptively reflect on the skills she would need to be successful in the program.

As Jackson reflected on his experiences in the academic enrichment program he participated in, he also described how the program was able to prepare him for what to expect as a physical therapy student:

It showed me, it really gave me a confirmation that, okay, I really can make this dream a reality to go to professional school. It was a really rigorous program in a sense that we were taking academic classes, we were doing workshops. I mean it was day in and day out around the clock type work. But for me to be able to be able to succeed in that environment, I really loved that.

Jackson discusses how his success in the enrichment program gave him confirmation that he would be successful in a professional program such as physical therapy. In particular, he described the program as being "rigorous". Jackson was the only participant who felt that his undergraduate education was supportive and provided him with the resources he needed to succeed. When discussing his undergraduate experiences, Jackson stood out against other participants as he seemed to speak of his experiences with a lot of pride and confidence in his

116

academic abilities. It came as a surprise that Jackson needed confirmation that he could succeed in this environment. Nonetheless, Jackson's reflection on his experiences in the enrichment program demonstrates the importance of such resources on the self-confidence of an applicant.

The academic enrichment programs also provided access to admissions advising for participants in the program. Kamryn describes her experiences with the enrichment program guiding her through the admissions process:

> So the instructors (facilitators) there, they kind of helped guide us through the PT path, everything that we needed for it. I didn't think it was too tedious or anything. You know, it was like a step by step process. Also any questions that I did have I was able to get in contact with the faculty at the school (organizer of enrichment program).

In discussing how she felt her participation in the summer program was helpful, Kamryn perceived that the facilitators of the program acted as mentors. Kamryn perceived that her participation in the academic enrichment program provided her with "everything" that she needed for the admissions process. Where Kamryn felt she was able to find information and resources through her own web searches, it was not until her experiences within the enrichment program that she felt that she was able to access the support she needed:

> So of course I've done some research on my own, like in undergrad, but I don't think I really knew about all the requirements until the summer program that I went to. We had like one on one meetings with the Director of admission. So she kind of went through our whole transcript and told us everything that we need and then what else we could do to kind of improve our resumes. But yeah, I did, I've done most of my research, like, you know, before that just searching online this school's requirements, the school's requirements, what prereqs they need like how many observation hours? So most of that,

most of it was found online, but I feel like a lot of the information, like what you really,

really, really want to know. I got that from the summer program.

In Kamryn's case, she felt that what she "really, really, really" wanted to know, she was able to

access it through her interaction with the mentors in the enrichment program and the chair of the

admissions committee. This is significant as it highlights the importance of having access to

appropriate advising resources. As discussed earlier, participants in this study did not have

access to such resources at their undergraduate institutions, and felt overwhelmed by the

admissions process. Kamryn's experiences in the enrichment program suggest that access to

appropriate advising from both academic and admissions advisors would have a significant

impact on student success in the DPT admissions process.

In addition, while Jackson felt prepared for DPT admissions requirements, the feedback

provided by the enrichment program helped him feel more confident in applying, stating that "I

had that feedback really made things a lot more comfortable for me with my application." Both

Jackson and Kamryn had done their own preparation prior to attending the summer program.

However, both participants perceived that the additional support provided by the experience

created a more positive experience within the application process.

The impact of participation in an academic enrichment program is reflected within the

narratives of Kamryn and Jackson. Where Kamryn felt that she did not have access to resources

as an undergraduate, she credited much of her success in the DPT admissions process to her

ability to access resources in the enrichment program. Even though Jackson enjoyed a supportive

undergraduate environment, he also felt that his participation in the enrichment program had an

impact on his success in the admissions process. Such impact reflects the potential of similar

programs to fill in a gap for students, that is otherwise left open by the lack of appropriate

advising resources.

It is worth mentioning that there is a general lack of awareness that such programs exist. Other participants in this study did not know about these opportunities, even when some participants attended the same undergraduate institution that offered these opportunities to prospective applicants. Participation in an academic enrichment program can increase access to information about the admissions process, and be a supportive factor for applicants.

**Race and Access**

Participants' racial identities and their interactions with peers and professors emerged as a common theme across all interview sessions with participants. These themes helped with understanding how participants' racial identity had an influence on how they accessed resources and on their interactions with those they encountered in the admissions process. Most participants did not experience overt racism within their undergraduate experiences or the DPT application process. However, they perceived that their racial identity had an influence on the way they accessed institutional resources, both as undergraduates and as a DPT student. For some participants, how their racial identities had an influence over their experiences were only apparent after reflection of their undergraduate experiences in this study.

Some participants discussed experiencing racial microaggression as undergraduates. Such experiences were also a reflection of Critical Race Theory's principle of racial realism, where racism is a norm rather than an aberrant occurrence. More importantly, participants' experiences also reflect how racism has an impact on the distribution of resources and access between Black and Latinx, and White students. As the findings below demonstrate, racism and racial microaggression led to participants described feeling excluded from resources that would help them achieve academic success as undergraduates.

As described earlier, all participants but one participant attended a PWI. The contrast in experiences provided an understanding into how racial identities and campus climate can have an

119

impact on student engagement. Participants' racialized experiences did not have an impact on their aspirations to a DPT program. Race and access includes four sub-themes; access to undergraduate resources, relationships with non-White students, Stereotype threat and Whiteness and privilege.

### *Access to Resources*

Participants in this study described how their racial identity had an influence on their ability to access resources on campus. Such access is defined by their relationships with faculty and peers, and access to campus resources. As discussed earlier, participants felt that their undergraduate institutions did not provide adequate resources for students interested in health-professions such as physical therapy. The ability for participants to establish connections with others were important in their access to resources. Participants described that being a racially minoritized student in a PWI was influential in how they created connections and relationships.

As a Black student attending a PWI, Kamryn did not feel that she was able to establish a personal connection with individuals on campus because she could not relate to other White students, faculty and advisors on campus:

> I attended a PWI, a predominantly white institution. So you know, I mean, there were resources for minorities and like people of color, but being surrounded with like a lot of white people and having like, professors I really didn't feel that connection to like have someone to really help me succeed like throughout my kind of like, journey to becoming, or going to physical therapy school.

As discussed above, many participants shared similar perspectives on attending a PWI. In some cases, students who felt that they could not relate to White faculty and peers had an impact on their willingness to approach White faculty when they faced issues in coursework. From the perspective of CRT's racial realism, this also perpetuates oppression of participants and existing

power structures by denying access to resources that may allow participants to succeed academically.

Marcella describes her experience of struggling with an Organic Chemistry class and did not reach out for help she perceived the professor, who was White, to be unwelcoming and therefore felt uncomfortable interacting with her:

> I did hesitate to reach out to the professor just because she looked mean, I don't know why she was a stern mean Caucasian woman. Versus I think maybe if she was Black, I would have went. Cause I was like, well, I'm used to being around Black people. Or maybe if they were Asian…But for her, I was like, I don't feel comfortable going to your office hours. I don't know if it's cause you look mean, but I don't want to go.

Marcella describes how she would be more comfortable if the professor was Black, or if the professor was Asian. It is important to note that this is likely due to the fact that Marcella generally felt more comfortable with other non-White professors and peers on campus. During the interview, Marcella, described how her close friend on campus is Asian. This suggests a sense of comfort that she did not necessarily experience with a White person. Marcella's discomfort with approaching White faculty, relative to working with other non-White faculty could therefore best be explained by her perception that White faculty were less welcoming, and that she perceived having to behave in a different manner when interacting with them.

To further explain Marcella's discomfort with approaching a White professor for help, Marcella described the need to code-switch when she is outside of her peer group, "I have to code switch. When I leave to go to school, like I have to talk a certain way, be a certain way at school." The need for Marcella to code-switch when she was not within the safe space of being around her peers or other Black students or faculty reflected a pressure to conform to norms of communication and behavior that had been created by a majority White society. This is a

common coping strategy for Black students attending PWIs as it assists them in moving between different cultures and social norms (Bailey-Fakhoury, 2014). She also mentioned having an "attitude", addressing the "angry Black woman" stereotype (Higginbottom, 1993). Marcella implies that the stress of having to behave differently in interactions with non-Black individuals leads to the perception that Black women are often perceived as being hostile to others.

Marcella's experiences also reflects the importance of examining oppression and discrimination through the perspective of intersectionality. In this instance, Marcella experiences discrimination through the need to code-switch with non-Black peers and faculty, and also feels the need to address stereotypes of her behavior as perceived by non-Black peers and faculty.

As discussed previously, most participants found that resources specific to supporting their DPT admissions experiences were insufficient. Where undergraduate institutions were able to provide resources such as academic advising, participants felt uncomfortable in accessing them. They described an exclusionary atmosphere on their college campuses, which were predominantly White. Olivia describes attending a meeting that was organized for students interested in physical therapy, and how she felt out of place:

> Even when I attended those meetings, it would just be like, okay, sit down in the back. And that's it. I don't think that they (program organizers) actually made an environment where people can feel welcome.

Participants felt more comfortable accessing resources that were provided specifically for students of color on campus. Margot had been making use of resources specifically provided to students of color by her institution. She chose to stay away from general campus resources as she was not comfortable accessing them:

Like I want to do this, but in terms of like other centers that weren't necessarily catered towards a minority population, I didn't want to receive help. I was like, I'm going to figure this out on my own.

Margot's unwillingness to receive help from resources that were meant for the general population was likely influenced by her interactions from her White peers. When she was accepted to her undergraduate institution, Margot describes how her friends accused her of being accepted only because of her last name:

But when I was accepted, I was told that I was accepted because of my last name and not because of my accomplishments. It was a very common theme among my classmates who didn't end up getting into the school or who did and were surprised that I got into it.. They're like going off of the like affirmative action…that were just like you're Latino, you're Hispanic. That's why you got in.

Margot did not explicitly describe feeling hurt by the comments made by her friends. Her body language and expression suggested that such comments were hurtful. She was accused of being accepted because of who she was, rather than on her own merit. Such interactions with her own peers likely had an influence on why she chose only to access resources at her university that were meant for Latinx students as she did not have to experience such microaggressions.

Olivia describes a similar experience where she exclusively made use of the resources provided by the university's department of multicultural services. She describes how majority of her time outside of the classroom was spent in the space provided by that department as it felt safe to her, particularly in instances where she felt physically threatened on campus. Having a physical safe space allowed her to pivot away from feeling anxious and being in fear for her safety on campus:

123

And we thankfully have this department…the department of multicultural services, which

is in the student center. And that was a safe haven for everyone because you're able to,

you know, piggyback from other people's ideas or learn, collaborate, or just relax. So that

was important for me because, I mean, I think there was one year that they had a White

supremacist come and it just felt like they weren't doing enough for people that were non-

Caucasian. So when you have social issues or anything that is outside of the education

realm occurring, it's hard to focus because of course your mind can go everywhere.

Some participants were unwilling to approach faculty for help with their classes as they

were not uncomfortable speaking with someone who was not of their same racial group. This had

an impact on how participants accessed resources, particularly if professors were the gatekeepers

of such resources. When participants reached out faculty for help on coursework or applying to

DPT programs, they experienced racial microaggression from faculty. Racial microaggressions

on campus contribute to an exclusionary campus environment for Black and Latinx. Even when

resources were available to participants, they did not feel comfortable accessing them. This again

reflects CRT's principle of racial realism, reflecting how racism has the impact of excluding

Black and Latinx participants, perpetuating existing power dynamics. This may have contributed

to participants' perception of isolation as undergraduates and in accessing resources in the DPT

admissions process. In addition, participants who are unable to create relationships and access

campus resources due to microaggression may have an impact on how they experience the DPT

admissions process. Carla describes approaching a professor for a letter of recommendation, who

then encouraged her to apply to less competitive programs:

I was trying to get a, like letter of recommendation and he would tell me like, oh, don't

apply here because like, you're not going to get in. Like, it's like super, super hard. Or

like he'll recommend, oh, this school, like for sure you could get in.

While Carla did not mention whether her identity as Latinx had an influence on how this faculty communicated with her, existing literature suggests that Black and Latinx students share similar experiences when communicating with faculty about their graduate school aspirations. Such experiences are unsupportive and hurtful for students who aspire to attend graduate or professional school, and have the impact of discouraging students from attending graduate and professional school altogether (Ramirez, 2011). However, Carla did not seem to take offense at this incident, brushing off his opinions and making sure that she did her own research on physical therapy programs:

> And like kind of gave me an idea of what to think about, but like, I didn't really like take any of his like opinions to consideration because I knew that I had to do my research and see if my stats like would fit in with the program I wanted to apply to.

Kamryn describes similar interactions with faculty and how she was perceived to be less intelligent because she is Black, and experienced microaggressions because of such stereotypes. She also described an incident that her friend, who is also Black, experienced when interacting with faculty:

> I'm in undergrad, like I said, I attended a PWI, so I have had some professors in my undergraduate career who have kind of like, you know, looked down on me. You know, just, I guess I don't, I guess it's just that racial thing, you know? I've also had, I mean, not me personally, but I've had my friend who met the PT advisor in our undergrad, she literally told her that maybe she like, you know, shouldn't apply to like some big name school. She should find other smaller schools. And it's not like she had a bad GPA or anything. She just told her that.

It is important to note that most participants reported having positive interactions with their faculty. While there is no clear indication why this may be the case, Carla's reaction to her

professors' comments above may help provide an explanation. Participants may have chosen to focus on relationships with faculty that were supportive rather than discuss experiences that may have been traumatic and hurtful, and therefore avoiding the risk of having to re-experience the harm and trauma.

While most participants may have chosen to focus on supportive relationships with faculty, microaggression on campus was experienced within interactions with their peers. Such instances of microaggressions alienate Black and Latinx students and make it harder to socialize on campus. Alicia describes her experiences of microaggression with White students at a social event on campus:

And they, like, they would try to be friendly in every way, but it's just like the way that they would approach you. It felt like they didn't know how to talk to you, but in it kind of just felt like, you know, just talk to me how you talk to everyone else, but they would come over and like do like a dance move or like say something a certain way that, you know, you can tell they were trying to like be relatable, but it's like, how do you know that I talk like that?… How do you know that I can dance? How do you know that I know that dance, you know, just things like that.

In describing her experience in a social setting with her White peers, Alicia was frustrated that they could not approach her in the same way that they might approach a non-Black person. In addition, the use of a "dance move" or saying "something a certain way" suggested that her White peers had a stereotype of how Black people spoke or moved. It also suggests cultural appropriation and objectification of a perception of Black bodies (Lewis et al., 2016). While Alicia did not explicitly mention this, her frustration at this incident suggested that she found it offensive. In addition, when interacting with her peers in the classroom, Alicia perceived that her presence was unwelcome:

I definitely did not like it, it just felt like, you know, you weren't really seeing like, and

you felt out of place just because people would like look past you or look over you and

things like that.

Alicia's descriptions of two different situations when interaction with her White peers suggest

that she was being objectified on campus. While her White peers seemed to be willing to

acknowledge her presence in social situations, they were not willing to do so in the classroom.

This also suggests that interaction with a Black person in a social situation was desirable, but

was less so in an academic situation.

As the themes for race emerged, it became clear that participants were aware of their own

racial identity and how it had an impact on their ability to access resources and create

connections with their peers. The only participant in this study who did not feel that his racial

identity had any impact on his access to undergraduate academic resources was Jackson, who

attended a HBCU. It is also important to note that existing literature also suggests that students

who attend a HBCU tend to enjoy more positive interactions with faculty and peers (Hurtado et

al., 2011). Jackson not only enjoyed the support of his faculty and advisors, but also enjoyed

access to various student activities that other participants in this study did not seem to engage in:

I had a lot of great opportunities while I was there...I was involved in student government

association. I was involved in the honors college throughout all my four years…And then

thankfully throughout my junior year, I was elected to be student government association,

vice president. And my senior year actually had the pleasure of serving as student

government, president of my HBCU...Great experience for me. I just really enjoy

undergrad as a whole. I think it was a great time to grow.

Jackson's experiences stood in contrast to those of other participants. It reflected the

extent of how microaggression and racial isolation on campus has an impact on the participants'

127

abilities to engage on campus, having an impact on participant access to resources. Additionally, experiences with microaggression and diversity on campus had an influence on participants' decision in DPT program enrollment and how they made sense of their academic experiences in the DPT program.

*Community with Non-White Students*

Previous experiences with race and diversity also had an influence on how participants created relationships. These experiences included growing up in a diverse neighborhood, and previous experiences of racism and microaggression creating mistrust in White people. Participants also recognize that racism is a normal occurrence that has an impact on the lives of all non-White students, and not just Black and Latinx student. Olivia describes growing up in a diverse neighborhood with majority non-White residents and how that had an impact on her perception of White people:

> Like I didn't know how to see or interact with white people. And granted, I wasn't raised to look at color like that. I was raised to just love people regardless, but it kind of makes it hard where there's so much going on in the world or your nation where you can't really build, or I guess it's hard to build that trust with some people, because in the back of my mind, I'm thinking, okay, you're racist.

Even though Olivia herself admits to not having interacted with a significant number of White children when she was growing up, she learned about racism perpetuated by Whites through mass media. As a result, she found it difficult to build relationships with White students because she felt that she could not trust them.

Such mistrust of White students may account for the reason why participants tend to create relationships with students who look like them. Ashley, who attended a PWI before her

transfer to her current institution, found herself seeking out fellow Black students because there were less of them on campus:

> I found myself gravitating, gravitating more towards people who similarly identify as myself at my first school, just because there were so few of us. So, you know, we would all be together.

Once Ashley transferred into a more diverse campus, she no longer felt the need to seek out other Black students:

> But at my second school, I feel like it was a lot easier to just kind of meet other people who weren't just like interested in the things that you were interested in. Didn't look like you, things like that, just because it was like different people around us, like 24-7.

In comparing her description of both experiences, Ashley seemed to perceive that being a racially minoritized student on a predominantly White campus made it necessary for all the Black students to "all be together". While she did not describe feeling unsafe at the first undergraduate institution she attended, this suggests that there was a sense of comfort and safety in being around people who looked like her. This did not seem to be the case after she transferred to a more diverse institution, describing that it was "easier" to meet non-Black students.

As Kamryn also attended a PWI, as one of two Black students in her class, she was unable to establish close relationships with White students:

> It was hard to connect to a lot of the students, like in peers, especially since I was at PWI, you know, I was like probably one or two of the only African American females in my class...I couldn't find myself, you know, you just couldn't feel as close to your classmates, like, cause you don't really have people that look like you and your classes. So that was kind of hard to kind of have like a lot of those close interactions with my classmates. You

know, like one or two friends I did have in classes, but it's not like, you know, I talked to

the whole class or like more than 10 people in the class.

This may also account for why participants generally feel more comfortable accessing campus

resources that were specifically targeted towards Black and Latinx students. Such resources

allowed participants to interact with other non-White, therefore creating a comfortable

environment within which they were able to access resources.

Gravitating towards non-White peers also emerged as a theme among participants when

forming close friendships. As an undergraduate, Victoria acknowledged that she only had one

peer she was close to. Victoria perceived that she was able to relate as they were both non-White

students and shared similar cultural and socio-economic backgrounds, even though her friend

identified as Asian:

So you try to find people who have those same experiences, and then you look around the

room and you find people who are from here whose experiences are based here, you

know, who may have a lot of advantages who may not even have to pay for college

because their family's able to afford it and things like that.

As a Black student attending a PWI, Olivia generally felt that it was easier for her to make

connections with other non-White students:

I saw them as easy to interact (with) because you know that you guys have similar

experiences, which, I mean, it's, it's bad to say, but it was really like race-related because

you feel like, okay, if you have this pool of White people, there's somebody that gets me,

even if you're Asian and Hispanic or Black or whatever, I feel like there's some

commonality.

Olivia felt more comfortable interacting with non-White students because of perceived shared social and cultural experiences that may make it easier for her to relate to these students due to a common experience.

Carla also felt the need to reach out non-White students as they may understand how it feels to be a minoritized student on campus. Carla specifically uses the term "struggle" to reflect her belief that non-White students experience racism and microaggression in similar ways:

And so seeing that I'm like one in a hundred or something I like felt very alone I guess. And I felt like I was, I kept wanting to search for people like me. Even if it were like, even if it weren't like Mexicans, if it were just like someone of color or identified as someone of color, like, I felt more connected to them because I felt like they maybe understood like the struggle, I guess.

The experiences of Victoria, Olivia and Carla suggests that Black and Latinx students were more likely to seek friendships with other non-White students because there was an assumption of a shared experience. Such experiences included coming from a less-privileged background, similar cultural experiences or understanding the impact of racism and racial microaggression. Finding community in non-White students therefore helped participants feel more comfortable on campus, particularly if they attended a PWI.

*Stereotype Threat*

Participants who are interviewed in this study also described feeling the effects of stereotype threat when interacting with others on campus, thus affecting their access to academic resources. This aligned with existing literature, where Black and Latinx undergraduates were concerned about being perceived negatively (Linley, 2018) or being academically inferior (Augustine, 2015). One such experience of stereotype threat was the perception that affirmative action policies allowed Black and Latinx students who are academically inferior to be admitted

131

to a college. As described above, Margot's academic capabilities were directly challenged as her peers told her that she was an "affirmative action" admit because of her last name and her identity as a White-passing Latinx person. While Margot did not describe how this perception had an impact on her academic performance or undergraduate experience, her frustration when describing this suggests that she felt hurt by such comments.

Participants avoided seeking out resources in fear of portraying the stereotype that Black and Latinx students are academically inferior. For example, Olivia describes an unwillingness to approach faculty for help in the fear that professors might question her academic capabilities, and that she would be denied resources because of her racial identity:

I viewed going to an faculty member for help as a sign of weakness, because even though that's not what it is, they actually care. You would hope they care, but I saw it as I should get this. Because if I was to go to you, you'd probably think I'm stupid…I've just, if I don't feel like you're ascending or you're welcoming, I'm not going to try to approach you. I'll just struggle… But I think it's just also not wanting to feed into this stereotype that y'all, aren't smart. And even if I'm seeking for help, I feel like in the back of their minds, they would be like, I don't have time for this person, or they wouldn't give me the most resources because I'm not White, but that's not true.

