An Examination of Diversity and Inclusion in Physical Therapy Programs' Admissions

by

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A dissertation submitted to the Graduate Faculty of
Auburn University
in partial fulfillment of the
requirements for the Degree
Doctor of Philosophy

Auburn, Alabama
May 2, 2020

Keywords: physical therapy, admissions, transformative paradigm, diversity

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Abstract

The purpose of this study was to examine Doctor of Physical Therapy (DPT) admissions practices. This study focused on admission committees' selection priorities and processes and their influence on diversity and inclusion. A survey was used to gather selection priorities, followed by semi-structured interviews to further explore their admission processes, rationale, and the impact of diversity and inclusion within their cohorts. The findings from this study identified cognitive constructs such as cumulative grade point average (cGPA), pre-requisite grade point average (pGPA), science grade point average (sGPA) and graduate record examination (GRE) as the most important admission variables. Programs used a common application, rubric to rank applicants, and committee meetings to finalize admission cohorts. Rubrics were described as consisting of cognitive variables such as GPA variations and GRE variations and non-cognitive variables such as interview and essay scores. Programs had admission constructs related to diversity, while no program had an admission construct related to inclusion. Programs that rated diversity higher than the profession average engaged in a holistic admissions process or valued non-cognitive variables at a nearly equal weight when compared to cognitive variables in their rubrics. To increase diversity within the physical therapy profession, the profession and programs could reassess their current practices to create a more equitable admissions process.

Acknowledgments

With love and my sincerest appreciation, I thank a number of people who helped me to throughout this journey. First and foremost, I would like to thank the Lord for all the blessings to date and any grace that I shall receive in the future. Second, without my wife, Vinescia, I would not have ever achieved this goal – your patience, love, support, and calmness provided me the opportunity to pursue this dream, no matter how long it took. No one knows how difficult I can be but you and I really appreciate how you showed me grace throughout this journey. To my precious daughter, London – I started this journey before you were even born, and I took too much time away from you to finish, but I hope that you know that you can achieve all that you hope to and I pray I have set a good example for you.

To Mama – thank you for showing me how to achieve my goals. You are an excellent role model for my family and I will always be thankful to you and the sacrifices you have made to put me where I am today. You have always believed in me and I pray I can make you proud one day. To Daddy – I know we don't talk much, but I wanted you to know that I have always looked up to you and strived to make you proud. To LaBrittney - thank you for always being there to listen and for supporting me on this journey. To my in-laws and other members of my family – thank you for helping with the kids, the house, the laundry, or any other day-to-day task so that I could finish this dissertation. It really wouldn't have been possible without you.

To my colleagues at Alabama State University, especially Dr. Susan Denham – thank you for your ongoing support, patience and flexibility. To my colleagues at Hart Spine & Rehab, thank you for the love, support, and prayers. I feel extremely blessed to work with you all and I appreciate your contributions, more than you know.

To my faculty committee, Drs. Maria Witte, Hannah Baggett, James Witte, Leslie Ann Cordie, and Gretchen Oliver – thank you for taking the time and investing in my success. Dr. J. Witte – thank you for seeing something in me and admitting me into the program. Dr. M. Witte – thank you for chairing this committee and guiding me along this long, fun process. Dr. Baggett – thank you, thank you, thank you! I have always appreciated your high expectations and "tough love," but never more so than throughout this process. Dr. Cordie – thank you for helping by providing a solid foundation in Adult Education theory and practice. Lastly, Dr. Oliver thank you for agreeing to serve as my University Reader.

This process has taught me that anything is possible through Christ. I am so proud to have achieved this goal, and I offer my profound gratitude to all who have helped, supported and guided me.

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List of Abbreviations

APTA	American Physical Therapy Association
ACAPT	American Council of Academic Physical Therapy
AAMC	Association of American Medical Colleges
CAPTE	Commission on Accreditation in Physical Therapy Education
cGPA	Cumulative grade point average
DPT	Doctor of Physical Therapy
FSBPT	Federation State Board of Physical Therapy
GRE	Graduate Record Examination
GPA	Grade point average
HBCU	Historically Black Colleges and Universities
HSI	Hispanic Serving Institution
NPTE	National Physical Therapy Examination
pGPA	Prerequisite grade point average
PTCAS	Physical Therapy Common Application Service
qGRE	Quantitative graduate record examination
sGPA	Science grade point average
tGRE	Total graduate record examination
vGRE	Verbal graduate record examination

CHAPTER 1: INTRODUCTION

When I walk into any health care facility, the first thing I do is look for clinicians who look like me. This is a natural thing for me, but it was not until over the last few years I begin to ask myself why I'm looking for people who look like me. After reflecting, I discovered sometimes I'm looking for someone that I could possibly relate to, sometimes I am counting the number of people who look like me to arbitrarily see how far our health care professions have grown with respect to diversity, and sometimes I do it because it is an ingrained habit to gravitate towards people who look like me. Remarkably, I do not think I am the only one that does this. On multiple occasions I have had patients within my clinics say comments such as: "I didn't know there were any Black PTs," "It is nice to be treated by someone who looks like me," and "It is good to see a young Black man doing well for himself." All of those comments are usually said in a private room during their initial examination or whispered in my ear. I have also had comments, which I would classify as micro-aggressions such as: "Are you the tech?" "Are you sure you know what you are doing?" and "You're a doctor?" (Lilienfeld, 2017). When those micro aggressions surface, I typically attribute them to ageism, but I cannot help but acknowledge the ethno-racial undertones of growing up and living in the South. Before I continue, I would like to make a point of clarification. When I walk into a health care facility, I am looking for the intersectionalities which compose my social identity some of which include, male, millennial, African American, and non-disabled. Still, in addition to my intersectionalities I also look for those who have been minoritized within health care professions in America, some of which include gender constructs such as woman, sexual orientation such as lesbian, gay, bisexual, and queer, ethno-racial constructs such as Latinx, Hispanic, American Indian, and disability status.

Diversity is a buzzword that has become pervasive in education, business, politics, and society. From my experience, within the health education field this term seems to be synonymous to ethno-racial identities, as opposed to representative of all marginalized populations. I have sat through numerous presentations with various health educators from dentistry, nursing, physical and occupational therapy, and medicine where the speakers would argue for topics such as holistic admissions, the value of increasing diversity within admission cohorts, and program tools to help minoritized populations succeed. Consistently though, those in the audience would make comments such as: "We are in rural Iowa, it's hard for us to attract diverse candidates", "We would be doing students a disservice if we lowered our standards and they aren't prepared for their licensure exams", and "They just aren't as competitive." Each of these comments has an undercurrent to this relationship of diversity and ethno-racial identity, as opposed to focusing more holistically some of which we cannot externally observe such as sexuality, gender identity, cognitive disability, socioeconomic status, or educationally disadvantaged. I would argue health care professionals need to ensure we are including all traditionally marginalized populations within this diversity conversation.

I am currently the co-chair of my program's admissions and have been a part of the admissions committee for the last three years. During my first two years, I learned our process, the history of our process, and even consulted with other physical therapy programs about their process. In addition, I reviewed the literature in other health professions such as nursing, dentistry, chiropractic, medicine, and pharmacy to gain a well-rounded view of health care professions' admissions practices. The overriding trend I found was a shift toward a more holistic admissions process, where programs were valuing more than an applicant's grade point average and standardized test scores. In addition, there was a positive correlation between

holistic admissions and an increase in marginalized populations ethno-racial representation in admission cohorts. Unfortunately, physical therapy admissions literature related to holistic admissions was scarce. I also noticed two red flags within physical therapy admissions literature: one, the profession's diversity related to ethno-racial identities has not grown proportionally with the population growth of minoritized individuals in society and two, diversity was overwhelming measured as an ethno-racial construct. With those two red flags in mind, I decided I wanted to investigate physical therapy admissions and how diversity and inclusion are addressed.

Background

Physical therapy is one of the fastest growing fields in the United States and is projected to grow by as much as 25% from 2016 to 2026 (United States Department of Labor, 2018). The American Physical Therapy Association (APTA) (2017a) defined a physical therapist as:

> health care professionals who diagnose and treat individuals of all ages, from newborns to the very oldest, who have medical problems or other health-related conditions that limit their abilities to move and perform functional activities in their daily lives. (para. 1)

Physical therapists work in a multitude of settings which include hospitals, schools, primary and secondary education, nursing homes, industrial settings, home health agencies, private clinics, and sports and fitness arenas (American Physical Therapy Association [APTA], 2017a). Typically, to become a physical therapist an applicant must earn a bachelor's degree, complete the program's prerequisite courses, obtain physical therapy volunteer hours under a licensed physical therapist, and take the graduate record exam (APTA, 2017a). Admissions into a program can be daunting, since less than 18% of applicants are offered admission and less than 10% enroll and matriculate (Commission on Accreditation in Physical Therapy Education [CAPTE], 2018). Admissions committees are tasked with selecting the best candidates, which

has been defined as students who are most likely to matriculate and pass the national physical therapy licensing examination [NPTE] (Agho, Mosley, & Williams, 1999; Huhn & Parrot, 2017; Nuciforo, 2014; Nuciforo, Litvinsky, & Rheault, 2014; Utzman, 2006; Wheeler & Arena, 2009). In addition, for programs to maintain their accreditation status they must demonstrate an 80% matriculation rate, 85% NPTE passage rate, and 90% employment rate (CAPTE, 2018).

Physical therapy education has evolved over the last 100 years. In the 1920s, education was housed in hospitals and health care facilities where education was content-based and dependent upon technical skills of mentors (Graham, 1996; Pinkston, 1989). In the 1960s, as the educational requirements advanced from a certificate to a baccalaureate, many programs shifted from hospitals and health care facilities to colleges and universities (Graham, 1996; Pinkston, 1989). With this shift, revisions of the physical therapy curriculum were warranted to add a clinical component to ensure didactic knowledge was transferrable to patient practice (Graham, 1996). In the 1970s, many programs focused on competency-based curriculums, while in the 1980s many programs began to emphasize problem-solving skills (Graham, 1996). Currently, 75% of the programs use a hybrid model, 10% traditional model, 9% systems-based model, and 5% use a problem-based curriculum (CAPTE, 2019). Within these transitions admissions committees have predominately focused on cognitive measures when admitting candidates (Agho et al., 1999; Byl, 1988; Cocanour & Peatman, 1988; Gross, 1989; Huhn & Parrot, 2017; Nuciforo, 2014; Nuciforo et al., 2014; Utzman, 2006; Wheeler & Arena, 2009).

Folk theory would suggest cognitive measures correlate to cognitive measures. Science grade point average (sGPA), cumulative undergraduate grade point average (cGPA), first year grade point average in physical therapy school (fGPA), verbal graduate record examination (vGRE), quantitative graduate record examination (qGRE), combined graduate record

examination (cGRE), age, gender, race, and faculty experience have all shown positive correlations to matriculation and/or passing the NPTE (Agho et al., 1999; Huhn & Parrot, 2017; Mohr, Ingram, Hayes & Du, 2005; Nuciforo, 2014; Nuciforo et al., 2014; Olivares-Urueta & Williamson, 2013; Shiyko & Pappas, 2009; Utzman, 2006; Utzman et al., 2007; Wheeler & Arena, 2009; Zipp, Ruscingo, & Olson, 2010). fGPA, uGPA, and sGPA demonstrated the strongest predictability of matriculation (Jewell & Riddle, 2006; Tempelton, Burcham, & Franck, 1994; Wheeler & Arena, 2009). In contrast, vGRE, qGRE, and cGPA demonstrated the strongest predictability of NPTE passing, but only accounts for less than 50% of the variance (Huhn & Parrot, 2017; Utzman et al., 2007). Interestingly, program factors such as accreditation status, number of faculty members with terminal degrees, and program length has been shown to account for nearly 30% of variance in NPTE passing (Huhn & Parrot, 2017; Mohr et al., 2005). To assist in predicting students at risk for failing the NPTE, Utzman et al. (2007) developed a prediction rule with cGPA, vGRE, qGRE, and race, but cautions programs in using their prediction rule. Utzman et al. (2007) suggested programs determine their specific prediction rule for their students. In addition, Utzman et al. (2007) urged programs not to use these rules as the sole admission factor. Physical therapy admission literature suggests cognitive variables are more likely to predict matriculation and passing the NPTE (Guffey, 2000; Huhn & Parrot, 2017; Jewell & Riddle, 2006; Mohr et al., 2005; Nuciforo, 2014; Shiyko & Pappas, 2009; Utzman et al., 2007).

Problem Statement

The Institute of Medicine and the Sullivan Commission both called for an increase in diversity within health professions to meet the future demand of society (Smedley, Stith, & Nelson, 2002; The Sullivan Commission on Diversity in the Healthcare Workforce, 2004).

Admissions literature in the physical therapy profession has focused on predicting student matriculation and passing the NPTE. Unfortunately, demographics within the profession have not changed despite the population growth of minoritized populations and push by the APTA to increase diversity (Nuciforo, 2014).

Purpose of the Study

The purpose of this study was to examine the admissions processes in doctor of physical therapy programs. This study also described the admission process for doctor of physical therapy programs, specifically how candidates were selected and how diversity and inclusion were addressed within the admissions process.

Research Questions

The following research questions were used in this study:

1. What are the overall ranking admissions variables for doctor of physical therapy programs by program chairs and/or directors, and admissions committee members?
2. What are the overall ranking admissions variables for doctor of physical therapy programs by demographics?
3. What is the process for selecting students for doctor of physical therapy programs?
4. What are the major influential factors in the admissions process for doctor of physical therapy programs?
5. How is diversity addressed in the doctor of physical therapy programs admissions process?
6. How is inclusion addressed in the doctor of physical therapy programs admissions process?

Significance of the Study

Diversity is a concern in the physical therapy profession. The APTA (2018c) reported less than 15% of physical therapist members identify as an ethnic and/or racial minority, despite nearly 30% of the U.S. population identifying as a racial and/or ethnic minority in 2017 (United States Census Bureau, 2017). This lack of ethno-racial minority representation in the physical therapy profession undermines the national effort to create a more reflective workforce (Moerchen et al., 2018; Wall et al., 2015). Although CAPTE (2018) reported a positive trend in minoritized ethno-racial student enrollment in doctor of physical therapy programs over the last few years, the graduation rate of ethno-racial minority physical therapist is still not reflective of society. The physical therapy profession can draw parallels from other professions such as nursing, pharmacy, dentistry, and medicine when scholars argue a diverse profession helps to facilitate a more culturally competent workforce, helps to educate non-minoritized classmates about factors that can optimize care to underrepresented communities, increases patient satisfaction and access to care, aids to bridge the gap seen in the healthcare experience of lower socioeconomic classes and middle class Whites, and creates better decision makers (Moerchen et al., 2018; Smedley, Stith, & Nelson, 2002; The Sullivan Commission on Diversity in the Healthcare Workforce, 2004; Wall et al., 2015). Documenting admission practices will help serve as a road map to combating the physical therapy profession's representation disparities and facilitate the profession in meeting the national effort of creating a more reflective workforce. Lastly, the narrow focus of using ethno-racial demographics as the defining characteristic of diversity predisposes the profession to a continuous cycle of marginalizing minoritized populations.

Assumptions

The following assumptions were made regarding this study:

1) Physical therapy program admissions are a social justice issue.
2) A transformative paradigm appropriate to study physical therapy program admissions.
3) Mixed method designs can combat the weaknesses of using solely a quantitative or qualitative design.

Definitions

Axiological assumption – The axiological assumption takes precedence and serves as the foundation for the ontological, epistemological, and methodological assumptions when creating the transformative worldview (Mertens, Bledsoe, Sullivan, & Wilson, 2010). The primary focus of the transformative paradigm is in addressing social justice and human rights (Mertens et al., 2010; Mertens & Ginsberg, 2008). The axiological assumption focuses on power differentials and the ethical and moral implications power differentials have created in terms of discrimination, oppression, misrepresentation, and feelings of being invisible (Harris, Holmes, & Mertens, 2009; Mertens et al., 2010). The transformative paradigm postulates discrimination, oppression, and misrepresentation are pervasive in society and perpetuate the status quo (Mertens et al., 2010).

Cognitive measures – includes grades such as mean grade point average, science grade point average, and prerequisite grade point average, and standardized test, such as Scholastic Aptitude Test, American College Testing, Graduate Record Examination, Medical College Admission Test, Miller Analogies Test, Pharmacy College Admission Test, and Dental Admission Test (Sedlacek, 2017).

Diversity – Includes group/social differences (i.e., race, ethnicity, socioeconomic status, gender, sexual orientation, country of origin, as well as cultural, political, religious, or other affiliations) and individual differences (i.e., age, mental/physical ability, personality, learning styles, and life experiences) (Commission on Accreditation in Physical Therapy Education, 2017b).

Epistemological assumption – In transformative terms, objectivity is valued in the sense of providing a balanced and complete view of the program processes and effects such that bias is not interjected because of a lack of understanding of key viewpoints (Mertens, 1999).

Holistic admissions – Holistic admissions are a flexible, individualized method of assessing an applicant's capabilities where balanced considerations are given for life experiences, personal attributes, and academic metrics with the goal of determining the value a student can contribute to an admissions class and society (Association of American Medical Colleges [AAMC], 2013; Witzburg & Sondheimer, 2013). Holistic admissions are three fold, one assessment of academic readiness such as GPA and standardized test scores, two, gauge interpersonal and intrapersonal competencies such as grit, compassion, and integrity, and three, promote diversity (AAMC, 2013; Glazer & Bankston, 2014; Kirch, 2012).

Inclusion – creating a welcoming campus environment for students via organizational strategies and practices that promote meaningful social and academic interactions among persons and groups who differ in their experiences, their views, and their traits (LePeau, Hurtago, & Davis, 2018; Tienda, 2013).

Methodological assumption – The transformative paradigm might involve quantitative, qualitative, or mixed methods, but the community impacted by the evaluation would be involved to some degree in the methodological and programmatic decisions (Mertens, 1999).

Minoritized – individuals who are positioned into a minority status only in a given context and by marginalizing and oppressive processes that sustain the overrepresentation and dominance of historically privileged social identities (Harper, 2012; Perez, 2019).

Non-cognitive measures – includes measures not traditionally used in admissions, which help to describe personal and social dimensions, adjustment, motivation, and student perceptions. Examples of non-cognitive measures: self-concept, realistic self-appraisal, community service, leadership experience, and preference for long-range goals to short-term goals (Sedlacek, 2017).

Ontological assumption – The transformative ontological assumption holds that there are diversities of viewpoints with regard to many social realities, but we need to place those viewpoints within a political, cultural, and economic value system to understand the basis for the differences (Mertens, 1999).

Transformative paradigm – The transformative paradigm is a set of philosophical assumptions that serves as a framework to guide researchers in a conscious effort for increasing social justice for historically marginalized groups (Mertens, 1998, 1999, 2010, 2014). Under the transformative paradigm, importance is placed on the lives and experiences of historically marginalized groups such as women, ethnic, racial and religious minorities, people with disabilities, people with low socioeconomic status, members of the lesbian gay bisexual transgender queer communities and other characteristics associated with societal oppression and discrimination (Mertens, 1998, 1999, 2013; Mertens, Bledsoe, Sullivan, & Wilson, 2010; Romm, 2015).

Underrepresented minority – The racial and ethnic populations that are underrepresented in physical therapy education relative to their numbers in the general population, as well as individuals from geographically underrepresented areas, lower economic strata, and

educationally disadvantaged backgrounds (American Council of Academic Physical Therapy [ACAPT], 2016). The following populations are currently underrepresented in physical therapist education programs as compared to the US population: Hispanic/Latino, African American/Black, American Indian/Alaskan Native, and Hawaiian/Pacific Islander (ACAPT, 2016). The APTA Diversity Task force was unable to conclusively determine underrepresented minorities with respect to geographic areas, economic strata, and educationally disadvantaged backgrounds (ACAPT, 2016).

Organization of the Study

This study aimed to report current doctor of physical therapy admissions practices. In addition, this study aims to critically analyze doctor of physical therapy admissions practices from a transformative paradigm. Given the profession's call to increase diversity, this study is timely. Subsequent chapters will present a review of literature related to this study (Chapter 2), outline the methods used (Chapter 3), present the results (Chapter 4), and discuss the implications and recommendations (Chapter 5).

CHAPTER 2: LITERATURE REVIEW

Chapter 2 will present the literature review. This chapter is organized by providing the theoretical framework for the study, followed by an overview of the physical therapy profession and physical therapy programs of the past and present. Following the overview of current physical therapy program, a call for educators to increase diversity within health professions will be presented, followed by physical therapy admissions and admissions in similar health care disciplines. Finally, the chapter will conclude with an argument of using the transformative lens in admissions, and how diversity and inclusion have been addressed in the past in relation to program admissions.

Purpose of the Study

The purpose of this study was to examine the admissions' processes in doctor of physical therapy programs. This study clarified admission committees' selection priorities. This study also described the admission process for doctor of physical therapy programs, specifically how candidates were selected and how diversity and inclusion were addressed within the admissions process.

Research Questions

The following research questions were used in this study:

1. What are the overall ranking admissions variables for doctor of physical therapy programs by program chairs and/or directors, and admissions committee members?
2. What are the overall ranking admissions variables for doctor of physical therapy programs by demographics?
3. What is the process for selecting students for doctor of physical therapy programs?

4. What are the major influential factors in the admissions process for doctor of physical therapy programs?
5. How is diversity addressed in the doctor of physical therapy programs admissions process?
6. How is inclusion addressed in the doctor of physical therapy programs admissions process?

Transformative Paradigm

History

The transformative paradigm is a set of philosophical assumptions that serves as a framework to guide researchers in a conscious effort for increasing social justice for historically marginalized groups (Mertens, 1998, 1999, 2010, 2014). The transformative paradigm postulates discrimination, oppression, and misrepresentation are pervasive in society and perpetuate the status quo (Mertens et al., 2010). Under the transformative paradigm, importance is placed on the lives and experiences of historically marginalized groups such as women, ethnic, racial and religious minorities, people with disabilities, people with low socioeconomic status, members of the lesbian gay bisexual transgender queer communities and other characteristics associated with societal oppression and discrimination (Mertens, 1998, 1999, 2013; Mertens, Bledsoe, Sullivan, & Wilson, 2010; Romm, 2015). The transformative paradigm emerged from the dissatisfaction of marginalized communities and researchers with the dominant research paradigms and practices (Mertens, 2015; Mertens et al., 2010; Wosley, Dunn, Gentzke, Joharchi, & Clark, 2017). Particularly, marginalized communities and scholars believed the current paradigms do not accurately reflect the lived experiences of historically marginalized groups (Mertens et al., 2010, Romm, 2015).

