EXAMINING THE RELATIONSHIP BETWEEN LEADERSHIP STYLES AND STUDENT OUTCOMES OF OCCUPATIONAL AND PHYSICAL THERAPY ACADEMIC PROGRAMS

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SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

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Dedication

This manuscript is dedicated to my loving family and friends, I love you all.

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Abstract

EXAMINING THE RELATIONSHIP BETWEEN LEADERSHIP STYLE AND STUDENT OUTCOMES IN OCCUPATIONAL AND PHYSICAL THERAPY ACADEMIC PROGRAMS

The purpose of this study was to examine the relationship between the transformational leadership style of academic chairpersons and student outcomes (student pass rates on NBCOT and NPTE exams) in occupational and physical therapy academic programs. A self-administered web- based questionnaire composed of a demographic questionnaire and the Multifactor Leadership Questionnaire (MLQ) Leader Form 5x (short) was used to gather information from participants. Student pass rates on the NBCOT and NPTE between 2015 and 2017 were retrieved from the NBCOT and NPTE websites for all participating programs. Participant responses to the questionnaire and student pass rates on the NBCOT and NPTE were analyzed using Pearson's correlation and coefficients, independent samples *t*-test, one-way ANOVA's, MANCOVA, partial correlation, and zero order correlation to determine if a relationship existed between variables. The results indicated that no direct relationship existed between these variables. However, a moderate relationship was found between certain demographic variables (e.g., Professional Development and transformational leadership). The results of this study also suggested that occupational and physical therapy chairpersons who demonstrate transformational leadership behaviors may impact departmental factors (climate, pedagogy environment and student engagement), which may impact student outcomes in their programs. Additionally, Professional development may impact transformational leadership behaviors of academic chairpersons and/or because these

academic chairpersons self-report high transformational leadership behaviors; they may be more likely to participate in professional development activities.

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Chapter One: Introduction

Background of the Problem

While leadership has been studied extensively in the literature (Bass, 1998; Burns, 1978; Heifetz, 1994; Kouzes & Posner, 2002; Seagren, 1993), only a few studies have examined leadership in the professional fields of occupational and physical therapy (Snodgrass & Shachar, 2008). The current focus of the research on leadership in occupational and physical therapy particularly in higher education on academic chairpersons has been on faculty perceptions of leadership behavior and performance, evidenced based practice and transition or impact of the entry level doctorate(Alexander, Perryman & Rivers, 2015; Cosgrove, 2007; Nicolson, 2008; Rothstein, 2003; Utzman, Riddle & Jewell, 2007). Academic chairpersons in occupational and physical therapy programs play an important role in curriculum development. Academic chairpersons also determine the needs of the program, needs of the profession, as well as society (American Occupational Therapy Association [AOTA], 2009, p. 807). They must also support faculty members in their development in the program and the university. Additionally, it is imperative that occupational and physical therapy chairpersons determine the needs of the university to ensure that university goals are connected to those of the program (AOTA, 2009). Therefore, the examination of the transformational leadership style of academic chairpersons in occupational and physical therapy programs and how these behaviors effect student outcomes will provide a better understanding of strategies that will improve student academic success and better prepare chairpersons for the challenges of the position.

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Leadership

In institutions of higher education, leadership effectiveness at the departmental level is a key component to the achievement of positive student outcomes (Bryman, 2007; Witziers, Bosker, & Kruger, 2003). Approximately 80% of the decisions that affect the university are made at the department level (Gmelch & Miskin, 1993). Therefore, the position of an academic chairperson is among the most significant in the university. Leadership in this context involves the academic chairperson's influence on faculty to achieve the goals of the department and institution (Metwally, El-bishbishy, & Nawar, 2014).

Kouzes and Posner (2002) suggested leadership is a journey and potential leaders have a unique path and use specific practices. These practices include "modeling the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart" (Kouzes & Posner, 2002, p. 13). According to Northouse (2004), leadership can be conceptualized either by looking through the lens of the individual leader or group and is comprised of four essential components: leadership is a process, involves influence, happens in a group, and involves some type of goal attainment (Northouse, 2004). Ruddell (2008) went further to suggest transformational leadership is an effective leadership style that motivates followers to achieve organizational outcomes and forego their individual desires and needs for that of the organization. In higher education institutions, transformational leadership tends be the most practiced form of leadership use by faculty to achieve the demands and meet leadership roles in the university (Black, 2015).

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Academic Chairperson

Academic chairpersons hold a position of leadership "charged with the challenges of developing the department's future and building faculty vitality" (Gmelch & Miskin, 1993, p.3). The role of an academic chairperson is one that involves complex skills and a high level of commitment. The published research on academic chairpersons focuses on the responsibilities of the position, motivations for accepting the position, and roles in the position (Carroll & Gmelch, 1992; Dyer & Miller, 1999; Gmelch, 2015; Gmelch & Miskin, 1993; Hecht et al., 1999; Palmer et al., 2015; Rodriguez et al., 2016).

Academic chairpersons are the largest group of administrators in the university (Dudek-Shriber, 1997). They are responsible for such tasks as program development, planning and "scheduling courses, hiring adjuncts, overseeing and keeping records on faculty/staff/students, collaborating with admissions, recommending promotions and tenure, strategic planning, supervising grants and contracts, program promotion, and supporting faculty" (Kearney, 2006, p. 3). Many academic chairpersons also have teaching responsibilities. Chairpersons new to the position may be less focused on developing a leadership style and practice as they attempt to balance administrative and academic responsibilities while also learning the tasks associated with the position (Cosgrove, 2007). While challenges exist for academic chairpersons, benefit exist for the role as well.

Many academic chairpersons accept the position as an appointment from current faculty, either by election, rotation, or from leaders in the administration. Occasionally, the university will recruit a chairperson from outside the institution without any faculty participation (Kearny, 2006). Gmelch and Miskin (1993) suggested the desire to be a

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department chairperson may be the result of two types of motivation: intrinsic and extrinsic. Academic chairpersons who are intrinsically motivated accept the position to provide opportunities to support faculty, build a better department, or further their career in academia (Gmelch & Miskin, 1993). Academic chairpersons who are extrinsically motivated are usually persuaded by other faculty or the dean of the university. A potential academic chairperson's motivation to accept an appointment is important because it may impact how future chairpersons perceive their roles. For example, if chairperson perceives their roles as taking their turn to be a leader in the department, they may not truly embrace the complexity of the position (Kearney, 2006).

The position of department chair is comprised of four major roles: manager, leader, scholar, and faculty developer (Gmelch & Miskin, 1993). According to Gmelch and Miskin (1993), faculty developer is the most important responsibility of an academic chairperson and "involves the tasks of recruitment, selection, and evaluation of faculty as well as providing the informal leadership to enhance faculty morale and their professional development" (p. 7). The second role of an academic chairperson is that of a manager and requires the chairperson to perform tasks such as budget preparation, assignment of faculty duties, and supervision of nonacademic staff (Gmelch & Miskin, 1993). As a leader, an academic chairperson must provide vision for the department, assist others in developing professional skills, develop and evaluate curriculum, and represent the department in college-wide activities (e.g., committees). Lastly, in the role of a scholar, academic chairpersons continue to teach and "maintain an active research program and obtain grants to support their research" (Gmelch & Miskin, 1993, p. 7). The perception of the importance of one role over another is dependent on the academic chairperson's

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orientation to a role. For example, academic chairpersons who have a greater orientation to the role of a leader will spend more time engaged in activities that support the long-term vision of the department (Gmelch, 2015; Gmelch & Miskin, 1993). In occupational and physical therapy academic departments, chairpersons face many challenges with the roles and responsibilities that are both common (e.g., budgeting and faculty development) and unique (e.g., accreditation) to the position (Fleming-Castaldy & Gillen, 2013; Gmelch, 2015; Utzman et al., 2007).

Academic chairpersons who lead occupational and physical therapy academic programs begin their careers as clinicians and transition to faculty (Kearney, 2006). The chairperson's previous role as a clinician may not have prepared them to adapt to the culture of academia (Kearney, 2006). In 2009, physical therapy academic programs began the transition to clinical doctorate degree programs. Although the degree would provide clinical autonomy, physical therapists may not have developed the necessary skills required for the rigors to conduct research at the level required of faculty (Plack & Wong, 2002). Also, prior to 2006, many occupational therapy chairpersons did not hold terminal degrees (e.g., PhD or OTD) and lacked the skills necessary to meet the demands of research and scholarship (Dudek-Shriber, 1997; Kearney, 2006).

Student pass rates on the licensing exam are important organizational outcomes of clinical education programs in the healthcare profession (Avi-Itzhak & Krauss, 2010). Upon completion of coursework and clinical fieldwork, occupational therapy students must pass the "National Board for Certification in Occupational Therapy [NBCOT] in order to become registered occupational therapists" (Avi-Itzhak & Krauss, 2010, p. 81). Physical therapy students take the National Physical Therapy Examination (NPTE) after

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graduating from an accredited physical therapy academic program (Utzman, Riddle, & Jewell, 2007) and must pass to gain licensure as a physical therapist. The Commission of Accreditation in Physical Therapy Education (CAPTE) "requires all programs to report pass rates as a part of ongoing curriculum review" (Utzman et al., 2007, p. 1182). Physical therapy programs that report low pass rates risk losing their accreditation status, which can negatively impact the program (Utzman et al., 2007). Likewise, the student pass rate on the NBCOT is one of the benchmarks that the Accreditation Council for Occupational Therapy Education (ACOTE) has used to determine the success of occupational therapy programs (Fleming-Castaldy & Gillen, 2013). "Noncompliance results in significant stress for program directors and faculty members, who must execute a remediation plan" (Fleming-Castaldy & Gillen, 2013, p. 365) to bring the pass rate up to meet the standards set by ACOTE.

Trends in Literature

Currently the literature on academic chairpersons' leadership style and student outcomes in occupational and physical therapy programs is "limited in volume and far more disparate in focus" (Heard, 2014, p.1). The focus of relevant studies on academic chairperson were on roles and responsibilities and leadership from the perspective of the follower. Lastly, student outcomes in occupational and physical therapy programs in the literature focused on program characteristics (size of department, credits and accreditation) and student competence.

Leadership and outcomes. Transformational leadership may alter "the beliefs and attitudes of followers and inspire the subordinates in their own interest parallel with the betterment of the organization" (Riaz & Haider, 2010, p. 30). Riaz and Haider (2010)

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suggested to be an effective transformational leader, one must have charisma, communication skills, intelligence, and individualized communication, as these four attributes promote creativity at the individual and organizational levels. Dudek-Shriber (1997) investigated the leadership practices of program directors and their relationship to the organizational health of their programs. Organizational health can be described as the establishment of clear acceptable goals, good communication, equitable distribution of influence and decision making, goal focus, cohesiveness, autonomy, problem solving, memory, and learning (Dudek-Shriber, 1997). The positive relationship that existed between leadership and organizational health was considered the most important result of the study. In addition, faculty respondents to the Leader Behavior Questionnaire (LBQ) perceived the leadership of their program directors as average. Additionally, high correlations were found between the Respectful Leadership subscale and subtests of organizational health. Dudek-Shriber (1997) suggested "having a respectful leader is very important to an occupational therapy department's well-being. Therefore, it is implied that directors need to continue to interact with their faculty members in a positive and supportive manner" (p. 375) as it is beneficial to a productive department.

Truskowski (2016) detailed the mandated transition from an entry-level bachelor's degree to a master's degree requirement for all occupational therapy programs in the United States and Puerto Rico in 2007. The update in the entry-level requirements resulted in changes to the academic program and the NBCOT exam. In 2009, the NBCOT exam changed to include simulation questions. This change in the test format resulted in a national decline in the pass rate for first-time test-takers from 88% in 2006 to 77% in 2009 (Truskowski, 2016). Truskowski (2016) sought to determine if there was a

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relationship between the number of credits an entry-level program offered, class size, and student pass rate on the NBCOT exam. Truskowski (2016) determined there was little to no statistical relationship between either number of credits or class size and student pass rates on the NBCOT exam.

Grignon, Henley, Lee, Abentroth, and Jette (2014) conducted a qualitative content analysis of physical therapy academic programs to identify and examine the expected outcomes of the programs. As a part of the accreditation process, physical therapy academic programs are required to identify the expected outcomes for their graduates. Programs from 75 institutions participated and submitted documents outlining expected outcomes of their graduates. Grignon et al. (2014) identified that "10 common themes emerged from the document: 1) service and social responsibility, 2) professionalism, 3) professional role, 4) professional commitment, 5) practice management, 6) communication, 7) professional growth and development, 8) evidence-base practice, 9) clinical reasoning, 10) patient management" (p. 49). The outcomes indicated graduates were expected to demonstrate competencies across all domains (i.e., individual practitioner, individual practice, physical therapy profession, healthcare profession, and society), and communication was integrated through all domains. Core documents of the profession, such as the Narrative Model for Physical Therapy Education, Code of Ethics, and the American Physical Therapy Association (APTA) Vision for 2020, may have influenced faculty in the development and evaluation of curriculum, resulting in similar expected outcomes across academic physical therapy programs (Grignon et al., 2014).

Academic chairperson and outcomes. Carrol and Gmelch (1993) expanded on previous research regarding roles of academic chairpersons. They investigated factors of

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effective chairperson performance; assessed individual (i.e.motivation), organizational (i.e. size of the department) and positional (i.e. academic rank) characteristics; the association between role factors and behavior outcomes of chairpersons; and identified and developed an academic chairperson profile. Carrol and Gmelch (1993) identified four roles of chairpersons: leader (leading the department in internal and external issues), scholar (effective at personal scholarly productivity), faculty developer (effective in areas of faculty development), and manager (managing resources). The most frequent role combination for a chairperson was a leader and a manager who was intrinsically motivated. The role of manager was identified as being extrinsically motivating for a chair.

Starling (1997) suggested a department chairperson's primary function is to bridge the gap between the faculty and the administration of the institution. Therefore, the chairperson must be a skilled negotiator to ensure that the department is effective and efficient in achieving its goals (i.e., academic achievement, a positive work culture for faculty, and process effectiveness in the department), which is essential to the organizational outcomes of the department and the institution.

Conceptual Model. Rudestam and Newton (2007) suggested, when using a theory or a conceptual model that provides a visual model, depicting the relationship of the variables and constructs to each other can be a powerful tool to guide research. Appendix A provides a visual model of a possible relationship between the perceived roles of occupational and physical therapy academic chairpersons, leadership style, and student pass rate of their program. In this model transformational leadership is depicted

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as the independent variable, perceived roles as the moderating variable and student pass rate as the dependent variable.

Statement of the Problem

Leadership research and academic outcomes in occupational and physical therapy programs are limited to a few studies dating back to 1985. Dudek–Shriber (1997) surveyed 233 full-time faculty and department directors about their leadership behaviors and the organizational health of their programs. The results indicated the majority of full-time faculty perceived their department director's leadership skills as average and program directors perceived the organizational health of their programs as high. There was also an overall significant relationship between aspects of leadership and the organizational health of the occupational therapy departments. Dudek-Shriber's (1997) research suggested the reason most directors were perceived as average was linked to their lack of experience or lack of training for the position. Snodgrass and Shachar (2008) indicated the position of chairperson was the first academically administrative role for most occupational therapists appointed to this position. Thereby, new chairpersons tend to meet only the minimum qualifications outlined by the ACOTE.

The position of academic chairperson in many occupational therapy programs is interchangeable with program director (depending on the institution guidelines). In 2006, ACOTE transitioned educational programs for occupational therapists from an entry-level bachelor's degree requirement to an entry-level master's degree (Kearney, 2006). In addition to restructuring the standards for all academic programs, there were requirements for program directors to have a doctoral degree by 2012 and "the majority

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of full time [sic] faculty to have a doctoral degree by the same date" (Kearney, 2006, p. 3).

Kearney (2006) concluded ACOTE implemented these changes to the standards for occupational therapy programs to align occupational therapy faculty degree requirements with those of other faculty and to better prepare students for entry-level practice in occupational therapy. In 2014, the AOTA Board of Directors issued a position statement on entry-level degrees for occupational therapy practice. The statement was an attempt to respond, "to the changing demands of higher education, the health care environment, and within the profession" (AOTA, 2014, p. 1). Board members of AOTA requested the profession transition to a doctoral entry-level educational program for occupational therapists by 2025. The rationale for their position is that the transition will increase evidence-based practice and research, professional autonomy, and specializations in practice. Also, it would meet the growing trend in the allied health professions to transition to entry-level doctorate degrees, like the physical therapy profession (AOTA, 2014).