Olivia describes how she would choose a harder path over seeking help from professors because she did not want to appear "weak" or feed into a stereotype that Black students have less intellectual or academic ability. While she does not discuss experiencing overt racism as an undergraduate, such perceptions may be due to previous interaction with faculty or peers. Nonetheless, the impact of stereotype threat in this instance is significant. Racism and microaggression from such experiences reinforces stereotype threat, it also results in mistrust of institutional agents. Participants who choose a harder path rather than seek help from faculty has

132

the impact of limiting access to academic resources, further perpetuating existing power dynamics between White and non-White students.

Kamryn describes the same fear of having her intelligence questioned as she describes the pressure to do well academically as an undergraduate and in a DPT program. In addition, she feels the pressure to do well as she understands the perception that others have about being a representative of an entire racial group:

> In undergrad I kind of brought that (stereotype threat) with me to PT school because I don't want to be like the student that's left behind. Especially being like one of the few minorities in my class. I don't want to any of the faculty or anything to be like, Oh, you know, like it'd be, we see a trend that minority, these aren't like doing well in the program or finishing a program thing. So I never want that to be like a stigma put on me or like any other minority.

Kamryn describes not wanting to be perceived as being intellectually inferior, and therefore being "left behind", in relation to other students. In addition, Kamryn's unwillingness to be perceived by faculty as being academically inferior suggests a response to stereotype threat that disengages and invalidates existing indicators of success within a DPT program (Schmader, et al., 2001).

Frank discusses how he felt the need to be on his "A game", suggesting that he needed to be at his best performance, whether academically, or when communicating with faculty, both as an undergraduate and a physical therapy student:

> So I think, I just feel like I had to work a little harder and I didn't really have faculty or staff I could go to. I understood the kind of things I had to go through just from dealing with feeling like I couldn't mess up or feeling like I had to be on my, A game all the time for people to take me seriously because you don't see a lot of Black people in the STEM

field. So it was just kinda like, I feel like that played a part, but it also made me work really hard to make sure to, to show that I can do this as I go along here. I can, I can probably do, I can do a really good job in this field.

Frank's concern about feeling like he could not "mess up" is a reflection of group-reputation threat (Shapiro, 2011). He believes that because Black students were not well-represented on his undergraduate campus, and in the STEM field, he felt the need to work harder to disprove the stereotype of Black students.

Stereotype threat also manifests in the relationships of participants. Participants describe an unwillingness to interact with her peers in the DPT program due to stereotype threat. Carla describes how she felt apprehension when reaching out to White students in her program as they might question her presence in the program:

I felt like they didn't want to be friends with me at first. Or maybe they, I guess I had misconceptions about them and thought that maybe either I had to be extremely smart for being here in this program, because I'm a person of color or maybe they thought that like, I wasn't going to succeed because I'm a person of color. So I had like two very extreme thoughts about White people in general.

Carla believed that White students perceived her to be less intelligent because of stereotypes about her racial group. Early in the interview, Carla describes how she had never experienced racism and microaggression in relation to her academic ability. However, she did point out that because she understood that she was "different" from her peers, such differences also led her to develop such perceptions.

Due to stereotype threat, participants also felt that they were representing their entire racial group when interacting with White peers or faculty. Participants described feeling the pressure to excel academically, or work harder than other students, since a common stereotype of

134

Black and Latinx students is intellectual inferiority. Ashley describes how she feels that even though she had already been admitted to a DPT program, she felt the need to work harder than others:

> I feel like it's, it's almost something that's kinda like innate too, I think minorities too, once you get to this point, like you can't just stop, you have to keep going. And just because like, you are one of the few, especially if you see that you're one of the few.

Like Ashley, Kamryn also describes using stereotype threat as motivation to succeed:

> Personally, being like a minority, it kind of pushed me harder to like want to be better than everyone else at my school. Cause I just wanted to like, you know, prove everyone wrong. You know, like minorities, like we can make it as well as being doctors, you know, anything. So I think that I just, it just really pushed me to want to work even harder to kind of, you know, like out shine my classmates or like just prove people wrong who have doubted me in the past.

The presence of stereotype threat can lead to anxiety and pressure. This aligns with existing literature on how stereotype threat can be discouraging for students (Booker, 2016). Carla describes that such pressure creates further stress:

> And I felt like I have such a weight on my shoulders because of that. Like, because I'm, it's not just because I'm one of the first or first generation is because I'm also like representing such a larger community. And so it was really hard to try not to compare myself, but it was definitely something that like, it's still in the back of my mind.

Additionally, stereotype threat manifests during the admissions process when students research admissions data for DPT programs. Awareness of the gap in Black and Latinx students admitted to DPT programs in previous years have had an influence on how participants perceived their own potential successes in the process. This led to participants experiencing

anxiety within the DPT process. Victoria describes her reflections on the overall admissions rate for Black and Latinx students to DPT programs and experiencing anxiety over her own academic abilities, even though she had not experienced academic difficulties as an undergraduate:

> And you see statistics, you notice that there is a small amount of people who are Hispanic and a small amount of people who are African-American and you start thinking, is it because they don't have the resources? Or is it because they are not getting enough help? Or is it because they're not so good at it? And you start panicking because you happen to fall within that percentage of the people who may or may not make it, or who may or may not be accepted.

By mentioning that Black and Latinx applicants were "not so good at it", Victoria perceived that the gap in number of students admitted was due to academic ability, rather than structural issues such as access to resources. Similarly, Olivia reflected on her perception of her own ability when seeing the admissions data for Black and Latinx students, and how she used that as motivation to work harder:

> So at first I went to see how many people are black and PT. And I think that was about 3% of the entire population. So part of me knew that and was like, okay, well, that doesn't mean that's my story. And of course it's not my story. Like I'm in school right now, but I would say for me that meant to push harder or try harder.

Victoria and Olivia held different perceptions of the published admissions data for accepted students. While Olivia also expressed some concerns over diversity of students admitted to DPT programs, she mentions how "that doesn't mean that's my story". Instead of experiencing anxiety over her own academic ability and internalizing stereotype threat, Olivia chose to perceive this as an opportunity for her to achieve academic success for herself. While stereotype

136

threat existed for many participants in this study, creating anxiety over the admissions process, participants such as Kamryn and Olivia also used it as motivation to succeed.

### *Whiteness and Privilege*

Participants in this study described a perception of how their White peers tend to come from more economically privileged backgrounds, or enjoyed certain privileges in accessing academic resources. This had an impact on the way participants perceived access to resources in relation to their academic successes. Such perceptions aligned with existing research and framework on structural discrimination within K-12 education and its impact on academic preparation as students go into college (Ladson-Billings, 2017). This aligned with CRT's principle of property of Whiteness, that, in this case, describes how Whiteness creates specific material privileges that allows ease of access to educational resources. Olivia described her perception that, even in high school, her White peers from more well-resourced school districts have had better academic preparation:

> Like we weren't poor, but the good chunk of this area have low to medium economic status. So as a result, we're (students in her high school) not really pushed as much as [school district], for example…I had to learn how to learn and I still don't know how to learn. I feel like because I'm here trying to figure things out and you guys, this is second nature to you and I feel like I'm behind because there is an upper hand, but then also you have to realize that nothing in life comes easy.

Olivia's experiences of how access to resources at the primary and secondary level has an impact on academic success in post-secondary education is significant. Specifically, Olivia felt that as an undergraduate, she had to spend time understanding basic academic skills, while peers who may have come from more privileged backgrounds already had those skills, and therefore had more time to spend on learning content taught in undergraduate coursework. As a result, Olivia

felt that she was already "behind" even before she started her undergraduate studies. Such experiences were also shared by Carla, who was a first-generation Latinx student as an undergraduate. Both participants recognized that their White peers tend to enjoy more privilege than other non-White students. Carla's parents were immigrants, with her father being the sole financial provider, and her mother did not know how to drive. She relied on school and public transportation to get around. Carla felt that this meant that she did not enjoy access to resources that her more privileged peers did:

> And I just always felt jealous or I felt like other people had it easier because like they were able to participate, after school activities when, when I have to go straight home or else it would get too dark for me to be alone, like out in the street. And so I felt like that kind of influenced just my overall perspective growing up especially in undergrad and made me when I would do poorly, I would victimize myself like I did before. And I would say it's because these people had an easy, you know...that was like, they already had an advantage to me, you know, or like anybody that like was able to was able to not have to take the bus and get dropped off by their parents and not have to wake up at five in the morning. Like they already had an advantage to me, you know?

Like Olivia, Carla perceived that privilege allowed some students to have access to resources even before they started undergraduate study. While she did not discuss having to work harder as Olivia did, it was evident that she was aware of how the ability of her peers to access resources ultimately allowed them to enjoy academic advantages as undergraduates. It is also important to note that at the beginning of the interview, Carla described how she would "self-victimize" when she realized that she was not succeeding academically in college, compared to her peers. She described feeling that this was because she did not have access to the same resources as they had, and that she "did not know" where such perceptions had come from,

138

and she likely picked it up from watching television. However, as the interview progressed, it became clear that Carla's understanding did not come from mass media. She understood that her lack of opportunities, even in after-school activities, had an impact on her college preparation compared to her peers.

In addition to academic preparation, participants are also aware that Whiteness or being White-passing, provides certain privileges to individuals that people of color generally do not enjoy. Margot, as a White-passing Latinx student, discusses her concerns of identifying as Latinx on her admissions application:

> And it's really hard looking at the numbers when they (DPT programs) have like accepted applicants and whatnot, because like Hispanic identifying people who do apply are such a low percentage of who are accepted that I almost caught myself thinking like, do I even self identify as this? Or do I just put white because 70% of the applicants who are accepted are White.

By feeling the need to identify as White instead of Latinx, Margo perceived that DPT programs simply do not want to make offers of admission to Latinx students because of their racial identity. This reflects the importance of data and how it has an impact on Black and Latinx applicants. The low admissions rates of Black and Latinx students gives the perception that the field of Physical Therapy does not want to accept an entire ethnic group of students. This has the impact of how an applicant might identify on their application, perpetuating a long-term cycle. Black and Latinx applicants may perceive low admissions numbers as being discriminatory against their own racial and ethnic groups, and may decline to identify as such on their application, having an impact on admissions data being report. This may contribute to lower admissions rates within these racial and ethnic groups, even if this is not the case.

In being able to identify as White in her application, Margot also enjoys the privilege of Whiteness. Those who consider themselves White-passing persons of color are able to move between two different identities, and in some cases, be able to enjoy the benefits of each group. For example, Margot describes being able to access resources for undergraduates of color because of her identity as a Latinx student, that she contributed as being influential in her undergraduate success:

> The university that I attended had a minority affairs program. So from the get go, before even started school, they had an orientation for every student coming onto the campus. And I was included in that orientation. So I got to see students who looked like me which was really cool…We got to register for classes early. We had on one, on one counseling for that. So that was amazing. And I definitely utilized that for my whole undergrad career, just because I didn't know what to take...that was a super positive interaction was having that program set up. And we also had access to tutoring for like virtually any class on campus that was offered, which was also amazing, like small class tutoring was definitely something that was like the biggest help ever.

Despite being able to access these resources, Margot also describes how she was made to feel excluded and uncomfortable when accessing the resources for Latinx students:

> I definitely felt like I was getting eyes looked at me as in like, you're not even like Hispanic, you're not even a minority. I don't know why you're here. That was definitely hard. And I've definitely, and I've experienced that throughout, like my whole undergrad in terms of that. And that's been something that I've like, always had to deal with.

While Margot described how she thought about passing as White on her PTCAS application, therefore using her White-passing status to an advantage, it emerged during her interviews that she felt that her White-passing status was often a disadvantage. As she described

her experiences in accessing academic resources, she also describes how being made to feel excluded was something that she "always had to deal with". She also describes how this had a negative impact on her social interactions on campus, and "not feeling like I am enough to join certain clubs or identify in a certain way".

The idea that Whiteness affords privileges to people who are able to adhere to the standards of Whiteness also has an impact on students when they are asked to interview with programs. Such standards have typically involved a history of racial discrimination, particularly against the Black community, where natural hair has historically been discriminated against and perceived as being unprofessional for the workplace and school (Johnson, 2020). Marcella had cut her hair shortly after graduation, and was in the process of growing it out:

> Like, cause I didn't feel, I didn't feel they would accept me because of my hair. Like they wouldn't think I was professional or they didn't think I wanted, I wasn't just a professional student. And I just, just was very concerned about appearance wise and which is unfair because natural hair is beautiful.

The historical discrimination against natural hair led to Marcella feeling anxious about how her appearance would be perceived by the admissions committee at her interview. Whiteness not only confers privilege in access to academic resources, but also creates a set of social norms by which all non-White individuals are expected to adhere to. Cultural norms that do not fit within the parameters of such social norms are perceived as unacceptable. In Marcella's case, this led to feelings of anxiety about her appearance and how it will impact her admission to the program.

**Program Choice**

Participants made decisions on where to apply based on location, cost, and diversity of the program. Program choice determines participant's access into the field of physical therapy by granting access into the education required for the field. This theme assisted in the understanding

of the ways in which participants make application and enrolment decisions as it applied to program choice. Notably, most participants prioritized cost and location in their decision-making process. This supports existing literature on DPT student choice, where Black and Latinx students prioritized program location (Moore et al., 2003) and the cost of attendance (Wilcox et al., 2005). Program location was a factor for participants because of proximity to their support systems. Ola described how he selected DPT programs based on how close it was to home, where he could be with family and friends:

> And you know, I get to, you know, go to my church and see my friends from home. And it just, I knew this was the school for me…I knew this school is my calling and I feel like the school that I'm at now, like I probably wouldn't have been able to get to where I'm at, had I went to like another school.

Like Ola, Alicia's decision was based on how close it was to family so she would have support during her time in the program:

> So I decided to go towards [institution] because I had a lot of family down here that like live in [city] and [city]. So I definitely wanted to have that support wherever I did decide to go.

The importance of support systems aligned with existing studies about the importance of familial support for Black and Latinx students (Pearson & Bieschke, 2001; Sáenz et al., 2018). Most participants chose to attend schools within the same state for cost reasons, but also because they could be closer to their family and friends.

Participants also described how program cost was a priority in their decision-making process. This was despite the fact that participants felt that their experiences with diversity as undergraduates had an influence on how they experienced their undergraduate campus life. In

Marcella's case, it is interesting to note that she had placed race and demographics as having the least priority, despite her own racialized experiences as an undergraduate:

> And at the end of the day, that would have just been more cost than anything. So I thought about cost first and foremost, then geographical location, more than anything. And then maybe third race and demographics came into it.

> Ola received two offers of admission. While he ultimately accepted the offer from the program that was closer to home, cost was an influence in this decision. When deciding whether to accept an admissions offer from another program, Ola describes how the potential of being in debt for a large sum of money was a deterrent:

> So at the time at the time the first school I got into was like, it was $50,000 a year…And it was a lot of money… I was like, should I put this $500 (deposit) in? I was thinking like $150,000 in debt without interest… And then April, like mid-April, my school that I'm in now, they accepted me and yeah…I get to live with my parents. Which has, I mean, yeah, (rent) it's free.

> To a lesser extent, a program's commitment to diversity emerged as a factor in the decision making process. All participants described how part of their considerations when it came to program location was whether it was located in a diverse city, or whether the program was at least committed to increasing diversity of their classes. Carla described how she had selected the program based her perception of its diversity, and expressed concerns about attending school in a predominantly White city:

> It included like a lot of like diversity, which I personally wanted because I'm just thinking about applying to schools maybe out of state better I guess more conservative or more like White. Like I just felt like I was going to stick out like a sore thumb. And even though like, my program is still like predominantly White or just like non-Hispanics or

non-Blacks in my program, like, I still felt like they were very inclusive and like trying to bring in as much diversity as possible.

While Margot chose to attend a public institution outside of her home state, this was based on diversity of the location:

That was definitely an experience that I enjoyed because it showed me a lot, a lot more diversity than where I came from. I really enjoyed just interacting with a lot of people with a lot of different backgrounds…and then coming to the program that I have now, that was definitely something I didn't want to give up. I didn't really want to, go to a place where I didn't really feel like myself in and where I am now, like just definitely checked all those boxes.

There is a recognition among participants that DPT programs tend to be less diverse because the number of Black and Latinx students accepted to programs were much lower compared to White students. In those cases, decisions were made based on the program's commitment to diversity. Jackson described his communication with potential programs where he asked about diversity:

And just a very open ended question, but just to hear how, you know, what they would describe their students to be also being a minority, I would just take note as well and even ask, like, what is diversity like in your program? You know, what are things being done for diversity?

Since Jackson applied only to, and was accepted to one DPT program, it was not known if DPT program responses to his questions would have made a difference in his decision to apply. Further, Jackson chose to apply to the DPT program because it had offered the academic enrichment opportunity.

Olivia felt that representation of Black and Latinx students were a reflection of a program's commitment to diversity, and therefore felt comfortable enough in a DPT program where she was still underrepresented:

> I need to be comfortable and feel like I can thrive in an environment. So with this program, I saw that there were like three Black people prior to me going in, I think less than that for Hispanic and Asian populations. So it's still probably like, I don't know, maybe 90% White, I don't know, I'm just making this number up, but at least I saw some representation.

While program diversity was an important part of the admissions process for Olivia, she also understood that because the larger pool of Black and Latinx applicants were small, it would not be reasonable to expect to be in a program with large representations of Black students.

The participants in this study described how the cost of tuition and location of a program was important to them. This allowed them to keep their costs of attendance low, and were able to stay close to their support systems, which also contributed to lowered expenses. While diversity of a program was important to participants, they also understood the reality of diversity within the field, and thus placed this at a much lower priority than program cost and location.

**Growth and Leadership**

Upon reflection of their experiences, all participants in this study described representation within the field as important to them. This theme assists in broadening our understanding of the ways in which participant's racial identity had an impact on their experiences, and the ways in which they have created meaning out of these experiences. Participants believed it was important for them to be leaders and be role models for other students aspiring to be physical therapists. In addition, participants describe experiencing personal growth from their experiences navigating

the DPT admissions process. The sub-themes for growth and leadership are taking the lead, and personal growth.

### *Taking the Lead*

The findings in this section align with existing studies on how being racially minoritized serves as motivation for Black and Latinx students engagement and leadership (Harper & Quaye; 2007; Hotchkins, 2017; Jones, 2017; Jones & Reddick, 2017; Logan, 2017). Engagement and leadership provided participants who an opportunity to disrupt existing narratives and stereotypes of Black and Latinx students, and allowed participants to empower other Black and Latinx students. Participants in this study describe how the lack of representation within the field of physical therapy provided them with motivation to succeed within the application process, and in the program they enrolled into. Jackson describes how seeing the low numbers of Black physical therapists in the field was a source of motivation:

> There are 5% of people that are African American in the field of physical therapy as a whole, and even less that are African American males. And just being able to learn those numbers was not only concerning, but more so, like I said, a motivational tactic for me.

The experiences also led participants to aspire towards being role models for other students. Jackson discussed how he has started taking the lead and having discussions with faculty and other Black and Latinx students in his program in the recruitment of Black and Latinx students:

> I'd begun already talking with faculty as a minority in my program about just different things that can be done to help recruit minorities…how minorities are recruited to the program or things of that nature.

Similarly, Kamryn has also aspired to be a leader in her own program. Reflecting on how she felt isolated within the admissions process, she has participated in discussions surrounding

146

recruitment of Black and Latinx DPT students and being mentors in the admissions process for prospective students:

> So some things that we have thought about or like when minorities do apply to the schools to kind of have one of us that's already in the program, kind of reach out to them and talk to them, answer any questions that they have… that would have helped me become more, more comfortable applying in like accepting the spot in the program.

It is also important to recognize that such efforts towards diversity and inclusion are student led, which are common among Black and Latinx students at PWIs (Jones & Reddick, 2017). However, such initiatives can also lead to an overreliance by the institution to depend on students and neglect to direct institutional funds towards such efforts (Jones & Reddick, 2017).

Margot discussed the idea of being the "token minority" in her class, but aspired to use that position to help other students feel less isolated. The use of the term "token minority" reflected her undergraduate experiences where her peers had accused her of being admitted to the institution only because of her last name. Margot was upset when she first described these microaggressions. By the third interview, she seemed to have taken ownership of being a "token minority" as a student of color to help others as a leader:

> If I could help the minority students who are in our class feel more included like I had in my undergrad experiences, I would love for that to be a part of future DPT endeavors. And that's definitely influencing, cause I want to, I'm like stepping more into a leadership role in that sense for being potentially the token minority student. I'll take that title because it means I can also help people who are, have similar backgrounds that I do.

Ashley also described making use of her position as a DPT student or a physical therapist and inspiring other students to achieve the same:

I think that I would, I could see myself possibly inspiring other minorities to pursue

something like this, or think that it's possible. Like I said, you don't see as a minority kid,

you don't see people like you all the time doing things that you like, you dream about the

things that they're doing and you don't see, you don't think it's possible that you can do it.

So I think as a future physical therapist, a black woman, Oh, hopefully be an inspiration

to someone and kind of show them, hopefully, maybe be like a mentor to someone who's

aspiring to do something similar.