Donna Mertens is characterized as the mother of the transformative paradigm and she explained:

> The transformative paradigm emerged in response to individuals who have been pushed to the societal margins throughout history and who are finding a means to bring their voices into the world of research. Their voices, shared with scholars who work as their partners to support the increase of social justice and human rights… The transformative paradigm is a framework of belief systems that directly engages members of culturally diverse groups with a focus on increased social justice. (Mertens, 2010, p. 4)

Originally, the transformative paradigm was defined by ontology, the nature of reality, epistemology, the nature of knowledge and the relationship between researchers and the communities in which they conduct their research, and methodology, the nature of systematic inquiry (Mertens, 1999). Based on the paradigm framework of Lincoln and Guba (2005) axiology was added to the defining philosophical underpinnings (Cram & Mertens, 2015).

Axiology

The axiological assumption takes precedence and serves as the foundation for the ontological, epistemological, and methodological assumptions when creating the transformative worldview (Mertens, Bledsoe, Sullivan, & Wilson, 2010). In addition, the axiological assumption also takes precedence over all values noted within dominant paradigms such as positivism and post-positivism (Mertens & Ginsberg, 2008; Shaw, 2003). This is due to the primary focus of the transformative paradigm in addressing social justice and human rights (Mertens et al., 2010; Mertens & Ginsberg, 2008). The axiological assumption focuses on power differentials and the ethical and moral implications power differentials have created in terms of discrimination, oppression, misrepresentation, and feelings of being invisible (Harris, Holmes, &

Mertens, 2009; Mertens et al., 2010). The transformative paradigm postulates discrimination, oppression, and misrepresentation are pervasive in society and perpetuate the status quo (Mertens et al., 2010).

The axiological assumptions frame the Belmont's report of ethical principles (Mertens, 2007b; Mertens et al., 2010; National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). From a transformative stance, respect for persons is critically examined from the lens of cultural norms within a community and the impact of these norms outside of their community, beneficence is redefined with a focus on promoting human rights and increasing social justice, and justice is focused on explicitly outlining the connection between the processes and outcomes of research and how in many instances marginalized groups are pushed to the edge (Mertens, 2007b).

Axiology within the transformative paradigm is focused on enhancing social justice, furtherance of human rights, and respect for cultural norms (Mertens, 2010). This paradigm is ideal for those who are investigating or have experienced discrimination and oppression (Mertens, 2010). Relational axiology guided by the principles of respect for persons, beneficence, and justice in addition to understanding reciprocity and cultural competence provide a foundational stance (Romm, 2015). In addition, the central tenent is power, which must be consciously addressed at every level of the research project (Mertens, 2007a). The role of the researcher in the transformative paradigm is to recognize inequalities and injustices within society, challenge the status quo, and demonstrate a shared sense of responsibility with historically marginalized populations to eliminate those inequalities and injustices within society.

Ontology

Lincoln and Guba (2005) defined ontology as the nature of reality. The nature of reality for the transformative paradigm is historical realism that is shaped by social, political, cultural, economic, ethnic, and gender values that have been crystalized over time (Lincoln & Guba, 2005). Mertens (1999) defined the ontological assumptions of the transformative paradigm as:

> The ontological question, "What is the nature of reality and by extension, truth?' is answered differently by scholars who align themselves with the three paradigms. The postpositivist paradigm's ontological view holds that there is one reality, one truth that can be known within a certain level of probability. The interpretive/constructivists have argued for the recognition of multiple socially constructed realities, and are thus subjected to the criticism of being mired in absolute relativism such that no one perspective is any "truer" than any other perspective. The transformative ontological assumption holds that there are diversities of viewpoints with regard to many social realities, but we need to place those viewpoints within a political, cultural, and economic value system to understand the basis for the differences. And, then, we need to struggle with revealing those multiple constructions, as well as with the decisions about privileging one perspective over another. (p. 5)

Mertens (1999) argues the ontological question is answered by exposing the difference in societal value systems and using these differences to understand how certain perspectives become privilege over another.

The basic tenets of the transformative paradigm's ontological belief are that there are multiple realities which are socially constructed and researchers should be explicit about the social, political, cultural, economic, racial, ethnic, gender, age, and disability values which define

realities (Mertens, 2007a). These differing realities can emerge based on unearned privilege and power associated with physical and cognitive characteristics such as being able-bodied, class, sex, and race (Mertens, 2007a). Under the transformative paradigm researchers must show an awareness of these societal values, privileges, and power differential and how they have the potential to impact social justice while engaging in ontological authenticity (Mertens, 2007a; Mertens & Ginsberg, 2008).

Epistemology

Lincoln and Guba (2005) defined epistemology as the nature of knowing that is constrained to the ontological assumption (Guba & Lincoln, 1994). The nature of knowing for the transformative paradigm is a transactional, subjectivist, and value-mediated reality (Guba & Lincoln, 1994; Lincoln & Guba, 2005). Mertens (1999) defined the epistemological assumption of the transformative paradigm as:

> In epistemological terms, the issue of objectivity is salient, along with implications for the nature of the relationship between the evaluator and the stakeholders in the program. In the postpositivist paradigm, objectivity is considered to be paramount and is thought to be achieved by observing from a somewhat distant and dispassionate standpoint. In the interpretive/ constructivist paradigm, interaction between the evaluator and participants is felt to be essential as they struggle together to make their values explicit and create the knowledge that will be the results of the study. In transformative terms, objectivity is valued in the sense of providing a balanced and complete view of the program processes and effects such that bias is not introjected because of a lack of understanding of key viewpoints. However, to obtain this depth of understanding, it is necessary for the

evaluator to be involved in the communities impacted by the program to a significant degree. (p. 5)

The transformative paradigm's epistemology focuses on the participant, researcher relationship and looks to uncover the most balanced way to determine what is real (Mertens, 2010; Mertens et al., 2010).

The basic tenets of the transformative paradigm's epistemological assumptions are that to know reality, researchers must have a relationship with the participants (Mertens, 2007a). This relationship must acknowledge that knowledge is socially and historically situated within complex cultural contexts (Mertens, 2007a). Under the transformative paradigm researchers must demonstrate cultural competence and an awareness of power differentials and put tools in place to ensure a balance reporting and/or construction of what is real (Mertens, 2007a; Mertens & Ginsberg, 2008). Transformative researchers name power and privilege at the individual, institutional, and systemic levels, all while emphasizing inequities and recognizing the viewpoints and strengths of the historically marginalized populations (Hurtado, 2015).

Methodology

Lincoln and Guba (2005) defined methodology as a system composed of strategies to investigate phenomenon, which are intertwined and dependent on the researchers' discipline (Lincoln & Guba, 2005). The methodology for the transformative paradigm is situated within dialogic and dialectical process where researchers and participants interact in a transactional nature; the dialogue is dialectic in nature to help combat preconceived notions, ignorance, and misapprehensions (Guba & Lincoln, 1994; Lincoln & Guba, 2005).

Mertens (1999) defined the methodological assumption of the transformative paradigm as

> Finally, in methodological terms, the postpositivist paradigm is characterized as using primarily quantitative methods that are interventionist and decontextualized. The interpretive/constructivist paradigm is characterized as using primarily qualitative methods in a hermeneutical and dialectical manner. The transformative paradigm might involve quantitative, qualitative, or mixed methods, but the community impacted by the evaluation would be involved to some degree in the methodological and programmatic decisions. (Mixed methods designs that use both quantitative and qualitative methods can be used in any paradigm; however, the underlying assumptions determine which paradigm is operationalized.). (pp. 5)

From a transformative stance, researchers are obligated to confer with participants in defining and determining which methods to use (Romm, 2015).

The basic tenent of the transformative paradigm's methodological assumption is a researcher can choose between quantitative, qualitative, or mixed methods, but there should be an interactive relationship between the researcher and participants. This interaction should begin at the inception of the phenomenon (Mertens, 2007a). Chosen methods should take into account cultural competence, and power, discrimination, and oppression issues should be openly addressed (Mertens, 2007a). Mertens (2009) suggested an inclusion of the qualitative dimension whether through pure qualitative methods or through mixed methods since each has historically been critical to establishing a dialogue between researcher and participants. Qualitative and mixed methods have provided different, non-mainstream, ways to investigate a phenomenon, which facilitates a better understanding of inequities (Biddle & Schafft, 2015; Mertens, 2009; Mertens, 2016). Although qualitative and mixed-methods are predominately used by researchers, there is not one single design or method demanded by the transformative paradigm as long as the

axiological, ontological, and epistemological assumptions are congruent with social justice (Mertens, 2016).

Physical Therapy

Overview of US History of Physical Therapy Practice

Physical therapy practice emerged in the United States during the World War I (WWI) era and continued to be redefined during the polio epidemic (Moffat, 2003). Mary McMillian is credited as the mother of physical therapy practice when she began training reconstruction aides, predecessor to today's physical therapist, to care for wounded soldiers in 1918. Prior to WWI, in the United States treatment for wounded soldiers was quarantine, immobilization, and bedrest (Moffat, 2003). This all begin to shift when Major General William Crawford Gorgas, Army Surgeon General, tasked the Army with evaluating more effective treatment strategies (Moffat, 2003; US Army Medical Services, 1923; 2013). After studying the programs in Great Britain, the Army established the Division of Special Hospitals and Physical Reconstruction (Moffat, 2003; US Army Medical Services, 1923, 2013). At that time, physical therapy was described as using hydrotherapy, electrotherapy, mechanotherapy, active exercise, indoor and outdoor games, and massage for mental and physical restoration (US Army Medical Services, 1923, 2013).

Over the next 100 years, the physical therapy profession continued to redefine its place in health care. Pivotal events such as the establishment of the American Woman's Physical Therapy Association (AWPTA) in 1921, establishment of Georgia Warm Springs Foundation in 1937, first House of Delegates meeting in 1944, name change to American Physical Therapy Association in 1944, passing of the Hill Burton Act in 1946, creation of national licensure exam, development and implementation of neurologic treatment philosophies from therapists such as Margaret Rood, Margaret Knott, Berta and Dr. Karl Bobath, Dorothy Voss and Signe

Brunnstrom, and Self-Employed Section of the APTA in the 1950s, the enactment of the Medicare legislation in 1964, the expansion of practice to include management of orthopedic and cardiopulmonary conditions in the 1960s and 1970s, the enactment of the Education of All Handicapped Children Act in 1975, creation of additional APTA sections such as Hand Rehabilitation, Oncology, and Veteran's Affairs and cardiopulmonary, electrophysiology, pediatrics, sports, and orthopedics specialist certifications in the 1980s, Medicare cap in 1997, and the push for direct access, autonomous physical therapist practice, and evidence-based practice in the 2000s shape the profession today (APTA, 2017b; Moffat, 2003). The next few paragraphs will outline the evolution of the United States physical therapy profession from the early 1900s until the present from professional, clinical, and legislative perspectives.

Origins–1930s. The United States physical therapy profession evolved around the World War I and the poliomyelitis epidemic (Moffat, 2003). Prior to WWI, both the public and private sectors had been pushing for increased support for those with disabilities. To meet this push, Surgeon General, Merritte Ireland, established the Division of Physical Reconstruction, which in conjunction with the Division of Orthopedic Surgery laid the foundation for the physical therapy profession in the United States. Three years into WWI and the number of wounded soldiers rising, the Army began searching for an effective way to care for soldiers. This search lead them to Robert Tait McKenzie who at the time was seen as the leading expert in care for wounded soldiers. After consulting with McKenzie, the United States established two groups of reconstruction aids, one to assist physicians, and another to provide training in vocational skills. By 1919, the army had established 45 hospitals with physiotherapy facilities and employed more than 700 reconstruction aids (Moffat, 2003).

Polio was originally referred to as infantile paralysis (Neumann, 2004). Physiologically, the poliovirus infects the anterior horn cells within the gray matter of the spinal cord, in addition to motor nuclei in the brain stem and leaves those infected with lower motor neuron signs such as muscle fasciculations, muscle spasms, atrophy, and paralysis. In the early years, treatment for polio primarily consisted of surgery, bed rest, and immobilization. Arguably, the most famous case of polio was in 1921 when President Franklin D. Roosevelt was diagnosed with polio. To assist with his treatment, the Warms Springs Foundation was established in Warms Springs, Georgia that not only served as a focal point for polio research and education, but also increased the visibility of the profession (Neumann, 2004).

In 1921, the first organized meeting of the AWPTA occurred where Mary McMillian was elected as the first President (Moffat, 2003). The AWPTA's purpose was to establish and maintain profession and scientific standards for those engaged in the profession. Additional landmark events in 1921 included the first textbook published by a physical therapist, *Massage and Therapeutic Exercise*, and the first issue of the association's publication, *The PT Review*. In 1922, the association changed its name to American Physiotherapy Association (APA) to acknowledge that men were a part of the profession (Moffat, 2003).

In the 1930s the professional practice continued to focus on wounded soldiers and polio epidemic (Moffat, 2003). As the profession was growing, physicians were actively distinguishing themselves from physical therapy technicians. By 1937, physical therapy physicians achieved recognition as a medical specialty and subsequently changed their name to physiatrist. In addition to achieving medical specialty, they established the American Registry of Physical Therapy Technicians. The American Registry of Physical Therapy Technicians was the first national registry of physical therapists (Moffat, 2003).

1940s–1950s. Similar to the origins of physical therapy practice, the 1940s was dominated by the treatment of wounded soldiers and polio (Moffat, 2003). Following WWII, the United States began to invest in the development and enhancement of prosthetic care. As a profession involved in exercise, physical therapist became integral in programs related to patients with amputations. A pivotal shift in treatment philosophies was noted when Elizabeth Kenny challenged the traditional polio treatments of surgery, bed rest, and immobilization in the early 1940s and suggested massage, gentle range of motion, muscle re-education, and hot, moist compression during the acute phase (Moffat, 2003).

In 1944, the APA established their official legislative body, House of Delegates (Moffat, 2003). In 1946, the APA officially changed its name to the American Physical Therapy Association (APTA) and established the first section. Sections are special-interest groups dedicated to a specific practice area. Legislatively, the 1946 Hill Burton Act helped to increase the job outlook and funding for physical therapists in hospital-based practices (Moffat, 2003).

In 1955 Jonas Salk developed the polio vaccine, which marked a significant change in the physical therapist health care role (Moffat, 2003). The vaccine nearly eradicated the disease over the next five years. Mentally, the role of physical therapist began to shift from a technician to a professional practitioner with 45 states and the territory of Hawaii enacting physical therapy practice acts, the establishment of the Self-Employed Section and Physical Therapy Fund, and the development of a seven-hour professional competency examination. The Physical Therapy Fund was established to foster scientific, literary, and educational research. Legislatively, the Social Security Act of 1956 was amended which increased opportunities for physical therapists to work with older adults and in 1957 Nebraska became the first state to allow direct access to physical therapy services (Moffat, 2003; Nicholson, 2008).

The 1950s was a decade of clinical growth within the profession. Seminal scholars such as Margaret Rood, Margaret Knott, Dorothy Voss, Berta and Dr. Karl Bobath, and Signe Brunnstrom all began to disseminate their neurological rehabilitation treatment techniques and theories. Margaret Rood is most noted for facilitation and inhibition techniques for individuals with central nervous system disorders and Margaret Knott and Dorothy Voss are most noted for their proprioceptive neuromuscular facilitation technique (Moffat, 2003). Berta and Dr. Karl Bobath are most noted for their neurodevelopment approach to neurological disorders and Signe Brunnstrom for her stages of cerebrovascular accident recovery (Moffat, 2003). The 1950s were a place of growth for the physical therapy profession professionally, legislatively, and clinically.

1960s–1970s. In the 1960s physical therapy clinical services expanded beyond wounded soldiers, patients with post-polio syndrome, and neurologically involved to the management of cardiopulmonary and orthopedic disorders (Moffat, 2003). Due to medical technological advances in open-heart surgery and increased research related to optimal cardiopulmonary recovery physical therapist began to provide preoperative and post-operative care (Mampuya, 2012; Moffat, 2003). Similarly in the orthopedic sector, advances in radiological imaging paired with technological advances in surgical tools and techniques provided a new and growing orthopedic patient population (Moffat, 2003).

Legislatively, in 1970 the creation of the Occupational Safety and Health Administration (OSHA) created additional practice avenues (Moffat, 2003). Two additional pivotal legislative actions were the amendment to the Social Security Act (SSA) that clarified the term outpatient physical therapy services and the passage of the Education for All Handicapped Children Act. Those actions allowed physical therapist to expand in home health and public school settings.

In 1963, the New York Chapter of the APTA was founded (Moffat, 2003). This marked a fundamental change of how the physical therapy profession would approach legislative issues shifting from a national approach to an individual state approach. This shift in philosophy helped to set the stage of the APTA supporting the disbanding of the American Registry and allowing states to govern physical therapist. There was also a rise in sections during this time with the Public Health, currently Community Health Section, Sports, Pediatric, Cardiopulmonary, Obstetrics and Gynecology, Clinical Electrophysiology, Orthopedic, and Geriatric Sections all being established (Moffat, 2003). Lastly, in 1969 the profession introduced physical therapist assistants with the first graduates graduating from Miami Dade College in Florida and St. Mary's Campus of the College of St. Catherine in Minnesota (Moffat, 2003; Wojciechowski, 2019).

1980s–2000. The 1980s–2000s continued the expansion of physical therapy practice into hand rehabilitation, oncology, federal affairs, and primary care (Moffat, 2003). In 1982, the House of Delegates took a bold step when they established a policy that outlined that physical therapists could practice independent of a physician's referral. Another pivotal evolution of physical therapy practice was in 1985 with the establishment of cardiopulmonary specialist examination (APTA, 2019d; Moffat, 2003). By the 2000s the American Board of Physical Therapy Specialties had established six additional areas in clinical electrophysiology, geriatrics, neurology, orthopaedics, pediatrics, and sports (APTA, 2019d). Lastly, in 1995 the APTA published *The Guide to Physical Therapy Practice*, which describes the role of the physical therapist in the examination, evaluation, diagnosis, prognosis, intervention, re-examination, and assessment of patients (APTA, 2011).

In 1988, the APTA began to explicitly support diversity within the profession when they formed the Department of Minority Affairs with Johnette Meadows serving as the director

(Reicherter, Wilson, Chesbro, & Manuel, 2003). Around this same time, a small group of minorities in the field of physical therapy established the American Academy of Physical Therapy (American Academy of Physical Therapy [AAPT], 2019). The AAPT established an aim to increase and prepare more minority professionals in the field to serve the underserved communities (AAPT, 2019). Lastly, the APTA established the Minority Scholarship fund in 1989 and subsequently the Minority Faculty Development Scholarship Award in 1999 to provide financial resources for minority students pursing a degree in physical therapy and a terminal academic degree in physical therapy, respectively (Moffat, 2003; Reicherter et al., 2003).

Legislatively, the Americans with Disabilities Act in 1990 was influential in establishing physical therapist as consultants (Moffat, 2003). In addition, federal regulations of the Balance Budget Act of 1997, Medicare Prospective Payment System, Resources Utilization Groups, and Omnibus Reconciliation Act each impacted physical therapy practice related to reimbursement. Arguably, the most impactful legislative act was the Balanced Budget Act and its imposed $1,500 cap on Medicare coverage for outpatient physical therapy services. This cap not only reduced the amount of money physical therapists could receive for their services per calendar year from someone who has Medicare for insurance, but the $1,500 was shared between physical therapy services and speech therapy services (Moffat, 2003).

2000s–Present. In 2000, APTA House of Delegates adopted Vision 2020 that stated:

> By 2020, physical therapy will be provided by physical therapists who are doctors of physical therapy, recognized by consumers and other health care professionals as practitioners of choice to whom consumers have direct access for the diagnosis of intervention for, and prevention of impairments, functional limitations, and disabilities related to movement, function, and health. (APTA, 2019e, para. 3)

Vision 2020 focused the profession on a push for autonomous practice, director access, entry-level doctor of physical therapy degrees, and evidence-based practice and provided the profession with the compass to help propel the profession into the 21st century.

In the early 2000s, the APTA continued their fight against the Balanced Budget Act and its effects on reimbursement for physical therapy services (Nicholson, 2008). This fight would continue until 2019 when Congress enacted a permanent solution to the hard cap on outpatient physical therapy services (APTA, 2019f). The year 2002 marked a pivotal year for physical therapy with the profession launching Hooked on Evidence on the Web and all programs finally transitioning to a master's degree (Nicholson, 2008). Additional things to note in the 2000s are the exponential growth of clinical residencies and clinical specialists and growth in the number of physical therapy programs and applicants.

In 2013, the APTA House of Delegates adopted a new vision statement, "Transforming society by optimizing movement to improve the human experience," which guides the profession today (APTA, 2019g, para. 2). This updated vision statement focuses on what the profession can do for society as opposed to the Vision 2020, which focused introspectively. As of 2019, all 50 states have some form of direct access with 18 states have unrestricted patient access and all programs have transitioned to offering an entry-level doctor of physical therapy degree (APTA, 2019h).

Overview of Physical Therapy Programs

Hospitals. Physical therapy training began in hospitals (Moffat, 2003). Nearing the end of WWI, the first Reconstruction Aid Program was established at Walter Reed with Marguerite Sanderson as the director (Moffat, 2003). Due to the immediate need, this original program was only 3 months in length, but required previous education in physical education, anatomy, or

exercise (Moffat, 2003; Plack & Wong, 2002). By 1918, there were 15 training programs preparing reconstruction aids to treat wounded warriors (Graham, 1996; Moffat, 2003; Plack & Wong, 2002). These training programs were six months and focused on anatomy, physiology, massage, hydrotherapy, electrotherapy, and exercise (Plack & Wong, 2002).

Due to variability of training, some in the profession were weary of the lack of quality control within training programs (Plack & Wong, 2002). This led to the APTA establishing the first minimum standards of the profession in 1928, which outlined that programs should have a prerequisite of being a graduate from a recognized school of nursing or physical education and the program be at least nine months with 1,200 instructional hours (Plack & Wong, 2002). This lack of quality control in conjunction with some in the profession belief that physical therapist should be more than technicians facilitated the shift to academia.

Academia. In 1927, New York University (NYU) became the first program to offer a baccalaureate degree in conjunction with their nine-month certificate program (New York University, 2019; Plack & Wong, 2002). Over the next ten years, the profession continued to wrestle with minimum educational standards, which led to the American Medical Association (AMA) assuming responsibility for accrediting physical therapy schools and establishing the educational standards for physical therapy technicians. AMA established a prerequisite of 60 college credits or graduation from a two-year nursing or physical education program and increasing the length of curriculum to at least 12 months (Plack & Wong, 2002).