In 2017, ACOTE proposed an entry-level degree mandate for occupational therapy programs to move from a master's to a doctoral-level program and for occupational therapy assistant (OTA) programs to move to the baccalaureate level by July 1, 2027 (AOTA, 2018). However, in July 2018, members of the AOTA Board of Directors passed a resolution that both OTA and OTD mandates be placed in abeyance to allow time for further investigation of the issues surrounding the mandates. In addition, the abeyance would allow time to send recommendations to the Representative Assembly for review. In August of 2018 ACOTE provided an update on entry-level education to

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include the following actions: 1) lifted the OTA abeyance and rescinded the single point entry mandate at the baccalaureate level for occupational therapy assistants, and 2) reaffirmed a single point of entry at the doctoral level.

Little research exists on academic chairpersons in the field of physical therapy. The focus of most of the research (APTA, 2011; Chan et al., 2015; Desveaux, 2012; Nicholson, 2008; Plack &Wong, 2002) was on evidence-based practices in clinical settings and the APTA 2020 vision statement, which indicated:

> By 2020, physical therapy will be provided by physical therapists who are doctors of physical therapy, recognized by consumers and other health professionals as the practitioners of choice to whom consumers have direct access for the diagnosis of, intervention for, and prevention of impairments, activity limitations, participation restriction and environmental barriers related to the movement, function and health. (APTA, 2011, p. 1)

The APTA 2020 Vision statement outlines six key points: (a) autonomous practice, (b) direct access care, (c) the transition to Doctor of Physical Therapy as an entry point of the profession, (d) the use of evidence-based practice, (e) the ability of the consumer to choose a practitioner, and (f) professionalism (Nicholson, 2008).

However, there is a debate in the profession around autonomous practice and professionalism. Like the profession of occupational therapy, physical therapy struggles with its identity, as a profession. Physical therapists are often defined by what they do rather than their professional contributions in healthcare. The move toward a doctorate as an entry point to the profession and the use of autonomous practice as a goal may not completely convey what the profession is trying to accomplish (Rothstein, 2003).

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Autonomous can be defined as "having the right or power of self-government; undertaken or carried on without outside control: self-contained; existing or capable of existing independently" (Rothstein, 2003, p. 206). Autonomy can sometimes be perceived by others (consumers or other healthcare professionals) as arrogance or having negative qualities. However, physical therapists need to embrace autonomy to attain professionalism and professional acknowledgement (Rothstein, 2003). The current study is important to the profession of occupational and physical therapy as it will add to the existing literature on transformational leadership.

Significance of the Study

This study adds to the current literature on leadership in the field of occupational and physical therapy, specifically, on how leadership practices of academic chairpersons may impact the student outcomes of an occupational and physical therapy academic program. The limited scholarly analysis of leadership research in occupational and physical therapy programs "evidences a high level of variance: in terms of methodology, theoretical analysis and outcomes" (Heard, 2014, p. 3). Heard (2014) further suggested the inherent organizational structure of clinical units and academic departments demand literature to support leadership to achieve optimal outcomes. This study provides a scholarly analysis of leadership practices among academic chairpersons and leaderships association with student outcomes.

Secondly, there is limited application of current leadership theories in the professional practice of occupational and physical therapy. Leadership is referenced in professional literature, but it is usually limited to the perspective of the follower (Heard, 2014; Snodgrass, Douthitt, Ellis, Wade, & Plemons, 2008; Snodgrass & Shachar, 2008).

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This study broadens the research by widening the lens used to view leadership the occupational and physical therapy professions. Specifically, this study looked at leadership practices and student outcomes through the lens of the leader rather than the follower. Lastly, there appears to be a disconnection between leadership research in occupational and physical therapy and the ongoing theory development related to research (Heard, 2014).

Snodgrass and Shachar (2008) examined leadership practices of occupational therapy program directors through a survey of the faculty. Snodgrass et al. (2008) examined the perceptions of occupational therapy rehabilitation clinicians on the leadership styles of directors and outcomes of leadership. Heard (2014) suggested both studies support a transformational leadership style for optimal organizational outcomes. However, Heard (2014) also implied a significant non-responder bias existed due to the low response rate in both studies. Lastly, in the current study the perception of academic chairpersons regarding their own leadership practices and how these practices influenced student outcomes were examined. This study is relevant to educational leadership, as it expands the empirical knowledge available to academic leaders in the fields of occupational and physical therapy, whereas current research on leadership is limited. Specifically, this study highlights self-reported leadership behavior and professional development of academic chairperson.

Scope of the Study

The purpose of this study was to determine the relationship between the leadership style of academic chairpersons and student outcomes (student pass rate on NBCOT and NPTE exams) in occupational and physical therapy programs. Specifically,

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the researcher examined the relationship between the following variables: perceived roles, the transformational leadership style of academic chairpersons, and student pass rate on the NBCOT exam or NPTE. The researcher sought to demonstrate how transformational leadership style influenced student outcomes in both occupational and physical therapy educational programs. The research provided descriptions of how the independent variable (transformational leadership style) and the moderating variable (perceived roles) impacts the dependent variable (student pass rate on the NBCOT exam or NPTE) in occupational and physical therapy educational therapy programs.

Definition of Terms

Terms included in a study require a definition, or to be operationalized, to provide the reader with specific meaning of the terms used in the study (Bailey, 1991). The terms used throughout the current study will be defined as the following to ensure consistency. Definitions without citations were developed by the researcher:

Allied healthcare professionals. Allied healthcare professionals include occupational therapists, physical therapists, speech-language pathologists, physician assistants, and nurses.

Department chairperson. Ruddell (2008) defined a chairperson as someone who is responsible for the management and leadership of an academic department.

Exemplary leadership practices. Common practices leaders use to guide and motivate their followers (Kouzes and Posner (2002) identified five practices of exemplary leadership: (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act, and (e) encourage the heart.

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Leadership. Dartey-Baah (2009) indicated leadership "involves a group and achievement of group goals. It requires the leader to set clear achievable goals, as well as provide the necessary resources and support that will encourage followers to do their best" (p. 3).

Occupational therapist. Occupational therapists "work with individuals and groups of all ages and levels of ability to promote healthy occupations. Occupations include all the activities that people are engaged in such as work, volunteerism, school, leisure, and personal care" (Anonymous, 2004, p. 121).

Occupational therapy. According to ACOTE (2012), occupational therapy is "the art and science of applying occupations as a means to effect positive measurable change in health status and functional outcomes of a client by a qualified occupational therapist" (p. S71).

Physical therapists. A physical therapist is an expert "in how the musculoskeletal and neuromuscular systems function" (Nicholson, 2008, p. 2).

Physical Therapy. Nicholson (2008) defined physical therapy as "the treatment or management of physical disabilities, malfunction, or pain by exercise, massage, hydrotherapy, etc., without the use of medicines, surgery or radiation" (p. 2).

Roles. Carrol and Gmelch (1992) defined roles as "the way an individual act or behaves in occupying a status" (p. 84).

Transformational leadership. Grosso (2009) defined transformational leadership as "a leader who uses charisma to increase awareness and consciousness of the followers regarding important issues of social and moral value and direct[s] them towards desired outcomes" (p. 1).

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Department Chairperson. Ruddell (2008) defines a chairperson as someone who is responsible for the management and leadership of an academic department.

Student Outcomes. Refers to the student pass rates on the National Board of Certification in Occupational Therapy (NBCOT) and National Physical Therapy Exam (NPTE).

Idealize Influence (attributes and behaviors). Leaders communicate a vision to followers. Followers admire, identify with, and wish to emulate the leader (Vinger & Cilliers, 2006).

Intellectual Stimulation. Leaders encourages followers to identify problems, encourages innovated thought, creativity and challenge the beliefs and values of the leader and organization (Harrison, 2011).

Individualize Consideration- Leaders encourage, support, coach and mentor their follower's personal development (Vinger & Cilliers, 2006).

Inspirational Motivation. Leaders motivate followers to communicate clear expectations and present optimistic views for the future (Cetin & Fayda- Kinik, **2015).**

Organization of the Study

In Chapter 1 of this study an investigation and a brief rationale for the study is introduced. Chapter 2 includes a review of the research that contributes to the existing body of knowledge on leadership practices and student outcomes and provides a theoretical framework that will support the research methods used in the study. The research methodology used in the study is outlined in Chapter 3. The results of the study are described in Chapter 4, and a discussion of the results with delineation of implications for future research and practice are described in Chapter 5.

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Summary

Chapter 1 included an overview of the problem, including the current research on the leadership style of chairpersons in occupational and physical therapy programs and their relationship to student outcomes. A discussion on leadership in higher education at the department level, specifically the use of transformational leadership as an effective leadership style to motivate faculty to achieve the goals of the department. Academic chairpersons lead their department by providing a vision to accomplish goals. Academic chairpersons also engage in responsibilities and tasks (i.e., hiring adjuncts and keeping records) as a requirement of the position.

A brief overview of transformational leadership and a review of trends in the literature on leadership, academic chairpersons, and organizational outcomes were presented to frame the current study. Dudek-Shriber (1997) investigated leadership practices of program directors and their relationship to the organizational health of occupational therapy programs and found there was a strong relationship between leadership and organizational health. Grignon et al. (2014) identified and examined student outcomes in physical therapy programs across five domains (i.e., individual practitioner, individual practice, physical therapy profession, healthcare profession, and society). The researchers found graduates were expected to demonstrate competences across all domains.

A brief discussion on the limited empirical research available on the relationship between leadership and student outcomes, particularly in the field of occupational and physical therapy, was also delineated. Finally, problems that academic chairpersons in occupational and physical therapy programs encounter in trying to achieve the goals of

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the program in the constructs of a university's and the profession's expectations were identified.

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Chapter Two: Review of the Literature

Introduction

This chapter includes a review of the literature as it relates to leadership practices and student outcomes. Specifically, this section of the chapter will review the leadership style, perceived roles of academic chairpersons, and student outcomes in occupational and physical therapy academic programs. Lastly, a review of the literature on instruments used to measure transformational leadership will be discussed.

Leadership

Seagren (1993) suggested "a leader is an individual who directs and guides the organization to its highest level of achievement" (p. 17). An academic chairperson is a leader "charged with the challenges of developing the departments' future and building faculty vitality" (Gmelch & Miskin, 1993, p. 1). Most researchers of the role of academic chairs have focused on the tasks and skills required for the position rather than the leadership requirements (Gmelch & Miskin, 1993). The study of leadership is examining the impact the leader has on their followers to accomplish organizational goals (Seagren, 1993).

A leader can be someone who holds power in a context, but a person who has power may not always be a leader. Burns (1978) stated:

> Leadership is a reciprocal process of mobilizing by persons with certain motives and values, various economic, political and other resources in a context of

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> competition and conflict, in order to realize goals independently or mutually held by both leaders and followers. (p. 425)

A leader's role and responsibility are to move their followers through various levels of needs and moral development. Burns (1978) used the example of how a child develops morally by the shaping and influence of their parents, clergy, and others in their lives. According to Burns (1978), "role-taking demands the appreciation of others' situations and perspective empathy for others' needs and goals" (p. 429). The more concise the motivation of the leader, the greater influence they have over followers. In the 1978 book *Leadership*, Burns used examples of political power and political leadership to illustrate leaders and leadership. Burns suggested leaders should understand that followers have their own power structures and motives regardless of size.

Burns (1978) used the example of the New Deal to illustrate leaders and leadership, specifically the relationship between President Roosevelt and John L. Lewis, the mine workers' chief. In 1933, the National Recovery Act, proposed by Roosevelt under the New Deal administration, was intended to create jobs for people and not for providing and supporting unionism (Burns, 1978). However, Lewis used Roosevelt's popularity and posters in the mines to encourage workers to join the union. The posters stated, "President Roosevelt Wants You to Join the Union" (Burns, 1978, p. 435). This helped increase membership and the power of the labor unions. During Roosevelt's re-election to office, Lewis tried to give a large donation to support Roosevelt's election campaign. Roosevelt publicly declined Lewis' donation, but, privately in small donations, accepted almost $500,000 from Lewis for his campaign. The relationship between Lewis and Roosevelt eventually ended due to political disagreements and foreign policies. This

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example highlights the power base and motives of a follower and the influence the follower can have on the leader.

Heifetz (1994) suggested the myth of a leader having do everything and being "the lone warrior" (p. 251) can isolate the leader. It is true that, in tough times, a leader must shoulder the burden of the problems in the organization. However, a leader who equips and trains followers to carry some of the burden is considered to have good leadership practices (1994). According to Heifetz (1994) "unloading the weight on people unprepared to respond would be negligent" (p. 251) on the part of the leader.

Heifetz (1994) identified seven suggestions "for bearing the responsibility that comes with leadership without losing one's effectiveness or collapsing under the strain" (p. 252): "1) get on the balcony (get ahead of the conflict), 2) distinguish self from role, 3) externalize the conflict, 4) use partners, 5) listen, using oneself as data, 6) find a sanctuary and 7) preserve a sense of purpose" (Heifetz, 1994, p. 252). Heifetz (1994) suggests leaders should actively participate, be observant and reflect on their own experiences in order to be effective.

Heifetz and Laurie (1997) discussed adaptive challenges that leaders face due to societal and technological changes. When long-held values of an organization are considered dated and new perspectives emerge, adaptive leadership is required. Failure to grasp the requirements of adaptive challenges or treating these challenges as if they are technical problems results in failure to complete the strategic development process necessary in adaptive work. The failure of a leader to identify "who needs to learn what to develop, understand, commit to, and implement the strategy" (Heifetz, 1997, p. 133) can result in stagnation of the organization. Leaders at all levels of the organization,

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regardless of perceived or actual authority, must encourage followers to identify the challenges of the organization, make value adjustments, and learn new ways to complete tasks. The leader must ask the right questions to develop solutions. Successful leaders focus on building relationships with followers, as followers have the answers (Heifetz & Linksky, 2004). Transformational leadership affects how followers think and behave, "establishing a united understanding to succeed in learning" (Mahdinezhad, Suandi, Silong, & Omar, 2013). Transformational leaders encourage and support their followers to use new ideas to solve problems and to achieve the goals of the organization (Mahdinezhad et al., 2013).

Transformational leadership. Burns was the first author to introduce the idea of transforming leadership, which eventually became the theory of transformational leadership (Chauchan, Sharma, & Satsangee, 2013). Burns also was the first to put forth the concept of transactional leadership, or managerial leadership (Chauchan et al., 2013). Transactional leadership deviates from transformational leadership "in that the transactional leader does not individualize the needs of subordination nor focus on the personal development" of their followers. (Northouse, 2004, p. 178). Transactional leaders exchange something of value with their followers (e.g., money) to push forward their goals.

Bass (1998) proposed transactional leadership does not promote highly motivated, committed, and satisfied followers, but rather, followers who engage in practices that lead to mediocrity. Bass indicated contingent reinforcement in transactional leadership is "in the form of leader's promises and rewards or threats and disciplinary actions; [to] reinforce behavior contingent on the follower's performance" (p. 3). When the expected

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performance of a task is clear, transactional leadership will most likely be used (Bass, 1998). In contrast, transformational leadership is best used when the reward cannot be connected to specific performance goals.

Transformational leadership involves inspiring followers to accomplish organizational goals by demonstrating exemplary practices (Jackson, 2009). Gregory-Mina (2009) believed that "transformational leaders build a learning infrastructure through three critical areas: committed service, charisma, and intellectual stimulation" (p. 3). Kouzes and Posner (2002) identified five exemplary practices indicative of a transformational leader: (a) modeling the way—being a role model and demonstrating the desired behaviors, (b) inspiring a shared vision—"inspiring their subordinates in their own interest parallel with the betterment of the organization" (Riaz & Haider, 2010, p. 30); (c) challenging the process—the willingness to take a risks and do something new; (d) enabling others—leadership is a team effort; and (e) encouraging the heart—caring for others in a way that supports them to move forward, creating a culture of celebration (Kouzes & Posner, 2002).

In transformational leadership, the leader feels responsible for the personal development of their followers. An important "objective of transformational leadership is to bring and develop followers to a level where they can successfully accomplish organizational goals and tasks without the direct supervision of the leader" (Dartey-Baah, 2009, p. 5). Dartey-Baah (2009) suggested there is a strong correlation between transformational leadership and follower commitment, high trust levels, and positive organizational outcomes.

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Bass (1998) suggested transformational "leadership is individually considerate, provides the followers with support, mentoring, and coaching. Each of the components can be measured with the Multifactor Leadership Questionnaire" (MLQ Form 5x; Bass, 1998, p. 5) Form 5x. According to Bass (1998), components of the MLQ can be used to create a demographic profile of future leaders. Charismatic, inspirational leaders often have many of the following characteristics: they have good parents, a stable home life, a leader amongst their peers at a young age, popular during formative years, bothered by other peoples' lack of initiative, confident, engage in religious activities, and hold office in organizations (Bass, 1998). Intellectual, stimulation leaders have parents who are college graduates, read a lot, and are above average students. Individualized, consideration leaders have positive work relationships, motivate others, had happy childhoods, received a lot of praise as a child, had an active mother in their formative education, and had a possessive and formal father (Bass, 1998).