In earlier interviews, Marcella had described how her high school did not have focus on career

counseling in the health or technology fields. As a result, Marcella described aspiring to

introduce high school students to the field. She hoped that that they would not have to experience

the same feelings of isolation and being overwhelmed:

And so now I want to be in a position where I can stress that. Yes, you can be a PT. I

look like you, you can come, you can do it. I want to be a part of the process where I go

to high schools and I tell them what it's like, the experience like entrance wise. Because I

didn't get that. I had to just learn it on my own. And it was just, it was hard. I was

nervous. It was nerve wracking. And it just, you always felt like you're doing something

wrong. So I want to help people and give them the knowledge.

In addition to being representatives of a program or the profession, other participants also

describe being informal mentors to other students. For example, Alicia reflects on her

experiences as a peer counselors to high school students navigating the college admissions

process:

And I, you know, I would always tell them my experience of like me trying to get into

my major and how rigorous the classes are and things like that. So I felt like it was a… I

was kind of like a counselor in a way…it was kind of a way to help answer questions that

148

they had about what's college, like, and what's you know, what's, how is it in biology? How hard is chemistry? And things like that, that I felt like it felt good to be in a position to be able to answer questions or help.

Jackson also began mentoring students in his undergraduate institution who are also interested in physical therapy so they have knowledge of how to be successful in the admissions process:

But I've since kind of used that experience to tell like future aspiring PTs that, you know, make sure you're doing all you can in your first three years, because really your senior year matters. But, you know, I knew by September of my senior year that I was in PT school. So, you know, it's really what you do your first three years that helps them build your application experiences.

At the time of this study, an anti-racist movement swept across all 50 states in the country, triggered by the death of George Floyd, a victim of police brutality. His murder sparked a wave of protests in support of the Black Lives Matter movement. Additionally, George Floyd's death was succeeded by the death of Breonna Taylor, who was murdered in her own home by an alleged police raid. Both deaths created opportunities for discussion on structural racism and discrimination, particularly against the Black community.

As the interviews took place shortly after these protests began, participants had strong feelings of the deaths and of the protests that took place around the country. This emerged during the interviews, when reflecting on participants' own racialized experiences. For some participants, faculty took the opportunity to address racism and anti-racism in the classroom. Carla describes how there was a visible shift from previous conversations around this issue:

I feel like not until what in light of what's happened, you know, with George Floyd, and the whole Black Lives Matter campaign. Like not until stuff like that happened that our

professors are making a more of an effort, to speak out about maybe racial disparities and things like that. We did have a communications course that specifically talked about racial disparities in the healthcare profession…And like, they want to really make a point that this is for everybody.

However, not all faculty were as proactive. Marcella described how she was bothered that faculty had not said anything about the protests, and took the lead in creating an opportunity to discuss the issue:

When everything was happening with the, with the police brutality and shooting and the knee on his neck, silence from our professors. And I was like, I was upset because I was like, we talk about everything…and for our professors not to say anything, I was just, I was just so disappointed…And he's (faculty) like, well, we don't feel it's our place to say anything. And [program] has a political stance. I was like, there's nothing political about black people dying by the police.

Marcella had reached out to a professor with whom she was more comfortable speaking to. However, the response she received was surprising, as the professor felt it was a "political" issue. Marcella described feeling frustrated by the silence of faculty on this issue, and attributed it to the fact that there were no Black faculty in her program. Silence by White and Latinx faculty suggested that they supported the narrative that anti-police brutality fit into a political agenda, or that they did not think it was their place to address the issue. Nonetheless, this highlights the importance of representation and inclusion for Black and Latinx students. Marcella gave the impression that if a Black faculty were on staff, there would have been at least one professor who would address this issue with students.

Ola also learned to take the lead on starting conversations around diversity and inclusion in the program he is enrolled:

I'm able to talk about these things with people who don't look like me and in a

comfortable, a safe environment. You know, and, I think, you know, me being black in

my program, I'm looked at as a leader too, able to like share my experiences with my

classmates and they do appreciate it is uncomfortable at times, but you know, you gotta

make people uncomfortable (to be) comfortable.

It is important to note that while Ola felt comfortable with sharing his experiences with his non-

Black peers in the program, existing Black and Latinx students in DPT programs are asked to

bear the burden of educating others about anti-racism. Participants in this study did not discuss

having to re-experience trauma from racialized experiences to educate others, but this is a

potential problem in underrepresentation of Black and Latinx students in DPT programs.

As participants in this study navigate the DPT admissions process, their experiences

ultimately culminated in them feeling the need to be leaders in their own programs and create

opportunities for other students to discuss issues of race and structural discrimination. It has also

allowed them to create opportunities to guide other students so they do not experience isolation

within the DPT admissions process.

*Experiencing Personal Growth*

Participants discussed experiencing personal growth as they navigated the DPT

admissions process. Such growth stemmed from having to overcome significant challenges

within the process, and relying on other sources of support when they were not provided by their

respective undergraduate institutions. This was a departure from existing literature on the

experiences of Black and Latinx students within the admissions experience that does not focus

on personal growth.

Participants experienced personal growth in different ways. Margot describes how

navigating the DPT admissions process has allowed her to identify more with her Latinx identity,

when she previously felt that she identified more as a White person. This may be due to her learning about racial inequities during the admissions process. Second, she also describes being more self-reliant and having more self-confidence:

> I've definitely come away, more self reliant. And self-assured from my past experience to coming into the DPT program too. And I think like those experiences of maybe seeing us like a little bit less of equal also, like is helping me better understand patient care in that sense. And helping my classmates understand that there is a difference.

Ola, on the other hand, experienced growth in terms of having more maturity and taking his studies more seriously. As an undergraduate, he did not have to be consistent in his studies to be successful. However, as faculty at the DPT program placed an emphasis on academic success, Ola felt that he had to be more consistent in his academic performance:

> And I've learned, I've learned that through being you know, a graduate student I'm learning, it's my full time job. I'm also paying a lot more. So that, that also influences, you know, me in how I prepare for things. Whereas an undergrad I wasn't paying as much. Yeah, that's really I've basically grown more in the last year than I did four years of undergrad for sure.

> Marcella described her personal growth in two ways. First, in her navigation of the DPT admissions process, she learned more about herself:

> And so with those experiences making me who I am, I feel like it's just made me a stronger person, a more aware person, a more conscientious person…it's made me realize that you just always have to be ready to learn.

Second, Marcella also describes how her identity evolved as she navigated the admissions process. She feels more comfortable in being able to have conversations about race, and being comfortable with her own identity as a Black woman:

At the end of the day, I've spoken my truth. I am who I am. I'm proud of that. And I think

in grad school more so I had a year to kind of figure out what I wanted before going to

grad school…And I had more time to really get in touch with myself and reflect on what

I wanted out of life, what I saw myself as, what I represented and how I wanted to portray

myself and how I wanted people to see me.

Victoria's experiences in the DPT admissions process helped her come to terms with her

own immigration status and racial identity, and how access is dependent on the privileges that

individuals enjoy:

So I think that those experiences have made me, I would say stronger and they have made

me persevere more as a person…In my case, I do, I do think that a lot of the experiences

that I've had with documentation problems, with, you know, feeling like maybe there's

not enough representation or feeling like sometimes you don't fit into a group it's made it

so that I can relate to a certain number of people.

A reflection of their experiences in the DPT admissions process led to aspirations to be

role models and mentors for other students to guide them through the admissions process.

Participants felt that having more representation within the field and in the student populations of

DPT programs would help with the sense of isolation within the admissions process. Participants

perceived that having more guidance through the admissions process would help with increasing

successful enrollment of Black and Latinx students in the DPT admissions process, and aspired

to provide such guidance to others.

## Chapter Summary

The findings of this study are organized under five major themes: overcoming challenges,

seeking support, race and access, program choice, and growth and leadership. The essence of the

admissions experience for Black and Latinx students is defined by access. This includes access

to institutional support and resources, access to financial resources, and access into the field of physical therapy. Participants' racial identity was connected to systemic and structural discrimination, which determines the level of access into higher education and the profession of physical therapy.

This chapter also explored how the racial identity of Black and Latinx students had a significant influence over how the DPT admissions process was experienced. Participants' experiences of microaggression have the effect of limiting access to resources. However, participants in this study were acutely aware of stereotype threat and generally tried to turn it into motivation for them to succeed academically. Upon reflection of their experiences, Black and Latinx students are focused on being role models for other students and guiding other students through the DPT admissions process.

## Chapter 5: Analysis and Discussion

The purpose of this phenomenological study was to explore the central question: What is the applicant experience of Black and Latinx students in DPT programs? Supplemental questions for this study included the indicators of success within the application experience for Black and Latinx students, the challenges within the application experience, and how resources offered by DPT programs contribute to Black and Latinx student's decisions to enroll. In this chapter, the implications of findings are discussed relative to existing literature. The conceptual framework of Critical Race Theory (CRT) is used to evaluate the findings and draw conclusions based on implications for practice. Further research in this area is also proposed.

### Summary of Themes

Central to the participant experience is that of access to physical therapy education. This included access to support as undergraduates and through the admissions process. Support is defined by the ability of participants to access resources, which are influenced by the interaction between their racial identity and availability of resources to students. Participants experienced and discussed the essence of their experiences in five distinct themes: 1) Overcoming challenges, 2) Seeking support, 3) Race and access, 4) Program choice, 5) Growth and leadership.

Within the theme of overcoming challenges, participants experienced isolation within the admissions process. They did not have access to institutional support such as pre-physical therapy advisors or student organizations. Such support was important in providing participants with access to information about admissions requirements and prerequisite coursework, and strategies to succeed within the admissions process. Participants also described the costs of application fees as a significant barrier in the admissions process.

Participants who did not have access to institutional support relied on themselves to seek out information on the DPT admissions process through websites. Direct interaction with DPT

programs became a supportive factor due to the positive nature of such interaction. Participants also formed support systems from relationships with faculty and with physical therapists. Academic enrichment programs that prepared participants for the DPT admissions process were found to be supportive, although such opportunities were limited. These supportive factors filled the gap left by institutional advising resources, which were not accessible by participants.

This study also found that participant experiences and access to resources were influenced by their racial identities. Participants described experiencing racism and racial microaggression and an exclusionary campus climate as influencing their choices not to access institutional resources that may have been available to them. They also perceived privilege to be associated with being White, with their White peers having more access to education resources and opportunities because of such privilege.

Finally, participants described experiencing personal growth through the admissions process. Their racialized experiences also served as motivation to be leaders within their own DPT programs. Examples of their leadership included taking the lead on having conversations about race and racism with their peers, and becoming mentors for other students who are preparing for the DPT admissions process.

**Findings in Relation to Existing Literature**

The findings of the study demonstrate that access to resources were influential in defining the admissions experiences of participants. These resources include academic and advising support, support from peers, faculty, and physical therapists. This confirms existing research on the experiences of Black and Latinx students in other fields of graduate study (Hadinger 2017, Ramirez, 2011). The findings in this study suggests the need to address issues of access and structural discrimination to increase access for Black and Latinx students to the profession. Access to a profession that can provide financial stability is important as it allows economic

mobility (Fox, 2018). However, the issues of access and discrimination reflected in this study perpetuates the problem of access to a profession that is defined by access to financial and academic resources.

The findings of this study aligned in some areas with existing literature in participants' undergraduate student experiences and their experiences within the DPT admissions process. These included undergraduate sense of belonging and experiences within the DPT admissions process. However, there were also departures from existing literature such as participant experiences with the Graduate Record Examination (GRE).

### *Undergraduate Experiences*

The findings of this study aligned with existing literature on sense of belonging for Black and Latinx students. Participants in this study who attended a Predominantly White Institution (PWI) as undergraduates described not having a strong sense of belonging with the campus community because of their experiences with racism and racial microaggression. This aligned with existing studies on the impact of racism and racial microaggression from both peers and faculty having an impact on sense of belonging (Lewis et al., 2019). In contrast, Jackson, who had attended a Historically Black College and University (HBCU) developed a strong sense of belonging to the campus community because he enjoyed support from faculty and peers, and was given multiple opportunities for engagement. Participants' weak sense of belonging can be attributed to underrepresentation of Black and Latinx students on campus, a culture of racism and racial microaggression, and a lack of resources and counter spaces within which Black and Latinx students could feel safe.

In this study, participants experienced varying levels of support from faculty. Participants' experiences aligned with existing literature when their relationships with faculty were a source of support within the DPT admissions process (Hurtado et al., 2011; Ramirez,

2011; Sweeney & Villarejo, 2013) by providing participants with letters of recommendation or helping participants to connect with physical therapists, for which participants described as being helpful to their application experience.

Most participants, however, did not describe their relationships with faculty having an impact on sense of belonging (Booker, 2008; Case, 2013; Hall, 2017), or that undergraduate faculty were willing to critically explore issues surrounding race and gender in the classroom (Booker, 2016). Participants did not describe their relationships with faculty having an influence on their aspirations to attend a DPT program (Hanson et al., 2016).

### *Graduate Admissions Experiences*

The findings of this study aligned with existing literature in the following ways; faculty and advisor support, knowledge of the admissions process, costs of application and enrichment programs.

As described above, participants found varying levels of support from faculty to the extent where faculty were able to provide support within the application process. In the same way, participants found varying levels of support in clinicians who encouraged them to pursue their goals, and provided them with professional opportunities such as employment and shadowing. Such variation in support was also reflected in existing studies (Cuellar & Gonzalez, 2019; Ramirez, 2011, 2013; Trolian & Parker, 2017) where some students found support in faculty through frequent interaction. As discussed earlier, support came in the form of faculty providing letters of recommendation and providing access to physical therapists.

Participants in this study described not having access to institutional resources that would help them with information on admissions requirements, or with navigating the admissions process. This aligned with existing studies on graduate students' experiences of the admission process (Hadinger, 2017; Ramirez, 2011) where students did not have access to information

about various aspects of the admissions process because of lack of access to appropriate advising.

The lack of access to adequate advising had an influence on the opportunities that participants were exposed to within the DPT admissions process. This process was not only time-consuming, but was limited by the availability of information through web resources. Participants who have had access to an academic advisor or admissions advisor in the process enjoyed access to information that was not available through web resources. The findings of this study suggest that such information may include enrichment opportunities that help students navigate the admissions process, or opportunities in applying to other physical therapy programs that may be a better fit for students. Lack of access to adequate advising resources has the impact of limiting opportunities into the field of physical therapy. The experiences of students who attended an academic enrichment program also reflects the importance of having such resources. These students felt more confident navigating the DPT admissions process having participated in the program.

The costs of applying to physical therapy programs were aligned with existing studies that found the costs of applying to multiple programs, and the cost of taking the GRE a significant barrier for students (Fenton et al., 2016; Hadinger, 2017; Ramirez, 2011). The participants in this study felt frustrated and developed anxieties when it came to applying to multiple programs. Some participants felt that in order for them to succeed, they had to apply to more programs than they could financially afford to do so. In some cases, participants also had to give up access to some resources, such as test preparation workshops, so they could afford the application fees for the schools they wanted to apply to.

The findings of this study contribute to existing knowledge of the DPT admissions process. As discussed in Chapter 2, existing studies focus on DPT programs' use of GRE and

159

undergraduate GPA in the admissions decision-making process (Andrews et al., 2006; Kume et al., 2019; Mitchell et al., 2019; Nuciforo, 2015; Shiyko & Pappas, 2009; Utzman, 2006). Studies that focus on the applicants' perspective employed a quantitative methodology, and focused on applicant choice in a DPT program (Ancrum-Smalls et al., 2000; Moore et al., 2003, Nuciforo, 2016; Wilcox et al., 2005). The findings of this study aligned with existing research where Black and Latinx students placed a higher priority on program location (Moore et al., 2003) and the cost of attendance (Johanson, 2007). Participants in this study were less concerned with program diversity and personal relationships with faculty (Johanson, 2007).

The findings of this study also demonstrated significant deviation from existing research in three ways. First, participants described the biggest challenges of taking the GRE as logistical. Most participants described a difficulty in getting to the testing location as a significant challenge. While they did not find the process of preparing for the GRE to be enjoyable, they also did not discuss having academic difficulty with the GRE, and accepted that it was a requirement that they needed to fulfill. This stood in contrast to existing studies where the GRE was found to be to be intimidating or dehumanizing (Ramirez, 2011).

Second, participants described how their experiences through the DPT admissions process led to significant personal growth. They described having a better understanding of their own ethnic and racial identity, having more self-confidence, and feeling more comfortable within their own racial identity. Additionally, participants described an aspiration to be role models for other Black and Latinx students in the DPT admissions process. Such aspirations and experiences were not reported in existing literature, and contribute to an understanding of how the DPT admissions process can shape the identities and aspirations of applicants.

Finally, participants described their interactions with DPT programs as a significant source of support in the admissions process. Such interactions were not reported in existing

160

studies that focused on DPT program choice. Support included provision of information on admissions requirements, and information on the admissions process. The finding that participants found support from DPT programs within the admissions process responded directly to the supplemental research question of how resources offered by DPT programs contribute to Black and Latinx student's decisions to enroll. Often, such support contributed directly to their decision to enroll in a specific program. Jackson and Kamryn applied only to the DPT program who had provided the enrichment program because of the support they received. This is significant for DPT programs who may consider focusing resources on admissions and recruitment professionals to cultivate relationships with prospective applicants.

## Findings in Relation to Critical Race Theory

Participants in this study described how their racial identity influenced their ability to access resources provided by their undergraduate institution. The ability to access these resources had an influence on their success at the DPT admissions process. Access to resources provided support in navigating the DPT admissions process from faculty or other institutional agents. Participants in this study describe how racism, racial microaggression on predominantly White campuses created an exclusionary campus climate. This led to participants feeling uncomfortable in accessing any resources that were provided by their undergraduate institution.

The next sections will discuss the findings of this study through the perspective of Critical Race Theory (CRT). The findings of this study suggest that undergraduate experiences of Black and Latinx students can be defined by a lack of access to resources and opportunities because of racism, racial/ethnic microaggression and structural discrimination. CRT is a critique of how existing systems and structures legitimizes such discrimination and aims to disrupt racist knowledge of race-neutrality and intellectual inferiority (Patton, 2016).

**Racial Realism**

Racial realism suggests racism controls all aspects of our society, permeating our social, economic and political structures (Bell, 1980, 1992; Dixson & DeCuir, 2004). People of color should not rely on existing structures and legal processes to seek relief from discrimination and oppression (Bell, 1980, 1992). In higher education, college campuses are perceived as sites of power. Oppression of students are reflected through the policies and actions of institutional agents such as faculty and staff (Pusser, 2015) who make decisions on who gets access to academic resources and knowledge creation (Huber, 2008).

The findings of this study suggest that Black and Latinx students experience racism and racial/ethnic microaggression as undergraduates. Such findings confirms existing research on the racialized experiences of Black and Latinx undergraduates (Augustine, 2015; Booker, 2016; Davis et al., 2004; Hall, 2017; Harwood et al., 2018; Solórzano et al., 2000, Von Robertson et al., 2016). Participants' experiences with racism and racial/ethnic microaggression reflect racial realism's principle of how racism permeates structures such as higher education campuses. Racism and racial microaggression victimizes its recipients and assigns arbitrary values to differences, which serves as an invisible force (Bell, 2004) to reinforce the status quo.

Faculty and advisors who discouraged participants from applying to specific DPT programs, suggesting that those programs are too competitive, display racially microaggressive behavior implying that that participants are not academically proficient because of their race. Findings show that this has the effect of discouraging participants from approaching them for further help. Participants also described how racism and racial microaggression from peers and advisors created a hostile campus environment that prevented participants from wanting to engage in, and access institutional resources. Such incidents of racism and racial microaggression include feeling the need to code-switch when interacting with institutional agents and White peers, and the need to represent their ethnic group in a positive way.

Participants' experiences is a reflection of how predominantly White college campuses perpetuate oppression of Black and Latinx students through the action of faculty and staff. Students are oppressed through objectification and stereotyping that creates a hostile campus environment. Participants in this study described how racial/ethnic microaggression led to an unwillingness to approach faculty for help or access academic resources that could help them be academically successful. Their experiences reflect a system of racial domination that results in power and resources being unequally distributed to White students, and oppresses Black and Latinx students (Huber, 2008). Within the DPT admissions process, lack of access to academic resources may prevent students from being successful in their entry to their chosen profession. This results in the maintenance of a White-dominated profession, maintaining the status quo.

The findings of this study reflect an unwillingness by institutions to improve campus climate for Black and Latinx students. Diversity policies on campuses create diversity regimes (Thomas, 2018). These regimes reflect an institution's benign commitment to diversity, but have no interest in making fundamental changes to the distribution of power, opportunities and resources, because it does not benefit them to do so (Patton, 2016; Thomas, 2018). In this study, Black and Latinx students enter a campus climate where policies, culture and curriculum are rooted in Whiteness (Patton, 2016). Administrators and faculty are a product of such climates and therefore reproduce racism without disruption (Patton, 2016). Policies at undergraduate institutions continue to be enforced by these individuals without concerns for racial consciousness. The balance of power continues to tip in favor of institutional agents who determine access and opportunities to campus resources, and White students who enjoy unrestricted access to campus resources.

Participants in this study described the need to adopt leadership roles within their respective DPT programs. This was motivated by their experiences with racism, racial microaggression and stereotyping. This aligned with existing studies on how Black and Latinx students on PWI campuses saw the need to dismantle racial stereotypes and to increase representation for students within predominantly White DPT programs (Hotchkins, 2017; Jones 2017; Logan, 2017).

Participants also saw the need to speak up against racial injustice (Hotchkins, 2017) and utilized these opportunities to resist oppression (Logan, 2017). This deconstructs power dynamics between the institution and students. Black and Latinx students who were able to speak up against the oppressive and exclusionary campus climate reflects how students cannot rely on institutions or institutional agents to create a safe campus environment. Participants felt empowered to challenge normative perspectives of racism and racism, dominant narratives of meritocracy and inferiority (Jones, 2017) without relying on institutional agents to do so. When participants are successful in increasing Black and Latinx representation within their respective student populations, they also contribute to the disruption of existing power dynamics between White and students of color.

