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## Workload Management Strategies to Promote Senior Physical Therapy Faculty Retention in the United States

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# Walden University

College of Education and Human Sciences

This is to certify that the doctoral dissertation by

Amanda Parrish

has been found to be complete and satisfactory in all respects,  
and that any and all revisions required by  
the review committee have been made.

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Walden University

2024

Abstract

Workload Management Strategies to Promote Senior Physical Therapy Faculty Retention

in the United States

by

Amanda Parrish

DPT, Duke University, 2011

BS, University of Arizona, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Education

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## Abstract

In recent years, several physical therapy programs have been launched at U.S. colleges and universities to respond to the need for trained practitioners to serve an aging population. However, there is a shortage of qualified physical therapy faculty to meet the needs of students and to adhere to accreditation requirements, and limited information exists regarding what resources might promote faculty job retention. The purpose of this basic qualitative study was to explore the perspectives of senior physical therapy faculty regarding how they had balanced their workloads throughout their career and what key resources they used that directly contributed to the longevity of their career. The conceptual framework for this basic qualitative study was grounded in Bandura's theory of self-efficacy and Herzberg's two-factor theory of motivation. The research question focused on the perceptions of senior physical therapy faculty regarding workload management and what resources contributed to the longevity of their career. A self-developed interview protocol was used to gather data from nine senior physical therapy faculty in the U.S. who were selected via purposeful sampling. Data from semistructured interviews were analyzed through open coding, followed by axial coding, and then the development of emergent themes. The primary themes encompass how participants used (a) organizational strategies, (b) support, and (c) self-advocacy to balance their workload. An implication for positive social change includes the identification of strategies that stakeholders might use to support the retention of physical therapy faculty to prepare students to meet the health care needs for the patients they serve.

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## Dedication

I dedicate this dissertation to my two kids, Austin and Lily. You both were my inspiration for pursuing this dream; I wanted you to see your mom achieve her goals. I am so proud to be your mom and hope that this accomplishment shows you that no matter the obstacle, you can do great things. As the former first lady Michelle Obama said, “The only limit to the height of your achievement is the reach of your dreams and your willingness to work hard for them.”

I would also like to dedicate this dissertation to my husband, Ray, who has provided unwavering support during all my educational endeavors. You are the reason I am successful. Thank you for your love and patience during this doctoral journey. So many times, you went above and beyond so I could spend the time to complete my dissertation. Thank you!

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## Chapter 1: Introduction to the Study

Physical therapy faculty shortages in the United States have been ongoing since the 1940s when the profession experienced a significant growth in physical therapy education programs to meet the needs of society (Pinkston, 1986). At that time, physical therapists were in great need to help rehabilitate wounded veterans from World Wars I and II and individuals infected with poliomyelitis (Moffat, 2012). Physical therapy faculty shortages identified in 1940 remain an issue in physical therapy education and warrant further investigation (Brueilly et al., 2022; Harris et al., 2018). Shortages of physical therapy faculty are projected to increase, with one third of the current faculty in the United States near the age of retirement (Salamh et al., 2019). Two additional factors related to the continued shortages of physical therapy faculty include the growing number of physical therapy programs and increased scholarship requirements with recent accreditation changes for physical therapy faculty (Salamh et al., 2019). This study was needed to further the understanding of the workload management strategies of senior physical therapy faculty related to their retention in academia. With this knowledge, stakeholders may be able to address the shortages of physical therapy faculty in the United States.

The specific problem that I addressed in this study was the growing shortage of U.S. physical therapy faculty amid an insufficient number of potential applicants (Brueilly et al., 2022; Dickson et al., 2020; Harris et al., 2018). Most of the available relevant literature is focused on understanding perspectives of junior physical therapy faculty satisfaction to help improve retention of junior faculty (J. L. Barrett, Mazerolle, &

Nottingham, 2019; J. L. Barrett, Mazerolle, & Rizzo, 2019; J. L. Barrett et al., 2020; Varnado et al., 2021). In my review of the literature, I found limited research on the perspectives of senior physical therapy faculty regarding how they have managed their workload throughout their career. Senior physical therapy faculty have experience in balancing the roles of teaching, scholarship, and service. They also add a unique perspective as many of them were teaching in 2016 when the Commission on Accreditation in Physical Therapy Education (CAPTE) changed the scholarly requirements for faculty (Brueilly et al., 2022). Senior physical therapy faculty who taught in the 1990s have also experienced changes to the professional degree when the programs shifted from a master's to a doctorate, adding to the depth of their experience to remain in academia despite significant alterations to the profession (Hinman & Brown, 2017). I conducted this study to understand the perspectives of senior physical therapy faculty regarding how they have managed the workload of teaching, scholarship, and service throughout their career.