In contrast only few transactional leadership styles (contingent reward, management by exception, and lasissez-faire) supported the research of the study (Bass, 1998). Items contained in the contingent, reward leadership component of the MLQ did not meet "the criterion of intuitive hypothesis coupled with empirical support" (Bass, 1998, p. 37). Only one of the 12 items in the Management by Exception section was validated and supported by empirical research in the study: which was when a leader is raised by both parents and they equally disciplined the respondent. Laissez-faire leaders have fathers who were not interested in their formative education, had few or no consequences for misbehaving, had no tangible rewards for good grades, and have not held any offices in the past 5 years (Bass, 1998). Bass (1998) suggests researchers

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should be confident when using the MLQ Form 5x to measure leadership functions that represent transformational leadership (Bass, 1998). Snodgrass and Shachar (2008) utilized the MLQ Form 5x to understand how effective leadership styles impact organizational outcomes in higher education. They found that transformational leadership has a positive relationship with leadership outcomes, while transactional leadership had a negative relationship (Snodgrass & Shachar, 2008).

Transformational Leadership in educational institutions. Transformational leadership in higher education, especially as it relates to the position of academic chairperson, requires the ability to persuade faculty to share the vision of the institution. Leadership in this context is viewed more as a shared practice than a directive. According to Seagren (1993), "leadership roles of those in formal positions of the organizational authority could more appropriately be seen as those who facilitate or empower rather than as those who control" (p. 21). The challenge for the chairperson in this situation is the ambiguity of their role; they have a responsibility to represent faculty to administration and advance the faculty's interest and agendas, as well as represent the administration to the faculty and advance the agenda and interest of the administration. There is an assumption that "the administrator of a department is its leadership and that the appointment of chairperson will automatically provide a leader. But experience indicates that it is not always the case" (Seagren et al., 1993, p. 22).

Reiss (2000) investigated the association between the self-rated transformational leadership styles of clinic administrators and education program directors of technical and professional programs and leadership outcomes (effectiveness scales). Reiss found a positive correlation between all five transformational leadership behaviors and all the

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effectiveness scales. Reiss (2000) also determined that professional education program directors rated themselves higher in transformational leadership behaviors than their subordinates.

Harrison (2011) examined instructors' leadership behavior and the influence it had on student outcomes, specifically, the relationship between student perceptions of the instructors' transformational and transactional leadership behaviors and student outcomes. The study sample included 112 students enrolled in an online leadership program who completed a survey using the MLQ to determine the leadership behavior of their instructors. The primary goal of the research was to determine which leadership behaviors were the most significant predictors of student outcomes. Harrison (2011) found all five transformational leadership behaviors (idealized influence attributes, idealized influence behaviors, inspirational motivation, individualized consideration, and intellectual stimulation) had a greater positive relationship with student outcomes (e.g., cognitive learning, perceptions, and teacher credibility) than transactional leadership behaviors.

Most of the literature on leadership styles and student outcomes primarily focuses on principals' leadership styles or behaviors and student outcomes in elementary and secondary schools (Allen et al., 2015; Cruickshank, 2017; Day et al., 2016; Pina et al., 2015), with most of the studies indicating a positive relationship. Pina et al. (2015) explored the impact of principals in Portuguese schools and used a mixed-methods approach to analyze data. Quantitative data were collected using middle and secondary school performance over a 4-year period on national examinations and questionnaires completed by students and teachers. Interviews of principals and focus groups made up of

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students, department heads, and teachers were used to gather qualitative data. The results indicated principals mostly demonstrated transformational leadership, and a relationship existed between transformational leadership of the principals and student outcomes (improvement on national examinations year by year).

Day et al. (2016) and Cruickshank (2017) examined the influences of transformational and instructional leadership on student outcomes. Both studies indicated an indirect relationship existed between leadership and student outcomes. Specifically, when transformational and instructional leadership strategies were used collaboratively, they improved school performance as measured by supported pedagogy and improved student achievement.

Allen et al. (2015) found a direct and indirect relationship between transformational leadership and student outcomes. Their study examined the relationship between transformational leadership, school climate, and student achievement in math and reading. While they were able to determine that a positive relationship existed between transformational leadership and school climate, the researchers could not for student achievement: According to Allen (2015) “these findings suggest that principals should examine their interactions with both students and teachers in an attempt to find more opportunities to impact student achievement” (p. 16). Allen et al. (2015) indicated leaders who behave as a role models increase the commitment of their followers to the institution and achieve organizational goals. Particularly in an academic setting, student outcomes can be positively influenced directly and indirectly by a leader’s behaviors through factors such as teacher engagement and improving school climate and environment (Cruickshank, 2017). In secondary and higher education settings researchers

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(Allen et al., 2015; Cruickshank, 2017; Day et al., 2016; Harrison, 2011; Reiss, 2000) suggests academic chairpersons can impact student outcomes through a supportive school climate and environment, support of faculty pedagogy, and using transformational leadership behaviors (i.e., idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation) when interacting with students.

Academic Chairperson

The position of academic chairperson can be viewed as one of key importance and complexity (Gmelch, 2015; Gmelch & Burns, 1993; Gmelch & Miskin, 1993; Gmelch & Parkway, 1999; Hecht et al., 1999; Robinson, 1996; Smart & Elton 1976; Snodgrass & Shachar, 2008). Academic chairpersons represent the largest group of administrators in higher education (Gmelch & Miskin, 1993; Snodgrass & Shachar, 2008). Academic chairperson are leaders and frontline administrators in their departments (Hecht et al., 1999; Khan et al., 2019). According to Rodriguez et al. (2016), academic chairpersons "serve as the essential link between administration and faculty members at an academic institution (p. e1). This unique position has been characterized by researchers as that of Janus (the Roman god) as being in the middle of opposing views or the gatekeeper (Gmelch & Burns, 1993). Seagren, Creswell, and Wheeler (1993) described the role of an academic chairperson as a block of wood being squeezed in a vise. On one side are the expectations and goals of the institution. On the other side are the demands of the department staff, faculty, and students, all trying to apply pressure and shape the role of the chairperson (Seagren et al., 1993).

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The attempt to bridge managerial and academic components of a university presents an inherent problem for the chairperson trying to exist in two worlds. Gmelch and Burns (1993) described the root of this problem as:

> The academic core of teaching and research operates freely and independently in a loosely coupled system, whereas the managerial core maintains the mechanistic qualities of a tightly coupled organization. The department chairperson is at the heart of the two systems. (p. 3)

Role and responsibilities. The role and responsibilities of an academic chairperson play an important part in institutional success. Academic chairpersons are responsible for the administrative tasks of the department such as the budgeting, hiring, and faculty evaluation (Seagren et al., 1993). Many researchers have taken a task approach to determining the actual roles and responsibilities of an academic chairperson (Caroll & Gmelch, 1992; Hecht et al., 1999; McLaughlin, Montgomery, & Malpass, 1975; Smart & Elton, 1976). However, viewing the position of an academic chairperson through the lens of a list of tasks and activities provides a very narrow view of the position. Academic chairpersons are unique, complex, and multidimensional and, therefore, should not be viewed only in terms of managerial demands but also in the leadership qualities necessary to develop faculty pedagogy and provide vision for the department (Dyer & Miller, 1999; Gmelch & Burns, 1993; Hecht et al., 1999; Snodgrass & Shachar, 2008). Gmelch and Miskin (1993) identified four roles and responsibilities of an academic chairperson: (a) faculty developer—selects, recruits, guides, and evaluates faculty in the department; (b) manager—requires the chairperson to perform administrative functions such as preparing budgets; (c) leader—involves many tasks that

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are both internal and external in nature; and (d) scholar—involves maintaining teaching and researching in their department discipline.

McLaughlin, Montgomery, and Malpass (1975) also investigated the roles and duties of academic chairpersons. They conducted a study using 38 state universities that award doctoral degrees to determine the roles of academic chairs. The researchers sent 1,646 surveys and 1,198 were returned (a 73% return rate). The survey consisted of 74 questions and the results demonstrated that chairs engaged in three major roles: academic, administrative, and leadership. The academic role involved engaging students in research activities; the administrative role included departmental duties such as record keeping; and the leadership role involved selecting, supporting, developing, and evaluating faculty performance. In addition, the results of the study suggest academic chairpersons can be understood from two perspectives: 1) the development of an academic chairperson and 2) through the roles and duties of an academic chairperson.

Smart and Elton (1976) collected data using a survey from 32 public universities, which included a list of 27 duties typically performed by department chairpersons and asked the respondents to indicate how many hours they spent on each task. Participant responses were correlated, and a factor analysis was used to determine the major categories of chair responsibilities. Four roles emerged from this analysis including (a) faculty role: recruiting, selecting, and evaluating faculty and reducing conflict (most of the chairperson's time); (b) coordinator role: soliciting ideas to move the department forward in achieving goals, planning and reviewing curriculum, and assigning teaching and research responsibilities to faculty; (c) research role: obtaining and managing grants and recruiting and managing graduate students; and (d) instructional role: teaching and

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managing department clerical and technical staff. Smart and Elton's (1976) study provides not only the major roles of an academic chairperson but the functional components or responsibilities of each role.

Lumpkin (2004) identified the four responsibilities of a department chairperson as (a) leadership, (b) understanding the breadth and depth of the four frames of organizations (i.e., structural, human resource, political, and symbolic), (c) the day-to-day management operations of their departments, and (d) committing to moving from good to great. Lumpkin (2004) discussed the use of the four frames of organizations as they related to the role of a department chairperson. Lumpkin (2004) used these frames to examine the role of a chairperson in terms of bridging the gap between the department and administration (e.g., the dean). According to Lumpkin (2004), "the department chair should seek out the guidance of the dean in order to gain a broader and more in-depth understanding of institutional policies, procedures, job expectations, and day-to-day management details" (p. 45). Academic chairpersons should also be able to establish priorities and short- and long-term goals as they relate to the growth and vitality of the department (Lumpkin, 2004). The role of a leader requires the department chairperson to establish relationships with the dean and other department chairs and faculty to align the department with the broader mission and goals of the college or university.

Academic chairpersons should invest in supporting faculty and staff—hiring the right people, empowering them with autonomy, facilitating collaboration, and providing appropriate rewards—as they are the most important resource in advancing the goals of the department (Lumpkin, 2004). Academic chairpersons should also be able to manage coalitions, power, and conflict. Academic chairpersons need "to learn how to address

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various political contexts including the hidden agendas that influence how and why people operate as do" (Lumpkin, 2004, p. 46).

Finally, the perception of others of the actions and decisions of the department and the chairperson is essential in achieving department goals. Relationships between individuals and groups can impact a department's success or failure in achieving goals and overall organizational outcomes. Academic chairpersons should also build a team in which "the faculty and staff, although possessing multiple perspectives and abilities, choose to work collaboratively to advance a shared vision" (Lumpkin, 2004, p. 46); thus, moving the department and the chairperson from good to great. The challenges and responsibilities of an academic chairperson are many, and the motivation to accept the position can be varied.

Motivation. During their employment at any university, most faculty members will consider the position of academic chairperson, even if they never pursue it (Gmelch & Parkay, 1999; Jackson, 2009). According to Gmelch and Parkay (1999), "even those who adamantly claim that they would never think of becoming a department chair have perhaps thought about how they would do things differently if they were in the position" (p. 3). Gmelch and Miskin (1993) suggested there are many reasons faculty transition to the position of academic chairperson. These reasons include that they were asked by the dean; it was their turn in the department rotation; or nobody wanted to accept the position, all of which are extrinsic motivators. Accepting the position for financial gain, a desire for administrative experience, or a genuine desire to help the department are intrinsic motivators. Faculty members who choose to accept the position of academic chairperson soon discover that a huge difference exists between a professor or scholar

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and a leader and administrator (Gmelch & Parkay, 1999). The decision to accept the position of academic chairperson requires a metamorphosis of a faculty member's current identity.

Faculty must move from an identity that is individualized, stable, and independent in nature to one that is more pubic, fragmented, and mobile in nature. (Gmelch & Parkay,1999). Gmelch and Miskin (1993) outlined the transitions of faculty to their new role as academic chairperson in their nine-role taxonomy. According to Gmelch and Miskin (1993), the nine transitions a chairperson undergoes in their new position include (a) solitary to social: the new chairperson's orientation to working alone to working with faculty to attain department goals; (b) focused to fragmented: having long periods of time for research and projects to multi-tasking a variety of tasks; (c) autonomy to accountability: having to be accountable to upper management, whereas previously they had control over their time and activities; (d) manuscript to memoranda: having long periods of time to review and edit written work to getting the point across quickly and accurately through memos; (e) private to public: having time alone to do research to needing to be accessible to upper management, faculty, and students throughout the day; (f) professional to persuading: focusing on providing the information to a new role as the compromiser; (g) stability to mobility: focusing on the discipline to focusing on the agenda of the university; (h) client to custodian: a consumer of resources to determining how resources are allocated; and (i) austerity to prosperity: increased financial responsibilities (Gmelch & Parkway, 1999). The transition from the roles of a faculty member to that of an academic chairperson can be complex and affect how a chairperson perceives their role in their department (Kearney, 2006).

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Self-perception. An academic chairperson's orientation to a role may be shaped by their perception of that role. Caroll and Gmelch (1992) identified the four role orientations of an academic chairperson as manager, scholar, faculty developer, and leader. The role of a manager requires the chairperson to manage department resources and staff, assign duties, and maintain departmental records (Caroll & Gmelch, 1992; Wilson, 1999). The role of a manager is a requirement for the position of academic chairperson and often not liked by the academic chairperson (Gmelch, 2015). Chairpersons who are oriented to this role engage in the basic operations of the department as a requirement of the university (Gmelch, 2015). The role of a scholar requires such activities as the maintenance of scholarly productivity and the ability to obtain resources for research (Caroll & Gmelch, 1992; Wilson, 1999). An academic chairperson who is oriented to scholarship will engage faculty in scholarly activities. The role of faculty developer requires the academic chairperson to encourage faculty training and professional development, provide leadership, and evaluate faculty. Academic chairpersons who are oriented to this role engage in activities such as being a mentor and coach to faculty (Gmelch, 2015). Lastly, the role of a leader involves both internal (solicit ideas to improve the department) and external (coordination of departmental activities with constituents) activities (Caroll & Gmelch, 1992; Wilson, 1999). Academic chairpersons who view themselves as a leader provide a vision to accomplish departmental and institutional goals (Dudek-Shriber, 1997; Gmelch & Miskin, 1993; Jackson 2009; Snodgrass & Shachar, 2008). Leadership is essential in higher education and an academic chairperson is a key leader in the university (Snodgrass & Shachar,

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2008); however, leadership research in the fields of occupational and physical therapy is "sparse and only in the late 1980's was it researched in earnest" (p. 226).

Occupational and Physical Therapy Academic Chairperson Leadership

According to Snodgrass and Shachar (2008), "little is known and understood about leadership and outcomes of leadership within academic occupational therapy programs" (p. 226), and they added this gap "must be filled to better prepare current and future OT program directors" (p. 226). The success of an academic department chairperson in the field of occupational therapy requires leaderships training and preparation. Unfortunately, many are only provided with a position description and qualifications outlined by the ACOTE.

In their 2008 study "Faculty Perceptions of Occupational Therapy Program Directors' Leadership Styles and Outcomes of Leadership," Snodgrass and Shachar (2008) indicated transformational leadership is a positive predictor of leadership outcomes in a variety of conditions and organizational settings. They implied the most effective leaders were those who chose to use a variety of leadership styles to accomplish organizational goals. The researchers suggested administrators in occupational therapy academic programs can use the findings from the study in the selection process of an academic chairpersons (Snodgrass & Shachar, 2008). Academic chairpersons can also use the findings to understand how leadership styles are perceived by faculty and impact the effectiveness of the department (Snodgrass & Shachar, 2008). In addition, they found nontenured faculty scored their academic chairperson higher for transformational leadership than those who were on a tenure track. The researchers suggested faculty on a

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nontenure track may have leadership expectations of the chairperson that are lower than their counterparts (Snodgrass & Shachar, 2008).

Cosgrove's (2007) examination of faculty perceptions of occupational therapy program directors' leader behaviors and the impact of behavior on job satisfaction is one of the few leader-follower studies in the field of occupational therapy. Cosgrove (2007) surveyed 122 faculty from accredited graduate occupational therapy programs throughout the United States who were either full-time faculty or an academic fieldwork coordinator. The Leadership Practices Inventory Observer, the Job Descriptive Index, and the Job in General Scales were used in the study. The results indicated the leadership practice most frequently used by occupational therapy program directors was Enabling Others to Act, and most faculty perceived their program directors' leadership behaviors to be low (Cosgrove, 2007). Cosgrove (2007) said, "Enabling Others to Act received the highest score despite its rating of low when compared to Kouzes' and Posner's percentile database" (p. 5). They concluded the low ratings may have been a result of the process used to appoint academic chairpersons with little training and position development.