**Colorblindness and the Myth of Meritocracy**

Colorblindness has emerged as a response to racism in higher education admissions (Lipsitz, 2019). Colorblindness does not consider the inequitable opportunities to Black and Latinx students because of structural discrimination, and the myth of meritocracy suggest that education inequality is because of one's choices rather than systemic and structural discrimination (Crenshaw, 2019; Lipsitz, 2019; Zamudio et al., 2011).

Most DPT admissions processes define merit based on GPA and GRE scores (Andrews et al., 2006; Shiyko & Pappas, 2009; Utzman, 2006). This disenfranchises Black and Latinx

164

students who are excluded from academic resources because of structural discrimination in their educational experiences. The findings of this study suggest that the inequitable access to resources that Black and Latinx participants experienced in high school and as undergraduates had an impact on their academic successes. Participants described feeling left behind compared to their White peers who may have enjoyed access to opportunities in high school that allowed them to be more prepared as undergraduate students. Therefore, White students were perceived to be academically ahead of their Black and Latinx peers as undergraduates, who had to learn study skills and strategies because they were not given the opportunity to do so earlier. Even though the participants in this study did not describe experiencing academic difficulties, inequitable access to opportunities were perceived to have had an influence over their ability to succeed.

Meritocracy within the admissions process is a problem as it excludes Black and Latinx applicants from the process. Admissions to the DPT program is only offered to students who are considered qualified (Kume et al., 2019; Mitchell et al., 2019). Such qualifications are defined by the student's undergraduate grade point average (GPA) and GRE scores, considered as objective measures of academic merit, potential and talent, but are in fact, measures of wealth and privilege enjoyed by most White applicants (Garces, 2020).

The use of objective measures creates the perception that the admissions process in higher education is fair and equitable to applicants. The findings of this study show that structural discrimination within the higher education system excludes less-privileged students from academic achievement. Participants describe not having access to advising and academic resources that would help provide them with information on the admissions process and having to struggle with building study skills while their more privileged peers did not. They also described difficulties with accessing the shadowing requirements for DPT program admissions.

Equity within graduate admissions is therefore an illusion. Fairness is justified with race-blindness and the use of GPA and GRE scores to make admissions decisions. Since Black and Latinx students face exclusion from the process because of access to resources, the current higher education, and the DPT admissions process is neither race-blind, nor meritocratic.

Colleges have adopted affirmative action admissions policies to address structural inequities in education. It is one of the strongest examples of anti-racist policy (Bensimon, 2020). However, there is a perception that affirmative action is a dilution of admissions standards (Klonoski et al., 2017). This has led to lawsuits that allege the use of race in admissions, to remedy structural discrimination, as unfair[3]. In its most recent decision in Fisher v. University of Texas (2013), the Supreme Court of the United States (SCOTUS) reinforced previous rulings that allowed for the use of race only after all other race-neutral alternatives have been exhausted.

Affirmative action lawsuits also have an impact on health professions education, particularly medical education. Regents of the University of California v. Bakke (1978) and Gratz v. Bollinger (2003) were examples of White applicants suing medical schools, alleging racial discrimination against White applicants. In these lawsuits, both sets of plaintiffs allege that the respective medical schools were discriminating against White, and perceived as being more competitive applicants, admitting Black and Latinx applicants who were perceived as having inferior academic ability. SCOTUS ruled in favor of the plaintiffs in both cases, prescribing that

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[3] Regents of the University of California v. Bakke (1978), Hopwood v. Texas (1996) Grutter v. Bollinger (2003) and Gratz v. Bollinger (2003) are considered landmark cases within higher education admissions. All lawsuits involve White plaintiffs suing higher education institutions for admission into medical and legal education programs.

colleges should not have racial quotas in admissions, and that race cannot be used as an influencing factor in the admissions decision making process.

The decisions by SCOTUS eventually led to many states across the US to officially ban affirmative action in college admissions (Davenport et al., 2018). Colleges that are not under a state-wide ban on affirmative action in college admissions pivoted away from considering race as a primary disadvantage in admissions (Davenport et al., 2018). Race-neutral policies do not account for structural discrimination that places Black and Latinx students at a disadvantage. These lawsuits and their decisions reflect how fairness and equity within the admissions process is a myth. Dismantling of race-conscious policies by the courts suggests that the impact had been felt and feared (Bensimon, 2020). The legal system reinforces the idea that the higher education admissions process is only fair and equitable when it has benefitted White applicants.

The impact of SCOTUS decisions on affirmative action law cases mean that DPT programs continue to face the pressure of maintaining an admissions process that is perceived to be fair and equitable to all applicants, resulting in the use of test scores. However, the use of test scores in the admissions process is exclusionary and reflects the quality of academic preparation of the test-taker (Carnevale, 2018), which is impacted by access to education. The findings of this study show that the challenges of cost and access to resources that help applicants succeed in the test excludes Black and Latinx students from applying to DPT programs. DPT programs that continue to rely heavily on the use of the Graduate Record Examination (GRE) assume that it is an accurate reflection of applicant success in the program. Reliance on the GRE to make admissions decisions denies access to Black and Latinx applicants. This contributes to existing racial inequities in the DPT admissions process, resulting in disproportionate enrolment of Black and Latinx students in DPT programs.

The findings of this study showed that the financial costs of access includes the cost to submit applications to various programs, and the cost of taking the GRE. This confirms previous research where participants describe feeling constrained by the costs of applying to medical schools, and the cost of taking standardized tests such as the GRE (Hadinger, 2017; Ramirez, 2011). Participants in this study describe how financial constraints led to them applying to less schools than they wanted and making decisions based on financial resource allocation. Such constraints prevent applicants from seeking additional resources, or taking the GRE multiple times to improve their scores, limiting access to physical therapy education and entry into the profession.

The myth of meritocracy in higher education admissions are also reflection of deficit-mindedness by colleges (Klonoski et al., 2017). Such deficit-mindedness attributes the perceived failure to achieve academic success to deficiencies in the students. This absolves the institution of any responsibility to provide students with access to resources. Deficit-mindedness creates the perception that students who fail to achieve academic success on their own is a result of their own academic deficiencies. Institutions that provide academic assistance is a reflection of lowering standards and dilution of higher education (Klonoski et al., 2017). However, the findings of this study show that students are unable to access resources because of a climate of exclusivity and structural discrimination, not because they are academically deficient.

**Whiteness as Property**

Whiteness as property describes how Whiteness provides economic and social privileges that only a select few enjoy (Harris, 1993). In this study, Whiteness produces frameworks that govern social norms and the education systems (Hode & Meisenbach, 2017), and reinforces the perception of self-reliance and individual merit in higher education (Okun, 2010). Whiteness defines access to education and academic resources in the following ways. First, White

168

communities tend to be middle-class and wealthier because of economic privileges that have been given to them. As a result, K-12 school districts in White communities tend to be better resourced than communities of color (Carnavale, 2019). Whiteness defines success as the ability of the individual to achieve success on their own merit. This defines admissions into higher education programs.

Black and Latinx students who come from school districts that are less well-resourced may enjoy less access to academic resources such as study skills, which have an impact on their undergraduate preparation (Ladson-Billings, 2017). Olivia, Marcella and Carla mentioned attending high schools located in less well-resourced school districts. Carla, whose parents are immigrants, describes how she was unable to attend enrichment activities after school due to a lack of resources. She believed that the lack of access to these resources meant she did not have the opportunity to develop appropriate study skills compared to her White peers. Participants' undergraduate experiences reflect structural inequities in education and how these are important to the undergraduate student experience. As a result, they felt that they had less academic resources, having a negative impact on their preparation going into their undergraduate studies.

Second, Whiteness serves as gatekeeper to higher education through the admissions process. Colorblind standards of admissions are a result of a legacy of racism and benefits individuals on the basis of notions of Whiteness. It does not consider the realities of an education system that creates inequities based on structural discrimination and racism faced by Black and Latinx students (Ladson-Billings, 2017). As discussed above, Whiteness creates privilege within the admissions process. Landmark cases in higher education admissions involved White plaintiffs who sued institutions for the use of race-based admission, accusing institutions of admitting less qualified Black and Latinx applicants in favor of diversity. This is a problem for Black and Latinx students because Whiteness creates a form of immunity against systemic

racism and discrimination suffered by communities of color (Cabrera, 2020). This creates

barriers to higher education access for Black and Latinx applicants within the DPT process.

**Intersectionality**

Intersectionality examines how multiple identities have an impact on the way individuals

experience racism and inequalities within the contexts of power and oppression (Collins, 2015;

Crenshaw, 1991). It allows researchers to examine experiences of specific groups of people

(Lewis et al., 2013). The findings of this study show that the dynamics of racism, power and

oppression is experienced differently by Black women and undocumented Latinx students. This

aligned with existing literature on racial and gender microaggressions on Black women (Awad et

al., 2015; Walley-Jean, 2009) and undocumented Latinx students (Abrego, 2006; Diaz-Strong et

al., 2011; Enriquez et al., 2019).

Black women participants describe instances of both racial microaggression and sexism

that created hostile campus environments or increased their anxieties about the DPT admissions

process. This included Marcella's fear of her natural hair being perceived as unprofessional, and

Alicia's experiences socializing with White peers. Such concerns were not shared by other

participants who were not Black women. These gendered and racial experiences demonstrate

how oppression may be experienced differently within the same ethnic group, where Black

women experience a multiplicative effect on discrimination and oppression (Lewis et al., 2013).

Black women's experiences with "multiple jeopardy" (King, 1988), acknowledges their

competing experiences with racism, sexism, and classism.

Victoria, who was undocumented at the time of the study, describes various difficulties in

accessing resources because of her immigration status. Her struggles of paying for college and

the need for her to be close to her family had limitations on the opportunities that she was able to

access. As a high school student, Victoria only had one option for college because it was the only

170

school who would offer her in-state tuition. She had two options for DPT programs because of immigration status restrictions. Victoria's experiences aligned with existing research on the challenges that undocumented students in this country have to overcome (Abrego, 2006; Diaz-Strong et al., 2011; Enriquez et al., 2019). This reflects how broader federal and state policies on immigration have severe influences over the ability of undocumented students to gain access to economic stability. Without the ability to gain in-state tuition for her undergraduate institution, Victoria would not have attended college.

Victoria's experiences reflect how her status as an undocumented student had an additive effect on how she experienced systemic racism and racial/ethnic microaggression. As a Latinx woman, she experienced racial/ethnic microaggression on campus. As an undocumented undergraduate student, legal restrictions had an impact on her mobility and limiting access to opportunities she would have otherwise enjoyed as a documented immigrant to the country. Such marginalization were not experienced by other Latinx women participants in this study.

**Counter-Narrative**

Participants in this study provided a counter-narrative that describes their access to academic resources and entry into the profession. Counter-narratives tell the stories of those who are often overlooked in history or in policy (Solórzano & Yosso, 2002). It seeks to challenge dominant discourses, particularly on race, and share marginalized experiences (Solórzano & Yosso, 2002). As discussed in chapter two, there is a gap in knowledge of the DPT admissions process from the applicant's perspective, allowing faculty members to make assumptions about applicants and objectify Black and Latinx applicants. Black and Latinx participant experiences provided a counter-narrative to the admissions and recruitment process. The findings of this study suggests that racism and racial microaggression on college campuses contributed to the ability of Black and Latinx students to access appropriate resources that helped them succeed

academically. Where colleges assume that it is the responsibility of students to seek out resources on campus, the narratives of participants in this study suggest that the campus climate creates a challenge in accessing these resources.

Majoritarian narrative suggests that affirmative action in higher education admissions requires the lowering of academic standards (Klonoski et al., 2017; Sulé et al., 2017). However, the use of academic standards in admissions evaluation is created by White administrators, using a definition of success determined by Whiteness (Dancy et al., 2018; Garces, 2020). The experiences of participants in this study create a counter-narrative to this definition. It suggests that academic success defined in higher education admissions disadvantages Black and Latinx students because of challenges in accessing academic resources. Creating standards that are based on White experiences with academic success does not consider the role of structural racism and how it creates challenges to access for Black and Latinx students.

## Implications for Practice

Participants in this study described finding out about the profession through their own research or personal experiences. They relied on their ability to reach out to DPT programs, faculty, and other physical therapists for support to achieve success through the admissions process. In addition, participants' lack of access to resources at undergraduate institutions and other challenges such as cost of application and standardized testing may account for the gap in Black and Latinx applicants to DPT programs. This suggests that availability of resources at the undergraduate level contribute to an increase in the number of Black and Latinx applicants to DPT programs. The systemic nature of access for the participants in this study suggests the need to address the issue from a systemic perspective. DPT programs are most successful at increasing matriculation rates of Black and Latinx students when they are able to work with institutional administration to create changes in attitudes towards equity.

I propose an equity-minded framework that provides support to Black and Latinx students interested in physical therapy from an institutional perspective. Similar programs currently exist, but do not provide large scale access (Toretsky et al., 2018), and do not consider the role of higher education in perpetuating inequities (Patton, 2016). The framework I am proposing focuses on race conscious practices within recruitment and engagement of Black and Latinx students in the DPT admissions process.

### Equity-minded Recruitment Model for DPT Programs

The findings of this study suggest that existing frameworks that provide pipeline access to Black and Latinx students (Toretsky et al., 2018) in the health professions do not address the issue of racism and racial microaggressions that are perpetuated by institutions. Higher education institutions perceive student success in a deficit lens by positioning success as a student's responsibility (Pendakur, 2020). This exacerbates and intensifies existing racial inequities in higher education institutions because it produces interventions that attempt to fix the student without considering the institution's role in perpetuating inequities (Pendakur, 2020). Equity-mindedness centers the responsibility of education on the institution and forces institutions to address how they are creating equitable opportunities for students (Pendakur, 2020). Considering racial equity in the engagement and recruitment of Black and Latinx students addresses the lack of access to academic resources, humanizing their racialized undergraduate experiences (McNair et al., 2020).

Figure 1 shows the equity-minded recruitment model to increase Black and Latinx student enrollment in DPT programs. The model proposed here is an adaptation of both McNair et al.'s (2020) and Toretsky et al.'s (2018) models. McNair et al's (2020) model of a Truth, Racial Healing and Transformation (TRHT) framework requires institutions to participate in a process of truth-telling of racial injustice, racial healing and transformation. Toretsky et al's

(2018) framework for URM recruitment, retention and academic success in the health professions provides specific student and faculty recruitment and provision of academic resources to increase the recruitment and retention of Black and Latinx students. In this study, I combine both models to implement recruitment and success strategies situated within a racial-equity perspective.

This framework includes two phases. In the first phase, DPT programs work to develop critical awareness, reflect critically on practice, and seek to transform their systems and processes. These aspects of phase 1 interact with each other to create a racially equitable recruitment framework. In phase two, DPT programs work towards specific recruitment and admissions practices that are a result of the activities completed in phase 1. Both phases in this model culminate in DPT programs achieving goals of increasing Black and Latinx student enrolment in DPT programs.

**Figure 1**

Framework for equity-minded Black and Latinx applicant success in DPT programs



**Phase One**

174
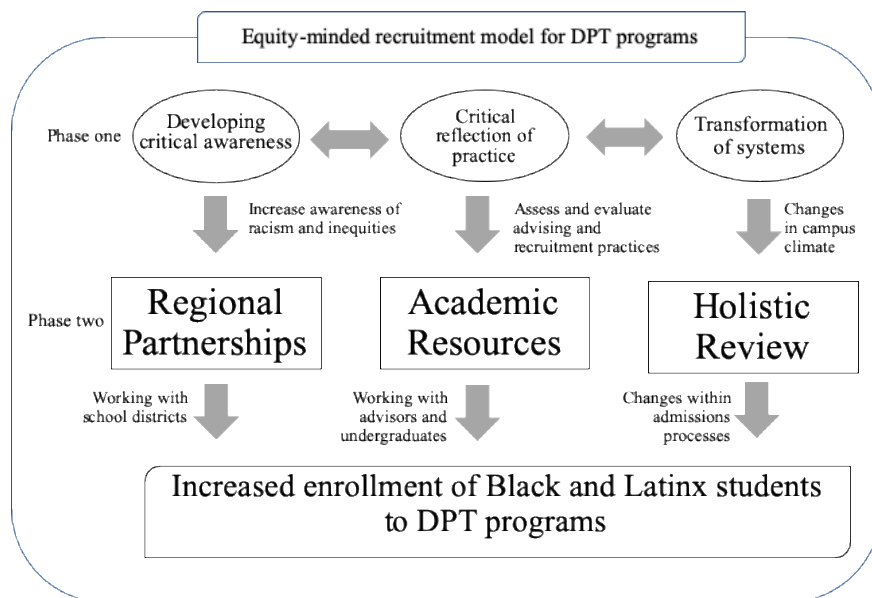
Phase one of this framework requires DPT programs to adopt three aspects that take the lead for DPT programs to evaluate and transform existing practices that addresses participant experiences of lack of access to academic resources and structural discrimination. Within this phase, DPT programs are required to develop an awareness of their own assumptions and role in perpetuating inequities. They are then asked to assess and evaluate their own advising and recruitment practices that then lead to a transformation of existing processes and systems.

*Developing Critical Awareness*

Equity-minded institutions are willing to assess their own racialized assumptions, address their lack of knowledge in the history of race and racism and engage in learning about the history of oppression and racial inequities (Bensimon et al., 2016; McNair et al., 2020). They are willing to take responsibility for the oppression of historically underserved student groups (Bensimon, 2016; McNair et al., 2020). Institutions who are critically aware of their contributions to systemic discrimination are also committed to being responsive to the systemic nature of inequities (Malcom-Piqueux, 2017). DPT programs should seek to understand that the systemic nature of inequities within the DPT admissions process begins beyond the applicant's undergraduate years and into their high school experiences. Programs who are committed to increasing enrollment of Black and Latinx students should consider how existing inequities within the education system contribute to a lack of opportunities to succeed academically. Critically aware DPT programs are able to understand how:

- The institution may have done harm to its surrounding community through existing policies that contribute to marginalization and oppression of Black and Latinx communities.
- The DPT program has contributed to marginalization and oppression of Black and Latinx communities surrounding the college community.

- The field of physical therapy may have contributed to existing health disparities.

*Critical Reflection of Practice*

Equity-minded institutions are able to critically access racialization in their own practices (Beers, 2020). In practice, DPT programs that have achieved critical reflection are mindful of how their own practices can disadvantage minoritized students. They are able to humanize students by referring to their respective racial and ethnic identities instead of using generic terms like such as under-represented minorities or non-White students (Beers, 2020; Bensimon, 2016; Malcom-Piqueux, 2017). Faculty and staff are be willing to talk about race in a clear and direct manner, and be mindful of how their practices can disadvantage minoritized students (Beers, 2020; Bensimon, 2016). Critically reflective DPT programs rely on data to guide their understanding of education inequities, and examine their practices to determine how they contribute to such inequities (Malcom-Piqueux, 2017). DPT programs should take the following steps to achieve critical reflection of practice:

- Address Black, Latinx and other students of color by their racial or ethnic identity rather than use generic terms such as non-White or underrepresented students.

- Be prepared to discuss race in a clear and direct manner, instead of referring to these issues as being political, or avoid discussing them altogether.

- Provide administrators and faculty with resources and training on understanding educational inequities.

- Review and assess recruitment and admissions policies for language that can disadvantage racially minoritized students and perpetuate historical educational inequities.

*Transformation of Systems*

Programs who embrace equity-mindedness, and are able to critically access their own practices will seek transformation of their systems and individuals within it (Bensimon, 2016; McNair et al., 2020). In practice, DPT programs must reflect on their own practices and adopt anti-racist policies and language among their own faculty and staff, they should empower faculty to adapt and revise teaching and practice towards equity-mindedness, which accommodates differences in student learning (Bensimon, 2016). Teaching practice is decolonized by creating spaces for diverse ways of participation and engagement (Parson & Weise, 2020), and treating student experiences and background as unique (Bensimon, 2016).

Where curriculum redesign is permissible within accreditation standards, faculty should consider the decolonization of curriculum based on feedback of minoritized students and faculty (Parson & Weise, 2020). Faculty should avoid making assumptions about student engagement (Parson & Weise, 2020). When considering application reviews, DPT programs should consider student socio-cultural identities and how educational inequities may have had an impact on their academic success.

Such transformation leads to a change in program culture and attitudes towards diversity and inclusion, leading to the creation of a safer and more inclusive environment for Black and Latinx students (Quaye et al., 2014). As such, it will be evident to prospective and current students that the program and its members take responsibility (Malcom-Piqueux, 2017) in the continuous assessment of their own practices, and are able to transform them using equity-mindedness as a guide (Bensimon, 2016).

**Phase Two**

Phase two of this framework allows DPT programs to put into practice, the outcomes of their activities in phase one. Within this phase, DPT programs adopt specific recruitment and admissions strategies that reflect those of an equity-minded DPT program. These recruitment

strategies include acknowledging of the need to provide more access to advising resources for students interested in a career in physical therapy. It also allows DPT programs to revise existing admissions review practices to adopt a more holistic framework of evaluation.

### *Developing Critical Awareness: Regional Partnerships*

Regional Partnerships describe the engagement of K-12 school districts and undergraduate institutions in the identification of students who are interested in the field of physical therapy. This aligns with the ability of institutions and programs to develop critical awareness from phase 1. Regional partnerships reflect an awareness of systemic inequities (Malcom-Piqueux, 2017), and an acceptance of institutional responsibilities in perpetuating these inequities.