The social change implications of studying the perspectives of senior physical therapy faculty include potentially improved compliance with accreditation standards. During accreditation reviews, common citations for faculty include noncompliance with faculty scholarship requirements (Brueilly et al., 2022). Hinman and Brown (2017) found within the accredited programs in the United States, 75% of them had at least one faculty member who had yet to produce a scholarly product and was not actively working on scholarship. In addition to accreditation compliance, understanding senior faculty

retention can potentially affect student satisfaction and the quality of education and could support the retention of junior physical therapy faculty (Stickney et al., 2019).

My role as a physical therapy educator has also led me to want to know more about senior physical therapy faculty perspectives on workload management. I have been a full-time faculty member at a physical therapy university for 6 years. My experience and intuition helped me throughout the study, especially during data analysis, because I could better understand the participants' perspectives. At the same time, my role as a physical therapy faculty member may have fostered bias and preconceived assumptions. I further discuss possible limitations and the strategies I used to mitigate those issues in the Limitations section of this chapter and in Chapter 3.

I begin this chapter by providing background information regarding the historical development of physical therapy faculty shortages. Additional sections are devoted to the statement of the problem, purpose of the study, research question, conceptual framework, nature of the study, and definitions. The last sections within this chapter include discussion of the assumptions, scope and delimitations, limitations, and significance of the study. The chapter concludes with a summary and a transition to Chapter 2.

### **Background**

Faculty shortages are one of the most serious challenges for U.S. physical therapy programs (Varnado et al., 2021). Despite ongoing shortages of physical therapy faculty, limited information exists regarding physical therapy faculty retention. Radtka (1993) found that in the late 1980s, the retention rate for physical therapy faculty in the U.S. was 10%, with higher numbers of faculty resigning within their first 4 years. At that time,

reported factors associated with low faculty retention included low salary, lack of professional growth, family responsibilities, and faculty members' returning to clinical practice (Radtka, 1993). Additional factors related to junior physical therapy faculty retention included the collegial environment of the institution, reports of stress and loneliness in navigating scholarship and teaching, and lack of training and mentorship (Harrison & Kelly, 1996). Since the 1980s, much has changed within the profession such as growth in the number of programs, the profession moving from a master's to a doctoral degree, and increased scholarship demands for physical therapy faculty, all of which has increased the shortages of physical therapy faculty (Salamh et al., 2019; Varnado et al., 2021).

Scholarship requirements for physical therapy faculty have changed throughout the profession, but it is unknown how changes in scholarship have influenced retention (Cahn, 2019; Peterson & Umphred, 2005). Significant changes to scholarship requirements include that at least 50% of the faculty at a physical therapy program must have a terminal academic degree and actively participate in a scholarly agenda (Myers et al., 2020; Rowland et al., 2020). Brueilly et al. (2022) found that in the 2019-2020 accreditation review cycle, 51.9% of all U.S. physical therapy programs had one or more citations related to faculty qualifications and faculty numbers. A main citation found by Brueilly et al. included not meeting the minimum requirement of at least 50% of physical therapy faculty having an academic doctoral degree.

In addition to challenges with faculty meeting the 50% terminal academic degree threshold, the shortages of physical therapy faculty have led department leaders to hire



clinicians who often have limited experience in scholarship (Cahn, 2019). Novice faculty, including those transitioning from the clinic, have reported elevated stress levels with achieving the scholarship demands of their job (Pagliarulo & Lynn, 2002). J. L. Barrett et al. (2020) found that junior physical therapy faculty with terminal academic doctoral degrees also reported challenges in meeting the requirements of teaching, scholarship, and service. Despite evidence to support challenges with scholarship in junior physical therapy faculty, limited literature exists regarding how alterations to scholarship requirements for physical therapy faculty have influenced retention, supporting the need for this study.

The need for physical therapy faculty participation in scholarship has been an ongoing and developing requirement for faculty, largely driven by changes to accreditation standards (Harrison & Kelly, 1996). Accreditation changes have increased scholarship demands for physical therapy faculty, making it more challenging for prospective faculty to meet the requirements. The American Physical Therapy Association (APTA) and CAPTE are professional organizations that place a strong value on scholarship and the need for faculty to maintain a scholarly agenda (Harrison & Kelly, 1996; Romig et al., 2011). In 1987, the APTA created an action plan to address faculty shortages and advocated for more faculty to produce scholarly publications to move the profession forward (Romig et al., 2011). Emphasis on scholarship by the accrediting body CAPTE and the APTA stems from the value of evidence in improving patient care and in promoting the profession among other medical providers (Bliss et al., 2018; Deusinger et al., 2018).