The study of leadership, particularly in physical therapy academic programs, is relatively limited (Chan et al., 2015; Desveaux et al., 2012). Much of the leadership research in physical therapy supports evidence-based practices and the transition or impact of the entry-level doctorate in physical therapy. Desveaux et al. (2012) explored leadership characteristics of physical therapists as practitioners and administrators. Specifically, the researcher sought to:

> a) describe the leadership characteristics that physical therapists in Canada perceive as extremely important in the workplace, in the healthcare system, and in

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> society, b) identify the proportion of physical therapists in Canada who perceived themselves as leaders, and c) identify differences in demographic profile, for example gender, highest level of education. (Desveaux et al., 2012, p. 368)

Members of the Canadian Physiotherapy Association (CPA) were emailed an invitation along with a description of the study and link to the questionnaire. A follow-up email was sent 2 weeks later to increase the response rate. The questionnaire was developed using literature gathered on leadership characteristics in business and healthcare settings. The questionnaire was piloted with faculty members of the University of Toronto Physical Therapy Department to ensure objectives of the study could be determined (Desveaux et al., 2012). The survey had a 30% response rate (1,875 participants); however, only 1,511 of the respondents completed the survey (80.6% completion rate). The results indicated across the three settings (i.e., healthcare, workplace, and society), physical therapists identified communication, professionalism, and credibility as the characteristics that were important to leadership (Desveaux et al., 2012). All three characteristics were rated the highest in a workplace setting, and 80% of respondents identified themselves as leaders. Desveaux et al. (2012) suggested demographic factors, such as being male and working in private practice or academic setting, were associated with respondents identifying themselves as a leader. Also, an emerging trend "was the difference among facility types in the perceived importance of business acumen: Respondents working in private practice facilities types were significantly more likely than those in other facility types to identify business acumen as important" (Desveaux et al., 2012, p. 373).

Chan et al. (2015) identified the strengths of physical therapists in leadership positions. The two main objectives of Chan et al.'s 2015 study were to "describe the

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leadership profile of a self-selected sample of physical therapists in Canada" (p. 342) and to determine if "physical therapists in leadership positions possess different strengths in their leadership profile than those not in leadership positions" (p. 342). Participants for the study were recruited from physical therapy academic departments, healthcare facilities, award recipients, CPA, and other physical therapy associations and divisions. The Clifton Strengths Finder was used to identify the personal strengths of the 108 leaders and 65 non-leaders who participated in study (Chan et al., 2015). Chan et al. (2015) identified a leadership profile of the participating physical therapists as the following: female, between the ages of 28 and 66, and had achieved a bachelor's or masters' degree as the highest level of education. Also, the largest representation of leaders in the profile were those in academia (57%). Three of the top five identified leadership strengths were represented in both the leader and non-leader groups. Learner was the most frequently identified strength, and achiever and input were also identified in both groups. Leaders presented with more experience (12 or more years) than non-leaders. Also, "more leaders than non-leaders exhibited the achiever strength (49% vs 32%)" (Chan et al., 2015, p. 344). Physical therapist with the achiever strength had a strong determination to accomplish goals and objectives.

Researchers have suggested the common leadership strengths (learner, achiever, and input) implied that these strengths are necessary to be a good physical therapist despite the area of practice and job description. Although Desveaux (2012) identified communication, credibility, and professionalism as strengths of physical therapy leaders, and Chan et al. (2015) identified learner, achiever, responsibility, input, and strategic as the top 5 strengths, there were parallels between the two studies. First parallel was "the

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responsibility strength defined as one who requires a certain degree of professionalism and credibility" (Chan et al., 2015, p. 366). Strategic strength, which requires a leader to be able to figure out complex situations, also requires good communication skills to disseminate a plan of action to their followers (Chan et al., 2015).

Why are occupational and physical therapy academic chairpersons unique?

Occupational and physical therapy chairpersons face both similar (achievement of organizational goals, developing faculty, and curriculum design) and different (accreditation standards) challenges from other academic chairpersons (Gmelch, 2015; Gmelch & Miskin, 1993; Kearney, 2006). Occupational and physical therapy academic chairpersons begin their professional careers as clinicians, which may not have prepared them to transition to the climate and culture of academia (Kearney, 2006).

Occupational and physical therapists struggle with their identities as professionals (Dudek-Shriber, 1997; Rothstein, 2003), particularly, when academic faculty have professional credentials and great clinical achievements but lack scholarly engagement (Dudek-Shriber, 1997; Rothstein, 2003). In occupational and physical therapy academic departments, student instruction has been the primary focus of faculty (Dudek-Shriber, 1997). Occupational and physical therapy faculty typically disseminate research as a part of a conference, seminar, or workshop (Gupita & Bilics, 2014) and not under the scrutiny of a peer-reviewed journal. Dudek-Shriber (1997) suggested the limited scholarship engagement of faculty in occupational therapy academic programs is not "advantageous to the profession in its efforts toward recognition as an academic discipline" (p. 374) or faculty career advancement.

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Gender also presents a challenge for occupational and physical therapy academic chairpersons. Women are highly represented in the profession of occupational and physical therapy (Dudek-Shriber, 1997). According to Bickel et al. (2002), many universities administrators still have institutional sexism and stereotypical views of women in leadership, which makes it difficult for women to move through the ranks of academia to gain tenure and become a full professor (Ginther & Kahn, 2004; Macphee & Canetto, 2015).

Lastly, occupational and physical therapy academic chairpersons have the additional challenge of meeting accreditation standards of their programs. Students in occupational and physical therapy programs must pass their respective national licensure examinations (NBCOT and NPTE) to enter the profession (Avi-Itzak & Krauss, 2010; Utzman et al., 2007). Accrediting entities of occupational (ACOTE) and physical (CAPTE) therapy academic programs ensure student pass rates are a part of an ongoing program curriculum review processes (Avi-Itzak & Krauss, 2010; Utzman et al., 2007). Programs that report low student pass rates risk being on probation or losing their accreditation status (Avi-Itzhak & Krauss, 2010; Utzman et al., 2007). Academic chairpersons must periodically revise curriculum in their attempt to adjust to changes in the profession, university, and accreditation standards (Sieg, 1986). Sometimes, academic chairpersons, in their efforts to remain in compliance with accreditation standards, may experience conflict with their institutions' policies and allocations of resources for the department (Sieg, 1986). An example of conflict between the institution and accreditation standards would be a mandatory transition to an entry-level doctoral program as this may present problems for institutions that are not setup for this type of transition (Sieg, 1986).

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Student Outcomes in Occupational and Physical Therapy

According to Fleming-Castaldy and Gillen (2013), "professional certification and licensure aim to protect the public by ensuring" (Fleming-Castaldy & Gillen, 2013, p. 365) that practitioners are qualified. The NBCOT exam is developed using practice surveys. Most states in the United States and Puerto Rico use the exam as a qualifier for licensure and certification. Likewise, the NPTE is a 200-item, multiple-choice, computerized exam for graduates of physical therapy programs. The NPTE "is based on an analysis of professional (entry-level) physical therapist practice that is updated every 5 years by the Federation of State Boards of Physical Therapy (FSBPT)" (Utzman et al., 2007, p. 1182). All occupational therapy programs are required to "report the number of students in each graduating class as well as the percent of those graduates who pass the certification exam" (Truskowski, 2016, p. 3). According to the NBCOT website (2017), "the programs passing percentage data is calculated on the number of New Graduates, who passed the NBCOT exam regardless of the number of attempts during the testing year to meet ACOTE reporting standards" (NBCOT, 2019, para 1).

The FSBPT is responsible for updating the NPTE to meet entry-level standards of practice (Utzman, 2007). According to Utzman (2007), "the NPTE is scored on a scale of 200 to 800 and the minimum passing score is 600 in all 50 states" (p. 1182). The computerized 200-item standardized exam requires students to answer based on clinical scenarios that frequently present in entry-level practice. According to CAPTE, student pass rates on the NPTE must be reported "as part of ongoing curriculum review" (Utzman, 2007, p. 1182). Professional development is also required for renewal of certification and licensure, and "it is the practitioners' responsibility to seek and engage

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in activities that develop their competencies beyond entry level education for practice informed by evidence" (Fleming-Castaldy & Gillen, 2013, p. 365).

Currently, there is limited research in the field of occupational therapy on the impact of transformational leadership style on student pass rates. Most research is limited to class size, number of credits, performance on the practice test, and online versus paper and pencil practice test and the relationship to student pass rate (Alexander, Perryman & Rivers, 2015; Avi-Itzhak, 2015; Avi-Itzhak & Krauss, 2010; Riddle, Utzman, Jewel, Pearson, & Kong, 2009; Roehrig, 1988; Utzman et al., 2007)

Avi-Itzhak and Krauss (2010) conducted a study with 13 students who attended a three-credit weekly graduate seminar in their last semester before graduation with the purpose of increasing student scores on the NBCOT practice test and decreasing "the number of areas of weakness delineated by the NBCOT over pre-seminar practice testing" (p. 83). All students participated in a computer-based practice test (CBT) weekly using Blackboard and "were assigned individual critical presentations" (p. 83). Feedback from the CBT practice test was used to guide the study practices of students during the seminar. According to Avi-Itzhak and Krauss (2010), "students were expected to refine their skills in analyzing vignettes in problem-based experiential learning pedagogy addressing evaluation and intervention across the lifespan and across diagnostic categories" (p. 83). The outcome measures included pre and postscores for the NBCOT CBT practice test and the seminar CBT on Blackboard. Two additional outcomes were also measured: "1) the score difference between post-seminar over pre-seminar NBCOT CBT practice testing and 2) the difference in number of areas of weakness between post-seminar compared to pre-seminar practice testing" (Avi-Itzhak & Krauss, 2010, p. 83).

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The results indicated 12 of the 13 participants' scores increased on the NBCOT CBT post seminar practice test. Also, "the expected decrease (a negative change) in the number of areas of weakness was observed in the paired observations of six of the 13 students" (Avi-Itzhak & Krauss, 2010, p. 84). Four students demonstrated an increase in the number of areas of weakness, and three students had no change observed in the paired observation (Avi-Itzhak & Krauss, 2010).

Avi-Itzhak (2015) conducted a study at a public, urban college with a group of occupational therapy students on predicting the first-time pass rate on the NBCOT. Specifically, the study assessed the "relationship between performance ratios (i.e., ratio of the items correctly answered) on each of the four NBCOT practice test domains and first-time pass status on the NBCOT" (Avi-Itzhak, 2015, p. 2). Avi-Itzhak (2015) used the four NBCOT domains on the practice test ratios to develop a logistic regression model to predict "the probability of first time pass status on the NBCOT exam and to identify the domains that have a significant predictive effect" (p. 2) for 65 students who graduated from the occupational therapy program between the years 2012-2013. Avi-Itzhak (2015) found "41 (63%) attained first-time pass status, whereas 24 (37%) attained first-time no-pass status" (Avi-Itzhak, 2015, p. 3). The four NBCOT domains were used to operationalize and conceptualize the independent variables (predictors). The four domains included:

> 1) gathering information regarding factors that influence occupational performance, 2) formulate conclusions regarding the clients' needs and priorities to develop a client-centered intervention plan, 3) select and implement evidenced-based interventions to support participation in areas of occupation (e.g., activities

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> of daily living, education, work, play, leisure, social participation) throughout the continuum of care, 4) uphold professional standards and responsibilities to promote quality in practice. (Avi-Itzhak, 2015, p. 3)

Lastly, Avi-Itzhak (2015) measured the first-time pass rate on the NBCOT exam (the dependent variable), and this "was defined as a categorical variable (first-time pass status, score of greater than or equal to 450; first-time no-pass status, score of less than or equal to 450)" (p. 4). All participants completed the graduate seminar designed to increase the necessary skills and competencies for entry-level practice (Avi-Itzhak, 2015). During the seminar, participants completed a pre- and post-NBCOT practice test and "the data source for the predicators (percentage of items answered correctly on each domain) was the post-seminar NBCOT practice test" (Avi-Itzhak, 2015, p. 4). Avi-Itzhak concluded only two of the four domains were significant: Domains 1 and 2. Each domain is computed differently (relative weight) to determine the score on the NBCOT. However, this is not the case for the NBCOT practice test when the performance ratio for each domain is reported in terms of absolute performance (Avi-Itzhak, 2015). Avi-Itzhak (2015) found "the total relative weight of the two significant predictors (Domain 1 and 2) amounts to 41% of the final score" (Avi-Itzhak, 2015, p. 5) while Domains 3 and 4 (not significant) represented 59% of the final score. Accordingly, "estimates of the probability of the first-time pass status on the NBCOT exam using the absolute performance ratio and the relative performance ratio weight yielded similar results" (Avi-Itzhak, 2015, p. 5).

Mu, Coppard, Bracciano, and Bradberry (2014) examined entry-level doctoral occupational therapy programs (OTD) that offered either a traditional or hybrid model of

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academic coursework. The researchers compared students' grade point averages (GPAs) at the end of each academic year, cumulative GPAs at graduation, Level 2 Fieldwork Performance Evaluations (FWPEs), grades on the NBCOT practice exam, and the actual NBCOT pass rates. Students from 81 entry-level OTD traditional and 13 hybrid programs participated in the study. A retrospective, between-groups comparison method was used to examine whether a significant difference existed between the two groups (Mu et al., 2014, p. s53). Mu et al. (2014) found "the results of the study indicated a significant difference at the end of the first- and second-year GPAs, with the traditional program students having a higher mean GPA" (Mu et al., 2014, p. s53). However, a significant difference was not found in first-year GPAs, both first- and second-level fieldwork performances, cumulative GPAs, NBCOT pass rates, or the NBCOT practice exams (both clinical simulation and multiple-choice questions). Cumulative GPAs were close; however, the cumulative GPAs were determined not to be statistically significant (Mu et al., 2014). The overall finding was that there was not a significant difference in outcomes for both traditional and hybrid entry-level OTD programs (Mu et al., 2014). Mu et al. (2014) indicated the findings may have been caused by a Type II error because of the disproportionately small sample. Also, the scores of participants on the NBCOT were not compared, only the pass rates of the program. The researchers suggested the scores of the individual participants would have provided more information on actual student performance outcomes (Mu et al., 2014).

Alexander, Perryman, and Rivers (2015) studied the use of a NBCOT test preparation course to increase the first-time pass rate on the NBCOT exam. The study consisted of occupational therapy students who attended Florida Agricultural and

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Mechanical University (FAMU) at the end of the summer semester in 2012. All students completed The Conner Ageless Learning Style Strategies Inventory (CALSI) and the Learning and Study Strategies Inventory (LASSI) to determine "their ability in the areas of learning style and study strategies related to skill, will, and self-regulation" (Alexander et al., 2015, p. 3). After completing the CALSI and LASSI, students were asked to complete the Occupational Therapy Knowledge Examination (OTKE) to determine the students' knowledge of the domain and process of occupational therapy (Alexander et al., 2015). The "means of the pre and post Occupational Therapy Knowledge Exam (OTKE) scores as well as the change between pre and post intervention were calculated" (Alexander et al., p. 1). The pre-OTKE mean was 50.85, the post-score was 56.00, and the change difference was 5.15. The results supported the use of a preparatory course, practice, and test preparatory techniques (i.e., OTKE, CALSI, and LASSI) in increasing the first-time pass rates of students in an occupational therapy program (Alexander et al., 2015).

Like occupational therapy students, physical therapy students must pass the NPTE to enter the profession. Roehrig (1988) identified the characteristics of physical therapy students that would best predict a passing score on the licensing exam using the test scores of 63 graduates from the University of New Mexico physical therapy program from 1980-1984. The independent variables of the American College Testing (ACT) program composites, prerequisite GPAs, non-prerequisite GPAs, scores from pre-admission letter (applicants were rated in nine areas), interview scores, and individual raw scores on the licensing exam were analyzed using a hierarchical multiple regression (Roehrig, 1988). According to Roehrig (1988), "six of the regression analysis were

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significant ($p < .05$), but three ACT composite scores with both GPA's; ACT composite score, both GPA's and interview; and ACT composite score prerequisite GPA, and interview score had similar adjusted multiple correlation values that were much larger than the other three analyses" (p. 697). The recommendation scores were the only scores found to be not significant. The study also determined that prerequisite GPAs, interview scores, and ACT scores correlated to the scores on the licensing exams. Roehrig (1988) suggested physical therapy programs should, if they have not already done so, include "ACT scores as a single predictor, which accounted for the most variance" (p. 697), on the licensing examination.