DPT programs should create and implement engagement activities with K-12 schools in Black and Latinx communities whose may have been historically harmed by the education system to humanize the experiences of communities and repair historical oppression and racial inequity. For example, Virginia Commonwealth University's Department of Physical Therapy works with the university's Division for Health Sciences Diversity to provide engagement programs for students in middle and high school. These programs provide early exposure to the field, and provides students with resources in college preparation (Division for Health Sciences Diversity, 2020).

The engagement of K-12 school districts provides DPT programs with access to students in high school who are considering the next steps in their life. Within this study, it is likely that participants experienced success because of early exposure to the field, which allowed them to anticipate the need for resources to academic success. Early exposure to the field may address challenges that unsuccessful applicants may experience in accessing resources and guidance towards success within the DPT admissions process. Exploratory activities may include hands-on

exposure to physical therapy as a field and involve Black and Latinx students as long-term mentors for prospective students.

### *Critical Reflection of Practice: Academic Resources*

Academic resources refer to DPT program engagement with undergraduates who are interested in the field of physical therapy. This aligns with the ability of DPT programs to develop critical awareness and critical reflection in phase 2. Being critically aware of how the program and larger institution has contributed to existing inequities, and critical reflection of practice, responds to participants' lack of access to advising resources. DPT programs provide access to academic resources in three ways: reflection of DPT faculty and admissions advisor practices, engagement with undergraduate academic advisors, and the provision of pipeline programs to further engage students.

Admissions advisors for DPT programs should be given tools to assess racialization in their own practice. Racialization in practice includes: racial neutrality, not understanding how enrollment and academic achievement is rooted within structural discrimination, and rejecting stereotypes and avoiding addressing race in a clear and direct manner (McNair et al., 2020). Advisors and faculty who consider themselves race-neutral show a lack of awareness of how institutional racism may have an impact on the student's ability to succeed academically. In addition, by claiming not to see race, advisors and faculty may find that they have more interactions with students who look like them. Advisors who claim not to see race also show a lack of awareness of their implicit biases and how it has an impact on how they interact with Black and Latinx students.

Engagement with academic advisors includes the provision of updated recruitment and admissions information, and working with advisors to identify potential applicants. Additionally, DPT programs should use such engagement to provide workshops for undergraduate advisors to

critically reflect on their own advising practices as they have with DPT faculty and admissions advisors. Advisors who are able to critically reflect and take responsibility for their race-neutral advising practice are empowered to decolonize their practices by humanizing racially minoritized students as individuals with unique backgrounds, understand and are able to consider the impact of structural discrimination when advising students.

DPT programs should advocate for the establishment of a pre-health advising office for students, if their institutions do not currently have one. A pre-health advising office provides support to undergraduate students who are interested in the health professions, including physical therapy. Having pre-health advisors to provide support for students reduces the amount of time taken for students to research programs on their own. They also fulfill the role of guiding and mentoring students through the admissions process and providing them with information on how to be more competitive.

DPT programs should also consider dedicating resources towards the establishment of academic enrichment programs for prospective applicants. As discussed in chapter 2, enrichment programs created in medicine and dentistry programs show positive outcomes for programs who provide these opportunities (Bediako et al., 1996; Jackson & McGlinn, 1994; Lichtenstein, 2013). Appendix J shows a compilation of such existing opportunities for students interested in physical therapy. Despite the existence of more than 200 physical therapy education programs in the US, only 11 schools offer such opportunities to prospective students.

Enrichment programs are a recognition of educational inequities. They provide opportunities for students who gain information on the DPT admissions process, and to develop study skills and strategies for students who were not provided such opportunities as undergraduates. Increasing access to such enrichment opportunities will lead to an increase in access to information, guidance and mentorship for success in the DPT application process.

*Transformation of Systems: Holistic Review Process*

Transformation of systems aligns with the ability of DPT programs to critically assess and transform their own practices, as prescribed in phase 1. It reflects DPT programs' understanding of differences between students and how such differences have structural causes and lead to differences in student learning and achievement. Such transformation leads to a change in campus culture and attitudes towards inclusion. DPT programs should address transformation with a revision of the admissions evaluation process, shifting from quantitative measures within the admissions process.

The findings of this study demonstrate how access to academic resources remains a challenge for prospective applicants to DPT programs. Such challenges ranged from the cost of test taking, to their ability to access resources that helps them prepare for success on these tests. Part of the transformation process for DPT programs is the need to realize that the concepts of fairness and meritocracy will continue to be myths until all students enjoy equitable access to education and academic resources. Relying on the use of GPA and GRE scores will continue to disadvantage Black and Latinx students if they do not enjoy equitable access to resources.

DPT programs should reduce their reliance on the use of GPA and GRE scores to make admissions decisions on applicants. Admissions committees should consider a shift towards a more holistic process of evaluation. As discussed earlier, a holistic review process is defined by the inclusion of factors such as the consideration of an applicant's personality, attitudes, communication skills, knowledge of the profession, and other aspects that a graduate program may find to be beneficial (Megginson, 2009).

When considering the use of a holistic review approach to evaluating applicants, admissions committees must also consider how the factors that are being considered as they may serve to further widen gaps between applicants, particularly if such evaluation criteria are

ambiguous (Rosinger et al., 2020) and based on traditional norms of excellence, whiteness and privilege. In a holistic review process that values excellence in extra-curricular activities through the perspectives of White and upper class cultural values, admissions committees may see merit in an applicant being able to commit a significant amount of time towards volunteering activities. Admissions committees should consider the completion of these activities within the context of an applicant's socio-economic background. For example, when evaluating an applicant's history of extra-curricular activities, admissions committees should simultaneously review the applicant's work history. Applicants who were required to take on part-time employment as undergraduates may have less time to commit towards extra-curricular activities compared to those who did not have part-time employment.

I propose a holistic review framework with the evaluation criteria that focuses on the applicant's attitudes towards the profession, communication skills, knowledge of the profession, life experiences when considering admission of an applicant. DPT admissions committees should make use of the following materials and information in their decision-making:

- Applicant socio-economic background as provided in application
- Applicant's race as it relates to their undergraduate experiences as provided in application
- Essay question on applicant experience with access to academic resources
- Essay question on applicant experience with healthcare disparities
- Essay question on applicant interest in physical therapy and how their personal characteristics and experiences contribute to the field
- Applicant's work experiences
- Applicant's shadowing and volunteer activities

The evaluation criteria for these factors should be clear and ambiguous, where a specific rubric is provided for reviewers. These factors should also be considered within the context of an applicant's socio-economic and racial background. Considering an applicant's experiences with diversity and racism is an example of race-conscious admissions policy that can address structural discrimination within higher education admissions.

**Increased Enrollment of Black and Latinx Students**

The steps taken by DPT programs in phases 1 and 2 culminate in the increased enrollment Black and Latinx students to DPT programs. DPT programs take responsibility for the program's role in perpetuating inequities and for their own racialized practices, and create specific recruitment practices that are equity-minded. This creates a culture within the program that respects student differences and is cognizant of existing power structures that have oppressed Black and Latinx students. As mentioned above, this leads to the creation of a more inclusive environment for Black and Latinx students (Quaye et al., 2014) and is evident to prospective and current students that the program and its members take responsibility (Malcom-Piqueux, 2017) in the continuous assessment of their own practices.

In addition, specific recruiting and admissions practices implemented by DPT programs, in response to the transformation process, allows programs to take tangible steps towards increased enrollment of Black and Latinx students. The creation of academic programs for students interested in the field of physical therapy allows early exposure to the field and provides access to academic resources needed for success. Working with undergraduate advisors allows the identification of more students interested in the field, and allows DPT programs to provide resources and adequate advising to students. Finally, the revision of admissions practices to include holistic review allows DPT admissions committees to consider the impact of systemic discrimination on Black and Latinx applicants' ability to be successful as undergraduates.

183

# Implications from COVID-19

The impact of COVID-19 was felt across all higher education institutions in the US. As an attempt to manage the spread of the virus, many colleges and universities made the decision to move instruction online for the rest of the 2020 academic year (Ellis, 2020). As there was significant impact and disruption to recruitment and admissions processes, it is appropriate to discuss implications resulting from the disruption caused by COVID-19 and how this may have an impact on recruitment and admissions in the future.

A significant impact of the COVID-19 pandemic on higher education admissions was the cancellation and reduction in availability of standardized testing for all graduate and professional programs. Services such as the GRE offered an at-home testing option for applicants, but were dropped because of validity and reliability concerns (Hu, 2020). At the same time, several graduate and professional programs announced waiving the GRE requirement for admissions (Hu, 2020). DPT programs may use this opportunity to consider moving away from the GRE requirement, and towards a greater reliance on the holistic review process. Such shifts allow admissions committees to consider how structural racism and inequities may have had an impact on the student's ability to perform well academically and on standardized testing.

The restrictions placed on travel and social interaction also had a significant impact on fulfilling application requirements. For example, visitor restrictions placed on hospitals and clinics meant that students experienced restricted access to shadowing and observation opportunities that were required for admission. In addition, changes in mode of instruction may have an impact on student grades and academic achievement. Research also shows that disruption to schooling caused by COVID-19 may have a more significant impact on Black and Latinx students, who are more likely to delay graduation, and experience larger negative effects on their GPA (Aucejo et al., 2020).

Despite the potential of negative impact on academic achievement and access to resources caused by COVID-19, DPT programs should consider the opportunities to increase access and equity for Black and Latinx students within the DPT admissions process. Such opportunities can be found in areas of admissions advising, recruitment and the admissions process.

**Advising and Recruitment**

COVID-19 provides some opportunities for students and programs in terms of advising and recruitment. Restrictions on social interaction meant that schools had to move away from traditional forms of recruitment such as open house and information sessions. Some programs shifted towards offering information sessions online to continue to provide information to applicants. The ability to access information sessions virtually allowed applicants the ability to visit with schools they were interested in attending without having to take time off or incur costs of travelling to different campuses.

**Costs of Application**

Given the restrictions placed on social interaction, some programs may find themselves having to conduct interviews virtually. While cost of travel did not arise as a significant concern for participants, having to spend money on travel may place a significant burden on already strained financial resources. Applicants might find it easier to attend virtual interviews since they do not incur costs of travel and accommodation. Applicants who might have familial or economic obligations may find the virtual interviewing option more convenient as they are not required to take significant time off work or to care for a family member.

Despite the opportunities provided by the COVID-19 pandemic that may increase racial equity and opportunity in the admissions process, other aspects should also be considered. DPT programs should consider how the internet can contribute to access disparities for students

(Gonzales et al., 2020; McCarthy, 2020) as some communities may experience a lack of internet access. When DPT programs conduct admission interviews, they should consider whether applicants have access to an internet connection that will allow for video conferencing capabilities (Joshi et al., 2020). In addition, some students may not have access to an environment that is conducive for a face-to-face interview (Joshi et al., 2020; Patel et al., 2020).

The lack of a reliable internet connection or conducive home environment for students are also why DPT programs should consider removing the standardized testing requirement. As discussed previously, complete lockdown or increased social distancing led to challenges in test taking and proctoring for many testing services, including the GRE. This has led to many schools removing the standardized testing requirement at both the undergraduate and graduate level. Removing standardized testing requirements also contributes to lowering the cost of application for applications, thus removing additional barriers to the admissions process.

## Further Research

The findings of this study focus on the admissions experiences of Black and Latinx students within the DPT admissions process. This study represents the aggregated experiences of applicants who had been admitted to a DPT program. Their experiences are not representative of all applicants, and does not consider the differences in Black and Latinx experiences of racism. In addition, this study does not consider disability status and nationality within the DPT admissions process. Further research should consider focus on a specific identity to provide more depth into the understanding of the experiences of successful applicants to DPT programs. The experiences of those who were unsuccessful should also be considered to provide a clearer picture of how existing academic and social structures have an impact on access into the profession.

The majority of participants in this study attended a PWI as undergraduates. One participant attended a HBCU. This seemed to have an impact on access to resources and student engagement. The participant who attended a HBCU seemed to enjoy a more positive undergraduate experience and was able to enjoy more access to resources. Further research should consider how differences in undergraduate institutions can have an impact on Black and Latinx experiences within the DPT admissions process.

The data collected from this study suggested that different aspects of a student's identity had an impact on access to resources. Further research should focus on intersected identities, how this may have an impact on the way students receive access to academic resources, and their experiences within the DPT admissions process. Also, further research should consider the DPT admissions experience from the admission committee's perspective. This would provide further understanding on the role of faculty as gatekeepers providing access into the field.

## Conclusions

This study came from a need to increase the enrollment of Black and Latinx students to the field of physical therapy. My position as an admissions coordinator in a DPT program gave me some idea on why this was the case. I understood that Black and Latinx students experience racism and racial microaggression, and structural factors prevent them from enjoying equitable access that allows them to be successful within the DPT admissions process.

The findings of this study reflect how the higher education admissions process cannot be divorced from the pursuit of racial justice. DPT programs who want to increase enrolment of Black and Latinx students in their cohorts have to recognize the existence of racial and structural discrimination, and how they are complicit in enforcing such discrimination. The recruitment and enrollment of Black and Latinx students is a holistic, communal effort that is most successful

when DPT programs can work with their institutions to reflect on their own practices and engage

in transformation of their practices that result in true inclusion for Black and Latinx students.

References

Abrego, L. J. (2006). "I can't go to college because I don't have papers": Incorporation patterns of Latino undocumented youth. *Latino Studies*, *4*, 212.

Aibana, O., Swails, J. L., Flores, R. J., & Love, L. (2019). Bridging the gap: Holistic review to increase diversity in graduate medical education. *Academic Medicine*, *94*(8), 1137–1141. https://doi.org/10.1097/ACM.0000000000002779

Alexander, Q. R., & Bodenhorn, N. (2015). My rock: Black women attending graduate school at a southern predominantly White university. *Journal of College Counseling*, *18*(3), 259–274. https://doi.org/10.1002/jocc.12019

Alsan, M., Garrick, O., & Graziani, G. (2018). Does diversity matter for health? *NBER Working Paper No. 24787*.

Ancrum-Smalls, P., Hagan, A., Kalbach, D., Smith-Wagner, S., & Shepard, K. F. (2000). Factors important in physical therapist applicants' choice of a physical therapist program. *Journal of Physical Therapy Education*, *14*(2), 9–14. https://doi.org/10.1097/00001416-200007000-00003

Andrews, A. W., Johansson, C., Chinworth, S. A., & Akroyd, D. (2006). Cognitive, collegiate, and demographic predictors of attrition in professional physical therapist education. *Journal of Physical Therapy Education*, *20*(1), 14–21.

Apugo, D. L. (2017). "We All We Got": Considering peer relationships as multi-purpose sustainability outlets among millennial Black women graduate students attending majority White urban universities. *Urban Review*, *49*(2), 347–367. https://doi.org/10.1007/s11256-017-0404-2

Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, *40*(5), 518–529.

Au, W. (2016). Meritocracy 2.0: High-stakes, standardized testing as a racial project of neoliberal multiculturalism. *Educational Policy*, *30*(1), 39–62. https://doi.org/10.1177/0895904815614916

Augustine, M. G. (2015). *An examination of attrition factors for underrepresented minority undergraduate students: phenomelogical perspectives of successful students and graduates*. Indiana University.

Awad, G. H., Norwood, C., Taylor, D. S., Martinez, M., McClain, S., Jones, B., Holman, A., & Chapman-Hilliard, C. (2015). Beauty and body image concerns among African American college women. *Journal of Black Psychology*, *41*(6), 540–564. https://doi.org/10.1177/0095798414550864

Bailit, H. L., & Formicola, A. J. (2010). Preface: About the dental pipeline program. *Journal of Dental Education*, *74*(10 SUPPL.), 5–6.

Bediako, M. R., McDermott, B. A., Bleich, M. E., & Colliver, J. A. (1996). Ventures in education: A pipeline to medical education for minority and economically disadvantaged students. *Academic Medicine*, *71*(2), 190–192.

Beers, M. (2020). Building an equity-minded campus culture. In T. B. McNair, E. M. Bensimon, & L. Malcom-Piqueux (Eds.), *From Equity Talk to Equity Walk: Expanding practitioner knowlege for racial justice in higher education (1ˢᵗ ed., pp. 19-51)*. John Wiley.

Bell, D. (1980). Brown v . Board of education and the interest-convergence dilemma. *Harward Law Review*, *93*(3), 518–533.

Bell, D. (1989). *And we are not saved: the elusive quest for racial justice*. Basic Books.

Bell, D. (1992). *Faces at the bottom of the well: the permanence of racism*. Basic Books.

Bensimon, E. M. (2020). The case for an anti-racist stance toward paying off higher education's racial debt. *Change: The Magazine of Higher Learning*, *52*(2), 7–11.

https://doi.org/10.1080/00091383.2020.1732752

Bensimon, E. M., Dowd, A. C., & Witham, K. (2016). Five principles for enacting equity by

design. *Diversity & Democracy*, *19*(1).

Berg, G. A., & Tollefson, K. (2014). Latina/o student perceptions of post-baccalaureate

education: identifying challenges to increased participation. *Journal of Latinos and

Education*, *13*(4), 296–308. https://doi.org/10.1080/15348431.2014.887470

Bersola, S. H., Stolzenberg, E. B., Fosnacht, K. J., & Love, J. (2014). Understanding admitted

Doctoral students' institutional choices: Student experiences versus faculty and staff

perceptions. *American Journal of Education*, *120*(4), 515–543.

https://doi.org/10.1086/676923

Bhattacharya, K. (2007). Consenting to the consent form: What are the fixed and fluid

understandings between the researcher and the researched? *Qualitative Inquiry*, *13*(8),

1095–1115.

Bhattacharya, K. (2009). the Other: De/Colonizing approaches to qualitative inquiry. In J. C.

Smart (Ed.), *Higher Education: Handbook of Theory and Research* (pp. 105–150).

https://doi.org/10.1007/978-1-4020-9628-0

Bhattacharya, K. (2015). The vulnerable academic: Personal narratives and strategic

de/colonizing of academic structures. *Qualitative Inquiry*, *22*(5), 309–321.

https://doi.org/10.1177/1077800415615619

Billings-Ladson, G. (2006). From the achievement gap to the education debt: Understanding

achievement in U.S. schools. *Educational Researcher*, *35*(7), 3–12.

Black, R., & Bimper, A. Y. (2017). Successful undergraduate African American men's

navigation and negotiation of academic and social counter-spaces as adaptation to racism at

historically White institutions. *Journal of College Student Retention: Research, Theory &*

*Practice*, *0*(0), 1–25. https://doi.org/10.1177/1521025117747209

Black, S. E., Cortes, K. E., & Lincove, J. A. (2015). Academic undermatching of high-achieving

minority students: evidence from race-neutral and holistic admissions policies. *The*

*American Economic Review*, *105*(5), 604–610.

Bleske-Rechek, A., & Browne, K. (2014). Trends in GRE scores and graduate enrollments by

gender and ethnicity. *Intelligence*, *46*, 25–34.

Booker, K. (2008). The role of instructors and peers in establishing classroom community.

*Journal of Instructional Psychology*, *35*(1), 12–16.

Booker, K. (2016). Connection and commitment: How sense of belonging and classroom

community influence degree persistence for African American undergraduate women.

*International Journal of Teaching and Learning in Higher Education*, *28*(2), 218–229.

Boske, C., & Elue, C. (2017). Are you qualified to be a member of this "elite group"? A school

leadership preparation program examines the extent "diverse" candidates are admitted to

graduate school. *Journal of Cases in Educational Leadership*, *20*(2), 145–162.

https://doi.org/10.1177/1555458916686645

Boske, C., Elue, C., Osanloo, A. F., & Newcomb, W. S. (2018). Promoting inclusive holistic

graduate admissions in educational leadership preparation programs. *Frontiers in*

*Education*, *3*(17), 1–13. https://doi.org/10.3389/feduc.2018.00017

Cabral, R. R., & Smith, T. B. (2011). Racial/ethnic matching of clients and therapists in mental

health services: A meta-analytic review of preferences, perceptions, and outcomes. *Journal*

*of Counseling Psychology*, *58*(4), 537–554. https://doi.org/10.1037/a0025266

Carales, V. D., & Nora, A. (2020). Finding place: Cognitive and psychosocial factors impacting

Latina/o students' sense of belonging. *Journal of Student Affairs Research and Practice*,

*00*(00), 1–16. https://doi.org/10.1080/19496591.2019.1662795

Carline, J., Patterson, D., & Davis, L. (2006). Enrichment programs for undergraduate college

    students intended to increase the representation of minorities in Medicine. *Academic*

    *Medicine*, *73*(3), 299–312.

Carline, J., Patterson, D., Davis, L., & Irby, D. (1998). Precollege enrichment programs intended

    to increase the representation of minorities in medicine. *Academic Medicine*, *73*(3), 288–

    298.

Case, K. F. (2013). Teaching strengths, attitudes, and behaviors of professors that contribute to

    the learning of African-American and Latino/a college students. *Journal on Excellence in*

    *College Teaching*, *24*(2), 129–154.

Chang, M. (2011). *Quality matters: Achieving benefits associated with racial diversity*. Kirwan

    Institute. http://kirwaninstitute.osu.edu/wp-content/uploads/2011/11/Mitchell-

    Chang_final_Nov.-1-2011_design_31.pdf

Chang, M., Sharkness, J., Hurtado, S., & Newman, C. B. (2014). What matters in college for

    retaining aspiring scientists and engineers from underrepresented racial groups. *Journal of*

    *Research in Science Teaching*, *51*(5), 555–580. https://doi.org/10.1002/tea.21146

Chaviano-Moran, R., Chuck, E., & Perez, H. (2019). Unintended demographic bias in

    GPA/DAT-based pre-admission screening: An argument for holistic admissions in dental

    schools. *Journal of Dental Education*, *83*(11), 1280–1288.

    https://doi.org/10.21815/jde.019.144

Chen, P. D., Ingram, T. N., & Davis, L. K. (2014). Bridging student engagement and

    satisfaction: A comparison between historically Black colleges and universities and

    predominantly White institutions. *Journal of Negro Education*, *83*(4), 565–579.

    https://doi.org/10.7709/jnegroeducation.83.4.0565

Cherry, L., & Blackinton, M. (2017). Student perceptions of factors influencing success in

hybrid and traditional DPT programs: A Q-Sort analysis. *Quarterly Review of Distance Education*, *18*(4), 71–81.