Although scholarship requirements help to substantiate the need for physical therapy care, variability between faculty scholarly achievements and student performance exists. Dickson et al. (2020) found a positive correlation between increased scholarship (up to 25% of faculty's available workload) and graduation rates. However, other researchers have found no correlation between scholarly productivity and other measures of student performance such as passing the national board exam (Cook et al., 2015; Rowland et al., 2020). Despite the emphasis on scholarly activity encouraged by the APTA and CAPTE, little correlation exists between physical therapy scholarly activity and student success. The primary drive for scholarly activity throughout a faculty member's career is to progress the profession forward by evaluating the effectiveness of physical therapy practice in patient care (Bliss et al., 2018; Deusinger et al., 2018).

Changes in accreditation requirements for physical therapy faculty have contributed to the growing shortage of qualified faculty (J. L. Barrett et al., 2020). Since its inception in 1977, CAPTE has set the standards on the minimum qualifications required for physical therapy faculty (Deusinger et al., 2018; Harris et al., 2018). Prior to the creation of CAPTE, physical therapy education followed the qualifications set by the American Medical Association (AMA) for faculty, which stated that adequate academic preparation and experience to teach specific subjects met the definition of qualified faculty (Hinman & Brown, 2017). After CAPTE was established, accreditation standards changed in 1979 to include qualified physical therapy faculty who were graduates of an accredited institution and have competence in their subject matter (Hinman & Brown, 2017). The APTA action plan proposal in 1987 encouraged scholarship by faculty to

progress the profession (Romig et al., 2011). Accreditation standards for physical therapy faculty were refined by CAPTE in 1990 to include that faculty must have expertise in their content area and participate in scholarship and professional activities (Hinman & Brown, 2017).

During the 1990s, the physical therapy educational scene also shifted from offering only a master's degree to offering doctoral degrees in physical therapy (Hinman & Brown, 2017). With the shift in degree level came increases in expectations for faculty. The most recent revision of accreditation standards established by CAPTE occurred in 2016, which stipulated that at least 50% of all faculty within a program must have an academic doctoral degree (PhD, EdD, or similar) and that all programs must offer the doctoral degree in physical therapy (Hinman & Brown, 2017). With each revision to the accreditation standards of what constitutes a qualified faculty member in physical therapy education, department leaders have encountered increasing difficulties in meeting those standards, contributing to the ongoing challenge of filling faculty positions with qualified applicants. Limited research exists, according to my review of the literature, regarding how accreditation changes for physical therapy faculty have influenced retention supporting the need for this study.

The rapid growth in physical therapy programs across the United States has further contributed to the shortages in physical therapy faculty within the United States (Ge, 2018; Salamh et al., 2019). The number of physical therapy programs in the United States increased from 235 in 2016 to 271 in 2021 (CAPTE, 2021). The rise in physical therapy program development was spurred by the projected need for physical therapists

to meet the needs of the aging U.S. population (Deusinger & Landers, 2022). In 2020, there was an average of 148.5 physical therapy faculty vacancies (Brueilly et al., 2022) across the 261 physical therapy programs in the United States (CAPTE, 2020). With the rise in physical therapy education programs, faculty vacancies have increased, further contributing to the shortages of physical therapy faculty.

Limited information exists regarding what resources faculty need to be successful and stay in academia. Of the available evidence, much of the focus has been on identifying factors associated with junior physical therapy faculty satisfaction and retention with a specific emphasis on scholarship and mentorship (N. Barrett et al., 2019; J. L. Barrett et al., 2020; Varnado et al., 2021). In addition, researchers exploring resources for junior faculty have focused on cross-sectional or 1-year follow-up studies, and little is known regarding how more experienced faculty have adapted to changes and coped with high workloads over time (J. L. Barrett, Mazerolle, & Nottingham, 2019; J. L. Barrett et al., 2020; Becker et al., 2021; Varnado et al., 2021). This study was needed to understand the perspectives of experienced faculty who have navigated through changes in accreditation standards throughout their career. I also wanted to gain insight on what strategies they had used to manage the workload of teaching, scholarship, and service. Information from individuals who have navigated this high workload landscape can potentially be applied by stakeholders to help develop resources and strategies for improving the retention and longevity of junior physical therapy faculty in their careers.

## **Problem Statement**

I undertook this study because of the ongoing shortages of physical therapy faculty within the United States. The specific problem addressed in this study was a shortage of qualified physical therapy faculty to meet the needs of students, programs, and accreditation requirements. A literature search focusing on data from physical therapy accreditation agencies revealed the 2020 vacancy rate and occupational turnover for physical therapy faculty to be 7% (CAPTE, 2020). The problem of poor faculty retention is made worse by a growing number of physical therapy programs, a high rate of senior faculty nearing retirement age, and accreditation standards for faculty to hold an academic terminal degree (Dickson et al., 2020; Santasier & Wainwright, 2018). Brueilly et al. (2022) found that a limited number of qualified faculty applicants also contributes to the prolonged faculty shortage in physical therapy education. Addressing physical therapy faculty shortages is important to preserve the quality of education, maintain accreditation standards, and minimize the workload on current faculty working in institutions with multiple vacancies.