In 1943, NYU saw a need for advanced physical therapist training and established the first advanced master's degree program (New York University, 2019; Plack & Wong, 2002). Despite NYU seeing a need for advanced physical therapist training, there was still a lot of variability in programs. APTA (2011) explained that from 1930 to 1950, there were 54 programs

developed, 35 offered a certificate, 18 offered both the certificate and baccalaureate degree, and only one offered solely the baccalaureate degree. In 1960, the House of Delegates passed a resolution that the baccalaureate would be the minimal physical therapist educational degree, which was due in large part to the Allied Health Professions Training Act of 1953 (Moffat, 1996; Plack & Wong, 2003). The only issue with the resolution was the APTA lacked the ability to enforce this resolution, due to the AMA still having the power to accredit programs. At the same time, Case Western Reserve University became the first program to offer an entry-level master's degree program (Plack & Wong, 2002). Additional pivotal moments in physical therapy education would include, in 1970 NYU received approval to offer a PhD program in physical therapy and in 1972, Howard University became the first historically black college or university (HBCU) to graduate physical therapy students (Moffat, 1996; New York University, 2019)

By the 1970s most programs were affiliated with colleges and universities, but the entry-level point in the physical therapy profession was still at three different levels: certificate, baccalaureate, and masters. This variability led to a wide range of program lengths from 12 months to four years; couple this with the evolution of treatment techniques, medical advances, increase in patient complexities and expansion of practice and the leaders in the profession felt an urge to create a more uniformed professional entry point. So, in 1979 the House of Delegates adopted a resolution to require a post-baccalaureate as the entry-level degree, but would allow programs 11 years for the transition. Unfortunately, this resolution met resistance throughout the years and was abandoned in 1988, two years prior to the enforcement year. This resolution would be tabled until 1999 where a resolution was passed to align with the soon to be passed Vision 2020 (Plack & Wong, 2003). Also of note, in 1992, the University of Southern California became the first program to offer the transitional-doctor of physical therapy degree and in 1993

Creighton became the first physical therapy program to offer an entry-level doctor of physical therapy degree.

Physical Therapy Programs Today

Programs. There are 243 accredited and 17 developing doctor of physical therapy programs in the United States (CAPTE, 2018). Private institutions make up 52% of programs with an average total cost of the attendance at nearly $110,000 (CAPTE, 2018). Three percent of programs are at a Historically Black College and University (HBCU) and 7% are at Hispanic Serving Institutions (HSI) (American Academy of Physical Therapy, 2018; CAPTE, 2018; Hispanic Association of Colleges and Universities). Forty-one percent of programs are classified as Master's College and Universities, 29% are classified as Research Universities, while the remaining programs are classified as Doctoral/Research Universities, Baccalaureate Colleges, or Special Focus Institutions (CAPTE, 2018). Programs average an operating budget of $400,000 (CAPTE, 2018).

Programs average 330 qualified applicants for 45 planned slots (CAPTE, 2018). Programs graduate 97% of enrollees, report 98% ultimate pass rate, and report 99% employment rate. Sixty-four percent of programs operate under a 4+3 curriculum format, where students attend undergraduate for 4 years, followed by 3 years of professional school. Programs average 123 weeks in length, with more than 70% of instructional time spent in didactic and laboratory phase. 87% of programs use a semester academic calendar, while 76% use a hybrid curriculum model (CAPTE, 2018).

Faculty. Core faculty to student ratio is 1:12 (CAPTE, 2018). Other faculty, listed as core faculty members excluding the program director and director of clinical education, average 50% teaching load, 20% scholarship, 10% service, and the remaining percentage divided between

clinical practice, administration, and other programs. Faculty average 53 years of age, 12 years teaching experience, and have been at their current program for 10 years. Seven percent of faculty identify as an underrepresented minority (CAPTE, 2018).

Students. Enrolled students average a cumulative grade point average (GPA) of 3.58 (CAPTE, 2018). In 2017, 60% of enrolled students identified as a female and 13% of students identified as an underrepresented minority (CAPTE, 2018).

Licensure. One of the goals of physical therapy programs is to prepare graduates to become licensed to practice physical therapy within a respective state. In the United States, to become licensed to practice graduates must pass the NPTE. Exceptions are made for foreign educated physical therapist. For example, the state of Alabama does not require foreign educated physical therapist to pass the NPTE, but request educational credentials from a recognized educational evaluation agency be sent directly to the Alabama licensure board, where they will subsequently determine the acceptability of the equivalency in the educational process (State of Alabama Board of Physical Therapy, 2012). The NPTE is an examination designed to assess an accredited program's graduate basic entry-level competence (Federation of State Boards of Physical Therapy [FSBPT], 2019). FSBPT (2019) outlined the NPTE has three purposes: 1) to provide examination services to regulatory authorities charged with the regulation of physical therapists and physical therapist assistants; 2) to provide a common element in the evaluation of candidates so that standards will be comparable from jurisdiction to jurisdiction; and 3) to protect the public interest in having only those persons who have the requisite knowledge of physical therapy be licensed to practice physical therapy. In addition to passing the NPTE, an applicant may also be required to pass a background check and/or a jurisprudence examination.

Jurisprudence is a test of the state's laws and rules related to physical therapy practice and is required by 29 states (FSBPT, 2019).

The NPTE is developed by the FSBPT whose mission is to protect the public by providing service and leadership that promote safe and competent physical therapy practice (FSBPT, 2019). The questions or items are developed by physical therapists that serve as item writers on either the Examination Development Committee or Item Bank Review Committee. The examination is updated every five years to ensure contemporary knowledge is being assessed with the most recent update in January 2018. Eligibility for taking the NPTE is dependent upon the state practice act, but FSBPT (2019) outlined that at minimum candidates must be a graduate of an accredited physical therapy program. The NPTE is a pass/fail examination consisting of 250 multiple-choice questions, where only 200 of the questions are scored. Raw scores are converted to scale scores ranging from 200 to 800 with a passing criterion of 600 (FSBPT, 2019).

The NPTE consists of three main items: physical therapy examination, foundations for evaluation, differential diagnosis and prognosis, and interventions (FSBPT, 2019). Within each item, candidates are assessed on nine body systems: cardiovascular and pulmonary, musculoskeletal, neuromuscular and nervous, integumentary, metabolic and endocrine, gastrointestinal, genitourinary, lymphatic, and systems interaction. In addition to being tested on nine body systems, candidates are also assessed on non-systems that include equipment, devices and technology, therapeutic modalities, safety and protection, professional responsibilities, and research and evidence-based practice. Musculoskeletal and neuromuscular and nervous systems compose a little greater than 50% of the NPTE (FSBPT, 2019).

Call for Educators

In 2013, the APTA updated the profession's vision statement and guiding principles to reflect the need for access and equity for all populations (APTA, 2017b; Nuciforo, 2014). This need is further echoed in the Institute of Medicine book *Unequal Treatment Confronting Racial and Ethnic Disparities in Health Care* and the Sullivan Commission's report *Missing Persons: Minorities in the Health Professions* (Smedley, Stith, & Nelson, 2002; The Sullivan Commission on Diversity in the Healthcare Workforce, 2004). Underrepresented minorities receive a lower quality of healthcare, even when access-related factors are controlled (Smedley et al., 2002). Although the sources of these disparities are complex and rooted in historical and contemporary inequities, increasing underrepresented minorities demographics within healthcare provides a viable solution (Smedley et al., 2002). The Sullivan Commission (2004) furthered echoed the nation's health professions demographics have not kept pace with the changing demographics in the United States, and this representation disparity may cause an even greater of health care disparities than uninsured populations. A failure to reverse this trend projects one-third of Americans will be at risk, with underrepresented populations affected the most. Diversity is a key to excellence in health care and to achieve this, care must be provided by well-trained, qualified, and culturally competent health professions workforce that mirrors the population they serve (The Sullivan Commission on Diversity in the Healthcare Workforce, 2004). To meet this call, programs in the medical, dental, pharmacy, nursing, and public health schools have shifted toward holistic admissions (Price & Grant-Mills, 2010; Wells, Sinkford, & Valachovic, 2011; Witzburg & Sandheimer, 2013).

Holistic admissions are a flexible, individualized method of assessing an applicant's capabilities where balanced considerations are given for life experiences, personal attributes, and

academic metrics with the goal of determining the value a student can contribute to an admissions class and society (Association of American Medical Colleges [AAMC], 2013; Witzburg & Sondheimer, 2013). Holistic admissions are three fold, one assessment of academic readiness such as GPA and standardized test scores, two, gauge interpersonal and intrapersonal competencies such as grit, compassion, and integrity, and three, promote diversity (AAMC, 2013; Glazer & Bankston, 2014; Kirch, 2012).

Physical Therapy Program's Admissions

Literature Search

The electronic databases Academic Search Premier, MEDLINE, CINAHL, PsycINFO, Primary Search, ERIC, Education Research Complete, and PsycArticles were searched using several combinations of the following key words: doctor of physical therapy schools, physical therapy, admissions, cognitive, non-cognitive, qualitative, quantitative, applicant and selection. None used qualitative methods or mixed methods. Some of the common themes were a need to determine student attrition and matriculation, passing licensure exam, and success on clinical rotations prediction variables. Scholars focused on variables such as undergraduate cumulative GPA (cGPA), undergraduate science GPA (sGPA), prerequisite GPA (pGPA), last 60 undergraduate GPA hours (60GPA), physical therapy GPA (ptGPA), total graduate record exam (tGRE), verbal GRE (vGRE), quantitative GRE (qGRE), written GRE (wGRE), letters of recommendation (LOR), interviews, physical therapy clinical performance instrument (PTCPI) and pre-physical therapy volunteer settings. There is only one study, which ranks admission variables. Agho, Mosley, and Williams (1999) reported from their survey of health professions foundational GPA first, overall GPA second, volunteer work in a field setting third, letters of recommendation fourth, and performance of personal interviews fifth as the most important

criteria for physical therapy programs when selecting their applicants. Interestingly, GRE was not given as an option and increasing diversity was ranked eight out of fourteen (Agho et al., 1999).

Cognitive

GPA

Cognitive variables include GPA and standardized test scores (Sedlacek, 2004, 2017). A strong argument can be made that prior academic success is a good indicator of the potential for future academic success (Olivares-Ureta & Williamson, 2013).

Literature is mixed on the utility of GPA on NPTE performance. Despite this, cGPA is the primary physical therapy admissions variable (Agho et al., 1999; Riddle et al., 2009; Utzman et al., 2007; Wolden, 2018). Physical therapy applicants with a cGPA of less than 3.5 have been reported to have a higher likelihood of failing the NPTE on their first attempt (Cook, Engelhard, Landry, & McCallum, 2015; Dillon & Tomaka, 2010; Riddle et al., 2009; Utzman et al., 2007; Wolden, 2018). In contrast, other scholars have reported a weak to no correlation between cGPA and NPTE performance (Fell, Mabey, Mohr, & Ingram, 2015; Thieman, 2003; Galleher, Rundquist, Barker, & Chang, 2012; Guffey, 2000; Huhn & Parrot, 2017; Meiners, 2015). Lastly, authors such as Zipp et al. (2010) and Shiyko and Pappas (2009) reported a positive correlation between cGPA and ptGPA.

Literature is mixed on the use of pGPA to predict NPTE performance. pGPA is defined as specified prerequisite coursework which typically includes science courses such as anatomy and physiology, biology, calculus, chemistry, and physics (PTCAS, 2018). Fell et al. (2015) reported from their sample of 290 PT graduates that pGPA accounted for nearly 8% of variability in NPTE performance. Similarly, Dockter (2001) and Lewis (2011) were able to show

a positive correlation between pGPA and NPTE performance, while Theiman et al. (2003) and Guffey (2000) found no correlation between pGPA and NPTE performance.

Also of note, Theiman et al. (2003) reported ptGPA was the strongest predictor of NPTE performance. The construct of ptGPA being positively correlated to NPTE performance is also supported by Dillon and Tomaka (2010), Utzman et al. (2007), and Adams et al. (2008).

GRE

Literature is mixed on the use of GRE to predict NPTE performance. Huhn and Parrot (2017) reported from their sample of 178 students over four cohorts that tGRE could predict NPTE performance. Utzman et al. (2007), Hollman et al. (2008), and Riddle et al. (2009) each reported vGRE as a strong to moderate predictor of first-time NPTE passage. In addition, Riddle et al. (2009) found qGRE to be a predictor of first-time NPTE passage, but not as strong of a predictor when compared to vGRE. In contrast, Dillon and Tomaka (2010) found tGRE to not be a predictor of NPTE passage. Hollman et al. (2008), Lewis (2011), and Meiners (2015) each reported no correlation between tGRE, qGRE, and NPTE performance. Lastly, authors such as Shiyoko and Pappas (2009), Jewell and Riddle (2005) and Thieman et al. (2003) reported a positive correlation between tGRE and physical therapy program GPA. Also of note, all of the aforementioned studies identified were based on the old version of the GRE.

Non-Cognitive. Non-cognitive is a term that describes any measured variable that is not a GPA variation or standardized test score. This term has also been reported in the literature as qualities, traits, and/or soft-skills. Some of the most common non-cognitive measures within physical therapy literature are interview, grit, and emotional intelligence scores. Non-cognitive constructs such as empathy, leadership, motivation, communication skills, moral reasoning, and

grit influence learning and success at a graduate level (Hollman et al., 2008; Koenig et al., 2013; Roll et al., 2018; Sedlacek, 2017).

Non-cognitive variables have not been well investigated in physical therapy education research, when compared to other health professions such as medicine, dentistry, nursing, and pharmacy. Guffey et al. (2002) used the non-cognitive questionnaire-revised and investigated its ability to predict NPTE performance. Guffey et al. (2002) found only the long-range goals domain is correlative to NPTE performance, specifically an inverse relationship was noted. Guffey et al. (2002) provided a few explanations for this result such as the non-cognitive questionnaire-revised is not an appropriate tool for predicting NPTE performance and sample size characteristics. Hollman et al. (2008) found behavioral interviews to predict NPTE first time passage rate. Behavioral interviews consisted of decision-making and problem solving, interpersonal skills, patient/client focus, communication, and teamwork constructs (Hollman et al., 2008). Aldridge, Keith, Sloas, and Mott-Murphree (2010) found a positive correlation between the Nelson Denny Reading Test and NPTE performance. Lastly, Galleher et al. (2012) also investigated two inventory surveys examining personality traits and coping skills and their ability to predict NPTE performance. From a sample size of 49 physical therapy graduates, Gallerher et al. (2012) found no relationship between personality traits and coping skills and NPTE performance.

Epistemology. Each of the articles referenced above use a positivist or post-positivist lens to predict success, which emphasizes a search for variables to select an arbitrarily created perception of the most qualified applicant for physical therapy school. Within this paradigm, researchers have failed to address the need for diversity, the need for social justice, and the need to address the inequities of the educational structure. In addition, researchers have attempted to

extrapolate non-cognitive measures as predictive constructs for cognitive measures, while ignoring the underlying qualitative construct of trustworthiness.

Two primary limitations with the GRE is the inability to measure all the qualities that are important in predicting success in graduate school or in confirming undergraduate achievement and that GRE is an inexact measure due to standard error of measurement (Educational Testing Services, 2017). Graduate admissions committees should avoid the use of cut-off scores and all scores should be treated as three separate and independent pieces of information. In addition, committees should take special care when interpreting results from underrepresented groups, as they may have educational and cultural experience different from the traditional majority. For example, in the most recent publication of statistical data from July 2016 – June 2017, those who identified as Black scored on average 7 points lower than those who identified as White, non-Hispanic (Educational Testing Services, 2017). Despite this, scholars still focus on using the GRE as a metric to suggest the most qualified applicant and weed out applicants. Also of note, a report from the national center for education statistics reported nearly 40% of those who identify as White graduate with a 3.5 GPA or higher, while only 19.5% of those who identify as Black and only 24.8% of those who identify as Hispanic graduate with a 3.5 GPA or higher (US Department of Education, 2012). As noted in the APTA vision statement and guiding principles there is a need and want for diversity, but this is not reflected in physical therapy admissions literature.

Other Health Professionals Admissions

Medical

The United States Bureau of Census (2000) projected that by 2050 over half of Americans will be a person of color (Smedley, Stith, & Nelson, 2002). Couple the rising

minoritized population with minoritized groups experiencing poorer overall health status, lower levels of access to care, and a disproportionate burden of chronic and infectious diseases, and there can be an argument for a significant healthcare crisis on the horizon (Smedley et al., 2002; United States [US] Bureau of Census, 2000). Smedley et al. (2002) outlined underrepresented minorities (URMs) are four times as likely to receive care from non-white physicians, minority physicians are most likely to practice in medically underserved communities, minority physicians have greater success in recruiting URMs to participate in clinical research, minority physicians have the ability to deliver a greater quality of care to URMs, minority physicians increase the culturally diversity of fellow physicians, and minority physicians may be better equipped to deliver preventative and primary care to URMs (Grbic & Slaper, 2010; Moy & Bartman, 1995; Wayne, Kalishman, Jerabek, Timm, & Cosgrove, 2010). These factors along with the acknowledgement of societal inequalities, barriers minorities face in health care education justifies a shift to holistic admissions (Grabowski, 2016; Price & Mills, 2010; Smedley et al., 2002). In 2003, Boston University School of Medicine (BUSM) became one of the first medical programs to begin the shift towards holistic admissions, and interestingly, in a 2014 survey, 91% of medical schools are using some form of holistic admissions (Glazer & Bankston, 2014; Witzburg & Sondheimer, 2013). Since shifting to holistic admissions, medical schools report an increase in diversity, either an increase or no decline in cognitive measures such as GPA and Medical College Admission Test, increase in community engagement, increase in teamwork, increase in cooperativeness, increase in openness to new ideas, and no decline in matriculation or licensure passage rates, which further echoes the utility and validity of holistic admissions (Glazer & Bankston, 2014; Grabowski, 2016).

Dental

Biesta (2008) questioned, "This it [sic] the question whether we are indeed measuring what we value, or whether we are just measuring what we can easily measure and thus end up valuing what we (can) measure" (p. 35). Following the recommendations from the Sullivan report and Institute of Medicine report dentistry adopted new accreditation standards which acknowledges the value of diversity and calls for schools to demonstrate efforts to increase diversity within their admission classes (Commission of Dental Accreditation [CODA], 2017; Smedley, Stith, & Nelson, 2002; The Sullivan Commission on Diversity in the Healthcare Workforce, 2004; Wells, Brunson, Sinkford, & Valachovic, 2011). Scholars argue diversity not only enhances educational experiences for students, but also builds a diverse workforce while increasing access to quality oral health care for all populations (Price & Mills, 2010; Smedley, Stith, & Nelson, 2002; The Sullivan Commission on Diversity in the Healthcare Workforce, 2004). In dentistry, cognitive variables such as GPA and Dental Admission Test (DAT) scores have shown a weak-moderate indicator of academic performance, in addition URMs historically score lower on these measures (AAMC, 2010; Andersen et al., 2007; Dental Admission Testing Program, 2010; Sedlacek, 2004; Wells et al., 2011). Although historically DAT scores and GPAs were accepted as the gold standard of admissions practices, they fail to address the diversity conundrum along with accurately representing the aptitude of all students (Price & Mills, 2010; Sedlacek, 2004; Wells, Brunson, Sinkford, & Valachovic, 2011). For example, URMs applicant score well on harder to quantify qualities such as motivation, grit, leadership, and other life experiences; with holistic admissions qualities such as those in addition to other non-cognitive variables such as empathy, creativity, and community service can be equally assessed with cognitive variables (AAMC, 2010; Sedlacek, 2004; Wells, Brunson, Sinkford, & Valachovic,

2011). In shifting toward holistic admissions dental educators are providing social equality and preparing future dentist for the diverse population of the future.

Transformative Lens in Admissions

There is a lack of research pertaining to physical therapy admissions using a transformative lens. The transformative paradigm has the ability to introduce intersectionality to help in deconstructing societal hierarchies (Wosley et al., 2017). Cole (2008) described intersectionality as an analytic approach that simultaneously considers the effects of multiple categories of social group memberships such as race, class, gender, sex, age, cognitive status, and physical status. Despite this concerted push, over the last 9 years underrepresented minorities' representation has only grown 2% (CAPTE, 2018). The transformative paradigm introduces questions such as how do we determine the most qualified applicant (Mertens, 2007b)? Where did our perception of the most qualified applicant originate? What impact does our perception of the most qualified applicant have on minoritized applicants (Mertens, 2007b)? Physical therapy educators must start asking themselves what is my role in contributing to this representation inequity and how will I assist in eliminating this representation inequity?

Current physical therapy admissions literature suggests that current investigative paradigms are inadequate in addressing this representation inequity. Kuhn (1970) argued that new paradigms emerge when current paradigms no longer adequately explain or insufficiently explain phenomenon. A new paradigm to look at admission policies and practices is the transformative paradigm. The transformative paradigm can provide five elements, which are currently missing in physical therapy admission literature. One, the transformative paradigm provides an opportunity for admissions committees to clarify their perception of the most qualified applicant by qualitative or mixed methods. Two, the transformative paradigm provides

an opportunity for admissions committees to reevaluate their policies and practices and see how they are combating or perpetuating the representation inequities by qualitative or mixed method analysis. Three, the transformative paradigm provides a different lens to view the representation inequity, with an emphasis on social justice and human rights. Four, the transformative paradigm provides an alternative paradigm to investigate the phenomenon, which can help to create a more all-inclusive truth. Finally, the transformative paradigm acknowledges those who have been minoritized in addition to providing data in a language that those in power understand by mixed methods.

Diversity and Inclusion

Definition

Diversity is a term that has evolved over the last 20 years. Carnevale and Stone (1995) defined diversity as differences in people based on their numerous identifications with group membership. The Sullivan Commission (2004) defined racial and ethnic diversity in health care workforce as:

> (1) The representation of all racial and ethnic groups from the community served within a given health care agency, institution, or system; (2) the system-wide incorporation of diverse skills, talents, and ideas from those racial and ethnic groups; and (3) the sharing of professional-development opportunities and resources, as well as responsibilities and power among all racial and ethnic groups and at all levels of a given agency, institution, or system. (p. 13)

Arredondo (2015) further dissected previous diversity definitions to ensure constructs such as gender, race/ethnicity, geographic origin, educational background or family background was explicit. Lastly, ACAPT (2016) echoed the sentiments of Arredondo (2015) within their

Diversity Task Force Report by defining underrepresented minorities as those from disproportionally represented racial/ethnic demographics, educationally disadvantaged backgrounds, e.g. first-generation, individuals from low socioeconomic status, and geographically underrepresented areas, e.g. Appalachia. Diversity and URM are used interchangeably within the physical therapy admissions literature. Therefore, diversity in health care can be broadly defined as the representation of individuals who identify with different membership groups which include but is not limited to race/ethnicity, gender, education, socioeconomic status, geographic location, physical and mental disabilities, belief systems, and any other marginalized population. Diversity within health care workforce is a working definition and will continue to acknowledge marginalized populations in addition to taking into account societal inequities related to inclusion.