Coleman-Salgado, B. (2019). The relationship of preadmission academic variables to academic performance in a doctor of physical therapy program. *Journal of Allied Health*, *48*(1), E9–E14.

Coleman, M. N., Chapman, S., & Wang, D. C. (2013). An examination of color-blind racism and race-related stress among African American undergraduate students. *Journal of Black Psychology*, *39*(5), 486–504. https://doi.org/10.1177/0095798412469226

Collins, P. H. (2015). Intersectionality's definitional dilemmas. *Annual Review of Sociology*, *41*, 1–20. https://doi.org/10.1146/annurev-soc-073014-112142

Conrad, S. S., Addams, A. N., & Young, G. H. (2016). Holistic review in medical school admissions and selection: A strategic, mission-driven response to shifting societal needs. *Academic Medicine*, *91*(11), 1472–1474. https://doi.org/10.1097/ACM.0000000000001403

Crenshaw, Kimberle. (1991). Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color. *Stanford Law Review*, *43*(6), 1241. https://doi.org/10.2307/1229039

Crenshaw, Kimberlé. (1989). Demarginalizing the intersection of race and sex: A Black Feminist critique of antidiscrimination doctrine, Feminist theory and antiracist politics. *University of Chicago Legal Forum*.

Crenshaw, Kimberlé, Gotanda, N., Peller, G., & Thomas, K. (1995). *Critical race theory: The key writings that formed the movement*. The New Press.

Creswell, J. W. (2007). Qualitative inquiry & research design: Choosing among five approaches. In *Qualitative inquiry and research design* (2nd ed). Sage Publications.

Crisp, G., Taggart, A., & Nora, A. (2015). Undergraduate Latina/o students: A systematic review

of research identifying factors contributing to academic success outcomes. *Review of Educational Research*, *85*(2), 249–274. https://doi.org/10.3102/0034654314551064

Cuellar, M. G., & Gonzalez, A. M. (2019). Beyond the baccalaureate: Factors shaping Latina/o graduate degree aspirations. *Journal of Hispanic Higher Education*, *0*(0), 1–16. https://doi.org/10.1177/1538192719830082

Dancy, T. E., Edwards, K. T., & Earl Davis, J. (2018). Historically White universities and plantation politics: Anti-Blackness and higher education in the Black lives matter era. *Urban Education*, *53*(2), 176–195. https://doi.org/10.1177/0042085918754328

Daniels, H., Grineski, S. E., Collins, T. W., Morales, D. X., Morera, O., Echegoyen, L., & Dolan, E. (2016). Factors influencing student gains from undergraduate research experiences at a Hispanic-Serving Institution. *CBE Life Sciences Education*, *15*(3), 1–12.

Davenport, E. K., Howard, B., & Weston, S. H. (2018). An examination of the effect of the University of Michigan cases on the complexion of higher ducation. *Alabama Journal of Educational Leadership*, *5*, 29–38.

Davis, M., Dias-Bowie, Y., Greenberg, K., Klukken, G., Pollio, H. R., Thomas, S. P., & Thompson, C. L. (2004). "A fly in the buttermilk": Descriptions of university life by successful black undergraduate students at a predominately White southeastern university. *The Journal of Higher Education*, *75*(4), 420–445. https://doi.org/10.1353/jhe.2004.0018

Delgado, R., & Stefancic, J. (2017). *Critical race theory: An introduction*. New York University Press.

Denzin, N. K. (2016). Critical qualitative inquiry. *Qualitative Inquiry*, *23*(1), 8–16. https://doi.org/10.1177/1077800416681864

Derck, J., Zahn, K., Finks, J. F., Mand, S., & Sandhu, G. (2016). Doctors of tomorrow: An innovative curriculum connecting underrepresented minority high school students to

medical school. *Education for Health*, *29*, 259–265. https://doi.org/10.4103/1357-6283.204219

Diaz-Strong, D., Gómez, C., Luna-Duarte, M. E., & Meiners, E. R. (2011). Purged: Undocumented students, financial aid polices, and access to higher education. *Journal of Hispanic Higher Education*, *10*(2), 107–119. https://doi.org/10.1177/1538192711401917

Division for Health Sciences Diversity. (2020, March 23). *VCU pipeline programs.* Virginia Commonwealth University. https://dhsd.vcu.edu/programs/

Dixson, A. D., & DeCuir, J. T. (2004). "So when it comes out, they aren't that surprised that it is there": Using Critical Race Theory as a tool of analysis of race and racism in education. *Educational Researcher*, *June/July*, 26–31.

Domholdt, E., Kerr, L. O., & Mount, K. A. (2006). Professional (entry-level) doctoral degrees in physical therapy: Status as of spring 2003. *Journal of Physical Therapy Education*, *20*(2), 68–76. https://doi.org/10.1097/00001416-200607000-00009

Domingue, A. D. (2015). "Our leaders are just we ourself": Black women college student leaders' experiences with oppression and sources of nourishment on a predominantly White college campus. *Equity and Excellence in Education*, *48*(3), 454–472. https://doi.org/10.1080/10665684.2015.1056713

Drees, B., Nairn, R., Nivet, M., & Danek, J. (2015). *Holistic admissions in the health professions: A public health perspective*. Urban Universities for HEALTH. https://aspph.confex.com/aspph/2015/webprogram/Session1138.html

Dudziak, M. L. (1988). Desegregation as a Cold War imperative. *Stanford Law Review*, *41*(1), 61–120. https://doi.org/10.2307/1228836

Dumke, E. K., Vanderwielen, L., Harris, K. A., & Ford-Smith, C. D. (2016). Interprofessional education in an enrichment programme for prospective health sciences students. *Journal of*

*Interprofessional Care*, *30*(2), 245–247. https://doi.org/10.3109/13561820.2015.1089224

Edgoose, J. Y. C., Steinkamp, L., Vang, K., Hampton, A., & Dosch, N. (2019). A qualitative

study of undergraduate racial and ethnic minority experiences and perspectives on striving

to enter careers in the health professions. *Wisconsin Medical Journal*, *118*(2).

Ellis, L. (2020, July 20). Colleges hoped for an in-person fall. Now the dream is crumbling. The

Chronicle of Higher Education. https://www.chronicle.com/article/colleges-hoped-for-an-

in-person-fall-now-the-dream-is-

crumbling#:~:text=Now%20the%20Dream%20Is%20Crumbling.,-

By%20Lindsay%20Ellis&text=Christ%2C%20announced%20at%20a%20Chronicle,begin

%20its%20fall%20semester%20online.

English, D., & Umbach, P. D. (2016). Graduate school choice: An examination of individual and

institutional effects. *Review of Higher Education*, *39*(2), 173–211.

https://doi.org/10.1353/rhe.2016.0001

Enriquez, L. E., Hernandez, M. M., Millán, D., & Vera, D. V. (2019). Mediating illegality:

Federal, state, and institutional policies in the educational experiences of undocumented

college students. *Law and Social Inquiry*, *44*(3), 679–703.

https://doi.org/10.1017/lsi.2018.16

Fanon, F. (1952). *1967. Black skin, white masks*. Grove.

Felix, H., Laird, J., Ennulat, C., Donkers, K., Garrubba, C., Hawkins, S., & Hertweck, M. (2012).

Holistic admissions process: An initiative to support diversity in medical education. *The

Journal of Physician Assistant Education*, *23*(3), 21.

Fenton, J. J., Fiscella, K., Jerant, A. F., Sousa, F., Henderson, M., Fancher, T., & Franks, P.

(2016). Reducing medical school admissions disparities in an era of legal restrictions:

Adjusting for applicant socioeconomic disadvantage. *Journal of Health Care for the Poor*

*and Underserved*, *27*(1), 22–34. https://doi.org/10.1353/hpu.2016.0013

Flowers, L. A. (2004). Examining the effects of student involvement on African American
college student development. *Journal of College Student Development*, *45*(6), 633–654.
https://doi.org/10.1353/csd.2004.0067

Formicola, A. J., D'Abreu, K. C., & Tedesco, L. A. (2010). Underrepresented minority dental
student recruitment and enrollment programs: An overview from the dental pipeline
program. *Journal of Dental Education*, *74*(10 SUPPL.), 67–73.

Forsey, M. (2012). Interviewing individuals. In S. Delamont (Ed.), *Handbook of qualitative
research in education*. Edward Elgar Publishing.

Fox, H. L. (2018). Diverse pathways? The impact of a federal investment in health professions
programs on enrollment of underserved students. *Health Professions Education*, *4*(2), 107–
114. https://doi.org/10.1016/j.hpe.2017.12.006

Franklin, J. D., Smith, W. A., & Hung, M. (2014). Racial battle fatigue for Latina/o Students: A
quantitative perspective. *Journal of Hispanic Higher Education*, *13*(4), 303–322.
https://doi.org/10.1177/1538192714540530

Freeman, A. D. (1978). Legitimizing racial discrimination through antidiscrimination law: A
critical review of Supreme Court doctrine. *Minnesota Law Review*, *62*(1049).

Gabard, D., Baumeister-Parikh, M., Takahashi, R., Wells, A., & Canfield, J. (1997). Barriers to
nonwhite potential students of physical therapy. *Journal of Physical Therapy Education*,
*11*(2), 38–45.

Garces, L. M. (2020). The false notion of "race-neutrality": How legal battles in higher education
undermine racial equity. *Change: The Magazine of Higher Learning*, *52*(2), 51–55.
https://doi.org/10.1080/00091383.2020.1732778

Gasman, M., Hirschfeld, A., & Vultaggio, J. (2008). "Difficult yet rewarding": The experiences

of African American graduate students in education at an ivy league institution. *Journal of Diversity in Higher Education*, *1*(2), 126–138. https://doi.org/10.1037/1938-8926.1.2.126

Gildersleeve, R. E., Croom, N. N., & Vasquez, P. L. (2011). "Am I going crazy?!": A critical race analysis of doctoral education. *Equity and Excellence in Education*, *44*(1), 93–114. https://doi.org/10.1080/10665684.2011.539472

Gonzales, A. L., McCrory Calarco, J., & Lynch, T. (2020). Technology problems and student achievement gaps: A validation and extension of the technology maintenance construct. *Communication Research*, *47*(5), 750–770. https://doi.org/10.1177/0093650218796366

Gonzalez, K. (2015). *Graduate degree aspirations of Latino undergraduate engineering students at a research institution* [Master's thesis, California State University]. California State University Archive. http://csus-dspace.calstate.edu/bitstream/handle/10211.3/163382/2015GonzalezKarla.pdf?sequence=3

Graham, J. R., West, L. M., & Roemer, L. (2013). The experience of racism and anxiety symptoms in an African-American sample: Moderating effects of trait mindfulness. *Mindfulness*, *4*(4), 332–341. https://doi.org/10.1007/s12671-012-0133-2

Greene, R., & Karavatas, S. (2018). Increasing diversity in the physical therapy profession by addressing deficiencies in the performance of African Americans on the National Physical Therapy Examination. *Journal of Best Practices in Health Professions Diversity: Education, Research & Policy*, *11*(1), 51–59.

Grinstein-Weiss, M., Perantie, D. C., Taylor, S. H., Guo, S., & Raghavan, R. (2016). Racial disparities in education debt burden among low- and moderate-income households. *Children and Youth Services Review*, *65*, 166–174. https://doi.org/10.1016/j.childyouth.2016.04.010

Gurin, P., Dey, E. L., Hurtado, S., & Gurin, G. (2002). Diversity and higher education: Theory

and impact on educational outcomes. *Harvard Educational Review*, *72*(3), 330–366.

    https://doi.org/10.17763/haer.72.3.01151786u134n051

Hadinger, M. A. (2017). Underrepresented minorities in medical school Admissions: A

    qualitative study. *Teaching and Learning in Medicine*, *29*(1), 31–41.

    https://doi.org/10.1080/10401334.2016.1220861

Hall, R. (2017). Factors contributing to the persistence of African American and Hispanic

    undergraduate males enrolled at regional predominately White institution. *Administrative*

    *Issues Journalst*, *7*(1). https://doi.org/10.5929/2017.7.1.4

Hanson, J. M., Paulsen, M. B., & Pascarella, E. T. (2016). Understanding graduate school

    aspirations: the effect of good teaching practices. *Higher Education*, *71*(5), 735–752.

    https://doi.org/10.1007/s10734-015-9934-2

Harper, S. R. (2009). Niggers no more: A critical race counternarrative on Black male student

    achievement at predominantly White colleges and universities. *International Journal of*

    *Qualitative Studies in Education*, *22*(6), 697–712.

    https://doi.org/10.1080/09518390903333889

Harper, S. R. (2010). An anti-deficit achievement framework for research on students of color in

    STEM. *New Directions for Institutional Research*, *148*. https://doi.org/10.1002/ir.362

Harper, S. R. (2012). Race without racism: How higher education researchers minimize racist

    institutional norms. *Review of Higher Education*, *36*(1 SUPPL.), 9–29.

    https://doi.org/10.1353/rhe.2012.0047

Harper, S. R. (2015). Resistant responses to racist colleges and universities. *Harvard*

    *Educational Review*, *85*(4), 646–675.

Harris, C. I. (1993). Whiteness as Property. *Harvard Law Review*, *106*(8), 1707–1791.

Harris, J. C., & Patton, L. D. (2019). Un/Doing intersectionality through higher education

research. *Journal of Higher Education*, *90*(3), 347–372.

https://doi.org/10.1080/00221546.2018.1536936

Harrison, L. E. (2019). Using holistic review to form a diverse interview pool for selection to

medical school. *Baylor University Medical Center Proceedings*, *32*(2), 218–221.

https://doi.org/10.1080/08998280.2019.1576575

Harwood, S., Huntt, M. B., Mendenhall, R., & Lewis, J. A. (2012). Racial microaggressions in

the residence halls: Experiences of students of color at a predominantly White university.

*Journal of Diversity in Higher Education*, *5*(3), 159–173. https://doi.org/10.1037/a0028956

Harwood, S., 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

Haslerig, S., Bernhard, L. M., Fuentes, M. V., Panter, A. T., Daye, C. E., & Allen, W. R. (2013).

A compelling interest: Activating the benefits of classroom-level diversity. *Journal of*

*Diversity in Higher Education*, *6*(3), 158–173. https://doi.org/10.1037/a0034065

Hausmann, L. R. M., Schofield, J. W., & Woods, R. L. (2007). Sense of belonging as a predictor

of intentions to persist among African American and white first-year college students.

*Research in Higher Education*, *48*(7), 803–839. https://doi.org/10.1007/s11162-007-9052-9

Hesser, A., Cregler, L. L., & Lewis, L. (1998). Predicting the admission into medical school of

African American college students who have participated in summer academic enrichment

programs. *Academic Medicine*, *73*(2), 187–191.

Holloway-Friesen, H. (2019). The role of mentoring on Hispanic graduate students' sense of

belonging and academic self-efficacy. *Journal of Hispanic Higher Education*, *0*(0), 1–13.

https://doi.org/10.1177/1538192718823716

Hotchkins, B. K. (2017). Black student leaders practicing resistance in the midst of chaos:

    Applying transgenerational activist knowledge to navigate a predominantly white

    institution. *Journal of Negro Education*, *86*(3), 269–282.

    https://doi.org/10.7709/jnegroeducation.86.3.0269

Houle, J. N., & Addo, F. R. (2019). Racial disparities in student debt and the reproduction of the

    fragile Black middle class. *Sociology of Race and Ethnicity*, *5*(4), 562–577.

    https://doi.org/10.1177/2332649218790989

Huber, L. P. (2008). Building Critical Race Methodologies in Educational Research: A Research

    Note on Critical Race Testimonio. *FIU Law Review*, *4*(1), 159–173.

Huitt, T. W., Killins, A., & Brooks, W. S. (2015). Team-based learning in the gross anatomy

    laboratory improves academic performance and students' attitudes toward teamwork.

    *Anatomical Sciences Education*, *8*(2), 95–103. https://doi.org/10.1002/ase.1460

Hurtado, S., Cabrera, N. L., Lin, M. H., Arellano, L., & Espinosa, L. L. (2008). Diversifying

    science: Underrepresented student experiences in structured research programs. *Research in*

    *Higher Education*, *50*(2), 189–214. https://doi.org/10.1007/s11162-008-9114-7

Hurtado, S., Kevin Eagan, M., Tran, M., Newman, C. B., Chang, M., & Velasco, P. (2011). "We

    do science here": Underrepresented students' interactions with faculty in different college

    contexts. *Journal of Social Issues*, *67*(3), 553–579.

Husserl, E. (1970). *The crisis of European sciences and transcendental phenomenology: An*

    *introduction to phenomenological philosophy*. Northwestern University Press.

Ingram, L., & Wallace, B. (2019). "It creates fear and divides us": Minority college students'

    experiences of stress from racism, coping responses, and recommendations for colleges.

    *Journal of Health Disparities Research & Practice*, *12*(1), 80–112.

Jackson, B., & Reynolds, J. (2013). The price of opportunity: Race, student loan debt, and

college achievement. *Sociological Inquiry*, *83*(3), 335–368.

https://doi.org/10.1111/soin.12012

Jackson, E., & McGlinn, S. (1994). Twenty-year follow-up of an enrichment program for

students preparing for health professional schools. *Academic Medicine*, *69*(11), 925–927.

Johanson, M. A. (2007). Factors influencing students' selection of physical therapist programs:

Differences between men and women and racial/ethnic groups. *Journal of Physical Therapy*

*Education*, *21*(1), 22–32. https://doi.org/10.1097/00001416-200701000-00004

Johnson, D. (2012). Campus racial climate perceptions and overall sense of belonging among

racially diverse women in STEM majors. *Journal of College Student Development*, *53*(2),

336–346. https://doi.org/10.1353/csd.2012.0028

Johnson, L. (2007). Rethinking successful school leadership in challenging U. S. schools:

Culturally responsive practices in school-community relationships. *ISEA*, *35*(3), 49–57.

Jones, S., & Stewart, D.-L. (2016). Evolution of Student Development Theory. *New Directions*

*for Student Services*, *154*, 17–28. https://doi.org/10.1002/ss

Jones, S., Torres, V., & Arminio, J. L. (2013). Perspectives on sampling. In Jones S., Torres V.,

& Arminio, J.L. (Eds.), *Negotiating the Complexitities of Qualitative Reserach in higher*

*education* (pp. 106-127). Routledge.

Jones, V. A. (2017). Marginality and mattering: Black student leaders' perceptions of public and

private racial regard. *The Western Journal of Black Studies*, *41*(3–4), 67.

Jones, V. A., & Reddick, R. J. (2017). The heterogeneity of resistance: How Black students

utilize engagement & activism to challenge PWI inequalities. *Journal of Negro Education*,

*86*(3), 204–219. https://doi.org/10.7709/jnegroeducation.86.3.0204

Joshi, A., Bloom, D. A., Spencer, A., Gaetke-Udager, K., & Cohan, R. H. (2020). Video

interviewing: A review and recommendations for implementation in the era of COVID-19

and beyond. *Academic Radiology*, *27*(9), 1316–1322.

https://doi.org/10.1016/j.acra.2020.05.020

Kim, D., & Otts, C. (2010). The effect of loans on time to doctorate degree: Differences by

race/ethnicity, field of study, and institutional characteristics. *The Journal of Higher*

*Education*, *81*(1), 1–32.

Kim, J., Chatterjee, S., Young, J., & Moon, U. (2017). The cost of access: Racial disparities in

student loan burdens of young adults. *College Student Journal*, *51*(1), 99–114.

Klonoski, E., Barker, G., & Edghill-Walden, V. (2017). General education: The front lines of

equity and inclusion at a midsize public university. *Journal of General Education*, *66*(1),

60–76. https://doi.org/10.5325/jgeneeduc.66.1-2.0060

Knoester, M., & Au, W. (2017). Standardized testing and school segregation: Like tinder for

fire? *Race Ethnicity and Education*, *20*(1), 1–14.

https://doi.org/10.1080/13613324.2015.1121474

Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the effects

of student engagement on first-year college grades and persistence. *Journal of Higher*

*Education*, *79*(5), 540–563. https://doi.org/10.1353/jhe.0.0019

Kume, J., Reddin, V., & Horbacewicz, J. (2019). Predictors of physical therapy academic and

NPTE licensure performance. *Health Professions Education*, *5*(3), 185–193.

https://doi.org/10.1016/j.hpe.2018.06.004

Ladson-Billings, G. J. (2007). Landing on the wrong note: The price we paid for Brown.

*Educational Researcher*, *33*(7), 3–13. https://doi.org/10.3102/0013189x033007003

Ladson-Billings, G. J. (2017). "Makes me wanna holler": Refuting the "culture of poverty"

discourse in urban schooling. *Annals of the American Academy of Political and Social*

*Science*, *673*(1), 80–90. https://doi.org/10.1177/0002716217718793

Ladson-Billings, G. J. (2018). The social funding of race: The role of schooling. *Peabody Journal of Education*, *93*(1), 90–105. https://doi.org/10.1080/0161956X.2017.1403182

Ladson-Billings, G. J., & Tate, W. F. (1995). Toward a Critical Race Theory of education. *Teachers College Record*, *97*(1), 47–68.