The impact of prolonged faculty shortages has led university leaders to hire clinically trained physical therapists who have limited exposure to teaching and scholarship and often do not have a terminal academic degree (J. L. Barrett et al., 2020; Bliss et al., 2018). Although this temporarily fills faculty positions, it also has the potential to lead to accreditation citations. Physical therapy programs are required to maintain specific faculty-to-student proportions and to have at least 50% of core faculty with an academic doctoral degree (Becker et al., 2021; Myers et al., 2020; Salamh et al.,

2019). In 2020, 51.9% of the 261 programs in the United States received a citation for not meeting core faculty qualifications and having low faculty numbers (Brueilly et al., 2022). Prolonged faculty shortages also increase the work demands on current faculty, potentially negatively influencing their decision to stay in academia (Bliss et al., 2018). Gaining a deeper understanding of strategies to help faculty manage their workload, which may include working simultaneously on an academic doctoral degree, could help provide information to improve the retention of junior physical therapy faculty and aid in their decisions to stay in academia.

A gap in the research existed on the perceptions of senior physical therapy faculty regarding strategies they had used to manage their teaching, scholarship, and service workload and resources that contributed to their decision to remain in academia throughout their career. Most researchers who have explored physical therapy faculty retention have focused on junior physical therapy faculty (e.g., J. L. Barrett, Mazerolle, & Nottingham, 2019; J. L. Barrett, Mazerolle, & Rizzo, 2019; N. Barrett et al., 2019; Varnado et al., 2021). Although exploring junior physical therapy faculty perspectives has furthered understanding of retention issues, focusing on senior faculty might shed light on what strategies for workload management have been successful. Additionally, a focus on senior physical therapy faculty perspectives regarding the longevity of their career could help stakeholders to establish a framework for junior physical therapy faculty to improve retention and potentially minimize the physical therapy faculty shortage. More information was needed to better understand the perspectives of senior

physical therapy faculty regarding retention and to identify strategies and resources that could improve decisions to stay in academia.

### **Purpose of the Study**

The purpose of this qualitative study was to explore the perspectives of senior physical therapy faculty regarding how they had balanced their workloads throughout their career and what resources they utilized that directly contributed to the longevity of their career. The research paradigm central to this study was a constructivist worldview in which the participants were viewed as having constructed meanings based on their experiences in certain situations (see Creswell & Creswell, 2018). I used this paradigm, in conjunction with Bandura's self-efficacy theory and Herzberg's two-factor theory of motivation, to gain a deeper understanding of senior physical therapy faculty retention. Knowledge gained from exploring senior physical therapy faculty perspectives may inform stakeholders about strategies they can use to help improve junior physical therapy faculty retention and reduce the number of physical therapy faculty shortages.

### **Research Question**

How do senior physical therapy faculty balance their workload as required by the university and accreditation body to remain in their teaching position?

### **Conceptual Framework**

The concept that grounded this basic qualitative study was occupational retention and motivations to stay at a place of employment. The conceptual framework consisted of Bandura's (1977) theory of self-efficacy and Herzberg's (1966) two-factor theory of motivation. This framework related to the study approach in that the research question

specifically asked how senior physical therapy faculty balanced their workload to remain in their teaching position. The best method to answer this specific research question, which concerned participant perspectives, was through a qualitative approach (see Creswell & Creswell, 2018; Ravitch & Carl, 2021).

Bandura's theory of self-efficacy, which researchers have used to understand underlying motivational factors that influence an individual's decision to initiate and persist in an activity or occupation (e.g. Barni et al., 2019; Caprara et al., 2006; Holzberger et al., 2013; Ismayilova & Klassen, 2019; Klassen & Tze, 2014), was logically connected to the nature of the study. Researchers (e.g., Alrawahi et al., 2020) have used Herzberg's two-factor theory to explore motivating factors related to job satisfaction among employees. Herzberg's theory can be broken down into satisfiers, which are things the employee values and relates to satisfaction, and dissatisfiers, which are related to reports of dissatisfaction at work (Alrawahi et al., 2020).

Both theories were helpful in understanding the motivations that influence senior physical therapy faculty to remain in academia and how this could relate to improved retention of junior physical therapy faculty. These theories also helped to frame the interview questions I asked to uncover how participating faculty had balanced their workloads and persisted throughout their career. Both theories were helpful in data analysis regarding understanding the participants' perspectives and using that information to address the research question. A thorough explanation of the conceptual framework is provided in Chapter 2.



### **Nature of the Study**

In this study, I used a basic qualitative design as it allowed for an open approach to understanding how participants have made meaning of their experiences with more methodological flexibility (see Kahlke, 2014). A basic qualitative design fit the research question in that the goal was to understand the perspectives of senior physical therapy faculty regarding how they had balanced their workload and what resources were directly related to the longevity of their career. This design approach allowed the participants to discuss and expand on their experiences related to workload and retention throughout their careers in academia.