Riddle, Utzman, Jewel, Pearson, and Kong (2009) sought to determine "whether student and program level variables predict the odds of students' failing the NPTE" (p. 1183). While controlling for certain variables (i.e., student demographics, academic troubles, and admission scores), they wanted to determine the impact of academic difficulty on the NPTE and how public, private, or Carnegie classifications affect failure on the NPTE. Quota sampling was used to recruit academic programs from physical therapy programs in the West, Midwest, Northeast, and Southern parts of the United States that offered doctorates in physical therapy, masters' degrees, or a transition degrees (master's to doctorate) between 2000 and 2004. These matching institutions were randomized, and an invitation was sent to participate in the study (Riddle et al., 2009). "Programs that did not use the GRE for admissions or that admitted fewer than 30 students per year were excluded" (Riddle et al., 2009, p. 1184), and 3,066 students from 19 programs were included in the study. Demographic characteristics (e.g., age, GPA, and GRE score) were provided by the academic program for each student. The "student

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sample had slightly smaller proportions of female, African American, and Hispanic students than the population of students enrolled in all accredited programs" (Riddle et al., 2009, p. 1184). According to Riddle et al. (2009), "academic difficulty was defined as failing a course or unit or being placed on academic suspension or probation" (p. 1184). The FSBPT provided information on NPTE performance (pass or fail). The results indicated academic difficulty was indeed a predictor for failure on the NPTE. The odds of failure on the NPTE for students who had academic difficulty was six times greater than those who passed. Also, "the results indicated that institutional status and Carnegie Classification were related to student performance on NPTE" (Riddle et al., 2009, p. 1188). Specifically, failure on the NPTE for public and private programs was dependent on the Carnegie classification. Riddle et al. (2009) suggested the results of the study could be used to assist students who have academic difficulty by developing strategies, tutoring programs, and exam preparation courses to assist students prior to taking the NPTE.

Utzman et al. (2007) determined whether admission data could be used to assess risk for student failure on the NPTE by studying 20 physical therapy programs that provided admissions data on 3,365 students who were admitted to programs between 2000 and 2004. The FSBPT provided performance data points from the NPTE. The information was "recoded into a dichotomous pass (Category 1) or fail (Categories 2, 3, 4) score, which was used as the dependent variable in the study" (Utzman et al., 2007, p. 1183). Independent variables included undergraduate GPA and GRE scores (vGRE and qGRE) used during the admissions process. Information on program characteristics and student demographics were also collected. Two versions of the NPTE were administered

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between 2000 and 2004, and 1,965 students took Version 1; 1,389 took Version 2; and seven students took both versions (Utzman et al., 2007). Utzman et al. (2007) indicated that "because the seven students first took Version 1 and encountered difficulty, they were counted as taking Version 1 for the between-program analysis" (Utzman et al., 2007, p. 1185). Of the students who took Version 1 of the NPTE, 93% passed the first time compared with the 79% who passed Version 2. The between-program analysis indicated student failure on the NPTE increased by 12% for every 0.1 decrease in GPA. Also, the odds of student failure on the NPTE increased by 6.6% on the vGRE and 3.5% on qGRE for every 10-point decrease in score on the qGRE. African American, Asian/Pacific Islander, or students who identified as "other" had a 200% higher chance of failing the NPTE compared to White/non-Hispanic and Hispanic students (Utzman et al., 2007). Within-program analysis indicated that verbal GRE scores (11 of 20) were a predictor of failure on the NPTE. Utzman et al. (2007) found "quantitative GRE scores alone contributed to the prediction of failure in two programs and in combination with undergraduate GPA in one program" (Utzman et al., 2007, p. 1186). Failure on the NPTE based on undergraduate GPA (uGPA) alone included only one program. The results indicated that a relationship between uGPA, vGRE, and qGRE are each a predictor of failure on the NPTE (Utzman et al., 2007). When each version of the NPTE was examined separately, along with uGPA, vGRE, qGRE, "the prediction of NPTE failure was almost identical" (Utzman et al., 2007, p. 1186). However, when both versions of the NPTE were examined, it was determined that Version 2 was more difficult and a predictor for failure on the NPTE. The findings of Utzman et al. (2007) provide information to physical therapy programs in developing admissions criteria. However,

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given that the sample size of African American and Hispanic students was not a true representation of the entire population, one must be cautious in drawing conclusions based on race and ethnicity due to factors such as socioeconomic, educational, and psychosocial factors.

Instrumentation

Instrumentation is defined as the measures that the researcher will take to measure the identified variables of the study (Rudestam & Newton, 2007). Surveys are the most used instrument to gather information about large populations (Bailey, 1991). The use of an already established instrument is best, as it saves time and has an established reliability and validity (Rudestam & Newton, 2007). For this study, the researcher reviewed the available literature on leadership, leadership styles, and roles of academic chairpersons in search for an appropriate instrument.

The focus of the literature on academic chairperson is on role ambiguity, role conflict, stressors that impact role performance, and the roles and responsibilities of academic chairpersons (Carroll & Gmelch, 1992; Gmelch, 2015; Gmelch & Burns, 1993; Miller & Johnson, 1982). Many of the researchers developed their instruments based on their reviews of literature, test groups, and previous experiences. Carroll and Gmelch (1992) conducted a study to determine the effectiveness of chair performance, antecedent variables (e.g., individual and organizational characteristics), associate role performance "with the behavioral outcomes of academic productivity, job satisfaction, role ambiguity, role conflict, and occupational stress" (p. 5) and the development of profiles associated with each role performance of the chair. The researchers developed a 36-item questionnaire containing a list of 26 duties of a department chair and 800 department

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chairs were asked to rate each duty on a 5-point Likert scale (1 being the lowest and 5 the highest) “to the question, how effective is your performance in each chair duty?” (Carroll & Gmelch, 1992, p. 6).

Other studies that used instruments to determine the roles of a chairperson, specifically in the field of occupational therapy, included Schaffer’s 1987 study of occupational and physical therapy chairpersons and/or directors in Canadian universities. The study sought to determine if there was an actual and/or perceived role conflict for the chairs. Schaffer (1987) used a combination of open and structured interview questions for chairpersons and a questionnaire for faculty and deans. The questionnaire asked participants to rank role responsibilities in order (e.g., teaching, research and scholarship, faculty recruitment, office management, etc.).

Miller and Johnson (1982) conducted a study using personnel (e.g., dean or equivalent, chairpersons of occupational therapy program, and newest and oldest occupational therapy department faculty) from 48 occupational therapy baccalaureate and certificate programs. The University of Florida was used as the test group for the instrument, so this university was excluded from the participating population of programs. All participants were given a list of 87 role expectations across 11 categories and asked to rate, on a 5-point Likert scale, “the importance they observed the chairperson actually giving to each role expectation, and on another 5-point scale, the importance they thought the chairperson ideally ought to be placing on each role expectation” (Miller & Johnson, 1982, p. 31). The chairperson questionnaire included a third section about the amount of conflict the chairperson experiences with the dean and

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faculty in each of the 11 categories. The instruments described in the previous studies all mostly focused on determining the importance of specific roles and duties of chairs.

An initial review of the literature on leadership led the researcher to consider the Leadership Practice Inventory (LPI) to provide information on the transformational leadership style of academic chairpersons. The LPI has been used to measure exemplary leadership practices and is comprised of five leadership practices of an exemplary leader (Kouzes & Posner, 2008) including (a) modeling the way: the leader does what they say they are going to do; (b) inspire a shared vision: the leader must imagine and be excited by the future and enlist others in sharing in the vision; (c) challenge the process: challenging the status quo; (d) enable others to act: group collaboration; and (e) encourage the heart: recognizing everyone's contribution and building a spirit of community (Kouzes & Posner, 2008).

The LPI is comprised of 30 statements (six statements for each of the five exemplary leadership practices) on both the Self and the Observer form. Each statement describes various leadership actions or behaviors that is cast on a 10-point Likert scale ranging from (1) *almost never* to (10) *almost always*; the higher the value, the more frequent the leadership behavior is used (Kouzes & Posner, 2008). Kouzes and Posner (2008) suggested leadership is not an inherent trait but a set of skills and abilities anyone can learn. To put it simply, leaders are not born, they are made. However, after reviewing more literature on leadership styles, the MLQ Form 5x developed by Bass in 1985 appeared to be more appropriate in assessing all the possible styles of a leader and not just transformational leadership.

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The MLQ measures behaviors that make up the transformational leadership style (i.e., Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration), transactional leadership (contingent reward and management-by-exception), and non-transactional leadership, also referred to as Laissez-faire (avoidance of leadership). The MLQ has been revised many times to increase reliability and validity (Northouse, 2004). Many scholars have had various issues with the original MLQ. These issues range from "whether the components of transformational leadership should be considered independent of contingent reward leadership" (Avolio, 1999, p. 444), specifically the items (behaviors, attributes, and impact) used to represent Charismatic Leadership. Avolio et al. (1999) used the MLQ Form 5x for their study on re-examining the components of transformational and transactional leadership using the MLQ, which contained behavioral items for all scales except for the Charismatic Leadership scale). The MLQ Form 5x is comprised of many leadership dimensions that will determine an individual's own leadership style and "the complexity of transformational leadership itself" (Northouse, 2004, p. 195).

Summary

A review of Chapter 2 included relevant literature in determining the relationship between transformational leadership styles of academic chairpersons and the student pass rate of occupational and physical therapy programs. Leadership involves practices where leaders develop followers to a level in which they buy into the organization's core values and, thus, achieve organizational goals independent of their leader (Dartey-Baah, 2009). Empirical research relevant to leadership in occupational and physical therapy academic

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programs is limited to the followers' views on leadership styles and practices of the chairperson.

The review of the literature included highlights of relevant research on the roles of chairpersons, specifically responsibilities and self-perception. Most of the literature on academic chairpersons referred to the general population of chairpersons and not specifically to occupational and physical therapy chairs. The limited articles on the roles of occupational and physical therapy academic chairpersons referred to levels of preparedness for the positions and effectiveness in the roles.

Limited research on occupational and physical therapy academic chairpersons' leadership practices and pass rate exists. The focus of the research in occupational and physical therapy in academic programs is on test performance, credits, and class size (Avi-Itzhak, 2015; Avi-Itzhak & Krauss, 2007; Mu et al., 2014; Riddle, 2009; Roehrig, 1988; Utzman et al., 2007). However, the literature on elementary and secondary education, specifically on the leadership styles of the instructor or principal may have a positive effect on student outcomes (Allen et al., 2015, Cruickshank, 2017; Day et al., 2016; Harrison, 2011; Reiss, 2000). The current study sought to examine the relationship, if any, between the leadership style of the academic chairperson and the student pass rate in their occupational or physical therapy programs.

The next chapter addresses the methodology for this study. Specifically, the procedures, sample, and analysis techniques will be delineated.

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Chapter Three: Research Design and Methodology

Introduction

The purpose of this study was to determine the relationship between the transformational leadership style of occupational and physical therapy department chairpersons and the student outcomes of their programs. This chapter includes the methodology, research questions, research design, setting, sampling, consent procedures, confidentiality procedures, data collection procedures, data analysis, instruments used, and reliability and validity of the study. Chapter 3 concludes with the limitations of the study and a summary of the research design methodology.

Research Questions

The researcher hypothesized academic chairpersons in occupational and physical therapy programs will demonstrate a transformational leadership style and have a high student pass rate on the NBCOT or NPTE examination. Additionally, academic chairpersons in occupational and physical therapy programs would perceive their primary roles as leaders. The research seeks to answer the following questions:

1. What is, if any, the relationship between the leadership style of occupational and physical therapy academic chairpersons and the student pass rate?
2. Are there any significant differences between demographic groups (occupational or physical therapy, tenure status, reason for taking the position) and transformational leadership measure (factor score)?
3. Controlling for perceived roles, how does leadership style relate to student pass rate?

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Research Design

A nonexperimental, quantitative, cross-sectional survey design was used to determine the relationship between leadership style (independent variable), perceived role (moderating variable), and student pass rate (dependent variable) in occupational and physical therapy academic programs. A quantitative research design was used for this study because the researcher sought descriptive statistical and numeric data to delineate the relationship between the independent (transformational leadership style), moderating (perceived role) and dependent (student pass rate on NBCOT and NPTE). A web-based survey was used to collect data for this study from occupational and physical therapy academic chairpersons in the United States and Puerto Rico.

Setting. Census data were used to gather information on the total population. A census of chairpersons from accredited occupational and physical therapy programs in the United States and Puerto Rico were provided from lists generated by the AOTA and APTA and used in this study. In 2018, 985 accredited occupational and physical therapy programs in the United States and Puerto Rico (AOTA, 2015; APTA 2018) met the criteria for this study. Both the AOTA and APTA lists provided identifying contact information for the chairperson and faculty of the occupational and physical therapy departments (i.e., name of program, phone number, address, contact email, and website).

Target Population. Inclusion criteria for this study were as follows. Each participant was a department chairperson (a) of an occupational or physical therapy program located in the United States or Puerto Rico, (b) for a program that offers an associate degree of applied science in occupational therapy(AAS), master's of science degree in occupational therapy (MS), bachelor's and master's degree in occupational

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therapy(BS/MS) or entry-level doctorate degree in occupational therapy (OTD); or programs that offer an associate of applied science in physical therapy (AAS), bachelor's of health science (BS) and doctor of physical therapy (DPT); and (c) of an occupational or physical therapy program that is accredited by the ACOTE or the CAPTE.

The participant exclusion criteria for this study were as follows: (a) occupational therapy programs that do not have NBCOT pass rates for 2015-2017; (b) physical therapy programs that do not have NPTE pass rates for 2015-2017; and (c) occupational and physical therapy academic chairpersons who did not complete the entire questionnaire. Additionally, leadership behaviors on the MLQ Leader Form 5x-short that did not measure transformational leadership behavior (contingent reward, management by exception [active], management by exception [passive], and laissez-faire) were excluded from the study.

Sample. The number of participants necessary to determine statistical significance in a study is best determined by conducting a power analysis. According to Rudestam and Newtown (2007), the researcher can use a power analysis to determine "how many subjects are necessary to detect any effects that result from the independent variables, given (a) the size of the effect of these variables in the population, (b) the type of statistical tests to be used, and (c) the level of significance (or alpha level) of the study" (p. 93). A power analysis provides the researcher with the probability of avoiding a Type II error. A Type II error occurs when the researcher does not reject the null hypothesis and should have (Rudestam & Newtown, 2007), which means the researcher indicates there is no relationship between variables when a relationship exists. The larger the Type II error, the lower the power probability, which will result in study findings that

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are insignificant (Rudestam & Newtown, 2007). A priori power analysis (using G* Power statistical calculator software version 3.1.9.4) based on a *F*-test with an effect size of f_2 = .25, an error probability of $p = 0.05$, power = 0.80, five leadership styles, and one demographic predictor determined the minimal required sample size to be 216.

Confidentiality. Approval from the Manhattanville College Institutional Review Board (IRB) was granted for this study (see Appendix B). Federal laws govern the ethics in research studies involving human beings (Babbie, 2011). A cover letter (see Appendix C) was developed to provide potential respondents with information on the purpose of the study, the criteria for participation, and assurance that all data would be treated confidentially.

Consent. Participation in the research (see Appendix D) was developed to provide potential respondents with information on research procedures, risks (no perceived risks), and benefits (provide current information on leadership in occupation and physical therapy), information on how to contact the research if respondents had questions, and an acknowledgement that respondents agreed to participate in the study. Written permission to reproduce copies of the MLQ Leader Form 5x-short (Avolio & Bass, 1995) was granted from Mind Garden, Inc. with the purchase of the license (see Appendix E).

Instrument. The MLQ Form 5x-short was an appropriate instrument for this study because it measures transformational leadership behavior. Additionally, the researcher developed a demographic questionnaire for academic chairpersons. The purpose of the questionnaire was to gather information about roles and responsibilities of occupational and physical therapy academic chairpersons.

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Multifactor Leadership Questionnaire. Transformational leadership behaviors were measured using the MLQ Leader Form 5x-short (Avolio & Bass, 1995). The MLQ Leader Form 5x-short (see Appendix F) is based on a 9-factor model, which includes idealized influence (attributed), idealized influence (behaviors), inspirational motivation, intellectual stimulation, individual consideration, contingent reward, management by exception (active), management by exception (passive), and laissez-faire. In addition, the MLQ Leader Form 5x-short measures three outcomes of leadership: extra effort, effectiveness, and satisfaction. Only the five factors that measure measured transformational leadership style, idealized influence (attributed), idealized influence (behaviors), inspirational motivation, intellectual stimulation, and individual consideration were used for this study. The MLQ Leader Form 5x-short has questions that asks leaders to describe their leadership behavior using 45 descriptive statements, on a 5-point Likert scale (0 = *not at all*, 1 = *once in a while*, 2 = *sometimes*, 3 = *fairly often*, 4 = *frequently if not always*).