Laird, T. F. N., Bridges, B. K., Morelon-Quainoo, C. L., Williams, J. M., & Holmes, M. S. (2007). African American and Hispanic student engagement at minority serving and predominantly White institutions. *Journal of College Student Development*, *48*(1), 39–56. https://doi.org/10.1353/csd.2007.0005

Lewis, J. A., Mendenhall, R., Harwood, S. A., & Browne Huntt, M. (2013). Coping with gendered racial microaggressions among Black women college students. *Journal of African American Studies*, *17*(1), 51–73. https://doi.org/10.1007/s12111-012-9219-0

Lewis, J. A., Mendenhall, R., Harwood, S. A., & Browne Huntt, M. (2016). "Ain't I a woman?": Perceived gendered racial microaggressions experienced by Black women. *Counseling Psychologist*, *44*(5), 758–780. https://doi.org/10.1177/0011000016641193

Lewis, J. A., Mendenhall, R., Ojiemwen, A., Thomas, M., Riopelle, C., Harwood, S., & Browne Huntt, M. (2019). Racial microaggressions and sense of belonging at a historically White university. *American Behavioral Scientist*, *0*(0), 1–23. https://doi.org/10.1177/0002764219859613

Lichtenstein, R. (2013). On Linkages: 25 years of promoting diversity in public health leadership: The University of Michigan's summer enrichment program in health management and policy. *Public Health Reports*, *128*(5).

Lilly, F. R. W., Owens, J., Bailey, T. C., Ramirez, A., Brown, W., Clawson, C., & Vidal, C. (2018). Influence of racial microaggressions and social rank on risk for depression among minority graduate and professional students. *College Student Journal*, *52*(1), 86–104.

Linley, J. L. (2018). Racism here, racism there, racism everywhere: The racial realities of

    minoritized peer socialization agents at a historically White institution. *Journal of College*

    *Student Development*, *59*(1), 21–36. https://doi.org/10.1353/csd.2018.0002

Linneberg, M. S., & Korsgaard, S. (2019). Coding qualitative data: A synthesis guiding the

    novice. *Qualitative Research Journal*, *19*(3), 259–270. https://doi.org/10.1108/QRJ-12-

    2018-0012

Lipsitz, G. (2019). The sounds of silence: How race neutrality serves White supremacy. In

    Kimberlé Crenshaw, L. Harris, D. Martinez HoSang, & G. Lipsitz (Eds.), *Seeing race*

    *again: Countering colorblindness across the disciplines* (pp. 23-51). University of

    California Press.

Macauley, K., & Plummer, L. (2017). Prevalence and predictors of anxiety in doctor of physical

    therapy students. *Journal of Allied Health*, *46*(2), e39–e41.

Malcom-Piqueux, L. (2017). Taking Equity-Minded Action to Close Equity Gaps. *Peer Review*,

    *19*(2).

Martin, K. D., Roter, D. L., Beach, M. C., Carson, K. A., & Cooper, L. A. (2013). Physician

    communication behaviors and trust among Black and White patients with hypertension.

    *Medical Care*, *51*(2), 151–157. https://doi.org/10.1097/MLR.0b013e31827632a2

McCallum, C. M. (2015). "Mom made me do it": The role of family in African Americans'

    decisions to enroll in doctoral education. *Journal of Diversity in Higher Education*, *9*(1),

    50–63. https://doi.org/10.1037/a0039158

McCarthy, C. (2020). COVID-19 crisis highlights disparities among students. *Student Affairs*

    *Today*, *23*(4), 12–12. https://doi.org/10.1002/say.30771

McKendall, S. B., Kasten, K., Hanks, S., & Chester, A. (2014). The health sciences and

    technology academy: An educational pipeline to address health care disparities in west

Virginia. *Academic Medicine*, *89*(1), 37–42.

https://doi.org/10.1097/ACM.0000000000000047

McNair, T. B., Ford, E. N., & Smith, J. G. (2020). Building the racial equity ecosystem for

sustainable change. *Change: The Magazine of Higher Learning*, *52*(2), 63–67.

https://doi.org/10.1080/00091383.2020.1732789

Megginson, L. (2009). Noncognitive constructs in graduate admissions: An integrative review of

available instruments. *Nurse Educator*, *34*(6), 254–261.

https://doi.org/10.1097/NNE.0b013e3181bc7465

Mertz, N., Strayhorn, T. G., & Eckman, E. (2012). Entering student affairs: A comparative study

of graduate school choice. *College Student Affairs Journal*, *30*(2), 1–14.

Miller, C. W., Zwickl, B. M., Posselt, J. R., Silvestrini, R. T., & Hodapp, T. (2019). Typical

physics Ph.D. admissions criteria limit access to underrepresented groups but fail to predict

doctoral completion. *Science Advances*, *5*(1), 1–8. https://doi.org/10.1126/sciadv.aat7550

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.

https://doi.org/10.1080/00221546.2003.11780854

Minikel-Lacocque, J. (2013). Racism, college, and the power of words: Racial microaggressions

reconsidered. *American Educational Research Journal*, *50*(3), 432–465.

https://doi.org/10.3102/0002831212468048

Mitchell, K., Ellison, J., & Gleeson, P. (2019). Current practices and perceptions of admission

criteria at physical therapist education programs in the United States. *Journal of Physical

Therapy Education*, *33*(1), 55–63. https://doi.org/10.1097/jte.0000000000000082

Moerchen, V., Williams-York, B., Ross, L. J., Wise, D., Dominguez, J., Kapasi, Z., & Brooks, S.

(2018). Purposeful recruitment strategies to increase diversity in physical therapist

education. *Journal of Physical Therapy Education*, *32*(3), 209–217.
https://doi.org/10.1097/jte.0000000000000032

Moffat, M. (1996). Three quarters of a century of healing the generations. *Physical Therapy*,
*76*(11), 1242–1252.

Moore, V., Beitman, L., Rajan, S., Dandrea, J., Nicolosi, J., Shepard, K., & Nixon-Cave, K.
(2003). Comparison of recruitment, selection, and retention factors: Students from under-
represented and predominately represented backgrounds seeking careers in physical
therapy. *Journal of Physical Therapy Education*, *17*(2), 56–66.

Morrow, J. A., & Ackermann, M. (2012). Intention to persist and retention of first-year students:
The importance of motivation and sense of belonging. *College Student Journal*, *46*(3), 483–
491.

Mosley, T. M. (2014). *The impact of help seeking attitudes, perceived racism, and racial identity
on intentions to seek counseling amongst African American undergraduate college students*.
Georgia State University.

Mullen, A. L., Goyette, K. A., & Soares, J. A. (2003). Who goes to graduate school? Social and
academic correlates of educational continuation after college. *Sociology of Education*,
*76*(2), 143–169. https://doi.org/10.2307/3090274

Museus, S. D. (2008). The model minority and the inferior minority myths: Understanding
stereotypes and their implications for student learning. *About Campus*, *13*(3), 2–8.
https://doi.org/10.1002/abc.252

Museus, S. D., & Park, J. J. (2015). The continuing significance of racism in the lives of Asian
American college students. *Journal of College Student Development*, *56*(6), 551–569.
https://doi.org/10.1353/csd.2015.0059

Nadal, K. L., Wong, Y., Griffin, K. E., Davidoff, K., & Sriken, J. (2014). The adverse impact of

racial microaggressions on college students' self-esteem. *Journal of College Student Development*, *55*(5), 461–474. https://doi.org/10.1353/csd.2014.0051

Nuciforo, M. (2015). Minority applicants to physical therapist education programs 2010-2012. *Physical Therapy*, *95*(1), 39–50.

Nuciforo, M., Litvinsky, Y., & Rheault, W. (2014). Variables predictive of admission to US physical therapist education programs. *Journal of Physical Therapy Education*, *28*(3), 112–119.

Ortlipp, M. (2008). Keeping and using reflective journals in the qualitative research process. *The Qualitative Report*, *13*(4), 695–705.

Owens, S. C., Rainey, Y., Tucker, P., & Edmunds, B. (2018). Effectiveness of a retention program to improve performance during the first semester of a doctor of physical therapy program. *Journal of Health Care for the Poor and Underserved*, *29*(1), 430–447. https://doi.org/10.1353/hpu.2018.0029

Parrish, A. R., Daniels, D. E., Hester, R. K., & Colenda, C. C. (2008). Addressing medical school diversity through an undergraduate partnership at Texas A&M Health Science Center: A blueprint for success. *Academic Medicine*, *83*(5), 512–515. https://doi.org/10.1097/ACM.0b013e31816be5cf

Parson L., Weise J. (2020) Postcolonial approach to curriculum design. In L. Parson & C. Ozaki (Eds.), *Teaching and Learning for Social Justice and Equity in Higher Education* (pp. 93-116). Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-44939-1_6

Patel, A., Knox, R. J., Logan, A., & Summerville, K. (2017). Area health education center (AHEC) programs for rural and underrepresented minority students in the Alabama Black Belt. *Archives of Public Health*, *75*(1), 1–10. https://doi.org/10.1186/s13690-017-0200-1

Patel, T. Y., Bedi, H. S., Deitte, L. A., Lewis, P. J., Marx, M. V., & Jordan, S. G. (2020). Brave

New World: Challenges and Opportunities in the COVID-19 Virtual Interview Season. *Academic Radiology*, *27*(10), 1456–1460. https://doi.org/10.1016/j.acra.2020.07.001

Patton, L. D., McEwen, M., Rendon, L., Howard-Hamilton, M.F. (2007). Critical race perspectives on theory in student affairs. *New Directions for Student Services, (2007)*(120), 39-53.

Patton, L. D. (2016). Disrupting postsecondary prose: Toward a Critical Race Theory of higher education. *Urban Education*, *51*(3), 315–342. https://doi.org/10.1177/0042085915602542

Pearson, S. M., & Bieschke, K. J. (2001). Succeeding against the odds: An examination of familial influences on the career development of professional African American women. *Journal of Counseling Psychology*, *48*(3), 301–309. https://doi.org/10.1037/0022-0167.48.3.301

Pendakur, V. (2020). Designing for racial equity in student affairs: Embedding equity frames into your student success programs. *Change: The Magazine of Higher Learning*, *52*(2), 84–88. https://doi.org/10.1080/00091383.2020.1732794

Perdew, P. R. (2001). Developmental education and Alfred Binet: The original purpose of standardized testing. In J. Higbee, D. Lundell, I. Duranczyk, & D. Banerjee-Stevens (Eds.), *2001: A developmental odyssey* (pp. 71–86). National Association for Developmental Education.

Perna, L. W. (2004). Understanding the decision to enroll in graduate school: Sex and racial/ethnic group differences. *The Journal of Higher Education*, *75*(5), 487–527.

Pike, G. R., Kuh, G. D., & Gonyea, R. M. (2007). Evaluating the rationale for affirmative action in college admissions: Direct and indirect relationships between campus diversity and gains in understanding diverse groups. *Journal of College Student Development*, *48*(2), 166–182. https://doi.org/10.1353/csd.2007.0018

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. *The Journal of Higher Education*, *86*(6), 807–833. https://doi.org/10.1353/jhe.2015.0030

Potvin, G., Chari, D., & Hodapp, T. (2017). Investigating approaches to diversity in a national survey of physics doctoral degree programs: The graduate admissions landscape. *Physical Review Physics Education Research*, *13*(2), 1–13. https://doi.org/10.1103/PhysRevPhysEducRes.13.020142

Price, S. S., & Grant-Mills, D. (2010). Effective admissions practices to achieve greater student diversity in dental schools. *Journal of Dental Education*, *74*(10 suppl), S87–S97.

Pyne, J., & Grodsky, E. (2020). Inequality and opportunity in a perfect storm of graduate student debt. *Sociology of Education*, *93*(1), 20–39. https://doi.org/10.1177/0038040719876245

Quaye, S. J., Griffin, A., & Museus, S. D. (2014). Engaging students of color. In S. J. Quaye & S. R. Harper (Eds.), *Student Engagement in Higher Education: Theoretical Perspectives and Practical Approaches for Diverse Populations* (pp. 15-35). Taylor & Francis.

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

Rashied-Henry, K., Fraser-White, M., Roberts, C. B., Wilson, T. E., Morgan, R., Brown, H.,

Shaw, R., Jean-Louis, G., Graham, Y. J., Brown, C., & Browne, R. (2012). Engaging minority high school students as health disparities interns: Findings and policy implications of a summer youth pipeline program. *Journal of the National Medical Association*, *104*(9–10), 412–419. https://doi.org/10.1016/S0027-9684(15)30194-2

Raymond, J. M., & Sheppard, K. (2017). Effects of peer mentoring on nursing students' perceived stress, sense of belonging, self-efficacy and loneliness. *Journal of Nursing Education and Practice*, *8*(1), 16. https://doi.org/10.5430/jnep.v8n1p16

Roman, G., & Buman, M. P. (2019). Preadmission predictors of graduation success from a physical therapy education program in the United States. *Journal of Educational Evaluation for Health Professions*, *16*, 1–7. https://doi.org/10.3352/jeehp.2019.16.5

Rosinger, K. O., Sarita Ford, K., & Choi, J. (2020). The Role of Selective College Admissions Criteria in Interrupting or Reproducing Racial and Economic Inequities. *Journal of Higher Education*, *00*(00), 1–25. https://doi.org/10.1080/00221546.2020.1795504

Ross, S. N. (2014). Diversity and intergroup contact in higher education: Exploring possibilities for democratization through social justice education. *Teaching in Higher Education*, *19*(8), 870–881. https://doi.org/10.1080/13562517.2014.934354

Ruiz, M. (2013). *Shifting Landscape: A Phenomenological study of Latinos social and academic integration on campus* (Publication No: 3596443) [Doctoral dissertation, Northeastern University]. ProQuest Dissertations and Thesis Global.

Sáenz, V. B., García-Louis, C., De Las Mercédez, C., & Rodriguez, S. L. (2018). Mujeres supporting: How female family members influence the educational success of Latino males in postsecondary education. *Journal of Hispanic Higher Education*, *19*(2), 169–194. https://doi.org/10.1177/1538192718787291

Scherr, R. E., Plisch, M., Gray, K. E., Potvin, G., & Hodapp, T. (2017). Fixed and growth

mindsets in physics graduate admissions. *Physical Review Physics Education Research*, *13*(2), 1–12. https://doi.org/10.1103/PhysRevPhysEducRes.13.020133

Schwebel, D. C., Walburn, N. C., Klyce, K., & Jerrolds, K. L. (2012). Efficacy of advising outreach on student retention, academic progress and achievement, and frequency of advising contacts: A longitudinal randomized trial. *NACADA Journal*, *32*(2), 36–43. https://doi.org/10.12930/0271-9517-32.2.36

Shiyko, M. P., & Pappas, E. (2009). Validation of pre-admission requirements in a Doctor of Physical Therapy program with a large representation of minority students. *Journal of Physical Therapy Education*, *23*(2), 29–36.

Smith, S. G., Nsiah-Kumi, P. A., Jones, P. R., & Pamies, R. J. (2009). Pipeline programs in the health professions, part 1: Preserving diversity and reducing health disparities. *Journal of the National Medical Association*, *101*(9), 836–851. https://doi.org/10.1016/S0027-9684(15)31030-0

Solórzano, D., Ceja, M., & Yosso, T. J. (2000). Critical race theory, racial microaggressions, and campus racial climate: The experiences of African American college students. *The Journal of Negro Education*, *69*(1), 60–73. https://doi.org/10.1080/095183998236926

Solórzano, D., & Yosso, T. J. (2002). Critical race methodology: Counter-storytelling as an analytical framework for education research. *Qualitative Inquiry*, *8*(1), 23–44. https://doi.org/10.1177/107780040200800103

Soto-Greene, M., Wright, L., Gona, O. D., & Feldman, L. A. (1999). Minority enrichment programs at the New Jersey Medical School: 26 Years in review. In *Academic Medicine* (Vol. 74, Issue 4, pp. 386–389).

Stoskopf, A. (2002). Echoes of a forgotten past: Eugenics, testing, and education reform. *Educational Forum*, *66*(2), 126–133. https://doi.org/10.1080/00131720208984814

Strayhorn, T. L. (2013). Measuring race and gender differences in undergraduate students'

    perceptions of campus climate and intentions to leave college: An analysis in black and

    white. *Journal of Student Affairs Research and Practice*, *50*(2), 115–132.

    https://doi.org/10.1515/jsarp-2013-0010

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. https://doi.org/10.1007/s12111-012-

    9226-1

Sulé, V. T., Winkle-Wagner, R., & Maramba, D. C. (2017). Who deserves a seat?: Colorblind

    public opinion of college admissions policy. *Equity and Excellence in Education*, *50*(2),

    196–208. https://doi.org/10.1080/10665684.2017.1301836

Sweeney, J. K., & Villarejo, M. (2013). Influence of an academic intervention program on

    minority student career choice. *Journal of College Student Development*, *54*(5), 534–540.

    https://doi.org/10.1353/csd.2013.0070

Szymanski, D. M., & Lewis, J. A. (2016). Gendered racism, coping, identity centrality, and

    African American college women's psychological distress. *Psychology of Women*

    *Quarterly*, *40*(2), 229–243. https://doi.org/10.1177/0361684315616113

Thomas, J. M. (2018). Diversity Regimes and Racial Inequality: A case study of Diversity

    University. *Social Currents*.

Thorn, E. (2014). *A qualitative examination of the support systems impacting the African*

    *American student persistence, retention and graduation at a predominantly White, research*

    *extensive, land-grant Midwestern university* (Publication No: 10157731) [Doctoral

    dissertation, University of Missouri-Columbia]. ProQuest Dissertations and Theses Global.

Tienda, M. (2013). Diversity ≠ Inclusion: Promoting integration in higher education.

*Educational Researcher*, *42*(9), 467–475. https://doi.org/10.3102/0013189X13516164

Toretsky, C., Mutha, S., & Coffman, J. (2018). *Breaking Barriers for Underrepresented Minorities in the Health Professions*. *July*, e1–e28.

Trolian, T. L., & Parker, E. T. (2017). Moderating influences of student-faculty interactions on students' graduate and professional school aspirations. *Journal of College Student Development*, *58*(8), 1261–1267. https://doi.org/10.1353/csd.2017.0098

Tuitt, F. (2012). Black like me: Graduate students' perceptions of their pedagogical experiences in classes taught by black faculty in a predominantly white institution. *Journal of Black Studies*, *43*(2), 186–206. https://doi.org/10.1177/0021934711413271

Twine, F. (2000). Racial ideologies and racial methodologies. In F. Twine & J. Warren (Eds.), *Racing research, researching race: methodological dilemmas in critical race studies* (pp. 1-34). New York University Press.

Utzman, R. (2006). *Use of quantitative admissions data to predict academic and licensure examination performance among physical therapist students* [Doctoral dissertation, Virginia Commonwealth University]. Virginia Commonwealth University Archive. https://digarchive.library.vcu.edu/bitstream/handle/10156/1817/utzmanrr_phd.pdf?sequence=1

Utzman, R., Riddle, D., & Jewell, D. (2007). Demographic and quantitative admissions data to predict academic difficulty among professional physical therapist students. *Physical Therapy*, *87*(9), 1164.

Van Manen, M. (2016). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing*. Routledge.

Vela, M. B., Kim, K. E., Tang, H., & Chin, M. H. (2010). Improving underrepresented minority medical student recruitment with health disparities curriculum. *Journal of General Internal*

*Medicine*, *25*(S2), 82–85. https://doi.org/10.1007/s11606-010-1270-8

Von Robertson, R., Bravo, A., & Chaney, C. (2016). Racism and the experiences of Latina/o

college students at a PWI (Predominantly White Institution). *Critical Sociology*, *42*(4–5),

715–735. https://doi.org/10.1177/0896920514532664

Waite, J. G., Farkas, G. J., Topp, K. S., Smoot, B., & Harmon, D. (2019). Assessing

determinants of musculoskeletal anatomy success in first-year physical therapy students.

*The FASEB Journal*, *33*(1_supplement), 442.1-442.1.

https://doi.org/10.1096/fasebj.2019.33.1_supplement.442.1

Walkington, L. (2017). How far have we really come? Black women faculty and graduate

students' experiences in higher education. *Humboldt Journal of Social Relations*, *39*, 51–65.

Wallace, S. (2019). *Supports and barriers that impact persistence of undergraduates in STEM

career pathways* [Unpublished master's thesis]. University of Colorado at Boulder.

Walley-Jean, J. C. (2009). Debunking the myth of the "angry Black woman": An exploration of

anger in young African American women. *Black Women, Gender & Families*, *3*(2), 68–86.

https://doi.org/10.1353/bwg.0.0011

Walpole, M., McDonough, P. M., Bauer, C. J., Gibson, C., Kanyi, K., & Toliver, R. (2005). This

test is unfair: Urban African American and Latino high school students' perceptions of

standardized college admission tests. *Urban Education*, *40*(3), 321–349.

https://doi.org/10.1177/0042085905274536

Walsh, L. A., Brogan, M. S., & Barba, W. C. (2000). Affirmative action in American higher

education and the goal of diversity in physical therapy programs. *Journal of Physical

Therapy Education*, *14*(1), 5–11.

Warner, T. V. (2019). Racial microaggressions and difficult dialogues in the classroom. In J. .

Mena & K. Quina (Eds.), *Integrating multicultueralism and intersectionality into the*

*psychology curriculum: strategies for instructors* (pp. 37–47). American Psychological Association. https://doi.org/10.4324/9781315712352-10

Webber, K. L., Krylow, R. B., & Zhang, Q. (2013). Does involvement really matter? Indicators of college student success and satisfaction. *Journal of College Student Development*, *54*(6), 591–611. https://doi.org/10.1353/csd.2013.0090

Weiss, G. (2017). Phenomenology and race (or racializing phenomenology). *The Routledge Companion to the Philosophy of Race*, *2017*, 233–244. https://doi.org/10.4324/9781315884424

Westbrook, T. (2015). *"Breaking the Cycle": A phenomenological inquiry into the perceptions of African American adult leaders at faith-based, predominantly White adult degree completion programs* (Publication No: 3720968) [Doctoral dissertation, Trinity Evangelical Divinity School]. ProQuest Dissertations and Thesis Global.