I considered other qualitative design considerations but opted against using them because they did not adequately address the research question. The research question did not pertain, for example, to the exploration of a phenomenon, such as in a phenomenological study; the construction of a theory, such as in a grounded theory approach; or the understanding of the interactions between individuals or a culture, like in an ethnographic study (see Merriam & Tisdell, 2016). I used a basic qualitative design because it allowed me to conduct the study with less structure related to the methodological framework while still applying a constructivist worldview to understand participants' perspectives regarding their experience of a topic under investigation (see Merriam & Tisdell, 2016).

In this basic qualitative study, I used a purposeful sampling strategy to recruit participants by sending an invitation email to a national physical therapy education database. Recruitment using a national database of physical therapy educators helped to

reduce the risk of preexisting professional relationships with the participants. The database included approximately 2,900 members of the education section of the APTA. Data were collected by conducting semistructured interviews with nine senior physical therapy faculty to explore their perceptions of workload management throughout their career. To identify common themes among this homogenous group of senior physical therapy faculty, 8–10 participants were appropriate (Guest et al., 2020; Hagaman & Wutich, 2017). Data were analyzed through open coding, followed by axial coding and then the identification of emergent themes.

### **Definitions**

The following terms will be used throughout this study:

*American Physical Therapy Association (APTA)*: A physical therapy professional organization that works to advance the profession by improving visibility and access to physical therapy in the community, advocating for payment and reimbursement to lawmakers and governmental agencies, and advancing educational opportunities for current physical therapists (APTA, 2022; Neiland & Harris, 2003).

*CAPTE requirements of a full-time physical therapy faculty member*: Professional requirements that each core physical therapy faculty member has an ongoing scholarly agenda and has a record of institutional or professional service. The collective faculty are expected to “initiate, adopt, and uphold academic regulations specific to the program and institution” (CAPTE, 2020, Related Elements from the PT Standards and Required Elements section, Item 4L; see also Hinman & Brown, 2017). In addition, faculty are expected to develop, review, and revise the curriculum, and ensure that students are safe

and ready to enter the clinical education environment (CAPTE, 2020; Hinman & Brown, 2017).

*Junior physical therapy faculty:* A physical therapy faculty member who has worked 4 years or fewer as a full-time faculty member in physical therapy education (J. L. Barrett, Mazerolle, & Nottingham, 2019; J. L. Barrett et al., 2020).

*Physical therapist:* A licensed individual who is able to affect an individual's functional movement to maintain mobility, reduce pain, manage chronic conditions, and improve quality of life (ChoosePT, n.d.).

*Senior physical therapy faculty:* A physical therapy faculty member who has worked more than 4 years as a full-time faculty member in physical therapy education (J. L. Barrett, Mazerolle, & Nottingham, 2019; J. L. Barrett et al., 2020).

*Scholarly agenda:* Accreditation standards set by CAPTE that require all full-time physical therapy faculty to contribute to knowledge development and ongoing analysis of new knowledge (Peterson & Umphred, 2005).

*Service:* Activities that can include engaging in institutional programs such as governance and committee work and community opportunities such as clinical practice, consultation, and involvement in community organizations (Majsak et al., 2022). Requirements for service can vary depending on the mission and values set by the institution.

### **Assumptions**

Assumptions in research are beliefs that are assumed to be true but cannot be proven. I had three assumptions in conducting this study. The first assumption was there

may be multiple realities or truths presented throughout the different interviews (see Ravitch & Carl, 2021). Within qualitative research, the ontological assumption is that there may be multiple realities related to how different participants perceive their experience (Ravitch & Carl, 2021). This assumption was important as variability in participant experiences was expected. Meaning, different participants may encounter a similar course of events, but have different perspectives regarding their experience.

The second assumption was that all participants would tell the truth regarding their experience in academia and how they had managed workload requirements throughout their careers. Because I sought to understand the participants' beliefs regarding their experience with managing their workload, I assumed that they could and would accurately recall specific details related to the interview questions. The assumption was that individuals did not have anything to gain or lose by participating in this study and would tell the truth regarding their experience with staying in academia.

The third assumption was that participants had created conscious strategies to manage their workload, contributing to their retention in academia. I assumed that participants were in control of their decision-making and how they managed their workload and remained in academia. Because I explored the perspectives of senior physical therapy faculty members, I assumed that they made the decisions that affected their workload and ability to remain in academia. I assumed that participants in the study, although they may have had outside influences from various sources, were the ones making the decisions to navigate their careers.