Demographic questionnaire. A demographic questionnaire (see Appendix G) for academic chairpersons in occupational and physical therapy programs was developed by the researcher using the literature on the roles and responsibilities of academic chairpersons (Dudek-Shriber, 1997; Gmelch, 1991; Gmelch, 2015; Gmelch & Miskin, 1993; Gmelch & Parkway, 1999; Jackson, 2019; Kearney, 2006; King, 1997). The demographic questionnaire was used to gather information on type of academic program (OT/PT), gender, tenure status, length of service as a chair, academic rank, reasons for a accepting position, responsibilities, primary role, professional development, and future plans after their term as chairperson ended. A self-administered web-based questionnaire

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was developed using Survey Monkey, that included the cover letter (see Appendix C), consent to participate (see Appendix D), the MLQ Form 5x-short (see Appendix F), and the demographic questionnaire (see Appendix G).

Data collection. A total of 985 academic chairpersons met the criteria from the AOTA and APTA website for potential respondents for this study. A group email was constructed from the list of potential respondents and their emails were pre-coded with identification numbers. Potential respondents were invited to participate via email and a self-administered, web-based questionnaire was used to gather information for this study. Five reminders were set up in Survey Monkey to automatically remind participants to complete the questionnaire after the fifth day, 10th day, 15th day, 20th day, and the 25th day. Information was collected from participants over a 30-day period.

Data analysis. A quantitative, cross-sectional research design was used for this study (Bailey, 1991). Research questions were addressed using descriptive statistics to determine if any relationship or difference existed between the variables. The statistical analysis included Pearson's *r* correlation coefficient, independent sample *t*-test, one-way ANOVA, MANCOVA, partial correlation, and zero-order correlation tests.

Three variables were analyzed in this study. The first variable measured was the transformational leadership style (independent variable), which comprised of the five transformational leadership behaviors (idealized influence [attributed], idealized influence [behaviors], inspirational motivation, intellectual stimulation, and individual consideration) as measured on the MLQ Leader Form 5x-short. Secondly, the overall pass rate (dependent variable) was comprised of the student pass rates for occupational and physical therapy programs on the NBCOT and NPTE for 2015, 2016, and 2017 and

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were retrieved from the NBCOT and NPTE websites for all programs that met the criteria to participate in this study. Lastly, the primary role of academic chairperson (moderating variable) was comprised of four identified roles of academic chairpersons, which are manager, scholar, faculty developer, and leader, and were measured using information collected from the demographic section of the web-based questionnaire for this study.

A Pearson's *r* correlation coefficient was used to determine if a relationship existed between transformational leadership style and overall pass rate. Independent sample *t*-tests, one-way ANOVA, and MANCOVA were used to determine if significant differences existed between demographic variables and transformational leadership style. Lastly, partial correlation and zero-order partial correlation were used to determine if the primary role (moderating variable) had any impact on the relationship between transformational leadership style and overall pass rate.

Reliability and validity. The reliability of the study is the extent of the accurate representation of the population being examined and consistency of the results over time (Golshani, 2003). In quantitative research, there are three types of reliability, "which relate to: 1) the degree to which a measurement, given repeatedly, remains the same; 2) the stability of a measurement overtime; and 3) the similarity of measurements within a given time period" (Golafshani, 2003, p. 598). Cronbach's alpha is an objective measure of reliability. Providing the instrument and specific data collection procedures that are clear and replicable substantiate reliability in a study (Tilson, 2019). In this study, a pre-coded (with identification numbers) group email was sent to 985 occupational and physical therapy academic chairpersons that met the criteria from a list provided by the AOTA and APTA website. These potential respondents were invited to complete a self-

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administered web-based questionnaire. Reminders were set up using Survey Monkey to automatically remind potential participants on the 5th, 10th, 15th, 20th and 25th day. Data was collected over a 30-day period. The MLQ Form 5x-short was used to gather information about transformational leadership behaviors and a demographic questionnaire developed by the researcher was used to gather information about roles and responsibilities of occupational and physical therapy academic chairpersons. Reliability for this study was also addressed by comparing results with similar studies such as Allen et al. (2015), Cruickshank (2017), and Day et al. (2016), to ascertain if results were stable and produced reliable results when repeated.

Validity refers to whether the results of the study reflected what occurred (internal validity) and how the results of the study could be generalized to a particular population (Tilson, 2009). The study data collection period was limited to 30 days to ensure the passage of time did not affect participant participation. A census of the population was invited to participate in the study and the participants were representative of the population. Researcher bias in this study was addressed using a self-administered web-based questionnaire to collect data in Survey Monkey. Lastly, the reliability and validity of MLQ Leader Form 5x-short was established in a review of the literature (Muenjohn & Armstrong, 2008; Rowold, 2005).

Summary

A quantitative research design was used to determine the relationship between the independent, moderating, and dependent variables. A census population of occupational and physical therapy chairpersons (n = 985) that meet the research criteria for participation (i.e., accreditation) in the United States and Puerto Rico were used in data

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collection. Leadership practices of occupational and physical therapy chairpersons were measured using a web-based survey, developed using demographic information (e.g., tenure and number of years of service), and the MLQ Leader Form 5x-short (Avolio & Bass, 1995, 2004). Reliability and validity of the MLQ Leader Form 5x-short was determined through the review of the literature. Student pass rate was taken from the NBCOT and NPTE website for the years 2015-2017. Research questions were addressed using statistical tests (descriptive statistics, Pearson's *r* correlation coefficients, independent samples *t*-tests, one-way ANOVAs, and MANOVA) and the results will be presented in Chapter 4.

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Chapter Four: Results

The purpose of this research study was to determine the possible relationships between transformational leadership of occupational and physical therapy department chairpersons and student outcomes of their programs. The chapter begins with an overview of the analysis of the quantitative data collected, including a description of the study sample, subject demographics, transformational leadership behaviors, and distributions of these behaviors. Then, Chapter 4 provides a detailed presentation of the results using descriptive statistics, Pearson's *r* correlation coefficients, independent samples *t*-tests, one-way ANOVAs, a MANOVA, and partial correlations to address the following research questions:

1. What is, if any, the relationship between the leadership styles of occupational and physical therapy academic chairs and student pass rates?
2. Are there any significant differences between demographic groups (occupational or physical therapy programs, tenure, perceived roles) and transformational leadership measures (factor scores)?
3. Controlling for perceived roles, how does leadership relate to student pass rate?

Finally, the chapter will conclude with a summary of the data findings as they relate to the research questions.

Study Sample

A total of 985 occupational and physical therapy chairpersons were included in the sample list derived from the AOTA and APTA websites. Of that, 448 did not open the initial email, 22 emails bounced back, and 26 opted out of the research. This left 489

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eligible participants, all of whom opened the survey. A total of 207 occupational and physical therapy chairpersons responded to the web-based questionnaire for the current study and the completion rate for the questionnaire was 78%.

Addressing missing data. Thirty-nine respondents partially completed the survey. Upon inspection of the data, there appeared to be a pattern where these respondents completed the demographic information but did not respond to the survey questions. Several of the respondents emailed the researcher back indicating they were not happy with the survey questions. Therefore, listwise deletion was used to address the missing data. An additional 55 responses were recoded and hidden in the final data set due to unanswered questions. The final data set included 113 participants.

Subject Demographics

Overall, more physical therapy (60%) than occupational therapy academic chairpersons responded to the questionnaire (see Table H1 in Appendix H). Most of the participants in this study were female (80%), did not have tenure (71%), and held an academic rank of professor (29%). Most participating occupational and physical therapy chairpersons had teaching responsibilities (98.3%) in addition to their leadership positions.

Almost half of the respondents indicated their primary reason for taking the position was for personal development (49.7%). Many of the respondents indicated their programs offered professional development or training programs (59.4%) for chairpersons. However, only a small portion of chairpersons planned to return to a faculty position (15%) or move to another administrative position (16%); most were unsure (69%) of plans after their term ended as an academic chairperson.

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Transformational Leadership Styles

In Table I1 (see Appendix I) the sample size, mean, and standard deviation of transformational leadership style for chairpersons who participated in this study is presented. The average scores on the MLQ (5x) ranged from 3.25 to 3.54 on a scale of 0 to 4. The perceived primary role of a leader (65%) was most associated with the transformational individualized consideration leadership behavior, which had the highest mean (M = 3.54; see Table I1 in Appendix I). Only a small percentage of the participants indicated that they frequently, if not always, used transformational leadership behavior. Individual consideration behavior had the highest percentage, 15% (see Table J1 in Appendix J) of participants who frequently, if not always utilized this transformational leadership behavior and idealized influenced (attributed) had the lowest percentage, 0.9% (see Table J1 in Appendix J) of participants who indicated that they frequently, if not always, used transformational leadership behavior.

Overall Pass Rate

In Table K1 and L1 (See Appendix K and Appendix L, respectively) the sample size, mean, standard deviation, and frequencies of the overall pass rate for occupational and physical therapy academic programs between 2015-2017 is presented. The average pass rate scores on the NBCOT and NPTE ranged from 33.33 to 100. Overall, 75.2% of the respondents had student pass rates at their respective institutions between 91% and 100%. Missing data for occupational therapy programs between the years of 2015-2017 were due to some programs initial accreditation beginning between 2016 and 2017. Physical therapy programs pass rates were not reported on the FSBPT website for

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programs that had fewer than two graduating classes or fewer than five graduates who took the NPTE during the 2-year reporting period (2015-2016; 2016-2017).

Research Question 1

The first research question investigated the relationship between the five types of transformational leadership behaviors (idealized influence [attributed], idealized influence [behavior], inspirational motivation, intellectual stimulation, and individualized consideration) and overall average student pass rate using a Pearson's *r* correlation coefficient. Occupational and physical therapy academic chairpersons (n = 113) were surveyed about their transformational leadership styles. The student pass rates were taken from the NBCOT and FSBPT websites.

Results indicated no significant correlation was found between each transformational leadership behavior of occupational and physical therapy chairs and the overall average student pass rates of their programs. A priori power analysis was calculated, and a sample size of 216 participants was indicated for the current study. However, since this study only used a sample of 113, this may have rendered a Type II error. Therefore, the sample size may have been a limitation in this research.

Research Question 2

The second research question asked if a difference existed between demographic groups (gender, tenure, or primary role) and transformational leadership measures (factor score). To answer Research Question 2, independent samples *t*-tests and one-way ANOVAs were computed to assess if any significant differences existed.

Independent sample *t*-tests were analyzed to determine if a significant difference existed between the following demographic variables: gender, tenure, program type,

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teaching responsibilities, professional development, and transformational leadership style. Before conducting the *t*-tests, the researcher tested for homogeneity of variances and it was satisfied via a Levene's *F* test, [$F(111) = 0.046$; $p = 830$]. The *t*-test revealed that there was a marginally significant difference [$t(111) = 1.99$; $p = 0.05$] between those who said that their institutions provided professional development ($M = 3.30$) and those who did not ($M = 3.17$). This suggests participants whose institutions provided professional development opportunities tended to report higher idealized influence (attributed) behaviors. The *t*-test computations for the remaining demographic variables of gender, tenure, program type, teaching responsibilities, and transformational leadership styles were not found to be statistically significant.

The researcher conducted a one-way ANOVA to observe any differences that might have existed for the variable of primary reason for accepting the position and any of the transformational leadership styles. Overall, significant differences were observed for idealized influence (behavior) [$F(4, 108) = 4.22$; $p = 0.003$]. A Tukey post hoc analysis indicated that those who took the position for personal development ($M = 3.32$) rated themselves lower in idealized influence (behavior) than did those who were drafted by the dean ($M = 3.65$). This suggests those chairs who accepted the position because they were drafted by the dean may have demonstrated an idealized influence (attributed) transformational leadership behavior more often than those who accepted the position for personal development.

The researcher also conducted a MANOVA to observe if differences might exist for the primary role and any of the five transformational leadership styles. Significant overall differences were observed for idealized influence (behavior) [$F(2, 109) = 6.62$; p

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= 0.002] and inspirational motivation [$F(2,109) = 9.78$; $p = 0.000$]. Initially, a post hoc analysis could not be computed for primary role because only one person identified themselves as a scholar; therefore, Question 9 was recoded to exclude this respondent. The Tukey post hoc test was rerun and a significant difference ($p = 0.002$) was found between those who identified as *leaders* ($M = 3.50$) and rated themselves higher in idealized influence (behavior) than did *managers (*$M = 3.23$). The Tukey post hoc also found a significant difference ($p = 0.000$) in *faculty developers* ($M = 3.50$) who rated themselves higher in inspirational motivation than *managers* ($M = 3.13$). No other differences were found in the remaining variables (total length of service, academic rank, and plans after term as chairperson).

Research Question 3

The researcher conducted a partial correlation to evaluate the relationship between all transformational leadership behaviors and overall student pass rate while controlling for the effects of the primary role of occupational and physical therapy academic chairs. Table M1 (see Appendix M) illustrates that a statistically significant association was not found between idealized influence (Attributed; $M = 3.24$, $SD = 0.36$) and overall pass rate ($M = 94.4$, $SD = 8.83$) while controlling for primary role of occupational and physical therapy academic chairs[$r_{ab.c}$ (98) = -0.13; $p = 0.90$]; inspirational motivation ($M = 3.40$, $SD = 0.40$) and overall pass rate ($M = 94.4$, $SD = 8.83$), while controlling for primary role of occupational and physical therapy academic chairs[$r_{ab.c}(98) = - 0.022$; $p = 0.83$], intellectual stimulation ($M = 3.32$, $SD = -0.38$), and overall pass rate ($M = 94.4$, $SD =$ 8.83), while controlling for primary role of occupational and physical therapy academic chairs[$r_{ab.c}$ (98) = -0.94, $p = 0.35$], and individualized consideration ($M = 3.57$, SD =

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0.32) and overall pass rate (M = 94.4, SD = 8.83), while controlling for primary role of occupational and physical therapy academic chairs[$r_{ab.c}$ (98) = -0.136, p = 0.18]. Also, no statistically significant association was found between idealized influence (behavior; M = 3.44, SD = 0.37) and overall pass rate (M = 94.4, SD = 8.83) while controlling for primary role of occupational and physical therapy chairs [$r_{ab.c}$ (98) = 0.114, p = 0.26].

Table N1 (see Appendix N) shows the relationships between leadership behaviors and overall pass rate while controlling for primary role. Results of the zero-order correlation determined that there was not a statistically significant relationship between idealized influence (attributed) and overall pass rate [$r_{ab.c}$ = -0.008, p = 0.94]; intellectual stimulation [$r_{ab.c}$ = -0.079, p = 0.43]; and individualized consideration [$r_{ab.c}$ = -0.110, p = 0.27] and overall pass rate. A weak positive partial correlation (see Table N1 in Appendix N) that was not statistically significant was determined between idealized influence (behavior) [$r_{ab.c}$ = 0.15, p = 0.14]; inspirational motivation [$r_{ab.c}$ = 0.027, p = 0.79] and overall pass rate. The results suggest transformational leadership styles may not be closely related to overall pass rates when controlling for primary roles of occupational and physical therapy academic chairpersons.

Summary

This chapter began with an overview of the data analysis procedures, a description of the study sample, addressing the missing data, subject demographics, and the transformational leadership style (idealized influence [attributed], idealized influence [behavior], inspirational motivation, intellectual motivation, and individual consideration) of occupational and physical therapy academic chairs. A detailed analysis of the results

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for Pearson's *r* correlation coefficient, independent *t*-tests, one-way ANOVAs, MANOVA, and a partial correlation were discussed to answer each research question.

Pearson's *r* correlation coefficients were computed to determine the relationships between transformational leadership behaviors of occupational and physical therapy academic chairs and the overall student pass rate of their programs. The results indicated that no statistically significant correlations were found.

Independent sample *t*-tests and one-way ANOVAs were computed to determine any significant differences between demographic variables and any of the transformational leadership behaviors. The results determined that a significant difference existed between the variable professional development and idealized influence (attributed) transformational leadership behavior. In addition, one-way ANOVAs were conducted to observe any significant difference between demographic variables and transformational leadership styles. A significant difference was observed for idealized influence (behavior), specifically, that those who took the position for personal development rated themselves lower in idealized influence (behavior) than those who were drafted by the dean. Significant differences were also observed for idealized influence (behavior), specifically, those who identified themselves as leaders rated themselves higher in idealized influence (behavior) than did managers and that faculty developers rated themselves higher in inspirational motivation than did managers.

Finally, a partial and zero order correlation was computed to determine how transformational leadership behaviors related to the overall student pass rate of occupational and physical therapy academic programs while controlling for perceived primary roles of occupational and physical therapy academic chairs. The results

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suggested that transformational leadership behaviors are not related to overall student pass rate when controlling for perceived primary roles of occupational and physical therapy academic chairs. Lastly, 75.2% of the respondents had a high pass rate on the NBCOT and NPTE exams, ranging from 91-100%.

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Chapter Five: Discussion

The purpose of this study was to determine the relationship between leadership styles of academic chairs and student outcomes (student pass rate on the NBCOT or NPTE) in occupational and physical therapy academic programs. This chapter includes detailed discussion and interpretation of the study results as they relate to the research questions. Additionally, implications for practice, the limitations of the study, and the effects they may have had on generalizing the results are outlined. Lastly, recommendations for future research will be delineated.