Wilcox, K., Weber, M. D., & Andrew, D. L. (2005). Factors influencing minority students' choice of physical therapist education programs. *Journal of Physical Therapy Education*, *19*(2), 8–14.

Wilson, M. A., Odem, M. A., Walters, T., DePass, A. L., & Bean, A. J. (2019). A model for holistic review in graduate admissions that decouples the gre from race, ethnicity, and gender. *CBE Life Sciences Education*, *18*(1), 1–12. https://doi.org/10.1187/cbe.18-06-0103

Wilson, M. B., Sedlacek, W. E., & Lowery, B. L. (2014). An approach to using noncognitive variables in dental school admissions. *Journal of Dental Education*, *78*(4), 567–574.

Wise, D., Dominguez, J., Kapasi, Z., Williams-York, B., Moerchen, V., Brooks, S., & Ross, L. J. (2017). Defining underrepresented minorities and promoting holistic review admission strategies in physical therapist education. *Journal of Physical Therapy Education*, *31*(4), 8–13.

Witzburg, R. A., & Sondheimer, H. M. (2013). Holistic review — shaping the medical profession one applicant at a time. *The New England Journal of Medicine*, *368*(17), 1565–1567. https://doi.org/10.1056/NEJMp1300411

Xu, Y. (2014). Advance to and persistence in graduate school: Identifying the influential factors and major-based differences. *Journal of College Student Retention: Research, Theory and Practice*, *16*(3), 391–417. https://doi.org/10.2190/CS.16.3.e

Yancy, G. (2008). *Black bodies. White gazes: The continuing significance of race*.

Yosso, T. J., & Ceja, M. (2009). Critical Race Theory, racial microaggressions, and campus racial climate for Latina/o undergraduates. *Harvard Educational Review*, *79*(4), 659–691.

Yosso, T. J., Parker, L., Solórzano, D. G., & Lynn, M. (2004). From Jim Crow to affirmative action and back again: A critical race discussion of racialized rationales and access to higher education. *Review of Research in Education*, *28*, 1–25. https://doi.org/10.3102/0091732X028001001

Zamudio, M., Russell, C., Rios, F., & Bridgeman, J. (2011). *Critical race theory matters: Education and ideology*. Routledge.

Zell, M. C. (2014). Converting capital: The experiences of Latinas/os in graduate health care programs. *Qualitative Report*, *19*(43), 1–26.

Zhang, L. (2013). Effects of college educational debt on graduate school attendance and early career and lifestyle choices. *Education Economics*, *21*(2), 154–175. https://doi.org/10.1080/09645292.2010.545204

# Appendix A

*Enrollment of Students in Graduate Programs, by Race and Ethnicity*

| Race/Ethnicity | % Change 2017 to 2018 |
|---|---|
| American Indian/Alaska Native | 1.2% |
| Asian/Pacific Islander | 6.1% |
| Black/African American | 1.1% |
| Hispanic/Latino | 7.3% |
| White | 1.2% |

*Note.* Adapted from Okahana, H., & Zhou, E. (2019). *Graduate Enrollment and Degrees: 2008 to 2018.* Council of Graduate Schools.

# Appendix B

*Enrollment of Students in Health Sciences Programs, Race and Ethnicity*

| Race/Ethnicity | % Change 2017 to 2018 |
|---|---|
| American Indian/Alaska Native | -0.9% |
| Asian/Pacific Islander | 3.0% |
| Black/African American | 4.5% |
| Hispanic/Latino | 6.9% |
| White | 1.9% |

*Note.* Adapted from Okahana, H., & Zhou, E. (2019). *Graduate Enrollment and Degrees: 2008 to 2018*. Council of Graduate Schools.

**Appendix C**

*Enrollment of Undergraduate Students at Degree-Granting Universities by Race and Ethnicity*

| Race/Ethnicity | % of total undergraduate enrollment |
|---|---|
| American Indian/Alaska Native | 19% |
| Asian | 58% |
| Black | 36% |
| Hispanic | 39% |
| Pacific Islander | 21% |
| White | 42% |

*Note.* Adapted from Snyder, T. D., de Brey, C. & Dillow, S. A. (2019). Digest of Education

Statistics 2017. National Center for Education Statistics.

**Appendix D**

**Invitation to Participants**

Dear student,

I would like to invite you to participate in a study I am conducting about the experiences of Black and Latinx students in the Doctor of Physical Therapy (DPT) admissions process. Your name was shared with me as a potential participant of this study.

The purpose of this study is to investigate the challenges and supports that Black and Latinx students experience while engaging in the DPT admissions process. I am looking for students who are willing to participate in a 30-45 minute interview to discuss their experiences during this process. Participation in this study is voluntary. Please find attached a document explaining the study and information about participating.

In order to participate, you must meet the following criteria:
- Identify as Black/African-American or Latino/a or Latinx
- Be currently enrolled in a DPT program as a 1ˢᵗ year student,
- Or have accepted an offer of admission to a DPT program for the coming academic year (Summer or Fall 2020).

Please respond to this email, or email me at mlee27@mymail.vcu.edu by [date here] if you are interested in participating. If you know other students who may be interested in participating in this study, please feel free to forward this email to them.

Thank you. Please let me know if you have any questions.

Regards,

Melissa Lee

**Appendix E**

**Invitation to Participants – Follow Up**

Dear [Name],

I am following up to my previous email inviting you to participate in a study I am conducting about the experiences of Black and Latinx students in the DPT admissions process. Your name was shared with me as a potential participant of this study.

The purpose of this study is to investigate the challenges and supports that Black and Latinx students experience while engaging in the DPT admissions process. I am looking for students who are willing to participate in a 30-45 minute interview to discuss their experiences during this process. Participation in this study is voluntary. Please find attached a document explaining the study and information about participating.

In order to participate, you must meet the following criteria:
- Identify as Black/African-American or Latino/a or Latinx
- Be currently enrolled in a DPT program as a 1ˢᵗ year student,
- Or have accepted an offer of admission to a DPT program for the coming academic year (Summer or Fall 2020).

Please respond to this email, or email me at mlee27@vcu.edu if you are interested in participating. I would appreciate it if you could respond by [date here]. If you know other students who may be interested in participating in this study, please feel free to forward this email to them.

Thank you. Please let me know if you have any questions.

Regards,

Melissa Lee

# Appendix F

## Demographic Survey

1. Please provide a pseudonym (false name) that will be used to refer to you and your story throughout the data collection and analysis process (i.e., Bobby instead of Henry).

2. What is your current enrollment status in the DPT program (incoming, 1ˢᵗ year)?

3. Race/Ethnicity:

4. Gender identity:

5. Is your DPT program located in a rural, suburban, or urban area? Is this a public or private school?

6. What was your undergraduate major?

7. Did you enroll into a DPT program immediately after obtaining your undergraduate degree? If not, how long after graduation did you decide to apply to a DPT program?

8. Where did you obtain your undergraduate degree? Did you transfer from a community college?

9. What is the highest education level of your mother?

10. What is the highest education level of your father?

11. Are you the first person in your family to enroll in a doctoral or professional program?

12. Are you the first person in your family to attend college?

13. Did you participate in an enrichment or pipeline program to help you prepare for your admission to the DPT program?

**Interview 1 Protocol**

<u>Welcome</u>

Thank you for agreeing to participate in this interview.  I am Melissa Lee and I am a doctoral

student at VCU. This interview is for my dissertation study and I am interested in learning the

experiences of students in the DPT admissions process. Specifically for this interview, I am

interested in your journey prior to applying to DPT programs. This includes your undergraduate

experiences and how you learned about the field of Physical Therapy. The information learned in

the interview will be used to help DPT programs understand minority student recruitment and

enrollment better.  This interview will take approximately 30-45 minutes.

<u>Process Guidelines</u>

Before we begin, I would like to go over some guidelines that will help our meeting go

smoothly. Please know that you can stop being interviewed at any point during this interview.  I

will be audio recording this session so that I can accurately capture all of your comments by

transcribing the conversation.  I am interested in **all of your viewpoints**-both positive and

negative. When responding to questions, please be as  specific as possible.

To maintain confidentiality, I will not include names in any reports so it is also crucial that you

not share any of the information discussed in this session. Your audio recording will be deleted

immediately following transcription and your name will be removed from any reports.

Do you have any questions before we begin?

1.  Tell me about your experiences as an undergraduate student at the institution you attended.
    1.  Probe: How did you decide to enroll at your undergraduate institution?
    2.  Probe: Did anyone else have an influence in this decision?
    3.  Probe: How was your relationships with faculty and advisors?
    4.  Probe: Describe your relationships with classmates and peer groups.


2.  What influenced you to become a physical therapist?

1. Probe: Was there a specific person who introduced you to the field?
2. Probe: (If not a specific person) Was there a specific event that you went to where you discovered that this career exists?

**Interview 2 Protocol**

<u>Welcome</u>

Thank you again for agreeing to participate in this interview. As I mentioned previously, this interview is for my dissertation study and I am interested in learning the experiences of students in the DPT admissions process. Specifically in this interview, I am interested in your experiences in applying to DPT programs. I am also interested in what helped you succeed in this process. The information learned in the interview will be used to help DPT programs understand minority student recruitment and enrollment better.  This interview will take approximately 30-45 minutes.

<u>Process Guidelines</u>

Before we begin, I would like to go over some guidelines that will help our meeting go smoothly. Please know that you can stop being interviewed at any point during this interview.  I will be audio recording this session so that I can accurately capture all of your comments by transcribing the conversation.  I am interested in **all of your viewpoints**-both positive and negative. When responding to questions, please be as  specific as possible.

To maintain confidentiality, I will not include names in any reports so it is also crucial that you not share any of the information discussed in this session. Your audio recording will be deleted immediately following transcription and your name will be removed from any reports.

Do you have any questions before we begin?

1) Describe your experience in the application process. How did you decide where to apply?
   a) Probe: Who helped you during the process?
   b) Probe: Where/who did you get access to the information required in the application?


2) What were your experiences with preparing for, and taking the GRE?
   a) Probe: How did you prepare for the GRE?
   b) Probe: What, if any,  challenges did you face?
   c) Probe: What about the GRE was or felt easy?
3) When and how did you learn about the requirements for getting into a DPT program?
   a) Probe: Were there any challenges completing these requirements? If so, what were they?

b) Probe: Who helped you when trying to complete these requirements?

4) Describe your communication with the schools you were interested in?
   a) Probe: What kind of questions did you have for the DPT programs you were interested in?
   b) Probe: What was your interaction with the faculty or advisors like?
   c) Probe: What kind of follow-up communication did you have with the DPT program after your initial interaction with them?
   d) Probe: What kind of follow-up communication did you have with the DPT program after submitting your application?
   e) Probe: Were you provided with additional information, such as financial aid and resources, during your communication with faculty or advisors?

5) Were there any programs that you participated in that helped you to apply to/prepare for either graduate school and/or DPT programs?
   a) Probe: What was helpful about the programs?
   b) Probe: What could have been added to make it better for you, looking back?

**Interview 3 Protocol**

<u>Welcome</u>

Thank you for agreeing to participate in this interview. This is the third and final interview for you in this study. This interview is for my dissertation study and I am interested in learning the experiences of students in the DPT admissions process. Specifically in this interview, I am interested in your reflections of the DPT admissions process and how you think your undergraduate experiences have had an influence on it. I am also interested in what helped you succeed in your journey. The information learned in the interview will be used to help DPT programs understand minority student recruitment and enrollment better.  This interview will take approximately 30-45 minutes.

<u>Process Guidelines</u>

Before we begin, I would like to go over some guidelines that will help our meeting go smoothly. Please know that you can stop being interviewed at any point during this interview.  I will be audio recording this session so that I can accurately capture all of your comments by transcribing the conversation.  I am interested in **all of your viewpoints**-both positive and negative. When responding to questions, please be as  specific as possible.

To maintain confidentiality, I will not include names in any reports so it is also crucial that you not share any of the information discussed in this session. Your audio recording will be deleted immediately following transcription and your name will be removed from any reports.

Do you have any questions before we begin?

1) In what ways did your race and/or ethnicity influence your experiences as an undergraduate and in preparing to apply to the DPT program?
   a) Probe: How did your race influence your relationships with faculty, peers and administrators?
   b) Probe: How did your race influence your social interactions with friends and student groups on campus?
   c) Probe: How do you think your race and/or ethnicity had an influence on the way you received help? Consider the relationships with your professors, administrators

and/or peers.

2) How does your prior experience as an undergraduate influence your decision to attend this specific program?
    a) Probe: How does your race and/or ethnicity influence your decision to attend this program?
    b) Probe: How did your previous experiences with campus diversity have an impact on your decision to attend this specific program?
    c) Probe: How did your previous experiences with faculty, advisors, and peers have an impact on your decision to attend this program?

3) (for incoming students) When thinking about your undergraduate experiences, and your experiences in the admissions process, what do you think this means for your DPT experiences?
    a) Probe: How do you think the experiences will be different?
    b) Probe: How do you think the experiences will be similar?
    c) Probe: What do you think this will mean for your future in the DPT program?

4) (for current students) In what ways do your undergraduate and experiences in the DPT admissions process influence your experience in the DPT program?
    a) Probe: How are your experiences different?
    b) Probe: How are they similar?
    c) Probe: What do you think this will mean for your future in the DPT program?

**Appendix H**

**Research Participant Information Sheet**

**STUDY TITLE:** Black and Latinx student experiences in the Doctor of Physical Therapy admissions process

**VCU INVESTIGATOR:** Tomika L. Ferguson, Assistant Professor, 804-828-1125

You are invited to participate in a research study about the experiences of Black and Latinx students in the Doctor of Physical Therapy admissions process. Your participation is voluntary.

In this study, you will be asked to participate in three interviews. Each interview will last approximately 30 minutes. Prior to the interviews, you will be given a survey that asks demographic information such as undergraduate school, your ethnicity, and family education. The interviews will focus on your experiences as an undergraduate and in preparing for the DPT admissions process, including any barriers and challenges you may have faced. In addition, you may also be asked to reflect on your experiences how you have succeeded in the DPT admissions process. The interview can be conducted by phone, or by video chat. Audio of the interview may be recorded for transcription purposes, and will be deleted after transcription is complete. During this time, a copy of the transcription will also be shared with you to confirm its accuracy.

If you have any questions, concerns, or complaints about this study now or in the future, please contact **Tomika L. Ferguson, tlferguson2@vcu.edu, 804-828-1125** and/or **Melissa J. Lee, mlee27@mymail.vcu.edu, 979-997-0101.**

**Appendix I**

**Summary of Interview**

Dear [Name],

Thank you for your participation in my study about the experiences of Black and Latinx students in the DPT admissions process.

I am providing a copy of our interview in this email for your review. I would appreciate it if you could let me know if this transcription is accurate, or if there is anything that the transcription may have missed.

Thank you.


Regards,

Melissa Lee

**Appendix J**

**Academic Enrichment Programs for Physical Therapy**

1) Columbia University, New York

2) Duke University, North Carolina

3) Howard University, Washington D.C.

4) Marquette University, Wisconsin

5) Medical University of South Carolina, South Carolina

6) Thomas Jefferson University, Pennsylvania

7) University of Alabama – Birmingham, Alabama

8) University of Florida, Florida

9) University of Nebraska, Nebraska

10) Virginia Commonwealth University, Virginia

11) Western University of the Health Sciences, California

Melissa J. Yeung

## EDUCATION

**Virginia Commonwealth University**                                    Richmond, Virginia
**Ph.D. in Educational Leadership, Policy and Justice**                 November 2020

**Texas A&M University**                                                College Station, Texas
**Master of Science in Higher Education Administration**                May 2013
**Certificate in College Teaching**

**National University of Singapore**                                    Singapore
**Bachelor of Arts in Political Science**                               December 2007

## WORK EXPERIENCE

**Pre-Health Advising Center**                                          *University of Houston*
*Pre-Health Advisor*                                                    *March 2020 – Current*
- Advise pre-health students on admissions requirements to various health professions programs including medicine, dentistry, physical therapy, occupational therapy, nursing
- Supplement university's academic advising services by providing students with mentorship and guidance on course registration and career planning
- Create policies and processes that support student engagement with the center
- Research and identify best practices on advising relationships to engage students in reaching their academic goals

**Department of Physical Therapy**                                      *Virginia Commonwealth University*
*Student Services Coordinator*                                          *June 2015 – February 2020*
- Provided coordination for DPT admissions process, including advising of prospective students, evaluation, file preparation and communication with admitted students
- Developed holistic review evaluation criteria for admissions
- Committee member for university's Summer Academic Enrichment Program, which focuses on a pipeline to the DPT program for underserved students
- Provided leadership and coordination for new student orientation for DPT program, including working with colleagues across campuses to provide services for new students
- Created statistical reports and data management for admissions and student success outcomes
- Coordinated the development, management and implementation of various enrolled student services, including advising on program requirements and completion, course registration and graduation, and clinical placements of students
- Provided leadership and coordination in ensuring student compliance of university health regulations
- Collaborated with external partners to review clinical affiliation process
- Participate in strategic planning of admissions goals and student success outcomes of department
- Coordinated department scholarships and awards to students

- Coordinated logistics and administrative preparation for annual White Coat ceremony for incoming students
- Managed budgets for department events and student travel to conferences

**Office of International Admissions and Programs**      *University of Houston-Clear Lake*
*International Admissions Counselor and Designated School*      *August 2014 – February 2015*
*Official (DSO)*

- Led and coordinated processing, file preparation, evaluation and data entry activities for undergraduate and graduate programs
- Led and coordinated coding and processing for all applications
- Advised international students on admissions process, application status, visa application process
- Make recommendations for automatic admission to specific programs for graduate applicants
- Reviewed international student transcripts for grades, conversion to US-based system and review accreditation of international institutions
- Maintained accurate admissions records for record keeping, created reports and analyze data of admissions activities to assist in decision making for meeting strategic goals
- Represented university at open houses for international students
- Liaison for university's international English language learners
- Advised applicants on change of status process for those on H, J, or F visas
- Oversaw provision of services to prospective students by front desk employees
- Make recommendations to improvement of admissions processing to Assistant Director of International Admissions

**Zachry Department of Civil Engineering**      *Texas A&M University*
*Program Assistant, Graduate Student Services*      *September 2013 – August 2014*

- Process and prepare application packets, transcripts and test scores for faculty review
- Advised potential students on admissions process for various Civil Engineering tracks
- Led and coordinated disbursement of student fellowship and scholarship activity
- Advised and monitor enrolled students on degree plans, graduation plans, and coursework
- Advised current students on course registration
- Worked with colleagues from campus-wide departments to ensure effective management of student records
- Supervised student workers in daily office operations
- Make recommendations to improvement of provision of services to both enrolled and prospective students

**International Student Services**      *Texas A&M University*
*Graduate Student Intern*      *May 2012 – May 2013*

- Trained as DSO in advising students, reviewing and processing I-20s, working with SEVIS platform
- Advised students on F-1 related issues such as employment and travel
- Processed travel and immigration related documents for international students
- Developed and implemented programs for incoming international students
- Presented at International Student Conference for all international students

236

**Center for Educational Development** *Republic Polytechnic, Singapore*
*Senior Executive* *December 2009 – June 2010*

- Project Manager for online staff training management portal, worked with both external and internal IT vendors to ensure maintenance of the portal
- Worked with colleagues in Human Resources to maintain updated database of current and incoming faculty
- Oversaw administration and program evaluation for the Polytechnic's professional development program
- Advised 200 faculty members in professional development opportunities and in professional development process
- Advised new faculty on professional development process and required trainings
- Maintained faculty training records, ensuring that all faculty meet training milestones
- Supervised two administrative assistants in co-ordination of logistics for professional development workshops and activities

**Student and Alumni Affairs Department** *Temasek Polytechnic, Singapore*
*Student Development Officer* *August 2008 – November 2009*

- Managed student financial aid programs, served as liaison with donors and disbursed funds, compile sensitive student information for record-keeping
- Advised prospective students in course selection, short-listed students for acceptance, and compiled statistical data
- Advised incoming student athletes on admissions process and course offerings
- Advisor to athletic groups, monitor student athlete academic performance, recommend additional tutoring where required
- Evaluate and made recommendations for contract renewal of sports coaches

## TEACHING EXPERIENCE

**Virginia Commonwealth University** Richmond, Virginia
Teaching Assistant, Department of Educational Leadership May- August 2018
Courses taught:
EDLP 702 - Understanding Self as Leader
EDLP 712 - Planning for Sustainable Change

## PUBLICATIONS

Naff, D., Williams, S., Furman, J., **Lee., M**. (2020). *Supporting student mental health during and after COVID-19*. Metropolitan Educational Research Consortium. Richmond, VA. https://merc.soe.vcu.edu/reports/published-reports/supporting-student-mental-health-during-and-after-covid-19/

## CONFERENCE PRESENTATIONS

Lee, M. (2014). *Can GRE scores be used as an effective indicator of success and help us allocate funding?* Presented at the Texas Associate of Graduate Admission Professionals Summer Institute, San Antonio, Texas.

Lee. M. (2017). *Concealed Carry on Campus* Presented at the 20th Annual Research Symposium, Virginia Commonwealth University, Richmond, Virginia.

Yeung, M. (2020). *Minority student success in Doctor of Physical Therapy education programs*. National Association of Student Personnel Administrators, Austin, Texas. *(cancelled)*

Lee, M. (2020). *Affirmative Action in Graduate Education: A critical perspective*. Critical Race Studies in Education Association Annual Conference, University of Delaware. *(cancelled)*