### **Scope and Delimitations**

In conducting this study, I explored perceptions of senior physical therapy faculty regarding their ability to manage their workload and how it might relate to retention of junior physical therapy faculty. Senior physical therapy faculty were specifically chosen as the focus of this study because they are a group of individuals who have remained in academia despite changing scholarship, workload, and professional requirements throughout their career. The scope of this study was limited to physical therapy faculty despite reported challenges in retention among other health care faculty in allied health programs (Tobin & Taff, 2020). Because the factors contributing to physical therapy faculty shortages in this study are unique to physical therapy faculty, future researchers should explore faculty perceptions of other allied professions. Additionally, findings from this study are limited to full-time physical therapy faculty who teach in programs within the United States. Accreditation standards are specific for programs within the United States. Other countries may follow different accreditation policies and may not have experienced the historical changes to physical therapy faculty requirements for scholarship. Additionally, part-time, or other non-full-time positions, may not have the same workload demands and accreditation requirements as full-time positions, which is why they were omitted from this study.

Findings from this study may have potential transferability to other physical therapy institutions to help provide insight into valuable resources likely to improve faculty retention. I focused on programs that were accredited by CAPTE, had between 60 and 65 students per cohort, and had 15–20 faculty within the physical therapy program.

Additionally, the study findings may be transferable to programs that admit more than one cohort per year, with each term lasting 15 weeks. Transferability is not applicable to other allied health programs such as nursing, occupational therapy, speech therapy, and athletic training as the shortages to faculty members and changes to faculty requirements are not similar to physical therapy (Bultas et al., 2022; Gazza, 2019; Jarosinski et al., 2022; Jeanmougin & Cole, 2023; Richards & Kieffer, 2022; Ruth-Sahd & Grim, 2021) and therefore require further investigation that is outside the scope of this study.

I used Bandura's self-efficacy theory and Herzberg's two-factor theory of motivation in the present study. Other theories could apply to understanding job motivation but were excluded from the present study. Specifically, Maslow's hierarchy of needs is an additional theory that could be considered in understanding individuals' perspectives regarding work motivation (Ghazi et al., 2013). This theory, although helpful in understanding components of motivation, does not fully apply to the research question and underlying concept of faculty retention that was explored in this study. Components of Maslow's hierarchy of needs are found in Herzberg's two-factor theory of motivation, which expands in more detail on how motivators and hygiene factors directly relate to work satisfaction (Ghazi et al., 2013; Herzberg, 1966). Although Maslow's hierarchy of needs concerns factors related to motivation, it was omitted from this study because it is not as specific as Herzberg's two-factor theory in relation to understanding job satisfaction and decisions to stay at a place of employment.

### **Limitations**

My role as a physical therapy faculty member may have posed a challenge as I could have interviewed individuals with which I had an already established pre-existing professional relationship. To minimize this risk, the recruitment of participants was through a national database for physical therapy faculty. However, despite using a national database there still was the possibility that a participant may be an individual with which I had a pre-existing professional relationship. While I do not have a position of power within my place of employment, being a work colleague may hinder a participant from speaking openly about their place of employment. Additionally, my place of current employment was undergoing a curricular change, which might hinder transferability of the results to other locations. With the curricular change, many faculty are asked to work on creating content for the new curriculum while still maintaining the workload of teaching, service, and scholarship. Consequently, for participant recruitment I used a national database of physical therapy educators to expand my potential participant pool within the United States. More information regarding participant recruitment will be thoroughly discussed in Chapter 3.

Another potential limitation was achieving the appropriate number of participants for saturation. To address this limitation, I would have expanded my participant pool to achieve the desired number of participants. Expanding my participant pool would have helped improve the transferability of the results by including perspectives from senior physical therapy faculty from other institutions within the United States. Additionally, if participant recruitment was low after 1 month of initial recruitment, I had planned to

follow-up with an additional invitation to participate in my study through the Physical Therapy education national database and use snowball sampling to achieve the desired number of participants. However, the number of participants who responded to the study was sufficient and no additional request for participation or snowball sampling was required.

I am aware that my role as a faculty member may increase the likelihood of bias in my analysis and interpretation of the data. I used bracketing techniques to recognize and minimize the potential opportunities for bias. The study also used member checking to minimize bias in data analysis and interpretation (Candela, 2019). An additional limitation and opportunity for bias was the data collection instrument. I created the interview questions based on the theories covered in the conceptual framework. To improve the dependability, I used an audit trail after each interview, which included logging the patient's name, date of the interview, where the data were collected, how much time the interview took, and any additional thoughts onto a password protected Word document. In addition, a spare notebook was available in case spur of the moment thoughts about the data or reflections about the participants spontaneously arose. At the end of the week, dedicated time was allotted to transfer the audit log from the written journal to a word document. The audit trail allowed a clear path for my personal reflection and others interested in replicating the study on my line of thought and helped to identify biases or misinterpretations of the data (Carcary, 2020). I also used reflexive journaling to help the credibility and confirmability of the study. Reflexive journaling occurred immediately after the audit trail after each interview, in addition it occurred



after each coding cycle, and after the development of themes. The reflexive journal was kept on a Word document in a password protected computer.