Interpretation of the Results

No significant correlation was found between each of the transformational leadership behaviors of occupational and physical therapy chairpersons and the overall student pass rates of their programs. Additionally, no significant relationships were found between the demographic variables gender, tenure, years of service, academic rank, teaching responsibilities and plans after their term is over as academic chairperson. The only significant relationships were found between certain demographic variables (i.e. professional development, primary reason for accepting the position and primary role) and transformational leadership behaviors (idealize influence attributes, idealize influence behavior and inspirational motivation.

Transformational Leadership Behaviors and Overall Pass Rates. In the current study, the transformational leadership style of occupational and physical therapy chairpersons was not found to be significantly related to student pass rates on the NBCOT and NPTE exams. This result is consistent with previous research that suggested the relationship between transformational leadership and student outcomes may not be

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direct but rather indirect (Allen et al., 2015; Black, 2015; Cruickshank, 2017). Transformational leadership, by its definition, is concerned with the relationship between the leader and the follower and does not appear to be strongly predictive of student outcomes (Robinson et al., 2008). However, transformational leadership may impact student outcomes when it is directed toward school processes (e.g., academic expectations, school mission, student learning opportunities, school climate, school environment, and pedagogy) that are connected to student learning (Allen et al., 2015; Black, 2015; Cruickshank, 2017; Hallinger & Heck, 1996; Robinson et al., 2008).

Consistent with results from the current study, Allen et al. (2015) did not find a relationship between transformational leadership and student outcomes. The researchers examined the relationship between transformational leadership, school climate, and student achievement in math and reading. While they were able to determine that a positive relationship existed between transformational leadership and school climate, they could not make the same claim for student achievement. Therefore, the relationship between school leaders and teachers, particularly one that supports the pedagogy of teachers, may indirectly influence student achievement and result in positive student outcomes.

School leaders who understand the complex needs of their schools and organizational goals may choose to use transformational leadership in collaboration with other leadership models to influence school performance and student outcomes (Cruickshank, 2017). Safran et al. (2014) found societal culture impacts the type of leadership style used by a school principal. Principals in the study used both an authoritative and integrative leadership style and both styles had positive, indirect

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relationships to student achievement. However, principals who used integrative leadership practices produced slightly higher student achievement rates. An integrative approach to leadership, particularly when using transformational and instructional leadership, can influence school performance and school environment, support pedagogy, and positively impact student learning and student achievement (Cruickshank, 2017; Day et al., 2016; Safran et al., 2014). In the current study, the results are consistent with previous research studies that suggest an indirect relationship may exist between transformational leadership style of occupational and physical therapy academic chairpersons and student outcomes. In the current study academic chairperson's self-reported high transformational leadership behaviors (idealize influence attributes, idealize influence behavior, inspirational motivation), which may have had an indirect impact on the high student pass rates on the NBCOT and NPTE exams.

Another possibility as to why a relationship was not found between transformational leadership styles of academic chairs and student outcomes in the current study could be related to the sample size. A power analysis is the best estimate of rejecting a false null hypothesis (Kim, 2015; Lieberman & Cunningham, 2009). A Type II error occurs when the researcher fails to detect a true effect (Christley, 2010; Cunningham & Koscik, 2017). A power analysis was conducted for this study and it determined the sample size should be 216 respondents. While 207 respondents replied in this study, due to missing data (i.e., MLQ Form 5x-short section of the survey), only a working sample of 113 respondents could be used for this research. In addition, the overall student pass rate had a working sample of 101 because pass rates for physical therapy programs were not reported for programs that had fewer than two graduating

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classes or fewer than five graduates in a class between 2015 and 2017. Occupational therapy programs also had missing data that can be attributed to some of the programs receiving initial accreditation between 2016 and 2017. Bartlett et al. (2001) suggested many studies that use entire population census data have low response rates. The missing data for the current study resulted in a smaller sample size than was determined for the study and may have rendered a Type II error (Knudson & Lindsey, 2014; Lieberman & Cunningham, 2009).

This was the first known study to examine the relationship between transformational leadership style of occupational and physical therapy chairs and student outcomes (pass rates on the NBCOT and NPTE) in their programs. However, this study did not include other allied health academic chairpersons (e.g., speech-language pathology, physician assistant, nursing) in examining their transformational leadership styles and student outcomes in their programs. Researchers have found a positive relationship may exist between the transformational leadership style of allied health academic chairpersons and organizational or leadership outcomes (Firestone, 2010; Romig et al., 2011; Snodgrass & Shachar, 2008) but have not addressed student outcomes. The researcher of the current study suggests that considering the addition of other allied heath chairpersons might increase the available population of academic chairs and present an opportunity for future investigation.

Professional development. Occupational and physical therapy academic chairs whose institutions provided professional development rated themselves higher in idealized influence attributes than chairs who did not receive professional development. These results suggest chairpersons who received professional development and training

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perceived themselves as having articulated a vision to their followers, gained the trust of their followers, inspired respect and motivation, and were admired by their followers at higher rates than those who did not. This is consistent with previously published research (Harrison, 2011; Panopules, 1999; Snodgrass & Shachar, 2008; Vinger & Cilliers, 2006). Allen et al. (2015) suggested leaders who behave as role models may increase the commitment of their followers to the institution and in achieving organizational goals. Specifically, in academic settings, student outcomes may be positively influenced indirectly by a leader's behavior through factors such as teacher engagement, improving school climate, and school environment.

The current study also suggests professional development may influence transformational leadership in a positive way as the mean scores for transformational leadership behaviors in this study were higher than those in the literature (Firestone, 2010 Metwally et al., 2014; Nordin, 2012; Vinger & Cilliers, 2006). Firestone (2010) suggested transformational leadership can be learned and leaders who participate in professional development and training activities can make the necessary behavioral changes that will be viewed by their followers as strengthening the leader's transformational leadership skills.

Many studies suggest professional development should be provided for all academic chairpersons to improve organizational outcomes (Gmelch, 2015; Kearny, 2006; Lindholm, 1999; Schwinghammer et al., 2015). Some suggest professional development should include competencies such as communication, conflict management, financial management, fundraising, and vision management (Comer et al., 2002; Palmer et al., 2015). Additionally, training should be conducted over several sessions, allow for

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opportunities to discuss and learn best practices from peers, and provide mentoring and experiential learning opportunities (Palmer et al., 2015; Stoller, 2013).

Primary reason for accepting the position. Chairpersons who were drafted by the dean for the position perceived themselves as having higher idealized influence (behavior) than chairpersons who accepted the position for personal development. It is not uncommon for chairpersons to be appointed by the dean of a college or university to the position of chairperson (Gmelch, 1991; Gmelch, 2015; Gmelch & Miskin, 1993; Hecht et al., 1999; Jackson, 2019). In universities "the chairperson assists the dean in motivating and leading the faculty toward fulfilling the institutions mission through the strategic plan" (Khan et al., 2019, p. e2). Department chairpersons are selected by the dean based on scholarship, personal characteristics (vision and integrity), and qualifications that the dean has determined to produce successful outcomes in the institution (Palmer et al., 2015). Khan et al. (2019) suggested deans tend to value leadership skills of department chairpersons more than managerial skills. Similarly, in the current study, academic chairpersons who were selected by the dean for the position perceived their abilities to communicate a vision and gain the trust of their followers as high. The top eight reasons why faculty chose to serve as a chairperson included the following: (a) personal development, (b) advancement in the department, (c) drafted by the dean or peers, (d) no one else would do it, (e) they could do a better job, (f) sense of duty, (g) for financial gain, and (h) opportunities at a different institution (Gmelch, 2015; Gmelch & Parkway, 1999; Jackson, 2019; Khan et al., 2019; Kearney, 2006; Schwinghammer et al., 2012). Kearney (2006) suggested the reason faculty accepted the position as chairperson will impact their performance in the position. Chairpersons who

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take the position because it is their turn may view the role as temporary with a plan to return to faculty (Boyko & Jones, 2010; Gmelch, 2015; Kearney, 2006). However, in the current study, only a small percentage of academic chairpersons (15%) planned to return to faculty. Most were unsure what they were going to do after their term was over. This contrast results in the literature where most chairpersons plan to return to faculty positions at the end of their term (Kearney, 2006; Wescott, 2000; Wilson, 1999).

Primary role. Chairpersons who identified themselves as leaders reported higher idealized influence behavior than those who identified themselves as mangers. In addition, chairpersons who identified themselves as faculty developers reported higher inspirational motivation than those chairs that identified themselves as managers. The literature on roles of academic chairs supported the results of primary role in the current study (Desveaux, 2016; Gmelch, 1993; Gmelch, 2015; King, 1997).

King (1997) suggested the primary roles of academic chairs are that of a faculty developer and scholar. Similarly, Gmelch and Miskin (1993) also identified the most important role of an academic chairperson is of a faculty developer. The role of faculty developer involves tasks that include mentoring and professional development of faculty (Gmelch, 2015 (Gmelch, 1991). How a chairperson perceives their role, ultimately, depends on their orientation to the role. Chairpersons who are more oriented to faculty will engage in activities that support the role of faculty developer such as mentoring and supporting faculty (Rodriguez et al., 2016; Schwinghammer, 2012; Seagren, 1991). In contrast, those who perceive their role as a leader will set a course to achieve the outcomes of the department and institution (Gmelch & Miskin, 1993; Jackson, 2019).

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Chairpersons in the current study viewed themselves as having great vision and perceived trust of their followers. Academic chairpersons of an occupational and physical therapy program may have self-reported high transformational leadership behaviors in this study because of the demands of the position. Desveaux et al. (2016) supported the idea that traits and behaviors of a leader may be a result of the position. Likewise, Snodgrass and Shachar (2008) implied occupational therapy academic program directors demonstrated similar leadership styles due to the universal demands and requirements placed on them. The researcher in this study suggests the reason occupational and physical therapy chairpersons reported their primary roles to be that of leaders and a faculty developers with higher transformational leadership behaviors than those of mangers is due to the requirements of the position of academic chair/program director in occupational and physical therapy programs. Specifically, accrediting entities of these programs, including ACOTE and CAPTE, require chairs and program directors to have a substantial number of years of experience (6 to 8 years), scholarship, administrative experience, teaching experience, clinical experience, and academic doctoral degrees (ACOTE, 2018; CAPTE, 2016).

Remaining demographic variables. No significant relationships were found for transformational leadership and the remaining demographic variables of gender, tenure, years of service, academic rank, teaching responsibilities, and plans after the term is over. The researcher suggests the results on gender may be due to the highly female-dominated professions of occupational and physical therapy (AOTA, 2010; CAPTE, 2017-2018). In the current study, female respondents mimicked their high representation in their professions. Snodgrass and Shachar (2008) suggested that “a statistically nonsignificant

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finding pertaining to gender may be due to the high prevalence of women in the profession of occupational therapy" (p. 234). This result was surprising as a common finding in the literature is that women in leadership use a more transformational leadership style (Panopoulos, 1999; Sindhera & Chaluvadi, 2015) and are more focused on building relationships with followers than their male counterparts (Chin, 2011; Fleming-Castaldy & Patro, 2012; Nasir et al., 2014). However, other researchers have suggested there are no differences in leadership practices between males and females (Chinyelum, 2016; Fleming-Castaldy & Patro, 2012; Kent et al., 2007).

Gender may also impact other demographic variables of academic chairpersons in occupational and physical therapy programs. Although women chairpersons were highly represented in both occupational and physical therapy academic programs, stereotypical views of women in leadership may still exist in their institutions (Bickel et al., 2002; Fleming-Castaldy & Patro, 2012). It takes longer for women to move through the academic ranks to become full professors than their male counterparts and gain tenure in most educational institutions (Ginther & Kahn, 2004; Macphee & Canetto, 2015). Similarly, most chairpersons in the current study were women, had academic ranks ranging from instructor to associate professor, and had been in their current positions for more than 5 years. Fleming-Castaldy and Patro (2012) suggested men in women-dominated professions may be fast tracked to leadership positions because of traditional views of men being better leaders than their female counter parts.

The perception of teaching responsibilities as a primary role of faculty in allied health academic programs, and not scholarship, may also impact tenure and academic rank (Dudek-Shriber, 1997; Gupta & Bilics, 2014). Additionally, faculty who engage in

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research and scholarship activities in allied health programs primarily disseminate their work at conferences and not under the critique of published peer-reviewed journals (Gupta & Bilics, 2014). This practice is not advantageous to the career pursuits of academic chairpersons in occupational and physical therapy programs (Dudek-Shriber, 1997), as publication is usually a requirement of tenure. Lastly, in the current study, most chairpersons were uncertain of their plans after their term ended, which was contrary to findings in the related literature of most chairpersons planning to return to faculty positions (Kearney, 2006; Wescott, 2000; Wilson, 1999). The results of this study suggest most occupational and physical therapy academic chairpersons often demonstrated all the transformational leadership behaviors, perceived their roles as leaders, and had high student pass rates on the NBCOT and NPTE exams.

Implications for the Profession

In the current study faculty selected to be an academic chairperson for an occupational or physical therapy program by the dean self-reported and may have exhibited transformational leadership behaviors (i.e. charisma, admiration and trust of collegues) which may have played a role in why they were selected. Secondly, academic chairpersons who possess these self-reported leadership behaviors many have impacted departmental factors (climate, pedagogy, environment and student engagement) which may in turn impact student outcomes in occupational and physical therapy programs. Additionally, professional development may impact the transformational leadership behaviors of academic chairpersons. Academic chairpersons who engage in professional development activities may demonstrate high transformational leadership behaviors as a result of these activities. Likewise, academic chairpersons who demonstrate high

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transformational leadership behaviors may be more likely to participate in professional development activities. Lastly, the results from this study expand the research on transformational leadership by supporting the indirect relationship that exists between the transformational leadership style of academic chairpersons and student outcomes

Limitations of the Study

Limitations of this study included the questionnaire, work sample, departmental factors, professional development and gender. Some participants did not complete the entire questionnaire and informed the researcher that they perceived the questions from the MLQ Form 5x-short as vague and stated negatively. Completing the survey for this study was voluntary and almost half of the eligible occupational and physical therapy academic chairpersons did not open the email or opted out, so no statements or conclusions can be drawn about any of the variables for non-respondents. Lastly the questionnaire was sent out during the Thanksgiving holiday and the timing may have effected participation.

The work sample for this study was 113 respondents, which was fewer than the minimum calculated power sample size of 216. No statistically significant relationship was determined between transformational leadership styles and student outcomes (student pass rate on the NBCOT or NPTE exams). The researcher suggests that this may have been due to a type II error.

Departmental factors were not measured in the current study, i.e. faculty pedagogy, department climate and student engagement and thus a limitation of the study. Additionally, no information regarding the type, frequency or format for professional development was gathered and whether these professional development activities

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supported transformational leadership behavior. Men were underrepresented in the sample thus the results cannot be generalized to all occupational and physical therapy academic chairpersons. Lastly, data were not available on the instructional decisions of faculty in occupational and physical therapy academic programs and therefor a limitation of the study.

Recommendations for Future Research

Occupational and physical therapy faculty who desire to be department chairpersons may want to assess their own leadership behavior in efforts to advance their career in their departments. Additionally, the results of this study can be used in the selection process of occupational and physical therapy academic chairpersons. Lastly occupational and physical therapy academic chairpersons should regularly engage in professional development opportunities in a variety of presentations (i.e. workshops, mentoring). Professional opportunities should teach, develop and support transformational leadership behaviors identified in this study.

Given the limited empirical research on occupational and physical therapy academic chairpersons leadership styles and their relationship to student pass rates on the NBCOT or NPTE exams, continued research in this area is needed. Future research should explore the type, frequency, format and content of professional development opportunities for occupational and physical therapy academic chairpersons. Additionally, future research should identify and investigate the impact of departmental factors (faculty pedagogy, climate, environment and student engagement) on student outcomes.

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Conclusions

This study sought to determine the relationship between the transformational leadership style of occupational and physical therapy department chairs and the student outcomes of their programs (e.g., student pass rate on the NBCOT or NPTE exams). The results of this study add to the current literature on leadership and student outcomes in the field of occupational and physical therapy. Specifically, the effects of demographic variables on transformational leadership behaviors as self-reported from occupational and physical therapy academic chairperson, and the indirect influence that transformational leadership behaviors may have on student outcomes.

Many of the decision that are made at the department level can affect the university, making the position of academic chairperson one of the most important in the university (Gmelch & Miskin, 1993). According to Seagren (1993) "an institution can run for a long time with an inept president but not for long with inept chairpersons" (p. 19). They have the responsibility of managing the academic department, assisting faculty in the development of curriculum, and supporting student and faculty scholarship all while ensuring they are meeting departmental and institutional goals (Cruickshank, 2017; Gmelch, 2015).