Dimensions of Diversity

Diversity dimensions beyond ethnicity and race literature are scarce. Similar to holistic admissions, medicine is leading the charge in exploring diversity dimensions beyond ethnicity and race. Morrison and Grbic (2015) explored the impact of six dimensions of diversity, level of parental education, college major, age, region of high school attended, MCAT score variability, and race/ethnicity within a sample of 33,510 medical students. Morrison and Grbic (2015) found only the racial/ethnic diversity dimension to have a significant impact on student's perception of learning. Interestingly, Morrison and Grbic (2015) reported that students from minoritized groups had a stronger association when compared the White, non-Hispanic demographic. In the United Kingdom, scholars have explored on diversity constructs such as socioeconomic backgrounds and disability (Alexander, Palma, Nicholson, & Cleland, 2017). Alexander et al. (2017) concluded from their United Kingdom medical school webpage analysis that programs

have not created inclusive websites, which may explain the lack of representation progress from their marginalized populations. Lastly, a report from Patterson et al. (2018) entitled *2018 Ottawa Consensus Statement: Selection and Recruitment to The Healthcare Professions*, highlighted the consensus from medical educators from around the world where they agreed that in addition to minoritized ethnic/racial groups, educators should also acknowledge diversity dimensions such as socioeconomic and rural backgrounds. Of note, scholars in medicine have reported ethno/racial diversity as being the most impactful diversity metric for cultural competency and learning outcomes, which may explain the higher incidence of ethno-racial diversity construct within the literature when compared to other dimensions (Gurin, Dey, Hurtado, & Gurin, 2002; Morrison & Grbic, 2015; Saha, Guiton, Wimmers, & Wilkerson, 2008; Vick et al., 2018).

Inclusion is a term that is often used in conjunction with diversity and equity. Tienda (2013) explored this term in relation to higher education in her essay entitled, *Diversity ≠ Inclusion: Promoting Integration in Higher Education*. Tienda (2013) argued higher education institutions cannot settle on increasing minoritized populations representation, but must focus on reassessing their intuitional and instructional strategies to achieve a goal of integration. LePeau, Hurtado, and Davis (2018) argued inclusion is creating a welcoming environment for students, faculty, and staff from different backgrounds. Scholars such as LePeau, Hurtado, and Davis (2018), Nussbaum (2011), and Sen (2000) have argued inclusion is a social justice issue. Within a social justice context, institutions should take actionable steps addressing inequities such as racism, sexism, heterosexism, and ableism, to achieve a goal of promoting student, faculty, and staff success (LePeau, Hurtado, & Davis, 2018). Therefore, inclusion in higher education can be broadly defined as creating an open, welcoming environment for students, faculty, and staff to facilitate an equitable integration of diverse experiences and thoughts. Lastly, Verna Myers

explained, “Diversity is being invited to the party. Inclusion is being asked to dance, ®” (The Verna Myers Company, 2019, para. 4).

Legal issues. Ethno-racial diversity has been explored in the United States court system. The first landmark decision was *Brown v. the Board of Education* where the United States Supreme Court established racial segregation in public institutions was unconstitutional (Warren & Supreme Court of the United States, 1953). Despite the ruling, many institutions resisted integration (Grabowski, 2016; Tienda, 2013). This resistance coupled with the acknowledgement of societal inequities gave rise to Executive Orders 10925 and 11246 that facilitated the concept of affirmative action (Lemann, 1999; U.S. Department of Labor, 2019). The intention of affirmative action was to provide an opportunity for marginalized populations in employment and education since they had previously been discriminated against (Grabowski, 2016; Miller, 2019). Ironically, affirmative action provided the framework for lawsuits to be filed related to the concept of reverse discrimination.

The first lawsuit to gain national attention under the guise of reverse discrimination was *Regents of the University of California v. Bakke* in 1978. Allen Bakke was a medical school applicant who was denied admissions into to the University of California, Davis School of Medicine on multiple occasions (Powell, 1978). Bakke argued that he would have been accepted if Davis School of Medicine did not have a quota of minority applicants. Justice Powell ruled in Bakke’s favor outlining quotas were a violation of the 14th Amendment, Title VI of the 1964 Civil Rights Act, but did clarify that using race/ethnicity in admissions was constitutional (Grawbroski, 2016; Powell, 1978; Schmidt, 2008).

Nearly 25 years after the *Regents of the University of California v. Bakke* ruling, *Grutter v. Bollinger* explored this concept of reverse discrimination again (O’Conner, 2003). Grutter was

a law school applicant who was denied admissions into the University of Michigan Law School who argued that the University of Michigan School of Law violated her 14th Amendment, Title VI of the 1964 Civil Rights Act based on their admissions process that favored underrepresented minority candidates. The Supreme Court reaffirmed the *Regents of the University of California v. Bakke* decision stating that race-conscious admissions are constitutional (O'Conner, 2003).

On the same day the Grutter v. Bollinger was decided, the United States Supreme Court also ruled on *Gratz v. Bollinger* (Rehnquist, 2003). Like Grutter, Gratz and her co-plaintiff Hamacher were denied admissions into the University of Michigan, but to the College of Literature, Science, and the Arts. The Supreme Court ruled in the favor of Gratz 6-3, while Chief Justice Rehnquist clarified that automatically distributing a decisive amount of admissions points to any underrepresented minority applicant was unconstitutional (Rehnquist, 2003). ACAPT (2016) argued that one take away from the *Gratz v. Bollinger* is affirmative action in school admissions is constitutional if race is one factor among many with the intent of creating a diverse class.

The most recently publicized exploration of reverse discrimination is *Fisher v. University of Texas.* Fisher was denied undergraduate admissions and argued that the use of race as a consideration was a violation of her Equal Protection Clause of the 14th Amendment (Kennedy, 2013, 2016). Her battle within the court system played out from 2009–2016 where the district courts, United States Courts of Appeals, and Supreme Court all ruled in favor of the University of Texas using race as a consideration in their admissions process as constitutional (Kennedy, 2013; 2016). Of note, in 2013 the Supreme Court vacated and remanded the United States Courts of Appeals due to a misinterpretation of strict scrutiny, which the United States Courts of Appeal

and Supreme Court subsequently ruled in favor of the University of Texas in 2014 and 2016, respectively.

Physical therapy. The APTA acknowledged the shortage of representative physical therapy providers and the impact this shortage can have on health care disparities and patient outcomes (APTA, 2019b). Similarly, Moerchen et al. (2018) outlined in their position paper, *Purposeful Recruitment Strategies to Increase Diversity in Physical Therapist Education*, that to prepare a more diverse physical therapy workforce programs must recruit, admit, and retain a student body which mirrors society. Unfortunately, the representation gap over the last decade in the physical therapy profession has widened (ACAPT, 2016; Green & Karvatas, 2018; Moerchen et al., 2018; Nuciforo, 2014; Walsh, Brogan, & Barba 2000; Wilcox, Weber, & Andrew, 2005). ACAPT (2016) provided nine recommendations to increase diversity within the physical therapy profession:

1. Promote physical therapy as a viable career option for URM students
2. Develop resources to help middle school, high school, community college, and 4-year college advisors mentor pre-DPT students
3. Develop a new task force to create pre-DPT admissions structure to simplify and standardize prerequisites across programs and revised the course prerequisites policies to state that programs should not exceed the standardized set.
4. Provide programming and resources to help promote the use of holistic admissions strategies at physical therapist education programs.
5. Advocate for greater financial assistance for URM physical therapist students
6. Recommend PTCAS explore the feasibility of automatically identifying applicants from medically underserved areas (MUA) and applicants who may be from

underrepresented areas or educationally disadvantaged backgrounds using the applicants' permanent addresses and the Health Resources and Services Administration (HRSA) MUA list or other sanctioned documents that indicates geographic or educational disadvantages.

7. Collaborate with APTA and Student Assembly to develop [reinvent] a mentoring network to match URM prospective students with current URM DPT students, and current URM DPT students with new URM professionals.
8. Promote the development of faculty and clinical residencies for URM graduates at Historically Black Colleges and Universities (HBCUs) and Hispanic-Serving Institutions (HSIs).
9. Prioritize a research agenda to further understand factors and provide evidence to support URM student choice of a physical therapist career.

Wise et al. (2017) charged physical therapy programs to engage in holistic admissions. To assist in this charge, the APTA has provided resources on their website outlining the rationale for holistic admissions and case examples in dentistry and medicine and facilitated educational sessions at their national conferences over the last two years (APTA, 2019c).

Scholars have argued that minoritized populations receive lower health care, die earlier, have more diseases, and so on (Sullivan Commission, 2012). One of the proposed strategies to decrease these negative health outcomes is increasing the demographics of minoritized health care workers (Sullivan Commission, 2012). Although this strategy appears viable on the surface, one of the major limitations is the ability to find what the profession defines as a qualified applicants. Within current admissions paradigms, qualified applicants are typically deemed those with high academic measures, such as grade point average and standardized test scores (Agho et

al., 1999; Cook et al., 2015; Riddle et al., 2009; Utzman et al., 2007). Unfortunately, those from minoritized communities demonstrate lower grade point averages and standardized test scores than their White or Asian counterparts, which subsequently decreases the applicant pool and potential minoritized health care workers to combat the proposed negative health outcomes (Educational Testing Service, 2017; U.S. Department of Education, 2012). Based on this, I am arguing our current paradigm for evaluating candidates is inadequate and an equitable paradigm, specifically a social justice paradigm, is warranted if the goal is to increase minoritized populations representation within the profession. A transformative paradigm introduces a shift in admissions paradigms. The goal of health care is to help society, not reward students who have achieved high academic measures; a transformative paradigm facilities this shift.

CHAPTER 3: METHODOLOGY

Chapter 3 addresses the study's methodology, specifically the purpose, positionality, participants, and data collection and analysis. This chapter expounds on the research questions by justifying the procedures in participant selection, mixed methods data collection, and data analysis. Trustworthiness is also discussed.

Purpose of the Study

The purpose of this study was to examine the admissions' processes in doctor of physical therapy programs. This study clarified admission committees' selection priorities. This study also described the admission process for doctor of physical therapy programs, specifically how candidates were selected and how diversity and inclusion were addressed within the admissions process.

Research Questions

The following research questions were used in this study:

1. What are the overall ranking admissions variables for doctor of physical therapy programs by program chairs and/or directors, and admissions committee members?
2. What are the overall ranking admissions variables for doctor of physical therapy programs by demographics?
3. What is the process for selecting students for doctor of physical therapy programs?
4. What are the major influential factors in the admissions process for doctor of physical therapy programs?
5. How is diversity addressed in the doctor of physical therapy programs admissions process?

6. How is inclusion addressed in the doctor of physical therapy programs admissions process?

Design of the Study

This study addressed doctor of physical therapy admissions, specifically the most valuable admissions variables and how those variables impacted diversity and inclusion within the physical therapy admissions process. An explanatory sequential mixed methods design was used, which involved collecting quantitative data first and then explaining the quantitative results with in-depth qualitative data (Figure 1). In phase I, survey data were collected from doctor of physical therapy programs in the United States to report which admission variables are the primary factors in admitting applicants and if these variables differed between institutions. In phase II, interviews were conducted to help explain the quantitative data. In this exploratory follow-up, the admissions committee members and/or program directors described their program's admissions process. Admission committee members and/or program directors also described how their admissions process addressed diversity and inclusion. Transformative paradigm was used as an interpretive lens to frame the data gathering, analysis, and interpretation. Figure 1 outlines the design of the current study.

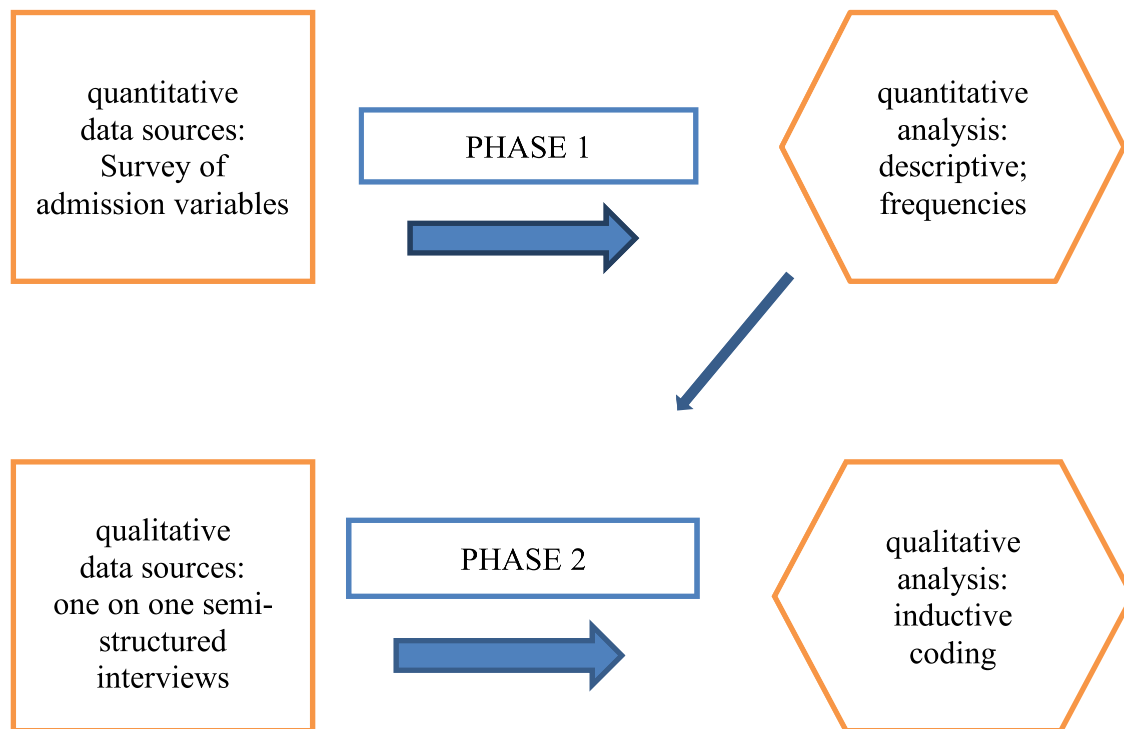

Figure 1. Study design.

Positionality

I am a millennial cis-gender non-disabled middle class critically conscious African American man who is from Birmingham, Alabama. Scholars such as W.E.B. Du Bois, Paulo Freire, Sandra Harding, and Donna Mertens influence me. Specifically, I identify with W.E.B. Du Bois' double consciousness concept, Paulo Freire's banking model concept, Sandra Harding's standpoint theory, and Donna Mertens' transformative paradigm. Donna Merten's transformative paradigm guides this inquiry.

I am an assistant, tenure-track professor at a historically black college and university (HBCU) in Montgomery, Alabama and have completed more than 32 continuing education hours on holistic admissions, attended multiple presentations on holistic admissions, participated in

two physical therapy admissions cycles at my program, and serve as a co-chair of my program's physical therapy admissions. At the core of my admissions inquiry is a desire to increase minoritized populations representation within health care professions. This desire was birth from prejudicial experiences as a patient, current feelings of isolation within the physical therapy profession, and the projected health care disparities of minoritized populations within the United States.

When developing this research topic, I wanted to explore why the population growth of minoritized individuals in the physical therapy profession has not mirrored the population growth in society. My preconceived notion is there is a cognitive dissonance with respect to admission committee's priorities and actions to increase minoritized populations representation within the physical therapy profession. I hope that I can create a framework that physical therapy program admissions committees can use to facilitate an increase in minoritized student's representation and inclusion within their programs.

I argue that my inquiry lens, transformative paradigm, is warranted to assist in providing an equitable solution to the representation inequity within the physical therapy profession. An equitable solution focuses on evaluating each candidate individually on their merit and potential, as opposed to an equality solution that focuses on ensuring we are evaluating each candidate exactly the same. All solutions in the literature have focused on equality, which appears to disproportionally disadvantage minoritized populations as noted by no meaningful statistical changes in minoritized populations representation in the physical therapy field (APTA, 2017b; CAPTE, 2018; Nucifero, 2014). I am arguing our current paradigm for evaluating candidates is inadequate and an equitable paradigm is warranted to increase minoritized populations representation within the profession.

Within the transformative paradigm I must acknowledge my power. As a co-chair of a physical therapy admissions committee, I have the power to create and influence policies and procedures that advantages or disadvantages applicants. Lastly, my aforementioned intersectionalities shape my perspective on value, reality, and knowledge.

Data Collection

This study used an explanatory sequential design. Explanatory sequential design can address the needs of marginalized communities in addition to providing conscious awareness to contextual and historical factors such as discrimination, oppression, racism, sexism, and any other ism that marginalizes a group of people (Mertens et al., 2010). From a transformative stance, mixed method designs are seen as vessels to enact social change as opposed to being pragmatic and opens opportunities for marginalized populations to share their viewpoints and truths (Mertens, 2007b; Romm, 2015). As aforementioned in Chapter 2, physical therapy programs admissions literature has predominately used positivist and post-positivist epistemologies to explore admissions, which provides correlative success variables, but fails to address questions such as why and how these variables are correlative to success, the empirical expertise of faculty, clinical success, and diversity. The next few paragraphs will outline my communication with participants, survey construction, and interview protocol.

In phase I, I contacted participants by email (See Appendix A). Fifteen percent of participants completed the survey after the initial participation email. Initially, I had planned three follow up emails, but only two were sent based on a 10% response rate after the first reminder and 0% response rate after the second reminder (See Appendix B). Each invitation email had a link to the admissions survey that was adapted from Agho et al.'s (1999) survey (See Appendix C). I used Qualtrics to design and distribute the survey. Four survey components

involved cognitive measures and five survey components involved non-cognitive measures, all of which were measures reported in the literature as factors which increase success in physical therapy school and passing the NPTE (Agho et al., 1999; Guffey, 2000; Huhn & Parrot, 2017; Jewell & Riddle, 2006; Mohr et al., 2005; Nuciforo, 2014; Nuciforo et al., 2014; Shiyko & Pappas, 2009; Wheeler & Arena, 2009; Utzman, 2006; Utzman et al., 2007).

Agho et al.'s (1999) survey included fourteen different admission decision factors: overall GPA, GPA in foundational courses, high school GPA, letters of recommendations, standardized test scores, increase diversity among students, performance on personal interview, participation in enrichment programs, volunteer work in a field setting, student's desire to work in an underserved community, personal goal statement, extracurricular activities, student's character, and prior work experience. This survey was a part of a larger five-part questionnaire, which was developed to review the interview and admission practices in medical and allied health programs (Agho et al., 1999). A panel of experts assessed the five-part questionnaire for face and content validity (Agho et al., 1999). I adapted this study's survey to ten admissions constructs based on the suggestion of Dillman et al. (2009). The ten admissions constructs used for this study were selected with the transformative paradigm guiding the design, while ensuring the most common constructs reported in physical therapy admissions research were represented. Lastly, to account for any novel constructs another section was added.

In phase II, I conducted nine phone interviews (See Table 1). All interviews were conducted in my office at Alabama State University, Suite 301C, located in the John L. Buskey Building on the campus of Alabama State University, at the participants' requested date and time. Participants requested date and time were submitted if they agreed to participate in a one-

on-one interview. A Sony ICD-BX140 4GB digital voice recorder was used to record all of the sessions.

I used as a standardized interview protocol for each interview (See Appendix D). Prior to interview, all but one participant emailed their consent form (See Appendix E). The one participant who did not email their consent form provided a recorded, verbal consent prior to the start of the interview and then subsequently emailed the signed consent document immediately following the interview. All consent forms were stored in Suite 301C located in the John L. Buskey Building on the campus of Alabama State University.

Participants

Phase I: Survey

Institutional Review Board approval was obtained from Auburn University on August 7, 2018 (See Appendix F). For phase I, I emailed every 247 accredited PT program listed in the program directory from the CAPTE website (APTA, 2018). Each program was sent an invitation email, followed by two follow-up emails over one-week intervals (See Appendix B). The overall response rate was 23%, where 15% responded after the initial email, 10% after the follow up email, and 0% after the next follow up email.

Phase II: In-depth Interviews

For phase II, participants signed up to volunteer after completing phase I. There were eighteen volunteers who signed up for an interview. I emailed all eighteen volunteers on their preferred day and time with a request for an interview within 3 weeks of their survey completion date (See Appendix G). Of the eighteen volunteers, nine responded within the first week of their initial contact date. I conducted those nine interviews prior to following up with the last nine participants. Due to data saturation, which will be described in the data analysis section, I only

conducted the initial nine interviews. Table 1 describes demographics of the participants of phase II.

Table 1

Demographics of Phase II Participants

Interviewee	Gender	# Applicants Accepted	Years on Admissions	Institution Type	Admissions Position	Program Location
1	M	36	15	Private	Program Director	West
2	F	35	6	Private	Program Director	North
3	M	36	15	Public	Admissions Chair	South
4	F	70	4	Public	Program Director	West
5	F	40	4	Public	Program Director	Mid-West
6	F	36	8	Public	Admissions Committee Member	South
7	M	100	1	Public	Admissions Chair	South
8	F	100	5	Private	Program Director	West
9	F	40	5	Public	Program Director	Mid-West

Data Analysis

Measures of central tendency and claims were reported to address the research questions:

1. What are the overall ranking admissions variables for doctor of physical therapy programs by program chairs and/or directors, and admissions committee members?

2. What are the overall ranking admissions variables for doctor of physical therapy programs by demographics?
3. What is the process for selecting students for doctor of physical therapy programs?
4. What are the major influential factors in the admissions process for doctor of physical therapy programs?
5. How is diversity addressed in the doctor of physical therapy programs admissions process?
6. How is inclusion addressed in the doctor of physical therapy programs admissions process?

I created tables to assist in addressing the first two research questions: What are the overall ranking admissions variables for doctor of physical therapy programs by program chairs and/or directors, and admissions committee members? and what are the overall ranking admissions variables for doctor of physical therapy programs by demographics (Tables 11–17)? These tables allowed me to organize my thoughts of the survey data, which assisted me in reinforcing the credibility of my proposed interview questions. Based on the survey results, I did not change any of the proposed interview questions. Of note, Tables 11–17 demographics delineations were based on the survey constructs and my observation of a natural participant split within the data. For example, both public and private institutions had an $n = 27$, institutions with < 40 applicants admitted had an $n = 26$ and institutions with >40 applicants admitted had an $n = 28$, and Carnegie R1-3 classification had an $n = 28$ and Carnegie M1-3, Unsure classification had an $n = 28$.

Trustworthiness assist in establishing the quality of mixed methods research (Lincoln & Guba, 1985; Mertens, 2015). To assist in my trustworthiness I took field notes in addition to

creating an audit trail (See Appendix H). I followed each interview with an entry in my audit trail. Mertens (2015) clarified that researchers should be sensitive to their bias which results from gender, race or ethnicity, sexual orientation, religion, disability, hearing status, and socioeconomic status, so I used my audit trail throughout the data analysis, which will be described in the proceeding paragraphs, to assist me in grounded my thoughts, ideas, themes, and claims.

At the start of this study, I decided to transcribe all of the interviews to facilitate the recursive process of data compiling, disassembling, reassembling, interpretation, and creating conclusions as described by Yin (2016). I transcribed the first five transcripts. The last four were transcribed by a third party.