### **Significance**

This study may be significant in that it helped identify what resources could be valuable in contributing to faculty retention. Little is known regarding senior physical therapy faculty perceptions about workload management throughout their career and additional information could help improve retention of junior physical therapy faculty. The following sections address the significance to practice, theory, and social change.

#### **Significance to Practice**

This study will help progress knowledge of what resources are valuable in managing the workload of a full-time faculty member. Knowledge about valuable resources could be useful to program directors or other administrators to help support junior physical therapy faculty transitioning into their new roles. Program directors and leadership within physical therapy education institutions can use this information to create supportive environments using meaningful resources related to improved satisfaction and retention. Providing resources developed from senior physical therapy faculty perceptions could help reduce the socioeconomic problem of physical therapy faculty shortages in the western United States. The specific socioeconomic problem that led to the development of shortages in the United States includes an occupational turnover for physical therapy faculty to be 7% (CAPTE, 2020), a growing number of physical therapy programs, a high rate of senior faculty nearing retirement age, a limited number of qualified faculty applicants, and accreditation standards for faculty to hold an

academic terminal degree (Brueilly et al., 2022; Dickson et al., 2020; Santasier & Wainwright, 2018).

### **Significance to Theory**

This study will help progress the knowledge and application of Herzberg's two-factor theory of motivation and Bandura's theory of self-efficacy in health care education. At the time of this study, little research has applied both theories in the understanding of retention in health care higher education. This study used both theories in helping to construct research and interview questions as well as in the analysis of the results. Further studies would benefit from this knowledge as the theories could be valuable in subsequent higher education research.

### **Significance to Social Change**

This study will help improve the quality of physical therapy education and consistency of meeting accreditation standards. Improving the retention of junior physical therapy faculty is important as prolonged shortages threaten the quality of physical therapy education and the ability of institutions to remain accredited. Understanding resources that are of value in managing the workload of scholarship, teaching, and service could aid in improved retention of qualified faculty to meet accreditation standards.

### **Summary**

In this chapter, I reviewed the background, problem statement, purpose, research questions, conceptual framework, and nature of the study, along with definitions, assumptions, scope and delimitations, limitations, and significance of the study. Key

information provided by this chapter includes understanding the historical framework leading to the development of physical therapy faculty shortages. Physical therapy faculty shortages are a problem for many stakeholders including other faculty, students, leadership, the university, and the profession. Understanding the perspectives of senior physical therapy faculty who have lived through changes in accreditation has the potential to help identify resources that could be of value to junior physical therapy faculty's decision to stay in academia.

Chapter 2 will address the literature search strategy, conceptual framework, and the literature review. This chapter will expand on Herzberg's (1966) two-factor theory of motivation, and Bandura's (1977) theory of self-efficacy. In the conceptual framework section, I will further discuss how these theories have been applied to previous research and how they benefit the current study. Chapter 2 will cover additional information regarding literature findings for physical therapy faculty satisfaction and why the current study was needed to address the problem of faculty shortages within physical therapy education.

## Chapter 2: Literature Review

The problem addressed in this study was a shortage of qualified physical therapy faculty to meet the needs of U.S. students, sufficiently staff physical therapy programs, and fulfill the requirements of accreditation bodies (Brueilly et al., 2022; Dickson et al., 2020; Harris et al., 2018). I explored the perspectives of senior physical therapy faculty regarding why they remain in academia and how they have balanced their workloads of scholarship, teaching, and service throughout their career. I focused on how those perspectives might be applied to address junior physical therapy faculty retention.

A dearth of literature exists regarding factors associated with physical therapy faculty satisfaction, workload management, and decisions to stay in academia. Most of the available studies addressing these factors have focused on junior physical therapy faculty as they have been identified as a vulnerable group for maintaining retention (Harrison & Kelly, 1996; Varnado et al., 2021). Junior physical therapy faculty members often are clinicians transitioning into academia (Deusinger et al., 2018) and report challenges with managing the roles of teaching, scholarship, and service (J. L. Barrett, Mazerolle, & Rizzo, 2019) spending most of their release time on teaching preparation (J. L. Barrett, Mazerolle, & Nottingham, 2019). Additionally, loneliness, intellectual stimulation, collegiality, work–life balance (Varnado et al., 2021), and mentorship (N. Barrett et al., 2019) are key indicators related to increased satisfaction among junior physical therapy faculty. Challenges encountered by junior physical therapy faculty include experience with managing the workload of teaching, scholarship, and service (J.

L. Barrett, Mazerolle, & Nottingham, 2019), along with meeting institutional and accreditation scholarship requirements (Brueilly et al., 2022).