This study provided inquiry into the complex nature of academic chairpersons in occupational and physical therapy programs. Academic chairpersons in this study self-reported high transformational leadership behaviors, which may be the result of the inherent leadership requirements of their position. Significant relationships were found between some demographic variables and transformational leaderships behaviors indicating that academic chairperson in occupational and physical therapy programs may

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benefit from professional development activities. Additionally, occupational and physical therapy academic chairpersons who demonstrate high transformational leadership behaviors may seek opportunities to engage in professional development activities.

Student pass rates on NBCOT and NPTE exams did not have a relationship with the transformational leadership style of academic chairpersons in occupational and physical therapy programs. However, this may be the result of a small sample size or an indirect influence of academic chairpersons' transformational leadership style on student pass rate. Further investigation into the relationship between transformational leadership style and student pass rates, should consider how departmental factors and faculty instructional decisions impact student outcomes.

Both occupational and physical therapy programs use an entry-level doctorate as a point of entry into the profession. These changes in the academic programs are directly related to the changes in the profession and healthcare environments (AOTA, 2014; Nicholson, 2008). According to the AOTA (2014) "the majority of health professions are either at the doctorate level, transitioning to the doctorate, or are debating the issue" (p. 3). This includes allied health professions such as nursing practitioners, audiologists, and pharmacists. While the transition to a clinical doctorate may prepare occupational and physical therapists and promote best practices based on empirical research, it may not prepare clinicians to assume academic leadership roles that promote effective organizational outcomes. Future research that will investigate transformational leadership behavior, professional development, instructional decisions and departmental factors, and student outcomes in the field of occupational and physical therapy is needed

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to ensure allied healthcare leaders are prepared to assume leadership roles and ensure successful outcomes.

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Appendix A

Conceptual Model

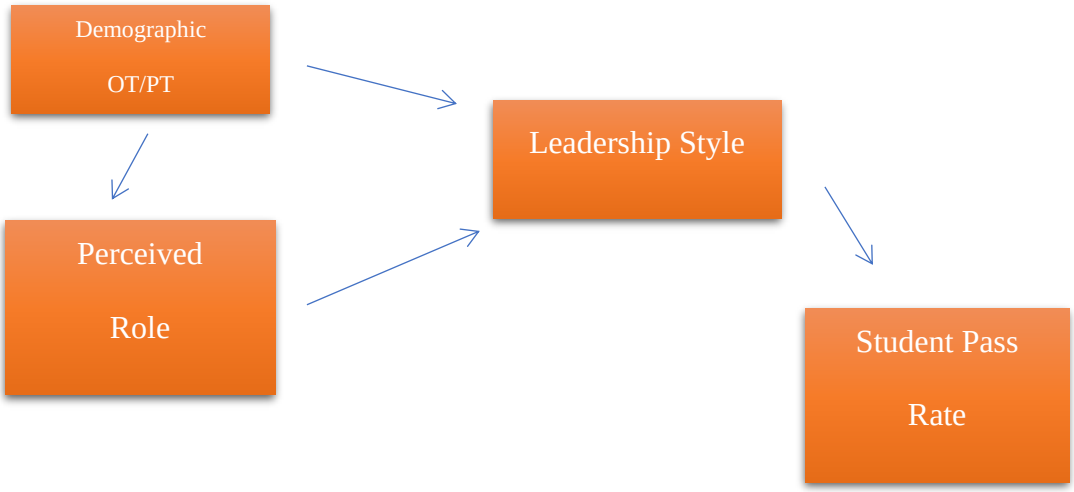

Figure A1. Conceptual model depicting perceived role (a moderating variable) of occupational and physical therapy chairpersons and how leadership style affects student pass rate.

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Appendix B

Institutional Review Board Proposal Approval

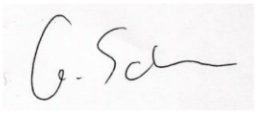
Manhattanville
COLLEGE

INSTITUTIONAL REVIEW BOARD (IRB)
NOTIFICATION OF RESEARCH PROPOSAL APPROVAL

To: PI **Tilson**
From: George Schreer, Chair, Institutional Review Board
Date: 7 October 2018

The Manhattanville College IRB has reviewed your proposal for research, titled *"Examining The Relationship Between Leadership Practices and Student Outcomes of Occupational and Physical Therapy Academic Programs"* I am happy to inform you that your study meets ethical guidelines for research using human subjects. This approval remains in effect until one year from the above date. As with all approvals, you are required to notify the IRB before making any significant changes to your protocol.

Best of luck,



George Schreer
Chair, Institutional Review Board
Manhattanville College

Cc: Provost, Prof. Iverson
OHRP IRB# 00007330, FWA# 00014945
IRB application number: 1819/020

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Appendix C

Questionnaire Cover Letter

Dear Participant,

My name is Ivy Tilson Rentz and I am a graduate student at Manhattanville College. The purpose of my research study is to examine the relationship between leadership styles and student outcomes in occupational and physical therapy academic programs. I am inviting you to participate in this research study because you meet the following criteria: a) department chairperson of an occupational or physical therapy program that is located in the United States and Puerto Rico; b) serve as department chairperson for a program that offers an Associates in Applied Science, Masters of Science, a Bachelors and Masters of Science degree or an entry-level Doctorate in occupational therapy; or your program offers an Associates in Applied Science, Bachelors of Health Science and Doctor of Physical therapy or an entry-level Doctorate in physical therapy c) are a chairperson of an occupational or physical therapy program that is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) or the Commission on Accreditation in Physical Therapy Education (CAPTE).

The following questionnaire will require approximately 15-20 minutes to complete. There is no compensation for responding nor is there any known risk. A potential benefit for participants involved in the study would be to provide information regarding leadership styles in occupational and physical therapy programs and how these styles impact student outcome (pass rate on the NPTE and NBCOT exam). All

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information collected will remain confidential so please do not include your name. If you choose to participate in this study, please answer all questions as honestly as possible. Participation in this study is voluntary. You may ask questions or withdraw from participation at any time.

The link to the survey is as follows: https://www.surveymonkey.com/r/OTPTchairs. This link is uniquely tied to this survey and your email address. However, if you do not meet the criteria outlined above, I ask that your please forward to the appropriate person within your department.

Thank you for taking the time to assist me in my educational endeavors. By indicating "yes" on the consent form and continuing to complete the questionnaire, you are indicating your willingness to participate in this study. Checking "no" will indicate your unwillingness to participate in the study and no further participation will be required.

If you have any additional questions regarding this study, please contact me at tilsonrentzi@student.mville.edu . If you have questions regarding your rights as a research subject, please contact the Manhattanville College Review Board (IRB) at irb@mville.edu.

Sincerely,

Ivy Tilson Rentz MSA, OTR/L

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Appendix D

Consent to Participate in Research

Identification of Investigators & Purpose of Study

You are being asked to participate in a research study conducted by Ivy Tilson Rentz from Manhattanville College as part of my doctoral dissertation. The purpose of this study is to determine the relationship between the leadership styles of academic chairpersons and student outcomes (student pass rate) in occupational and physical therapy academic programs.

Research Procedures

Should you decide to participate in this research study, you will be asked to sign this consent form once all your questions have been answered to your satisfaction. This study consists of a self-administered web-based questionnaire and the Multifactor Leadership Questionnaire (Avolio & Bass, 1995) that will be administered to individual participants using Survey Monkey. You will be asked to provide answers to a series of questions related to leadership in occupational and physical therapy academic departments.

Time Required

Participation in this study will require approximately 15-20 minute of your time, in one sitting.

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Risks

The investigator does not perceive more than minimal risks from your involvement in this study.

Benefits

A potential benefit for the participants involved in the study would be to provide current information regarding leadership in occupational and physical therapy programs, how leadership practices promote health of the department, and add to the existing body of knowledge in the field of occupational and physical therapy. Research in the field of occupational and physical therapy is essential to achieve the aspirations of the profession which include best practice based on empirical research and the position of occupational and physical therapy as an academic discipline.

Confidentiality

The results of this research will be presented at the researchers' doctoral dissertation defense. The results of this project will be coded in such a way that the respondent's identity will not be attached to the final form of this study. The researcher retains the right to use and publish nonidentifiable data. While individual responses are confidential, aggregate data will be presented representing averages or generalizations about the responses. All data will be stored in a secure location accessible only to the researcher. Upon completion of the study, all information that matches up individual respondents with their answers*)* will be destroyed.

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Participation & Withdrawal

Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind. You may also refuse to answer any individual question without consequences.

Questions about the Study

If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

Ivy Tilson Rentz

Educational Leadership

tilsonrentzi@ student.mville.edu

Questions about Your Rights as a Research Subject

The Institutional Review Board (IRB) at Manhattanville College has approved the recruitment of participants for this study. If you any questions or concerns, please contact the IRB at irb@mville.edu.

Giving of Consent

I have read this consent form and I understand what is being requested of me as a participant in this study. I freely consent to participate. I have been given satisfactory answers to my questions. The investigator provided me with a copy of this form. I certify that I am at least 18 years of age.

I agree to complete the survey

() yes

() no (If no, thank you for your participation, please end here)

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Appendix E

Permission to Use Multifactor Leadership Questionnaire

Multifactor Leadership Questionnaire™

Instrument (Leader and Rater Form)

and Scoring Guide
(Form 5X-Short)

by Bruce Avolio and Bernard Bass

Published by Mind Garden, Inc.

info@mindgarden.com
www.mindgarden.com

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Appendix F

Multifactor Leadership Questionnaire Form 5x

www.mindgarden.com

To Whom It May Concern,

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

Multifactor Leadership Questionnaire

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

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

As a leader ....

I talk optimistically about the future.
I spend time teaching and coaching.
I avoid making decisions.

The person I am rating....

Talks optimistically about the future.
Spends time teaching and coaching.
Avoids making decisions

Sincerely,

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

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Appendix G

Occupational and Physical Therapy Academic Chairpersons Questionnaire

1. Which program are you a chairperson for?
    a. Occupational Therapy
    b. Physical Therapy

2. Gender:
    a. Male
    b. Female

3. Tenured:
    a. Yes
    b. No

4. What is the total length of service as department chair?
    a. Less than 1 year
    b. 1-4 years
    c. 5 or more years

5. What is your current academic rank?
    a. Instructor
    b. Assistant Professor
    c. Associate Professor
    d. Professor
    e. Other

6. What was your primary reason for accepting the position of department chair?
    a. Personal development
    b. Drafted by dean or colleagues
    c. Financial gain
    d. Sense of duty, it was my turn
    e. Other

7. Do you have teaching responsibilities in addition to your position as chairperson?
    a. Yes
    b. No

8. What is your primary role as department chairperson?
    a. Faculty developer
    b. Leader
    c. Scholar
    d. Manager

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9. Does your institution provide professional development or training for department chairs?
    a. Yes
    b. No

10. What are your plans after your term as chairperson?
    a. Return to faculty
    b. Move into another administrative position
    c. Unsure

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Appendix H

Table H1

Frequencies of Academic Chairpersons and Program Type

	Frequency	Total %	Valid %	Cumulative %
Occupational Therapy	45	39.8	39.8	39.8
Physical Therapy	68	60.2	60.2	100
Total	113	100	100	

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Appendix I

Table I1

Descriptive Statistics for Transformational Leadership Style Using the MLQ

	n	*M*	*SD*	Valid *n*
Idealized Influence (Attributed)	113	3.25	.366	113
Idealized Influence (Behaviors)	113	3.44	.377	113
Inspirational Motivation	113	3.39	.403	113
Intellectual Stimulation	113	3.32	.382	113
Individualized Consideration	113	3.54	.335	113

Note. MLQ = Multifactor Leadership Questionnaire (Leader Form, 5x-short); Total possible scores on MLQ range from 0 to 4.

,

Appendix J

Table J1

Frequencies of Scores for Transformational Leadership Style

		Frequency	%	Valid %	Cumulative %
Idealized Influence (Attributed)	Not at all	0	0	0	0
	Once in a while	1	0.9	0.9	0.9
	Sometimes	12	10.6	10.6	11.5
	Fairly often	99	87.6	87.6	99.1
	Frequently, if not always	1	0.9	0.9	100
	Total	113	100	100	
Idealized Influence (Behaviors)	Not at all	0	0	0	0
	Once in a while	0	0	0	0
	Sometimes	12	10.7	10.7	10.6
	Fairly often	91	80.6	80.8	91.2
	Frequently, if not always	10	8.8	8.8	100
	Total	113	100	100	
Inspirational Motivation	Not at all	0	0	0	0
	Once in a while	0	0	0	0
	Sometimes	11	9.7	9.7	9.7
	Fairly often	90	79.7	79.7	89.4
	Frequently, if not always	12	10.6	10.6	100
	Total	113	100	100	
Intellectual Stimulation	Not at all	0	0	0	0
	Once in a while	0	0	0	0
	Sometimes	15	13.3	13.3	13.3
	Fairly often	93	82.2	82.2	95.6
	Frequently, if not always	5	4.5	4.5	100
	Total	113	100	100	
Individual Consideration	Not at all	0	0	0	0
	Once in a while	0	0	0	0
	Sometimes	5	4.4	4.4	4.4
	Fairly often	91	80.6	80.6	85.0
	Frequently, if not always	17	15	15	100
	Total	113	100	100	

Note. Not at all = 0; *Once in a while* = 1; *Sometimes* = 2; *Fairly often* = 3; *Frequently, if not always* = 4.

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Appendix K

Table K1

Descriptive Statistics for Overall Pass Rate

	n	Minimum	Maximum	*M*	*SD*
Overall Pass Rate	101	33.33	100	94.4	8.83

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Appendix L

Table L1

Frequencies of Score for Overall Pass Rate

Pass Rate	Frequency	%	Valid %	Cumulative %
30-40	1	0.9	0.9	0.9
41-50	0	0	0	0.9
51-60	0	0	0	0.9
61-70	2	1.8	1.8	2.7
71-80	1	0.9	0.9	3.5
81-90	12	10.6	10.6	14.1
91-100	85	75.2	75.2	89.4
Missing Values	12	10.6	10.6	100
Total	113	100	100	

Note. The total *n* does not add up to 113 for all variables due to missing values.

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Appendix M

Table M1

Partial Correlation for Transformational Leadership, Overall Pass Rate, and Primary Role

	Idealized Influence (Attributed)	Idealized Influence (Behavior)	Inspirational Motivation	Intellectual Stimulation	Individualized Consideration	Overall Pass Rate
Idealized Influence (Attributed)	---	0.288**	0.423**	0.229	0.323**	-0.013
Idealized Influence (Behavior)		---	0.442**	0.293**	0.266**	0.114
Inspirational Motivation			---	0.232	0.314**	-0.022
Intellectual Stimulation				---	0.427**	-0.094
Individualized Consideration					---	-0.136
Overall Pass Rate						---

Note. ** Correlation is significant at the $p = 0.01$ level (2-tailed).

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Appendix N

Table N1

Zero Order Partial Correlation for Transformational Leadership, Overall Pass Rate, and Primary Role

	Idealized Influence (Attributed)	Idealized Influence (Behavior)	Inspirational Motivation	Intellectual Stimulation	Individualized Consideration	Overall Pass Rate	Primary Role
Idealized Influence (Attributed)	---	0.286**	0.407**	0.231	0.324**	-0.008	-0.036
Idealized Influence (Behavior)		---	0.500**	0.309**	0.300**	0.146	-0.291**
Inspirational Motivation			---	0.252	0.349**	0.027	-0.362**
Intellectual Stimulation			.	---	0.436**	-0.079	-0.102
Individualized Consideration	.				---	-0.110	-0.169
Overall Pass Rate						---	-0.131
Primary Role							---

Note. ** Correlation is significant at the $p = 0.01$ level (2-tailed)

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BIOGRAPHY

Ivy Tilson Rentz is currently a licensed occupational therapist and the president of Kidz Korner childcare centers in Westchester County, New York. Ivy is a graduate of York College where she received her Bachelor of Science in Occupational Therapy; Central Michigan University, where she received her Masters in Science Administration; and Manhattanville College where she received her Doctorate in Education. After graduating from York College, Ivy began working at United Cerebral Palsy in Nassau County for a year, before opening her own pediatric practice.

Ivy executed contracts with Westchester County Department of Health and New York City Department of Education to provide pediatric therapy services to children. In 2002, Ivy opened her first childcare program in her home and then went on to open a commercial childcare program in 2007. In 2009, she joined the faculty at York College as the Academic Fieldwork Coordinator and taught various pediatric treatment courses.

Ivy currently is married to Damon Rentz and has six children. She attends New York Covenant Church, in New Rochelle NY. Ivy is the Director of Youth Ministries, leader of both Children's Church and the Women's Ministry at New York Covenant Church. She is also on the executive board of Adelbrook's residential and educational programs for children with autism. Ivy plans to return to teaching pediatric treatment courses in an occupational therapy academic program soon.

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