During the disassembling data phase, I used analytic memos and in vivo coding. Analytic memoing helped me in mapping thoughts, extracting meaning from the data, maintaining momentum, and opening communication with participants. For example, after the sixth interview I no longer asked the interviewees, “Tell me about your program’s inclusive initiatives”. This question was replaced with, “Tell me how you make your underrepresented minorities feel welcomed in your program”. In vivo coding as suggested by Saldana (2016) helped me in prioritizing and honoring my participant’s voice. In addition, in vivo coding is in alignment with the transformative paradigm in allowing participants to share their viewpoint, truths (Mertens, 2007b).

When I began to reassemble the data, I created a data matrix to assist in searching for patterns (See Table 2). I also engaged in constant comparison, negative instances, and rival thinking. Each of these in combination with revisiting my audit trail and analytic memoing helped me to establish themes within the data.

Table 2

Sample Data Matrix

Participant	Process	Interviews	Diversity	Cog	Non-cog	Inclusion
1	2 stages	Yes, MMI	"Not really addressed"	cGPA, vGRE, last 60	Interviews Essays Volunteer hours	"Not really addressed"
2	2 stages	Yes, Red flag	"We look at it in the end"	cGPA, GRE	Interviews Essays	"Not really sure what you mean"
3	1 stage	No	"Diversity is hard for us"	sGPA, cGPA	None	"We partner with other programs"

When interpreting the data, I continued to revisit the field notes, transcripts, audit trail, analytic memoing, and data matrixes. I also began to engage in member checking. Member checking helped me to not only establish credibility with my participants, but it allowed me to get clarification when my field notes and transcription did not match. For example, I was unable to verify the asynchronous interview platform of one participant. After member checking, I was informed that the company changed their name, which is why I was unable to verify the company's existence.

Once I had an outline of my initial themes, I created thick descriptions representative of the newly established themes. This involved me revisiting each transcript and using in vivo

coding to establish quotes reflective of the newly established themes. For example, under the theme program survival I used the quote, "… You know because when you get awarded [sic], you know, positive kudos from CAPTE about how many people pass the exam…" Interviewee 2.

During the conclusion phase, I continued to revisit all preceding stages. My goal of this phase was to ensure I stayed true to the intent of the transformative paradigm as described by Mertens (2007a), recognition inequalities and injustices within society, challenge the status quo, and demonstrate a shared sense of responsibility with historically marginalized populations to eliminate those inequalities and injustices within society. Once my themes were finalized, I created four claims. Lastly, I created a call to action for physical therapy educators.

I determined data saturation after the initial nine interviews. As aforementioned, I engaged in data compiling, disassembling, reassembling, and interpretation from interview one to interview five. After interview five, I created themes. Some of my initial themes were PTCAS, GPA, GRE, Non-cognitive, Holistic Application, and Program Survival. After I created my initial themes, I began engaging in all five recursive processes for interview six. I then refined my themes, prior to engaging with interview seven's transcription. This process was then carried forward to interview eight and nine's transcript. Lastly, after interview seven, no new themes emerged; I continued to engage in that recursive process for interviews 8 and 9 to confirm no new themes emerged.

CHAPTER 4: FINDINGS

Purpose of the Study

The purpose of this study was to examine the admissions' processes in doctor of physical therapy programs. This study clarified admission committees' selection priorities. This study also described the admission process for doctor of physical therapy programs, specifically how candidates were selected and how diversity and inclusion were addressed within the admissions process.

Research Questions

The following research questions were used in this study:

1. What are the overall ranking admissions variables for doctor of physical therapy programs by program chairs and/or directors, and admissions committee members?
2. What are the overall ranking admissions variables for doctor of physical therapy programs by demographics?
3. What is the process for selecting students for doctor of physical therapy programs?
4. What are the major influential factors in the admissions process for doctor of physical therapy programs?
5. How is diversity addressed in the doctor of physical therapy programs admissions process?
6. How is inclusion addressed in the doctor of physical therapy programs admissions process?

Overview

Chapter 4 addresses the study's findings. Throughout this chapter I make the claims: (a) the continual push for objectivity has predisposed the profession to perpetuate a representation

inequality; (b) physical therapy school admissions processes are program specific; (c) diversity is an ancillary priority for programs; and (d) inclusion is not an admissions construct, but vital in the acclimation of minoritized students. Overall, physical therapy programs ranked cognitive measures such as cGPA, sGPA, pGPA, and GRE higher when compared to non-cognitive measures such as increasing diversity, volunteer activities, prior work, life experience, interview score, and letters of recommendation, irrespective of program demographics. Programs explained cognitive measures were ranked higher primarily due to lack of program resources, positive correlation to NPTE passage, and its ability to objectively distinguish among candidates. In addition, programs clarified all admissions are guided by a faculty-voted rubric. Diversity was addressed prior to and during committee meetings, but not accounted for within admissions rubrics. Lastly, inclusion was not addressed during the admissions process, but programs did have initiatives in place once a student was admitted.

Phase I: Survey Demographics

A total of 58 participants participated in the study (Table 3). Seventy-one percent (*n*=41) identified as White, 16% (*n*=9) preferred not to answer, and 9% (*n*=5) identified as other (Table 4). Eighty-four percent (*n*=49) were members of their institutions admissions committee, while 66% (*n*=38) served as a program chair and/or director (Table 5). Fifty percent (*n*=29) of institutions were public and 50% (*n*=29) of institutions were private (Table 6). Geographically, 31% (*n*=18) of the programs were in the south, 19% (*n*=11) were in the West, 19% (*n*=11) were in the North, 17% (*n*=10) reported Other, and 14% (*n*=8) were in the East (Table 6). Of those reporting Other, 7 reported they were in the Midwest, 2 Southeast, and 1 New England. Fifty-five percent (*n*=32) of the programs were located in a college of Health Sciences, 19% (*n*=11) in Allied Health, 17% (*n*=10) in Other, 5% (*n*=3) in Medicine, 2% (*n*=1) in Arts and Science, and

2% (*n*=1) in Public Health (Table 7). Of those reporting Other, 2 reported Health Professions, 2 reported Rehabilitation Science, while Off-Campus, Health and Education, Health Professions, Physical Therapy, Graduate Division, and Health and Human Services were each reported once (Table 8). Thirty-four percent (*n*=20) of programs admit 31-40 students, 33% (*n*=19) admit >50 students, 20% (*n*=12) admit 41-50 students, and 12% (*n*=7) admit 20-30 students (Table 8). 95% (*n*=15) were unsure of their Carnegie classification, 19% (*n*=11) were R1, 17% (*n*=10) were R2, 14% (*n*=8) were R3, 14% (*n*=8) were M1, 9% (*n*=5) were M2, and 2% (*n*=1) was M3 (See Table 10).

Table 3

Sex of Participants

Sex	*n* (%)
Male	19 (33%)
Female	24 (41%)
Prefer not to answer	15 (26%)

N = 58

Table 4

Race/Ethnicity of Participants

Race/Ethnicity	*n* (%)
White	41 (71%)
Asian	2 (3%)
Native Hawaiian/Pacific Islander	1 (2%)
Other	5 (9%)
Prefer not to answer	9 (16%)

N = 58

Table 5

Faculty Position of Participants

Faculty Position	*n* (%)
Program Director/Chair	38 (64%)
Admissions Committee	49 (83%)

N = 58

Table 6

Institution Type

Funding	*n* (%)
Public	29 (50%)
Private	29 (50%)

N = 58

Table 7

Physical Therapy Program's Geographic Location

Geographic Location	*n* (%)
North	11 (19%)
South	18 (21%)
East	8 (14%)
West	11 (19%)
Other	10 (17%)

N = 58

Table 8

Physical Therapy Program Department's Location Within the University

Department	*n* (%)
Health Science	32 (55%)
Allied Health	11 (19%)
Medicine	3 (5%)
Arts and Science	1 (2%)
Public Health	1 (2%)
Other	10 (17%)

N = 58

Table 9

Physical Therapy Admission Cohort Size

Admission Cohort Size	*n* (%)
20–30	7 (12%)
31–40	20 (34%)
41–50	12 (21%)
>50	19 (33%)

N = 58

Table 10

Physical Therapy Program Carnegie Classification

Carnegie Classification	*n* (%)
Doctoral Universities – Highest Research Activity (R1)	11 (19%)
Doctoral Universities – Highest Research Activity (R2)	10 (17%)
Doctoral Universities – Highest Research Activity (R3)	8 (14%)
Master's College and Universities: Larger Programs (M1)	8 (14%)
Master's College and Universities: Medium Programs (M2)	5 (9%)
Master's College and Universities: Medium Programs (M3)	1 (2%)
Unsure	15 (26%)

N = 58

Phase II: In-depth Interviews Demographics

A total of 9 participants participated in phase II of the study (Table 1). Thirty-three percent (*n*=3) were male and 66.6% (*n*=6) were female, while 33.3% (*n*=3) were at a private institution and 66.6% (*n*=6) were at a public institution. Participants' admission classes ranged from 36–100 students and their years on the admissions committee at their institution ranged from 2–30 years. Each participant was provided a number for anonymity (See Table 1).

Admissions Variable Rankings

Overall Admission Variable Rankings

The top three mean rankings were, cGPA 2.80 ± 2.06, pGPA, 2.96 ± 2.06, and GRE, 4.44 ± 2.45 (Table 11). Increasing diversity mean ranking was 6.17 ± 2.18 (See Table 11). Other rankings were specified as vGRE, 60GPA, type of volunteer setting, state of residency, diversity/health disparity essay, type of university attended, and overcoming adversity.

Table 11

Overall Admission Variable Rankings

Admission Variable	Mean Ranking	SD
Interview Score	5.15	2.51
Letter of Recommendation	6.04	2.19
cGPA	2.80	2.06
Increasing Diversity	6.17	2.18
Volunteer Activities	6.80	1.48
GRE	4.44	2.45
pGPA	2.96	2.06
sGPA	4.61	3.10
Prior Work/Life Experiences (i.e. military experience, licensed PTA)	7.00	1.67
Other	9.04	2.36

N = 58

Admissions Variable Rankings Based on Demographics

Public. The top three mean rankings were, cGPA 2.56 ± 1.85, pGPA, 2.70 ± 1.96, and GRE, 4.11 ± 2.49 (Table 12). Increasing diversity mean ranking was 5.97 ± 1.74 (See Table 12). In addition, some participants comments were: "we don't do interviews", "The interview score is the most heavily weighted scoring item because it consist of the interview itself, as well as letters of rec, volunteer and work experiences", and Academic factors (GPA, Science GPA and GRE are equally valued and together are valued about 50% of the application…)."

Table 12

Public Institution's Admission Variable Rankings

Admission Variable	Mean Ranking	SD
Interview Score	5.33	2.42
Letter of Recommendation	6.00	2.20
cGPA	2.56	1.85
Increasing Diversity	5.97	1.74
Volunteer Activities	6.70	1.27
GRE	4.11	2.49
pGPA	2.70	1.96
sGPA	5.22	3.14
Prior Work/Life Experiences (i.e. military experience, licensed PTA)	7.26	1.63
Other	9.15	2.48

N = 27

Private. The top three mean rankings were, cGPA 3.04 ± 2.26, pGPA, 3.22 ± 2.15, and sGPA, 4.00 ± 2.99 (Table 13). Increasing diversity mean ranking was 6.37 ± 2.56 (See Table 13). Other rankings were specified as GRE verbal, Science and Math GPA, overcoming adversity, GPA last 60 credit hours and type of University attended. In addition, some participants comments were: "We have a holistic review process, so all areas are considered together", "We no longer interview due to the size of the applicant pool…" and "Our admissions formula is weighted such that the academic portion is ¾ of one's score and the interview is ¼ of one's score."

Table 13

Private Institution's Admission Variable Rankings

Admission Variable	Mean Ranking	SD
Interview Score	4.96	2.62
Letter of Recommendation	6.07	2.22
cGPA	3.04	2.26
Increasing Diversity	6.37	2.56
Volunteer Activities	6.89	1.69
GRE	4.78	2.42
pGPA	3.22	2.15
sGPA	4.00	2.99
Prior Work/Life Experiences (i.e. military experience, licensed PTA)	6.74	1.70
Other	8.93	2.29

N = 27

<40 applicants admitted. The top three mean rankings were, pGPA 2.42 ± 1.63, cGPA, 2.54 ± 1.92, and GRE, 4.38 ± 2.38 (Table 14). Increasing diversity mean ranking was 6.35 ± 2.04 (See Table 14). Other rankings were specified as the type of volunteer setting, we only use GPA and GRE, GPA last 60 credit hours, and we don't do interviews. In addition, some participants comments were: "2 GPAs (Cumulative and science prereq) weighted equally; GRE weighted slightly less; no interviews" and "do not include anything but GRE, pre-req GPA, interview, essay onsite and references."

Table 14

Institutions with <40 Applicant Admitted Admissions Variable Rankings

Admission Variable	Mean Ranking	SD
Interview Score	5.38	2.48
Letter of Recommendation	5.73	2.09
cGPA	2.54	1.92
Increasing Diversity	6.35	2.04
Volunteer Activities	6.69	1.38
GRE	4.38	2.38
pGPA	2.42	1.63
sGPA	4.92	3.14
Prior Work/Life Experiences (i.e. military experience, licensed PTA)	7.04	1.75
Other	9.54	1.39

N = 26

>40 applicants admitted. The top three mean rankings were, cGPA 3.04 ± 2.19, pGPA, 3.46 ± 2.30, and GRE, 4.32 ± 3.09 (Table 15). Increasing diversity mean ranking was 6.00 ± 2.33 (See Table 15). Other rankings were specified as GRE verbal, overcoming adversity, and type of university attended.

Table 15

Institutions with >40 Applicants Admitted Admission Variable Rankings

Admission Variable	Mean Ranking	SD
Interview Score	4.93	2.55
Letter of Recommendation	6.32	2.28
cGPA	3.04	2.19
Increasing Diversity	6.00	2.33
Volunteer Activities	6.89	1.59
GRE	4.50	2.56
pGPA	3.46	2.30
sGPA	4.32	3.09
Prior Work/Life Experiences (i.e. military experience, licensed PTA)	6.96	1.62
Other	8.57	2.95

N = 28

R1, R2, R3. The top three mean rankings were, pGPA 2.39 ± 1.42, cGPA, 2.57 ± 2.01, and sGPA, 4.32 ± 3.08 (Table 16). Increasing diversity mean ranking was 6.36 ± 1.70 (See Table 16). Other rankings were specified as type of volunteer settings, overcoming adversity, and GPA last 60 credit hours.

Table 16

Carnegie R1-3 Classification Admission Variable Rankings

Admission Variable	Mean Ranking	SD
Interview Score	5.32	2.13
Letter of Recommendation	6.39	1.89
cGPA	2.57	2.01
Increasing Diversity	6.36	1.70
Volunteer Activities	7.11	1.45
GRE	4.50	2.59
pGPA	2.39	1.42
sGPA	4.32	3.08
Prior Work/Life Experiences (i.e. military experience, licensed PTA)	7.21	1.62
Other	8.82	2.72

$N = 28$

M1, M2, M3, Unsure. The top three mean rankings were, cGPA 3.08 ± 2.13, pGPA, 3.60 ± 2.45, and GRE, 4.40 ± 2.35 (Table 17). Increasing diversity mean ranking was 6.16 ± 2.62 (See Table 17). Other rankings were specified as GRE Verbal, Science and Math GPA, and Type of University attended.

Table 17

Carnegie M1-3, Unsure Classification Admission Variable Rankings

Admission Variable	Mean Ranking	SD
Interview Score	4.96	2.89
Letter of Recommendation	5.65	2.45
cGPA	3.08	2.13
Increasing Diversity	6.16	2.62
Volunteer Activities	6.48	1.48
GRE	4.40	2.35
pGPA	3.60	2.45
sGPA	4.92	3.15
Prior Work/Life Experiences (i.e. military experience, licensed PTA)	6.76	1.73
Other	9.24	1.93

N = 26

Representation Inequality

The higher-ranking admission variables found in this study, cGPA, pGPA, sGPA, and GRE, have been reported in the literature as positive correlates to program success as measured by matriculation and NPTE first time pass rate (Cook et al., 2015; Dillon & Tomaka, 2010; Hollman et al., 2008; Huhn & Parrot, 2017; Riddle et al., 2009; Utzman et al., 2007; Wolden, 2018). Interviewee 6 explained the majority of their ranking of applicants is based on cognitive variables, “We really look at GPA, GRE scores, that is what we make our decisions on. We factor in cumulative undergraduate GPA, science GPA, verbal GRE, quantitative GRE, and analytic writing… We look at references and look at essay[sic].” Of note, two programs

acknowledged only using GPA and GRE during their admissions process. Grounding admissions predominately within these cognitive variables disproportionally affects minoritized applicants, as demonstrated within the lack of ethno-racial representation within the physical therapy profession (Nuciforo, 2014; CAPTE 2018).

Objective was a term that was used to describe the admissions process. Programs explained they wanted their admissions process to be objective and fair for all candidates, "So we are trying to make this an objective process where our decisions are not made on fluff, bias, personal belief systems, and let the data speak for itself," Interviewee 3. Similarly, Interviewee 5 explained, "… it's so cut and dry and you know you can't argue someone's GRE score, their GPA," in response to disagreements between faculty members on which applicants to offer admissions. Lastly, Interviewee 9 outlined, "We are merit based, so we look at a mix of science GPA, cumulative GPA, overall GPA, GRE, observation hours, and recommendations…" Interviewee 9 went on to further explain that GPA and GRE variants are rated higher than all other admissions variables and their program has created GPA and GRE cut-off scores for applicants in order to reach the second round of their admissions process.

Within each of those abovementioned exemplars, a process of selecting candidates based on a GPA and GRE variant was suggested as the optimal method for determining who to offer an admissions slot and/or to move beyond the first round. As aforementioned in Chapter 2, each of those suggested measures disadvantages minoritized populations. As scholars Cook et al. (2015), Riddle et al. (2009), and Utzman et al. (2007) suggested, the optimal GPA for success as measured by NPTE first-time pass rate is 3.5, but per the US Department of Education (2012) report more than 75% of those who identify as Black and/or Hispanic graduated with a GPA of less than 3.5. Similarly, scholars Hollman et al. (2008), Riddle et al. (2009), and Utzman et al.

(2007) suggested vGRE as a strong to moderate predictor of first-time NPTE passage. Using the previous version of the GRE the suggested success marker was above the 20th percentile rank or approximately >400. Of note, the Educational Testing Service (2017) reported those who identified as Black scored on average 7 points lower than those who identified as White, Non-Hispanic. All other reported racial/ethnic groups, American Indian, Asian, Hawaiian/Pacific Islander, Mexican, Puerto Rican, Other Hispanic, and Other, were within the standard deviation of White, Non-Hispanic. The focus primarily on GPA and GRE variants as primary entry point criterion into physical therapy program admissions, subsequently the physical therapy profession, may explain why the representation inequality within the profession has persisted. An argument can be made that this continual push for objectivity has predisposed the physical therapy profession to perpetuate a representation inequality.

One suggestion to counteract the skewed cognitive metrics toward White, non-Hispanic applicants is to reassess arbitrary cut-offs. For example Interviewee 7 explained that his program considers applicants who may have a GPA below 3.0, "If a student does score below a 3.0, but for the last 60 semester hours are above a 3.5 we will still consider them." Similarly, Interviewee 4 explained that they have shifted the weight of cognitive variables and expanded their admissions process to ensure they are looking at non-cognitive variables during the first round of their admissions process, "We do still look at GPAs. We look at total GPA, the sGPA, and GRE scores, despite the fact that we don't have a minimum. We have a calculation for those scores being factored in at a minimal level". Of note, Interviewee 7 reported diversity, as measured by the APTA, within their cohorts at 43% and Interviewee 4 reported an ethno-racial representation increase within their applicant pool. Each of those two exemplars demonstrated that expanding beyond GPA and GRE variants as suggested in the literature increased the minoritized

populations representation within their applicant pool and subsequently within their admissions cohorts.

Process for Selecting Students

Common Application

Each program interviewed used Physical Therapy Common Application Service (PTCAS), “We use PTCAS”, Interviewee 5. PTCAS is centralized application service which launched in 2008 with a goal of simplifying the application process for prospective physical therapy applicants by creating a single web-based application where an applicant can use one set of materials and apply to multiple programs (APTA, 2019). Within PTCAS programs have the option to gather data such as personal information (i.e. sex, date of birth, race and ethnicity, citizenship, and residency), infarctions (i.e. academic probation, felonies, and revoked licenses), supplemental questions (i.e. have you graduated from a PTA program, have you previously enrolled in a professional physical therapy program, and how do you describe your current gender identity), GPA (i.e. cumulative undergraduate, post-baccalaureate, overall, and graduate), standardized test (i.e. qGRE, vGRE, wGRE, and tGRE), education (institutions attended), personal statements, experiences (i.e. employment, extracurricular activities, observation hours, and volunteer/community enrichment), achievements (i.e. honors, awards, and scholarships), and socioeconomic indicators (i.e. your parent’s family income falls within the table’s guidelines and you are considered to have met the criteria for economically disadvantaged and I graduated from a high school from which a low percentage of seniors received a high school diploma) (APTA, 2019). Only 17 accredited physical therapy programs did not participate in PTCAS during the 2018-2019 admission cycle (APTA, 2019).

Programs used supplemental applications, “There is a typical supplement application that goes with it,” Interviewee 7. Supplemental application materials can include an additional essay, medical examination results, immunization records, background check, proof of health insurance, and basic life support for healthcare providers certification card.

All application materials must be submitted prior to the proposed deadline, to be considered, “Our admission deadline is October 1st,” Interviewee 5. Interviewee 5 explained that her program has a hard deadline of October 1st and no applications will be considered after the deadline. PTCAS list two types of deadlines, firm and soft. Firm deadlines are deadlines in which an applicant cannot apply to a program after the deadline has passed, while soft deadlines are deadlines where an applicant can still apply to a program after the deadline has passed, but the program has the discretion to have less consideration of the application and/or not consider the application at all (APTA, 2019). In summary, applicants applied with a common application by a program specified deadline for consideration into their admission cohort.

Admissions Rubric

Programs used a rubric to rank applicants. Rubrics are scoring guides that quantify admission constructs, “They get certain points for volunteer hours, depending on how many they did, prior military experience, are they a PTA. All those are weighed in to for that academic score. But it’s largely based on GPA and GRE,” Interviewee 7. Rubrics can be divided into two domains, cognitive and non-cognitive, “We ended up with the committee deciding to weight the cognitive and holistic review scores close to equally,” Interviewee 4. Not all programs have rubrics that can be divided into cognitive and non-cognitive domains, “We look at overall GPA, so we look at every single course they’ve ever taken in any postsecondary and we use the GPA that the PTCAS calculate, and then it’s GRE scores and that’s it,” Interviewee 5. Interviewee 5

explained that their admissions process only uses cognitive measures of GPA and GRE. In summary, rubrics guided programs in ranking their admission applicants.

Cognitive. In DPT admission rubrics, cognitive domains are subcategorized as cGPA, pGPA, sGPA, 60GPA, tGRE, vGRE, qGRE, and wGRE.

GPA. cGPA was reported in every interview, “One is overall GPA, second is their prerequisite GPA, and then we also access the last 60 credit hours. There last 60 should be more reflective of their academic ability,” Interviewee 2. Programs set minimal standards on their GPA requirements, “Our minimum is 3.0, so that’s the very first process that happens…,” Interviewee 4. Interviewee 4 further explained that without a minimum 3.0 cGPA and pGPA they would not be considered for admissions. Some programs make exceptions to their 3.0 minimum requirement, “If a student does score below a 3.0, but their last 60 semester hours was above a 3.5, we will actually consider them,” Interviewee 7. Interviewee 7 explained that their admissions committee decided to consider applicants who may have a cGPA or pGPA below 3.0, as long as they have demonstrated a positive trend in their 60GPA.

Programs determine how GPA variants will be calculated. Some programs used every course ever taken by the applicant, “From any place they have taken college courses and then all of that goes into their GPA,” Interviewee 5. Interviewee 5 explained that within their rubric that cGPA is calculated based on every college course the applicant has ever taken, including graduate credits. In contrast, some programs forgave grades. For example, if an applicant has repeated a course, the program will use the most current grade in calculating GPA (APTA, 2019).

Lastly, programs determined time cut-offs with respect to pGPA courses, “…we do not as an institution have a limit on people’s prerequisite courses,” Interviewee 2. Programs

traditionally set 10-year requirements for consideration of prerequisite courses (APTA, 2019). In summary, a GPA variant was used in each admissions rubric, but which GPA variant and how the GPA variant was calculated was program dependent.

GRE. GRE was a reported rubric construct. Interviewee 2 explained, “We have a portion that looks at the three elements of the GRE, the writing score, the quantitative, and the verbal.” Programs set minimal scores for their GRE, “… a GRE quantitative and verbal of 150 in each category,” Interviewee 3. Interviewee 3 explained that applicants must have a minimum of 150 each on the qGRE and vGRE to be considered for their program. Similarly, Interviewee 5 explained, “We look at the writing portion of the GRE… they have to have a 3.5 or above.” Not all programs set a minimal score for their GRE, “We don’t have a minimum GRE score,” Interviewee 7. Interviewee 7 explained that their program does not have a minimal GRE score and the applicant’s score is factored into an equation for the amount of points that will be allocated for their rubric’s GRE portion. In addition, not all programs used the GRE in their rubric, “We will probably add the GRE next year. There is just not good data out their that it predicts success,” Interviewee 1. Interviewee 1 explained that they do not currently use the any GRE variant in their admissions rubric, but are considering adding it since all of the neighboring schools are using the GRE. In summary, if a GRE variant was used in an admissions rubric the point allocation was program dependent.

Non-cognitive. In DPT admission rubrics, non-cognitive domains are subcategorized as any construct that does not include a GPA or GRE variant and can include interviews, essays, demographic information, residency status, and life-experiences.

Interviews. Programs used interview scores within their admissions rubric. Interviews are commonly conducted on-site, “They will receive a little information about the program and

then they get a tour while they are here in the building," Interviewee 2. Some programs have implemented synchronous and asynchronous online interviews, "We offer interviews, interviews we do asynchronously," Interviewee 7. Interviewee 7 explained that they use a platform called YouSeeU™, to complete asynchronous interviews (currently Bongo™). Bongo™ is a video assessment and soft skill development platform designed to facilitate communication, collaboration, and critical thinking mastery (eduPresent, 2019).

Interviews scores are calculated based on an interview rubric. Interviewee 5 outlined, "People were circling 'yes' if they scored a five out of five or 'some' if they scored four out of five, they write 'maybe' or so." Interviewee 5 explained during their interview process each applicant interviews with every faculty member who provides them with a score out of five, in addition to an option of circling a yes or no. Not all programs use interviews, "We don't do interviews," Interviewee 9. Interviewee 9 explained that her program does not use interview scores in their admissions rubric. In summary, if interview scores are used the interview rubric and point allocation within the admissions rubric are program dependent.

Essay. Applicants submit essays on PTCAS, on-site, and/or in their supplemental application, "… we have our applicants who are invited to an interview to write an essay onsite instead of using the PTCAS essay," Interviewee 3. PTCAS has a pre-determined essay topic for all programs, which is determined by the APTA year to year. In the 2018–2019 cycle the essay prompt was: Describe a meaningful experience in your life. Reflect on how that experience influenced your personal growth such as your attitude and behavior (APTA, 2019). On-site and supplemental essay topics are program dependent. Interviewee 4 stated, "…from their essay response that asked them about their awareness of culture competencies, barriers, and disparities in health care." Interviewee 4 explained her program used an essay in their supplemental

application and last year's essay topic focused on their diversity construct. Essay scoring was program dependent. Rubrics are used to score an applicant's essay, where grammar, syntax, and/or content may be evaluated. In contrast, Interviewee 3 outlined, "We also decided to look at written scores of the GRE and that is being counted as the essay." Interviewee 3 explained that if an applicant scored a 3.5 then they received the full points for the essay point's allocation of their admissions rubric. Not all programs used an essay score, "We don't put weight on the essay. We have no idea who writes it," Interviewee 1. Interviewee 1 explained that although they collect the applicants essay from PTCAS, but do not use it in their admissions rubric. In summary, if essay scores are used the essay rubric and point allocation within the admissions rubric are program dependent.

Additional factors. In addition to interviews and essays, admissions rubric may also allocate points towards residency, volunteer hours, observations hours, extracurricular activities, letters of recommendations, grit, diversity, or undergraduate degree institution. Interviewee 2 outlined, "We also have an element that addresses extracurricular work related activities of that student so it assess the application whether they worked while they were doing undergraduate, whether they were a student athlete, how involved they were in various clubs or volunteer activities, and then the student can be awarded points for those kind of activities." Similarly, Interviewee 4 explained, "We have discussed and considered qualities that we value in a physical therapist and some of those categories are intellectual curiosity, …commitment to the profession of PT and interdisciplinary approach to health care, positive characteristics identified in letters of recommendation, leadership experiences and a commitment to diversity and inclusion." In summary, if additional factors are used, point allocations are program dependent.

Committee meeting. Committee meetings are scheduled to present and/or discuss applicants with a final determination on how to proceed within the admissions process. When the admission committee meets is program dependent. Admission committee meetings can take place prior to the interview process, "Depending on the admissions committee decision on the cutoff scores to invite for an interview," Interviewee 3. Admission committee meetings can take place after one interview cycle, "We look at how all the numbers turned out and set[sic] look at last year's cutoff, look at the trends over the years in terms of who, you know, how many people to offer a position to, based on this first interview knowing we have three more," Interviewee 9. Admissions committee meetings can take place after the entire interview process, "We review all of the previous rubrics and then add in the interview scores and then make a decision about whether we are going to make an offer for admissions to that student, deny them, or offer them a slot on the waiting list," Interviewee 2.

Admission committee meetings consisted of determining interview cut-off scores, who to offer admissions, wait-list, or deny, and presentation of admission cohort. Interviewee 9, "Then we don't look at anything other than merit. And we kind of let the chips fall where they were made". Interviewee 9 explained that within their admissions committee meetings they solely use the predetermined rubric to makes decisions on admissions, wait-list, or deny. In contrast, Interviewee 1 outlined, "What we have seen is that sometimes when we bring them back, that hasn't always gone well." Interviewee 1 explained decisions are sometimes made to wait-list or deny a candidate based on their past behavior, irrespective of their final rubric score. At the conclusion of committee meetings a vote is taken to proceed to the next steps within the admissions process.

Early decision. Programs participated in early decision. Early decision is a binding option program for applicants who have determined a particular DPT program is their first choice (APTA, 2019). Applicants must pay an additional fee, they are only allowed to apply to one program within PTCAS, and they have to agree to enroll if they are accepted into the program (APTA, 2019). Interviewee 3 explained, "We do participate in early decision process. So there's a potential to fill our classes with early decision. Depending on the admission committee's decision on the cutoff scores to abide for an interview." Not all programs participated in early decision.

Factors That Influence a Program's Admissions Process

Program Resources

Program resources were reported as an influential factor in the DPT admissions process. Program resources include faculty and staff's workload and student financial, technological, and academic support.

Interviewee 2 explained how faculty workload is lessened with assistance from the university, "I do think it is positive that we have a centralized [sic] group because that's very helpful and that they can be very objective and administrative and managing that data, and it also help to streamline faculty workload that they don't have to review applications and all that." Interviewee 2 further explained that since they have staff assistance from someone outside of their faculty, they have the feasibility to look at more than cognitive measures prior to inviting applicants for an interview. Similarly, Interviewee 4 outlined, "We have a team of about seven people who review the verified applications first with the holistic review process," Interviewee 4. Interviewee 4 explained that her program could engage in a holistic admission process since they have the staff to individually look at every applicant." In contrast, "I'm told it was done that way

because of the ease of it. It was just easy to calculate," Interviewee 5. Interviewee 5 explained that one reason her program focuses solely on cognitive measures is because they do not meaningfully increase faculty workload.

Program resources influenced whether a program would conduct interviews. Interviewee 9 outlined in her response to conducting interviews, … "everybody is willing to put in the work, continue putting in the work to interview. We interview on the weekends, and it's a lot of work, but we think it's worth it." Interviewee 9 explained that interviews are taxing on the faculty's time. Interviewee 9 further explained to help ease the faculty workload burden her program was leveraging their interviews as a scholarship opportunity focused on their interview trustworthiness. Interviewee 1 outlined how his institution provides financial support to assist in the interview process, "… we go to those schools to do interviews." Interviewee 1 further explained that his institution provides faculty financial support to interview candidates at their school as opposed to having them fly or drive to their institution. Lastly, Interviewee 7 outlined how his institution is leveraging technology to assist in their interview process, "… and they can do this from the comfort of their own home." Interviewee 7 further explained that they have decreased the applicant's financial burden since his program's interviews are asynchronous.

Rubric

Rubrics are influenced by antidotal experience and scholarship. Interviewee 3 outlined, "…you bring me the elite and the elite will get by. We don't have to deal with the couple of stragglers. They can go eliminate those students before [sic] students per class that were made to be safe." Interviewee 3 explained that one of their rationales for increasing their admission cutoffs were to limit those students who could possibly require remediation during the program and fail to pass the NPTE on the first attempt. Similarly, Interviewee 6 outlined, "I can't

confidently say its evidence based, but its correlated," Interviewee 6. Interviewee 6 explained that her program may not be using evidence-based practices when admitting applicants, but their process has led to a 100% NPTE pass rate and 97% matriculation rate. Programs also explained that scholarship influenced their rubrics. Interviewee 3 outlined, "Interesting enough, we make the cutoff score at 3.5 prerequisite GPA this year because research we did on our students that show that those who took the licensure exam before they graduated…" Interviewee 3. Interviewee 3 explained that the cutoffs they selected this year was based on internal scholarship. Similarly, Interviewee 2 outlined, "We rate more heavily prerequisite GPA because our historic data although limited at this point shows that that's a better predictor of their performances." Interviewee 2 explained that due to their program data coupled with what they have found in published scholarship, serves as a basis for why they weight pGPA heavier than all other constructs.

Programs have designed rubrics to address an objectivity construct and ensure program survival. Interviewee 3 explained, "So we are trying to make this an objective process where our decisions are not made on fluff, bias, personal belief systems, and let the data speak for itself." Programs explained that rubrics should be objective to ensure all applicants have a fair chance at being admitted into their programs. Interviewee 9 explained that they use the multiple mini interview process, "The only interview process that have at least some level of reliability in terms of predicting, predicting may be a little strong. Anyway, it has a little more reliability if you are trying to identify candidates who will be successful because you can tailor those stations to those areas that are primarily important to your program and use standardized questions that you ask." Similarly, Interviewee 3 stated, "... and they get six minutes. It's like speed dating." Interviewee 3 further explained that his program uses an emotional intelligence construct as an

interview guide and since faculty are only assessing one emotional intelligence construct, their objectivity or confirmability is increased. In addition to fairness, programs also fear being sued, "that's based on our legal department telling us we could not, you know, have standards or scoring mechanisms that showed favoritism," Interviewee 3. Interviewee 3 explained that their rubric had to go through their legal department to ensure they were not providing an illegal advantage to applicants based on race and ethnicity.

Program survival is influenced by NPTE passage and matriculation rates. Due to this, programs have designed rubrics to select candidates who are most likely to achieve those two aims. Interviewee 1 stated in response to conflict during admission committee meetings, "We have some that will argue we need the best qualified, because in the end we have to report our board pass rate." Interviewee 1 explained that in their admission committee meeting conflicts are usually resolved by selecting applicants who are more likely to pass the NPTE. Similarly, Interviewee 9 outlined why they have set cutoff scores "… so we set our cutoffs at a point academically where experience tells us, the history tells us that individuals should be able to do the work." Interviewee 9 explained that they have done internal scholarship which have helped them establish cutoffs scores which informs them on which applicants are more likely to pass the NPTE on the first try and to matriculate through the program without remediation. In contrast, some programs expressed a hesitation in using rubric scores that are correlated to NPTE passage and program matriculation:

> "The challenge right now academically is that we set our profession up in such a way that it penalizes the programs to do that in an effort to enhance their diversity. You know because when you get awarded [sic], you know, positive kudos from CAPTE about how many people pass the exam and the data on that is really clear that minorities don't do

well on that thing. Then you get penalized when you take more minorities in your class and then they don't pass the exam, and it has really little to do with whether you think they are going to be a good therapist or not, so we set ourselves up in the profession to not really foster bringing more minorities into these programs, " Interviewee 2.

Interviewee 2 explained that although their rubric is designed to help predict NPTE passage and matriculation, this aim limits their program's ability to increase diversity.

Program Preference

The admission committee meetings are a place where admission committees can discuss program and/or institutional preference. Programs interviewed discussed that administrations have asked admission committees to consider preference to admit students who identified with a religion, identified with a race and/or ethnicity, who obtained their degree from their university or another university within their system, and/or who was a resident of their state. Programs who were asked to provide preference were conflicted, "You can't advertise any favoritism that's given to someone of a different ethnicity or background. That's against the law, right?" Interviewee 3. Interviewee 3 explained that although the program was asked to provide preference to increase underrepresented minority representation, they were conflicted on how to implement this request legally. Similarly, another interviewee expressed pressure from administration to admit applicants who identified with the religion of the institution, while another interviewee expressed pressure from administration to offer guaranteed spots to undergraduates from their institution. Lastly, one program outlined that due to legal implications they are not able to explicitly provide preference, but they have adjusted their rubric to take into account characteristics that are more likely to be seen in underrepresented minorities, "We are hopeful that our item in the academic rubric that address extracurricular work that we look at the

data, that is something for many students who do have some racial or ethnic diversity are also very strong in that area," Interviewee 2. In summary, some programs provide preference based on administration suggestions and/or to facilitate a program representation goal.

The previous paragraphs highlighted the process of offering an admissions slot to applicants. No program during the survey or in-depth interviews of this study had the same admissions process or rubric. Some of the determining factors of a program's admissions process were the faculty's value of admissions variables, faculty's anecdotal experience of a successful physical therapy student, published literature and unpublished program data related to physical therapy student success, and a program's mission and resources. Ultimately, the physical therapy admissions process is a socially constructed process created by the faculty members at their respective institution.

Diversity Within the Admissions Process

Diversity Prior to the Application Submission

Programs addressed diversity prior to the application. Recruiting was a primary medium for addressing diversity prior to the application, "We have faculty that goes out and do some high school presentations… we have faculty that go out every year for their health fair, and their open houses and things like that to encourage students to apply," Interviewee 5. Interviewee 5 explained that her department has a committee that goes to urban areas and to promote the profession and encourage students to apply to their program. Similarly, Interviewee 4 outlined, "One of our initiatives is that we have hired a consultant to be part of our admissions team… she goes to a lot of local college events and to some of our local community colleges and small colleges and does some programs about the process [sic] of learning about physical therapy and health care. She also goes to middle and high schools." Interviewee 4 explained that her college

made a conscious effort to hire someone who identifies as a minoritized individual within the physical therapy profession to serve as a consultant in promoting the profession and encouraging other minoritized individuals to apply to their program.

Programs used financial resources to increase diversity within their cohorts. Interviewee 9 outlined, “What we have tried to do is keep our cost down, so that we are an option across the board for individuals who might have little socioeconomic resources.” Similarly, Interviewee 4 stated, “We have also had a push huge push for more scholarships, and we have a fair number of scholarships that relate to diversity status and rural status.” Both programs acknowledged finances as a barrier in increasing representation of minoritized populations.

Programs used targeted initiatives to increase diversity within their cohorts. Interviewee 2 outlined, “we have been able to attract a number of nontraditional students and one of the reasons we’ve done that is we do not as an institution have a limit on people’s prerequisite courses.” Interviewee 2 explained that since they do not place a year limit on prerequisite courses, they are able to attract a higher number of nontraditional students. Interviewee 3 said, “I applied for a grant through our board of regions, and I got a $40,000 grant to look into this, and we found through our interviews with African Americans… we found that the root of the problem is the people.” Interviewee 3 explained that he was able to apply for a grant through his university and learned through his scholarship that African Americans within his community were unaware of the physical therapy profession and/or they were steered in other career paths such as medicine, dentistry, and nursing. In addition, Interviewee 3 said he used his remaining funds to create physical therapy informational programs at local middle and high school. Interviewee 4 outlined how her institution has focused on their messaging, “We’ve made a few changes on our website. We have a couple of things about diversity on our website.” In addition,

Interviewee 4 explained that her college has created a flier that is included in every event the graduate programs do which highlights how important diversity is for their college and university.

Each of the aforementioned examples, recruitment, financial aid, and adjustment of pre-requisite application requirements, was designed to target and increase the respective program's minoritized applicant pool. On the surface, an increase in the applicant pool would suggest a positive step toward increasing minoritized individuals representation within the field, but there is still the conundrum of are minoritized applicants competitive applicants. There is considerable debate within the education field on the concepts of equity and equality. McCowan (2016) explained that equity is likened to equality of opportunity. McCowan (2016) further explained equity is distinct from equality in the sense that equality is focused on fairness or sameness for each individual, while equity is focused on providing each individual an opportunity for success. In the context of an equity paradigm, it would be fair to treat people in different ways and expect different outcomes, if the individual presents with specific needs that present as an insurmountable barrier to success (McCowan, 2016). Within current admission practices an equality undercurrent is noted where all applicants are ranked based predominately on cognitive measures, which U.S. Department of Education (2012) and Educational Testing Service (2017) have shown is skewed toward the White, non-Hispanic ethno-racial identity. Scholars such as Miller (1995), Ladson-Billings (2006), Carter and Welner (2013), and Schott Foundation for Public Education (2015) have each studied this trend in education and coined this discrepancy with terms such as achievement gap, education debt, and opportunity gap. Mertens (2015) synthesized the major issues proposed by education scholars related to these discrepancies as test content, examine readiness, motivation, and response set, standardization level, examiner bias

and language differences, reliability and validity issues, and social inequities. Each of those issues is rooted in marginalization.

Diversity Within Admissions Committee Meetings

Programs addressed diversity within their admission committee meetings. Programs explicitly created a diverse admissions class. Interviewee 1 outlined in response to diversity within the final admission class, “We look at our makeup gently during our admissions process. We have no quotas.” Interviewee 1 explained that their faculty sometimes struggle with the decision of admitting all qualified underrepresented minorities and selecting those who may have scored a few tenths of a point higher within the admissions rubric. In contrast, some programs do not address diversity with their admission committee meetings and/or rubric, “We are not permitted by our institution to do anything specific about singling out students who self-identified their race or ethnicity,” Interviewee 2. Interviewee 2 explained that per her University they are unable to allocate points within their admissions rubric for race and ethnicity. Interviewee 2 highlighted the misconception of diversity as solely an ethno-racial identity construct.

When diversity is seen solely as an ethno-racial identity construct programs must contend with legal precedents. Interviewee 3 explained this, “Because that goes against the whole civil rights thing. You know, you can’t quote [sic] it, no affirmative action business or things like that”. Interviewee 3 went on to explain that although one of their goals is to increase ethno-racial identities of minoritized individuals within the profession they were unable to legally use ethnicity or race as a metric when considering which applicants to offer admissions. An acceptance and usage of the diversity definition as proposed by ACAPT (2016) to include additional group and social differences such as socioeconomic status, sexual orientation, age,

physical ability, and life experience would facilitate a shift in the perception of diversity beyond solely an ethno-racial construct. Interviewee 1 echoed this sentiment, "I would like to go after first generation and low socioeconomic students. If we are ever to break poverty in our culture, we need to get them." In addition to programs expanding their perception of diversity, they must expand their perceptions of qualifications. Current qualifications are skewed toward one ethno-racial identity. Interestingly, Interviewee 1 explained, "We looked at the data and noticed that minorities were excelling at things like grit and emotional intelligence, so we are looking to add those items within our rubrics." Interviewee 1 further explained that one of the goals as a program is to increase the diversity of their cohorts and they believe if they adjust their rubric to include items in which minoritized populations have scored well, then this would lead to an increase in diversity within their cohorts.

Diversity was a secondary admissions variable that programs considered after an applicant met their cognitive standards. Overall, the increasing diversity admission variable had a mean ranking of 6.17 ± 2.18 (See Table 11). Increasing diversity's mean ranking behind cognitive admission variables such as cGPa, GRE, pGPA, sGPA, and interview score was consistent irrespective of the physical therapy program's demographic profile (Table 12-17). In addition, in during the in-depth interviews multiple programs expressed that they valued diversity, but failed to allocate points related to diversity within their admissions rubric.

Inclusion Within the Admissions Process

Programs did not address inclusion within their admissions process. Two out of the nine interviewed outlined an inclusion initiative once students were admitted and no program listed an inclusion metric within the other section of the survey. Programs explained that they did not address inclusion because this was not a criterion they were judged on by CAPTE, they lacked

resources to address inclusion, and/or the lack of correlation with inclusion and NPTE passage and/or program matriculation. Interviewee 1 said, “I’m not sure how to address inclusion during the admissions process.” Interviewee 1 further explained that he was unsure of how inclusion fit into admissions and could not think of how he or CAPTE could measure inclusion.

With respect to inclusion initiatives once a student is admitted Interviewee 4 outlined, “So I would definitely think that’s an area that’s a little bit more of work in progress, but we do have something starting.” Interviewee 4 further explained they do not have programs within their department due to lack of resources, but can refer students to campus programs. Likewise, Interviewee 2 outlined in her response to their programs inclusion initiatives, “We do have as part as of our university and academic success center, so we do have tutoring service available for student who are having academic challenges.” Inclusion is not a component of the admissions process, but was addressed from an academic perspective once a student was admitted.

Inclusion was not reported as an admissions construct, but is vital in the acclimation of minoritized students. Inclusion is a term that is often used interchangeably with diversity and equity in an alphabet soup of diversity, equity, and inclusion. Within physical therapy program admissions, inclusion can be correlative to matriculation or persistence within a program. Tinto (2017) explained in his seminal article, *Through the Eyes of the Students*, that a student’s motivation to persist within a program is a result among the interactions between student goals, self-efficacy, sense of belonging, and perceived worth or relevance of the curriculum. Tinto (2017) goes on to further explain, “What is also required is that students who value their participation, that they matter and belong” (p. 258). Lastly, programs should be aware of W.E.B. Du Bois’ double conscious concept where he explained the minoritized individuals struggle with double-consciousness, in that the Negro not only see through their eyes, but the eyes of others

(Project Gutenberg, 2019). This idea of double-consciousness further cement the importance of programs addressing this concept of inclusion for successful acclimation and matriculation.

Programs failed to use inclusion as an admissions variable. One suggestion for programs to use inclusion as an admissions variable is to assess an applicant's awareness of inclusion. Similarly to Interviewee 4 and their assessment for diversity, "It's really kind of based on the student's awareness of health disparities and their experience with individuals who may have experienced health disparities. So, they are given an essay… specific essays about their experience." Within this essay, programs could assess an applicant's awareness of the impact of cultural and professional norms on minoritized individuals. Lastly, this push for an inclusion admissions variable is directly in line with a transformative paradigm, by ensuring the thoughts, feelings, viewpoints, and opinions of minoritized individuals are valued within an admissions process.

CHAPTER 5: DISCUSSION

This transformative study investigated diversity and inclusion in doctor of physical therapy admissions. My findings outline cognitive variables such as cGPA, pGPA, sGPA, and GRE as more valuable for prospective applicants, while constructs related to diversity and inclusion are not seen as valuable admissions variables. In addition, my findings suggest programs view their admissions primary aim is to admit applicants who are most likely to matriculate and pass the NPTE. Chapter 5 further discusses the study's summary, relationship to literature, implications, recommendations, limitations, and my personal transformation throughout this study.

Summary

The purpose of this study was to examine the admissions' processes in doctor of physical therapy programs. This study clarified admission committees' selection priorities. This study also described the admission process for doctor of physical therapy programs, specifically how candidates were selected and how diversity and inclusion were addressed within the admissions process. I had six research questions:

1. What are the overall ranking admissions variables for doctor of physical therapy programs by program chairs and/or directors, and admissions committee members?
2. What are the overall ranking admissions variables for doctor of physical therapy programs by demographics?
3. What is the process for selecting students for doctor of physical therapy programs?
4. What are the major influential factors in the admissions process for doctor of physical therapy programs?

5. How is diversity addressed in the doctor of physical therapy programs admissions process?
6. How is inclusion addressed in the doctor of physical therapy programs admissions process?

I made four claims from the data:

1. The continual push for objectivity has predisposed the profession to perpetuate a representation inequality
2. Physical therapy school admissions processes are program specific
3. Diversity is an ancillary priority for programs
4. Inclusion is not an admissions construct, but vital in the acclimation of minoritized students.

Programs most commonly ranked cognitive variables such as cGPA, pGPA, sGPA, and GRE as the most important admission variables irrespective of program demographics. Diversity was most commonly ranked as the 5th most important admission variable, while only six out of fifty-eight programs ranked diversity within their top 3 admission variables. Programs outlined all applicants applied through a common application, most often PTCAS, by a specified deadline. Once applications were received, programs used their admissions rubric to rank candidates. If programs used interviews, interview rubrics were used to score applicants. Following interviews, admission committees met to discuss applicants, finalize rankings, and offer admission to their top applicants. Within the admissions process programs focused on diversity prior to the application process by recruitment, offering financial support, and engaging in a holistic admission processes and during committee meetings by retrospectively revaluing admission variables. Inclusion was not used as an admission construct or addressed during the

admissions process, but programs outlined academic support programs to assist acclimation of admitted students. Lastly, diversity was seen as an ethno-racial construct, as opposed to encompasses all marginalized populations.

Relationship to Literature

This study is in agreement with Agho et al. (1999) who reported cognitive measures as the most important admission variables, with diversity being ranked in the bottom half of admission variables. In contrast to Agho et al. (1999) who reported pGPA as the most important variable, cGPA was ranked as the most important admissions variable. In addition, Agho et al. (1999) did not use GRE as an admission variable, while this study reported GRE as a top third admission variable. Furthermore, if the goal of the profession is to increase diversity, this study provides evidence to support the expansion of admission rubrics beyond cognitive measures. This study also highlights the lack of acknowledgement of minoritized populations beyond ethno-racial, geographic location, and educationally disadvantaged identities.

Programs with ethno-racial diversity, as defined by the APTA, higher than the professional average engaged in a holistic admission process or valued non-cognitive variables at a nearly equal weight when compared to cognitive variables. One example was a program that engaged in a holistic admission process and reported an increase in their diversity metrics. Another example was a hybrid program that reported higher than the profession's average diversity in areas of race, ethnicity, geographic locations, and socioeconomic status. These results are in agreement with Grabowski (2016), Glazer and Bankston (2014), and Witzburg and Sondheimer (2013) who each reported an increase in ethno-racial diversity when programs implement a holistic admissions process. In addition, Witzburg and Sondheimer (2013) reported

increased collegiality, curriculum engagement, openness to new ideas and perspectives, and supportive environment of their cohorts.

Programs with ethno-racial diversity, as defined by APTA, mirroring or lower than the professional average, reported admission practices where non-cognitive measures were not weighed significantly, if at all. Although this study reported a positive trend of minoritized population representation with respect to race, ethnicity, geographic location, and socioeconomic status for holistic admissions, programs must also begin to expand their acknowledgement and data gathering processes to include additional minoritized populations, such as disability, gender, religion, or heritage if the profession is to create a more diverse workforce.

This study also highlights the incoherence between national diversity initiatives and program admission practices. Nuciforo (2014) reported from a data set of 2011–2012 physical therapy applicants that underrepresented minorities applied to DPT programs with lower GPA and GRE scores. Both Chen and Carroll (2005) and U.S. Department of Education (2012) reported lower undergraduate graduation GPAs in URM when compared to White, non-Hispanics. With respect to GRE scores, Bleske-Rechek and Browne (2014) claimed from their historical analysis of GRE scores how the GRE is a test that is more correlative to race and ethnicity as opposed to aptitude. A variety of explanations have been cited in the literature to explain this discrepancy in GPA and GRE such as opportunity gaps, academic priorities, biculturation, test bias, and financial resources (Austin, 2012; Chen & Carroll, 2005; Fleming, Lavertu, & Crawford, 2018; Hardy, 2015; Johnson, 2006; Rendon, Jalomo, & Nora, 2000; Steward & Haynes, 2016). Drawing from this data, current DPT admissions practices are predisposed to admitting White, non-Hispanic applicants if the predominate measures of success continue to be matriculation and NPTE passage. An argument can be made that the profession

should broaden success markers beyond matriculation and NPTE passage to ensure minoritized applicants are not disadvantaged. Lastly, more research is warranted to explore the relationship of GPA and GRE within all marginalized communities.

Implications of Cognitive Dominate Admissions Practices

This study outlined cognitive constructs as more valuable for DPT applicants when compared to non-cognitive constructs. Sedlacek (2004) outlined that underrepresented minorities are more likely to excel in non-cognitive constructs such as motivation, grit, leadership, and life experiences. In addition, Educational Testing Service (2017) outlined underrepresented minorities scored seven points lower on the GRE, while U.S. Department of Education (2012) reported a less than 25% of underrepresented minorities reported a graduation GPA above 3.5. Ignoring this data perpetuates the representation inequity within the profession.

As abovementioned, Grabowski (2016) reported holistic admissions increased the diversity pool in medical school admissions. Likewise, Price and Grant-Mills (2010) reported a similar increase in the diversity among dental admission cohort with use of holistic admissions. An argument can be made that diversity is key in eliminating health inequities. To facilitate diversity within the profession, the profession must analyze their admissions practices and determine the value of diversity. This study highlights DPT admissions committees values applicants that are more likely to matriculate and pass the NPTE, irrespective of how the applicant will benefit society.

The profession must ask, do we value diversity, equity, critical thinking, virtue, and life-long learning or do we value what is easily measured, GPA and GRE (Biesta, 2008).
ACAPT (2016), Saha et al. (2008), and Walsh et al. (2000) have outlined how diversity within cohorts prepare students to meet the needs of the diverse society, while scholars such as Smedley

et al. (2002) and The Sullivan Commission (2004) have outlined how diversity benefits society by increasing medical access to underserved communities and addressing social justice. The profession must begin to take into account educational disparities for the betterment of society and fairness to minoritized applicants. The lack of equitable admission practices has predisposed the profession to a representation inequality and a shift in admissions values is warranted. Lastly, the profession needs to reflect on former U.S. President Lyndon B. Johnson's quote,

> You do not take a person who for years, has been hobbled by chains and liberate him, bring him up to the starting line of a race and then say, 'You are free to compete with all the others,' and still justly believe that you have been completely fair. (Johnson, 1965)

Recommendations to Increase Diversity within the Physical Therapy Profession

Increasing diversity within the physical therapy profession improves the overall health of the nation (The Sullivan Commission, 2004). This study outlined admission practices are focused on offering admissions to applicants that are most likely to matriculate and pass the NPTE. Scholars such as Cook et al. (2015), Riddle et al. (2009), and Utzman et al. (2007) have suggested attributes of successful applicants who are most likely to matriculate and pass the NPTE are applicants with a cGPA of 3.5, pGPA of 3.5, and a vGRE of 150 (new version). Minoritized applicants are less likely to achieve those attributes, which subsequently lower their invitations for interviews, if applicable, and ability to be offered admissions when compared to the White, non-Hispanics (Educational Testing Service 2017; Nuciforo, 2014; U.S. Department of Education, 2012).

Recommendation 1

To increase minoritized populations representation within the profession, the profession must continue provide a working definition of minoritized populations within the profession.

Ethno-racial identities are no more valuable than a disability, which is no more valuable than socioeconomic identity. Every applicant has intersectionalities amongst social identification markers and our goal as a profession is to bring in as many different viewpoints, ideas, opinions, and truths as possible. The goal is to create a more diverse profession reflective of society, in hopes of creating a more inclusive profession for the betterment of society. The profession must drop the elitism and actively target populations that understand, empathize, and can help, relate, and give back to those that have been traditionally marginalized in our health care system.

Recommendation 2

To increase minoritized populations representation within the profession, admission committees must engage in a holistic admissions process. This sentiment was first reported in APTA's Diversity Task Force where the task force recommended providing programming and resources to help promote the use of holistic admissions strategies (ACAPT, 2016). The medical, dental, and pharmacy professions have provided a framework for increasing diversity (Glazer & Bankston, 2014; Grabowski, 2016; Wall et al., 2015; Witzburg & Sondheimer, 2013). A holistic admissions process provides a more equitable opportunity for minoritized applicants to show their merit.

Recommendation 3

To increase minoritized individuals within the profession, CAPTE must create a metric for diversity and hold programs responsible for achieving the diversity metric. This study outlined that CAPTE standard of NPTE board passage guided admission practices. Without a diversity metric, programs lack incentive to increase cohort diversity. As stated by Interviewee 2, "don't rock the boat." This was echoed in a study by Cook et al. (2015), where they found program modifiable factors such as clinical education experience, program length and design,

and student selection and composition to not be significantly associated with NPTE passage, while GPA was the only variable associated with NPTE passage. Cook et al. (2015) further explained that if taken a face value the admissions process should exclusively focus on GPA, however they suggest NPTE passage should not be the only measure of success. A diversity metric introduces a new measure of success.

Recommendation 4

To increase minoritized populations representation within the profession, programs must accept the responsibility of increasing diversity within the profession. Nuciforo (2014) outlined in the 2011–2012 admission cycle that only 20% of the applicants identified as minorities, while only 15% of enrolled students identified as minorities. Interestingly, in 2017 only 13% of enrolled students identified as minorities (CAPTE, 2018). Accepting responsibility entails creating and prioritizing a research agenda focused on minoritized applicants recruiting and retention, equitable admission practices, and program success measures, devoting financial resources, and creating initiatives targeted at developing faculty who identify with a minoritized community (ACAPT, 2016). Accepting responsibility for increasing diversity is a recursive charge between the profession and individual programs.

Recommendation 5

To increase minoritized populations representation within the profession, programs must assess their teaching and learning practices. In 2018, 91% of graduates from accredited U.S. DPT programs passed the NPTE on their first attempt, while the ultimate NPTE pass rate was reported at 98% (Federation of State Boards of Physical Therapy, 2019). The question must be asked is this primarily due to admitting predominately high academically achieving applicants and/or faculty teaching and learning practices. Cook et al. (2015) was unable to find program

modifiable factors to be associated with NPTE pass rate, while Huhn & Parrot (2017) and Mohr et al. (2005) found program factors such as accreditation status, number of faculty members with terminal degrees, and program length to account for nearly a third in the variance of NPTE scores. Additional studies are warranted to assess and determine effective teaching and learning practices to facilitate NPTE success. An argument can be made that by identifying effective teaching and learning practices to facilitate NPTE success programs would allow their mission to guide admissions and not predominately depend on admission metrics which disadvantages minoritized populations.

Recommendation 6

To increase minoritized populations representation within the profession, the profession and programs must expand success metrics. Success has predominately been measured within DPT programs by matriculation and NPTE passage (CAPTE, 2018; Cook et al., 2015; Kume, Reddin, and Horbacewicz, 2018). Additional success markers can include: admission cohort diversity metric, life-long learning metric, and serving underrepresented populations metric. Expanding success markers facilitates a more equitable admissions process.

Limitations

The results were limited by sample size. Despite three reminders, there was only a 23% survey response rate, which is a third of the proposed 60% target for health related colleges and university surveys (Fincham, 2008). An additional limitation was the lack of clarity and flexibility with admissions survey. For example, three participants communicated they did not use some of the criteria listed, so they did not rank those criteria. There could have been additional participants who did not rank all the criteria. Additional limitations included lack of racial-ethnic diversity in participants. I did not interview anyone who identified as a racial or

ethnic minority within the physical therapy profession. Results may only be specific to Doctor of Physical Therapy (DPT) programs. Lastly, my theoretical framework guided the research questions, design, and interpretation of the result; so, another framework could provide a different interpretation of current Doctor of Physical Therapy admissions practices.

Personal Transformation

As I embarked on this physical therapy admission practices journey I hoped to find data ranging from programs that only used cognitive variables to programs that used a combination of cognitive and non-cognitive, programs that addressed diversity and/or inclusion within their admission rubrics to programs that did not address diversity and/or inclusion within their admission rubrics, programs that explained they valued diversity and/or inclusion and created reflective data points within their admission rubric and programs that explained they valued diversity and/or inclusion, but failed to create reflective data points within their admission rubric, and even programs who explained that diversity and/or inclusion was not something that should be addressed within admissions. I also felt I could sympathize and empathize to all stakeholders within the admissions conversation, since I was an applicant less than ten years ago and my current role as an admissions chair at a school that is on CAPTE probation. As I continued along this journey, I learned this admissions process is likened to a kaleidoscope of competing interest.

From a program's perspective, the conventional idiom is the primary goal of admissions is to admit candidates who will matriculate and pass their licensure examination. This is one component of CAPTE accreditation and how peers will judge them. From this perspective, statistics are currency; so, a 100% first-time board passage rate is viewed as more successful as a 90% first-time board passage rate or a mean GPA of incoming students of 3.9 is seen as more successful than a mean GPA of 3.5. As I continued to engage with scholars, committee members,

chairs, and program directors over the last two years, I came to opinionize this perspective as self-serving. In addition, this perspective has not been shown to increase minoritized representations within higher education spaces. I now see an opportunity to challenge the status quo and push for currency which is reflective of the physical therapy profession's core values such as altruism and social responsibility and marginalized populations.

From a faculty's perspective, admissions are usually seen as a burden. Within academia, admissions or committee work is not seen as valuable as scholarship and/or teaching. This was evident when I would engage with faculty on admissions committees and the sentiment was to make admissions as simple and quick as possible and/or a regret of not being able to individually evaluate every applicant due to lack of time. As someone who identifies as a minoritized individual within the physical therapy profession, this alarms me because (a) history has shown that the simple variables to weed out applicants, GPA and GRE, disproportionally disadvantages minoritized applicants; (b) there are faculty members who lack expertise within the admissions and have the power to make life altering decisions for applicants; and (c) there are faculty members who want to engage in a more holistic process, but lack the resources. I now see an opportunity to educate faculty on the impact of admissions variables on marginalized applicants and create resources to facilitate a more inclusive admissions process.

Lastly, from a student's perspective, I can remember my hope was to get into a physical therapy program. Unfortunately, I only had a 3.0 GPA which I believed did not accurately reflect my aptitude or desire to become a physical therapist. Similar sentiments were expressed by some of the participants I interviewed. I can recall one interviewee who explained how he can sympathize with applicants who had poor grades during their first two years of undergraduate school and have been following all the programs suggestions to improve their application, but

still fall short of being offered admissions. As a student I could recall, so many factors that led to my 3.0 GPA from playing two Division I sports, to rigors of a biology-psychology double major, to the rigors of a tough professor, to life altering events such as a death in the family. Each of those factors and experiences shaped my GPA and subsequently my application. I now see an opportunity to share my journey with prospective applicants to provide additional hope that their dream is attainable.

In summary, I now see a kaleidoscope of competing interest within physical therapy admissions. Programs are focused on survival, faculty members are focused on time, and students are focused on hope. Physical therapy admissions process is dynamic and program centered. I can clearly see a space where I can express my voice, listen to other minoritized voices, then hopefully facilitate meaningful change to create an equitable admissions process.

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APPENDICES

APPENDIX A: INITIAL EMAIL

Dear Admissions Committee Members, Program Chair/Director,

My name is LaDarius Woods, PT, DPT. I am a PhD student in the Department of Educational Foundations, Leadership, and Technology at Auburn University. I would like to invite you to participate in my research study to learn more about the admissions process at your institution. You are invited to participate because you are a member of your institution's admissions committee and/or a program chair/director.

Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to take an anonymous online survey through Qualtrics. Your total time commitment will be approximately 5–10 minutes.

The information gathered will provide data on current physical therapy admissions practice. There will no cost to participate or compensation. No personally identifiable information will be associate with your responses. Information collected through your participation will be used to fulfill dissertation requirements. If you decide to participate, please click the website link below to the survey website.

Follow this link to the Survey:
${l://SurveyLink?d=Take the Survey}

Or copy and paste the URL below into your internet browser:
${l://SurveyURL}

Follow the link to opt out of future emails:
${l://OptOutLink?d=Click here to unsubscribe}

If you decide not to participate in the survey, your decision will not jeopardize your future relations with the Department of EFLT and Auburn University.

I appreciate your time and consideration in completing this survey.

Sincerely,

LaDarius Woods, PT, DPT
Principle Investigator
PhD Student
Educational Foundations, Leadership, and Technology
205.213.1446
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Dr. Maria Witte
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334.887.3078
wittemm@auburn.edu

APPENDIX B: FOLLOW-UP EMAILS

Dear Admissions Committee Member, Program Chair/Director,

If you have already completed the survey, please disregard this email and thank you. Due to the anonymity of the survey I am unable to determine who has completed the survey, which is why you have received the follow-up invitation.

My name is LaDarius Woods, PT, DPT. I am a PhD student in the Department of Educational Foundations, Leadership, and Technology at Auburn University. I would like to follow up from a previous invitation sent last week for you to participate in my research study to learn more about the admissions process at your institution. You are invited to participate because you are a member of your institution's admissions committee and/or a program chair/director.

Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to take an anonymous online survey through Qualtrics. Your total time commitment will be approximately 5-10 minutes.

The information gathered will provide data on current physical therapy admissions practice. There will be no cost to participate or compensation. No personally identifiable information will be associated with your responses. Information collected through your participation will be used to fulfill dissertation requirements. If you decide to participate, please click the website link below to the survey website.

Follow this link to the Survey:
${l://SurveyLink?d=Take the Survey}

Or copy and paste the URL below into your internet browser:
${l://SurveyURL}

Follow the link to opt out of future emails:
${l://OptOutLink?d=Click here to unsubscribe}

If you decide not to participate, your decision will not jeopardize your future relations with the Department of EFLT and Auburn University.

I appreciate your time and consideration in completing this survey.

Sincerely,

LaDarius Woods, PT, DPT
Principle Investigator
PhD Student
Educational Foundations, Leadership, and Technology
205.213.1446
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APPENDIX C: ADMISSIONS CRITERIA SURVEY

End of Block: Informed Consent

Start of Block: Screening

Admissions Criteria Survey

Are you a current member of your institution's admissions committee?

- ○ Yes
- ○ No

Are you the program chair and/or director?

- ○ Yes
- ○ No

End of Block: Screening

Start of Block: Program Demographics

Is your college/university:

- ☐ Public
- ☐ Private
- ☐ Unsure

Geographically, where is your college/university located:

- North
- South
- East
- West
- Other ____

Where is your department located within the college/university

- Health Science
- Allied Health
- Medicine
- Arts and Science
- Public Health
- Other ____

How many students does your program typically admit per class?

- <20
- 20-30
- 31-40
- 41-50
- >50

How is your college/university classified by the Carnegie classification?

- ◯ Doctoral Universities - Highest Research Activity (R1)
- ◯ Doctoral Universities - Higher Research Activity (R2)
- ◯ Doctoral Universities - Moderate Research Activity (R3)
- ◯ Master's College and Universities: Larger programs (M1)
- ◯ Master's Colleges and Universities: Medium programs (M2)
- ◯ Master's Colleges and Universities: Small programs (M3)
- ◯ Unsure

End of Block: Program Demographics

Start of Block: Admission criteria

Please rank the following admission criteria from 1 (most important) to 10 (least important) based on the current practices of your institution.
______ Interview score
______ Letters of recommendations
______ Cumulative grade point average
______ Increasing diversity
______ Volunteer activities
______ Graduate Record Exam
______ Prerequisite grade point average
______ Science grade point average
______ Prior work, life experience (e.g. military service, worked as a tech, licensed PTA)
______ Other, please specify

End of Block: Admission criteria

Start of Block: Additional comments

Any additional comments.

____

End of Block: Additional comments

Start of Block: All of the following questions are optional.

What is your gender identity?

____

What is your age?

____

How would you describe yourself?

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

Were you a part of last year's admissions committee? (If not, how many years has it been since you served on the admissions committee?)

- ○ Yes
- ○ No ____

How many years have you been on the admissions committee?

____

How many years have you been a full time faculty member?

____

End of Block: All of the following questions are optional.

Start of Block: Optional - one-on-one interview sign-up

Would you be willing to participate in a one-on-one interview about your institution's admissions practices?

- ○ Yes
- ○ No

End of Block: Optional - one-on-one interview sign-up

APPENDIX D: INTERVIEW EMAIL

[Insert Name],

Thank you so much for signing up for a one-on-one interview for my study entitled: *An Examination of Doctor of Physical Therapy Programs' Admissions Selection Process and Influential Factors Addressing Diversity and Inclusion*. I will be conducting interviews over the next two months, so if you can, please email me with 3 times that would work best for you. Based on your responses you listed:

[Insert Day, Time] would be best.

If possible, I would like to suggest:
1. [Insert Day, Time, Time Zone]
2. [Insert Day, Time, Time Zone]
3. [Insert Day, Time, Time Zone]

Look forward to hearing from you. I have also attached the consent form.

LaDarius Woods, PT, DPT, CSCS
Doctoral Student - Adult Education
Auburn University
205.213.1446
ldwoodspt@gmail.com

FOLLOW-UP INTERVIEW EMAIL

[Insert Name],

I wanted to follow-up on my previous email concerning scheduling a time to complete the one on one interview for my study entitled: *An Examination of Doctor of Physical Therapy Programs' Admissions Selection Process and Influential Factors Addressing Diversity and Inclusion*.

Look forward to hearing from you.

LaDarius Woods, PT, DPT, CSCS
Doctoral Student - Adult Education
Auburn University
205.213.1446
ldwoodspt@gmail.com

APPENDIX E: INFORMED CONSENT FORM

The Auburn University Institutional Review Board has approved this Document for use from 08/07/2018 to 08/06/2019
Protocol # 18-232 EP 1808

AUBURN UNIVERSITY

COLLEGE OF EDUCATION

EDUCATIONAL FOUNDATIONS, LEADERSHIP AND TECHNOLOGY

INFORMED CONSENT
for a Research Study entitled
"An Examination of Doctor of Physical Therapy Programs' Admissions Selection Process and Influential Factors Addressing Diversity and Inclusion"

You are invited to participate in a research study to examine how Doctor of Physical Therapy school candidates are selected. The study is being conducted by LaDarius Woods under the direction of Maria Witte in the Department of Educational Foundations, Leadership, and Technology at Auburn University. You are invited to participate because you are a member of your institution's admissions committee, a program director and/or chair.

What will be involved if you participate? Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to participate in a one-on-one interview to further clarify, add, and highlight your institution's admission practices. This interview will last approximately 1 hour. All interviews will be recorded and transcribed to ensure the accuracy of your statements. All interviews will be destroyed after 3 years. You may be contacted for a follow up interview to help clarify your responses once data analysis begins.

Are there any risks or discomforts? The risks associated with participating in this study are breach of confidentiality and social. To minimize these risk, all data will be coded based on interview date. In addition, all data will be stored in an encrypted file.

Are there any benefits to yourself or others? If you participate in this study, you will be contributing to the field, but we cannot promise you will receive any other benefits.

Will you receive compensation for participating? You will not receive compensation for completing this study.

Are there any costs? If you decide to participate, you will not incur any financial cost.

4036 Haley Center, Auburn, AL 36849-5221; Telephone: 334-844-4460: Fax: 334-844-3072

www.auburn.edu

The Auburn University Institutional Review Board has approved this Document for use from 08/07/2018 to 08/06/2019
Protocol # 18-232 EP 1808

AUBURN UNIVERSITY

COLLEGE OF EDUCATION

EDUCATIONAL FOUNDATIONS, LEADERSHIP AND TECHNOLOGY

If you change your mind about participating, you can withdraw at any time by informing the researcher you no longer would like to participate. In addition, if you choose to withdraw, your data can be withdrawn and destroyed as well. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University or the Department of Educational Foundations, Leadership, and Technology.

If you have questions about this study, please contact LaDarius Woods, PT, DPT at (205) 213-1446 or ldw0018@tigermail.auburn.edu or Dr. Maria Witte at (334) 844-3078 or wittemm@auburn.edu

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334) 844-3078 or e-mail at IRBadmin@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE SIGN BELOW.

I CAN MAKE A COPY OF THIS LETTER FOR YOUR RECORDS.

____

Participant Date

____

Investigator Date

The Auburn University Institutional Review Board has approved this document for use from _________ to ________. Protocol #_______

4036 Haley Center, Auburn, AL 36849-5221; Telephone: 334-844-4460; Fax: 334-844-3072

www.auburn.edu

APPENDIX F: AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL

AUBURN UNIVERSITY INSTITUTIONAL REVIEW BOARD for RESEARCH INVOLVING HUMAN SUBJECTS
RESEARCH PROTOCOL REVIEW FORM
FULL BOARD or EXPEDITED

For Information or help contact **THE OFFICE OF RESEARCH COMPLIANCE (ORC)**, 115 Ramsay Hall, Auburn University
Phone: 334-844-5966 **e-mail:** IRBAdmin@auburn.edu **Web Address:** http://www.auburn.edu/research/vpr/ohs/index.htm

Revised 2.1.2014 **Submit completed form to IRBsubmit@auburn.edu or 115 Ramsay Hall, Auburn University 36849.**

Form must be populated using Adobe Acrobat / Pro 9 or greater standalone program (do not fill out in browser). Hand written forms will not be accepted.

1. PROPOSED START DATE of STUDY: 06/01/2018

PROPOSED REVIEW CATEGORY (Check one): ☐ FULL BOARD ☑ EXPEDITED

SUBMISSION STATUS (Check one): ☑ NEW ☐ REVISIONS (to address IRB Review Comments)

2. PROJECT TITLE: An Examination of Doctor of Physical Therapy Programs' Admissions Selection Process and Influential Factors Addressing Diversity and Inclusion

3.

LaDarius Woods	Doctoral Student	Adult Education	ldw0018@tigermail.au
PRINCIPAL INVESTIGATOR	**TITLE**	**DEPT**	**AU E-MAIL**
9907 Turtle River Road, Pike Road, AL 36064		2052131446	lwoods@alasu.edu
MAILING ADDRESS		**PHONE**	**ALTERNATE E-MAIL**

4. FUNDING SUPPORT: ☑ N/A ☐ Internal ☐ External Agency: ____________ ☐ Pending ☐ Received

For federal funding, list agency and grant number (if available). ____________

5a. List any contractors, sub-contractors, other entities associated with this project:

____

b. List any other IRBs associated with this project (including Reviewed, Deferred, Determination, etc.):

____

PROTOCOL PACKET CHECKLIST

All protocols must include the following items:

- ☐ **Research Protocol Review Form** (All signatures included and all sections completed)
  (Examples of appended documents are found on the OHSR website: http://www.auburn.edu/research/vpr/ohs/sample.htm)
- ☑ **CITI Training Certificates** for all Key Personnel.
- ☑ **Consent Form or Information Letter** and any Releases (audio, video or photo) that the participant will sign.
- ☑ **Appendix A**, "Reference List"
- ☐ **Appendix B** if e-mails, flyers, advertisements, generalized announcements or scripts, etc., are used to recruit participants.
- ☑ **Appendix C** if data collection sheets, surveys, tests, other recording instruments, interview scripts, etc. will be used for data collection. Be sure to attach them in the order in which they are listed in # 13c.
- ☐ **Appendix D** if you will be using a debriefing form or include emergency plans/procedures and medical referral lists (A referral list may be attached to the consent document).
- ☐ **Appendix E** if research is being conducted at sites other than Auburn University or in cooperation with other entities. A **permission letter** from the site / program director must be included indicating their cooperation or involvement in the project. NOTE: If the proposed research is a multi-site project, involving investigators or participants at other academic institutions, hospitals or private research organizations, a letter of **IRB approval** from each entity is required prior to initiating the project.
- ☐ **Appendix F** - Written evidence of acceptance by the host country if research is conducted outside the United States.

FOR ORC OFFICE USE ONLY

DATE RECEIVED IN ORC: ________ by ________
DATE OF IRB REVIEW: ________ by ________
DATE OF IRB APPROVAL: ________ by ________
COMMENTS:

PROTO...
APPRO...
INTERV...

The Auburn University Institutional Review Board has approved this Document for use from 08/07/2018 to 08/06/2019
Protocol # 18-232 EP 1808

6. GENERAL RESEARCH PROJECT CHARACTERISTICS

6A. Research Methodology

Please check all descriptors that best apply to the research methodology.

Data Source(s): ☑ New Data ☐ Existing Data

Will recorded data directly or indirectly identify participants?
☑ Yes ☐ No

Data collection will involve the use of:

- Educational Tests (cognitive diagnostic, aptitude, etc.)
- ✓ Interview
- Observation
- Location or Tracking Measures
- Physical / Physiological Measures or Specimens (see Section 6E.)
- ✓ Surveys / Questionnaires
- ✓ Internet / Electronic
- ✓ Audio
- ✓ Video
- Photos
- Digital images
- Private records or files

Other: ______

6B. Participant Information

Please check all descriptors that apply to the target population.
☑ Males ☑ Females ☐ AU students

Vulnerable Populations
☐ Pregnant Women/Fetuses ☐ Prisoners ☐ Institutionalized
☐ Children and/or Adolescents (under age 19 in AL)

Persons with:
☐ Economic Disadvantages ☐ Physical Disabilities
☐ Educational Disadvantages ☐ Intellectual Disabilities

Do you plan to compensate your participants? ☐ Yes ☑ No

6C. Risks to Participants

Please identify all risks that participants might encounter in this research.

☑ Breach of Confidentiality* ☐ Coercion
☐ Deception ☐ Physical
☐ Psychological ☑ Social
☐ None
☐ Other:

*Note that if the investigator is using or accessing confidential or identifiable data, breach of confidentiality is always a risk.

6D. Corresponding Approval/Oversight

- **Do you need IBC Approval for this study?**
  ☐ Yes ☑ No

  If yes, BUA # ______ **Expiration date** ______

- **Do you need IACUC Approval for this study?**
  ☐ Yes ☑ No

  If yes, PRN # ______ **Expiration date** ______

- **Does this study involve the Auburn University MRI Center?**
  ☐ Yes ☑ No

  Which MRI(s) will be used for this project? (Check all that apply)
  ☐ 3T ☐ 7T

  Does any portion of this project require review by the MRI Safety Advisory Council?
  ☐ Yes ☑ No

  Signature of MRI Center Representative: ______
  Required for all projects involving the AU MRI Center

  Appropriate MRI Center Representatives:
  Dr. Thomas S. Denney, Director AU MRI Center
  Dr. Ron Beyers, MR Safety Officer

7. PROJECT ASSURANCES An Examination of Doctor of Physical Therapy Programs' Admissions Selection Process and Influential Factors Addressing Diversity and Inclusion

A. PRINCIPAL INVESTIGATOR'S ASSSURANCES

1. I certify that all information provided in this application is complete and correct.
2. I understand that, as Principal Investigator, I have ultimate responsibility for the conduct of this study, the ethical performance this project, the protection of the rights and welfare of human subjects, and strict adherence to any stipulations imposed by the Auburn University IRB.
3. I certify that all individuals involved with the conduct of this project are qualified to carry out their specified roles and responsibilities and are in compliance with Auburn University policies regarding the collection and analysis of the research data.
4. I agree to comply with all Auburn policies and procedures, as well as with all applicable federal, state, and local laws regarding the protection of human subjects, including, but not limited to the following:
    a. Conducting the project by qualified personnel according to the approved protocol
    b. Implementing no changes in the approved protocol or consent form without prior approval from the Office of Research Compliance
    c. Obtaining the legally effective informed consent from each participant or their legally responsible representative prior to their participation in this project using only the currently approved, stamped consent form
    d. Promptly reporting significant adverse events and/or effects to the Office of Research Compliance in writing within 5 working days of the occurrence.
5. If I will be unavailable to direct this research personally, I will arrange for a co-investigator to assume direct responsibility in my absence. This person has been named as co-investigator in this application, or I will advise ORC, by letter, in advance of such arrangements.
6. I agree to conduct this study only during the period approved by the Auburn University IRB.
7. I will prepare and submit a renewal request and supply all supporting documents to the Office of Research Compliance before the approval period has expired if it is necessary to continue the research project beyond the time period approved by the Auburn University IRB.
8. I will prepare and submit a final report upon completion of this research project.

My signature indicates that I have read, understand and agree to conduct this research project in accordance with the assurances listed above.

LaDarius Woods	LaDarius Woods Digitally signed by LaDarius Woods Date: 2018.06.23 10:10:08 -05'00'	6/23/2018
Printed name of Principal Investigator	**Principal Investigator's Signature**	**Date**

B. FACULTY ADVISOR/SPONSOR'S ASSURANCES

1. I have read the protocol submitted for this project for content, clarity, and methodology.
2. By my signature as faculty advisor/sponsor on this research application, I certify that the student or guest investigator is knowledgeable about the regulations and policies governing research with human subjects and has sufficient training and experience to conduct this particular study in accord with the approved protocol.
3. I agree to meet with the investigator on a regular basis to monitor study progress. Should problems arise during the course of the study, I agree to be available, personally, to supervise the investigator in solving them.
4. I assure that the investigator will promptly report significant incidents and/or adverse events and/or effects to the ORC in writing within 5 working days of the occurrence.
5. If I will be unavailable, I will arrange for an alternate faculty sponsor to assume responsibility during my absence, and I will advise the ORC by letter of such arrangements. If the investigator is unable to fulfill requirements for submission of renewals, modifications or the final report, I will assume that responsibility.

Printed name of Faculty Advisor / Sponsor	**Faculty Advisor's Signature**	**Date**

C. DEPARTMENT HEAD'S ASSSURANCE

By my signature as department head, I certify that I will cooperate with the administration in the application and enforcement of all Auburn University policies and procedures, as well as all applicable federal, state, and local laws regarding the protection and ethical treatment of human participants by researchers in my department.

Printed name of Department Head	**Department Head's Signature**	**Date**

APPENDIX G: INTERVIEW PROTOCOL

Interview Protocol: An Examination of Doctor of Physical Therapy Programs' Admissions Selection Process and Influential Factors Addressing Diversity and Inclusion

Pre-Interview Setting
Time of Interview:
Date:
Location(s):
Interviewer:
Interviewee:

Introduction
Interviewer: Hi, my name is LaDarius Woods and I would like to thank you for taking the time to participate in our study. I have been a PT for about 5 years and recently joined the faculty at Alabama State University in Montgomery, Alabama. I am currently working on my PhD in Adult Education at Auburn University and this interview will go towards me completing my dissertation. Your service as a member of the admissions committee, program director and/or chair, is what brings both of us here today.

I am looking to learn more about your admissions process. The interview should take approximately 1 hour. During the interview I will ask you questions about your admissions processes, specifically what you are looking for in a candidate and how your program is addressing diversity. You will hear me use the term underrepresented minority (URM) and to ensure we are on the same page, I am referring to the 2016 Diversity Task Force Report which defines URM as racial and ethnic, which includes African American/Black, American Indian/Alaskan Native, Hispanic/Latino, and Native Hawaiian/Pacific Islander, individuals from geographically underrepresented areas, lower socio-economic status, first-generation, and educationally disadvantaged backgrounds.

Next, I would like for you to review and sign this consent form.

- Obtain signed consent form.

To help ensure that I can focus on our interview and capture our interview as accurately as possible, I request that I record our interview. Can I get your consent to record our interview?

- Verbally agreed to record interview

At this point, do you have any questions for me before we get started?

Interview

Big Q: How do Doctor of Physical Therapy (DPT) Programs select their candidates? Small Q: How do DPT programs address diversity?

Questions

1. Tell me a little about yourself?
    a) Name
    b) Rank
    c) Position
    d) How long been on committee
    e) Satisfaction
    f) Background in PT, committees

2. Tell me a little bit about your program?
    a) Name
    b) Location
    c) Place within larger institution
    d) Demographics
    e) Mission
    f) Goals

3. Tell me a little bit about your admissions process?
    a) Avg. number of applicants
    b) Avg. number accepted
    c) What are you looking for?
    d) Rubric?
    e) Where did your rubric come from?

4. Tell me about a time when you and someone disagreed about a student who was offered a slot in your admitting class?
    a) Story
    b) How was this resolved
    c) Carryover

5. Tell me about a time when you and someone disagreed about a student who was not offered a slot in your admitting class?
    a) Story
    b) How was this resolved
    c) Carryover
6. Tell me about your priorities as a committee member?
    a) Ranked?
    b) Why this measure over this measure?
    c) What is your goals as a committee member?

d) Where do you think you get these views from?
e) EBP?

7. Tell me about your interviewing process?
   a) Does your program conduct interviews?
   b) Why or why not?
   c) What kind?
   d) Is there training?
   e) Goal of interviewing?

8. My passion is diversity within healthcare and specifically, PT programs, Tell me about your programs diversity initiatives?
   a) What is diversity to you?
   b) How has this manifested in admissions?
   c) Where do you see diversity in the future?
   d) Is diversity even needed?

9. I know a lot of programs are revamping their admissions to account for things such as diversity (as we just discussed) or no undergraduate GPA, tell me about anything cutting edge or sweeping changes you program is thinking about starting?
   a) New ideas
   b) Suggestions
   c) Holistic admissions?

10. Tell me about your satisfaction with the admissions process at your school.
    a) Any changes you would implement.
    b) Why these changes
    c) Future of admissions.

11. Is there anything else you would like to add?

Wrap-up

Well thank you for you time and I really appreciate your help in this project. I want to reiterate that you interview will remain confidential. Also, due to the nature of our research we may have to follow up with you for clarification or possibly ask a few additional questions. Would that be ok with you?

- Agreed to possible follow up.

Well, again thank you for your time and have a great rest of your day.

APPENDIX H: EXCERPTS FROM AUDIT TRAIL

9/22/18 – 7:00 AM.

- One thing that is jumping out to me is that the mission and vision of universities are not in align with admissions processes. Many of the interviewees are not sure about their missions, but do have the ability to locate their missions. Oddly, the mission is yearly evaluated based on CAPTE standards. Many of the application process is guided by the thoughts and whims of the committee. I have only met one professor that informed me they are using literature to guide their process. One thing that is interesting is that this most recent conversation informed me that they are using lit, but with a few new younger faculty members have decided to increase their #'s. I am beginning to question what we value as PT. I think I will add a value question for my future interviews. I wonder if this will guide more toward a holistic admissions process.

9/22/18 – 10:00 AM.

- From my thinking, I am wondering if programs value diversity. I would argue a value of diversity would be an internal push for diversity and a consistent effort to increase. I wonder if diversity is something people are looking for because CAPTE mandates this. Interestingly, it seems that diversity is not prioritized in admissions rubrics. I have heard flak that they don't have it due to legal issues. I also wonder if CAPTE created a ranking, if programs would actively search/increase more. And if your ranking consistently falls below, then you go on probation. I believe that without specific criteria, programs will not be prioritized. Currently the specific criteria is NPTE and matriculation and jobs. Diversity is not there. If diversity is not there, then it's hard for me to see programs will re-prioritize their admissions/values.

9/25/18 – 7:00 AM

- I am approaching this conversation, inquiry all wrong. In my quest, I am looking for two things. 1. To highlight how minorities have been discriminated against in admissions and 2. Determine the best method to admit students. Should I accept that methods will be dependent upon the school and that it is ok, for some schools to only look for X and others look for Y. Is there a place in society for both. But if I take that angle am I excusing the blanket discrimination of numbers. Should it be a 50/50. I think I need to do more thinking. But, again, is there a place for each?

2/21/19 8:15AM

- Over the last week I have started to look closer at the data. A few things that I am noticing is that within the holistic admissions, the overall goal seems to be a candidate/graduate that can add value to society, while the other the focus is on passing a board examination. I think that interviews are becoming commonplace, but I'm wondering if we are doing enough to ensure they are trustworthy. I have also noticed that a lot of quant terms are used to describe interviews, such as validity and reliability. I'm not saying you can't do that, but I just wonder the level of expertise/skill those making decisions have. I think that is another issue that I think I'm having or will have: if those making the decision are qualified. i.e. we would not allow someone who didn't know

orthro teach orthro, but we let ppl who don't know much about admissions be apart of admissions. It seems the qualifications for being on admissions and to take part is to be a faculty member. I'm just not sure that is sufficient. I think there should be some level of competence. Personally, without this, I think we engage in dogma and the same ppl, who look like us, act like us get in. And last I checked, URM are not in the driver seat, so they are the ones on the outside looking in. I think another question though is resources. Do programs have resources to train admissions? The answer to the question should be yes though. It should be a CAPTE criteria similar to teaching. I really think this is a social justice issue, but I wonder if I'm alone on this feeling.

2/24/19 3:15

- So, today I worked through 2 transcripts. A few big take a ways I got was cog factors are heavily weighted. Within those cogs, they are supported by literature to predict passing boards. No one spoke about matriculation, but there was a conversation about success within the program, but the interviewee seemed to dismiss that as a normal process. This committee member/chair has been around for >15 years, so from his experience those #'s aren't too predictive, but he also has been at HBCU's most of the time, I think that matters. Another thing that jumps out is the strive for changing, getting a better admissions process. Each program spoke about looking at their rubric, constantly changing, trying to get the best applicant. Both spoke about using internal data, external data, and just "common sense." Both seemed to be striving to increase URM. Both had programs to target students in high school/middle school and invested resources towards those entities. Both spoke about a concrete plan to increase URM, but both plans have not been around long, so they don't know the success of said plans. One program has shifted to no longer allow students to 2x dip, but focus on EI. While the other just wants to do more than just look at numbers. Overall, I think both programs are striving to increase diversity, with respect to racial/ethnicity, but neither spoke about diversity with respect to geographic, socioeconomic status, etc. I think these are the themes I'm picking up thus far
    - Cognitive factors are strong correlative variables to admissions
    - Non-cognitive variables are perceived as important qualities to obtain
    - Uneasiness on how to validly and reliably capture non-cog
    - Yearly assessment of admissions rubric

5/16/19, 10:00 AM – Writing

- I have completed Ch. I-III. I have also completed Ch. IV the quant portion. Today I will work on the qual portion and attempt to finish it. In Ch. V, my goal is to combine both quant/qual, because this is how you create a mixed method study as opposed to a mix modal study. So far looking back over the data, I think I have a strong Ch. I-III. I really would like some feedback on those chapter's though. From my quant data, I noticed that cognitive measures predominately how we select applicants. Overall, the trend was cGPA, pGPA, sGPA, and GRE. The non-cogs were predominately 4th and greater. Also, diversity was not a commonly high ranking criteria. This may be due to meritocracy, or just not being a properly defined construct. Even when I break down the data by institution types, cGPA, pGPA, sGPA are the top 3, with the occasional GRE jumping in the top 3. Also, diversity is typically 5-7th. Personally, this is kind of what I expected. I

really think the qual with help to clarify this and/or add a little more information to why we have these data.

5/16/19 – 3:00 PM

- I have been working since 9:00 AM and I am a bit tired. I was able to make my way through 3 transcripts and take out some in-vivo coding. I tried to pull some quotes and place them within the categories I created and I also ended up creating new categories based upon the quotes. Overall, I think I have some rich data and the key will be selecting the most representative quote and using my words to effectively paint the picture. I also think I may have done more than 8 interviews. I will figure that out on another day though, my head is starting to hurt.