This chapter will include an overview of the literature search strategy, discussion of the conceptual framework, and a review of the literature. I will discuss in detail what is currently known regarding physical therapy faculty retention. The chapter will end with a discussion regarding how this study contributes to addressing the gap in the literature regarding physical therapy faculty shortages.

### **Literature Search Strategy**

To find relevant articles for my study, I used the following databases available through the Thoreau multidatabase search tool in the Walden University Library: CINAHL, Chronicle of Higher Education, Cochrane Database of Systematic Reviews, ERIC, Education Source, Emerald Insight, Gale, MEDLINE, SAGE, and Science Direct. My initial search using Thoreau was too narrow leading me to expand to the larger and broader search engine of Google Scholar. My first search with Google Scholar using the search terms *physical therapy faculty* and *satisfaction* yielded more than 300,000 studies. Results were narrowed down by setting the time parameters to between the years of 2018 and 2022. From that search, I further narrowed my parameters to dissertations and peer-reviewed journal articles available as full-text PDFs.

Primary keywords used throughout my literature search in the databases and Google Scholar were *retention* or *attrition* or *turnover*, *resilience*, *physical therapy*, *physical therapy faculty*, *physical therapy education*, *satisfaction*, *motivation*, *mentorship*, *higher education faculty*, *Herzberg's two-factor theory of motivation*, and

*theory of self-efficacy*. Various combinations of the search terms were applied. I reviewed the title and abstract of each result to identify key articles. Additionally, I searched for works by key authors who had previously published on the topic of physical therapy faculty satisfaction. Other search strategies included looking at the article archives of key journals that published studies related to my topic such as the *Journal of Physical Therapy Education* and *Physical Therapy Journal*.

### **Conceptual Framework**

The concept in this study was senior physical therapy faculty members' persistence and motivation to remain in academia. Key theories related to perseverance and motivation include Bandura's (1977) theory of self-efficacy and Herzberg's (1966) two-factor theory of motivation. Both theories use motivation as an underlying thread in the explanation of how individuals engage in specific tasks, such as an individual's decision to stay at a specific job or with a certain career. Both theories are necessary for the study as they explain different aspects of career motivation. Herzberg's two-factor theory focuses on content-specific aspects of occupational motivation, such as the primary motives affecting behavior (Ghazi et al., 2013), whereas Bandura's self-efficacy theory helps define more cognitive processes associated with career motivation (Ghazi et al., 2013).

Bandura's theory of self-efficacy is derived from his social cognitive theory, which suggests learning occurs within a social context, factoring in the interaction of personal factors, environment, and behavior (Pajares, 1996). Self-efficacy plays a large role in the personal domain resulting in specific behaviors depending on their level of

self-efficacy (Pajares, 1996). Individuals typically engage in activities where their self-efficacy is high and avoid activities where they feel less confident in their success (Bandura, 1977; Pajares, 1996). The premise of self-efficacy theory is that individuals are more likely to engage and persist in situations where they believe they can be successful (Bandura, 1977). Four key efficacy expectations exist within the theory that can influence self-efficacy, including performance accomplishments, vicarious experience, verbal persuasion, and emotional arousal (Bandura, 1977). The most impactful of the four expectations affecting self-efficacy is performance accomplishments, where self-efficacy is substantially altered by performing specific tasks versus watching the task modeled or discussed (Bandura, 1977). Established coping strategies for stressful or negative situations can contribute to the strength of an individual's personal efficacy (Bandura, 1977).

Bandura's theory of self-efficacy has been studied at length in kindergarten through Grade 12 education regarding teacher self-efficacy and job satisfaction, teaching effectiveness, and academic achievement (Barni et al., 2019; Caprara et al., 2006; Holzberger et al., 2013; Ismayilova & Klassen, 2019; Klassen & Tze, 2014). Teachers with higher levels of self-efficacy report increased job satisfaction, reduced job-related stress, and can negotiate challenging student situations easier (Barni et al., 2019; Caprara et al., 2003; Ismayilova & Klassen, 2019). Despite ample information regarding self-efficacy in kindergarten through Grade 12 settings, few studies have applied Bandura's theory to college-level or higher education faculty and students (Daumiller et al., 2020). More information regarding self-efficacy in the teaching of higher education faculty

would help understand any relationships between self-efficacy and satisfaction, stress, student academic performance, and motivations to stay in academia.

Faculty teaching in college and higher education settings encounter different experiences compared to their kindergarten through Grade 12 counterparts, and further application of self-efficacy theory is warranted. Faculty in college and higher education settings are required to teach and produce research, which is often linked to promotions and academic rank (Ismayilova & Klassen, 2019). In the few studies that have explored self-efficacy in college and higher education, faculty confidence and self-efficacy to carry out different domains of a faculty workload (teaching, research, and service) were not consistent or transferable (Ismayilova & Klassen, 2019). Ismayilova and Klassen (2019) in a quantitative study surveyed teaching and research levels of self-efficacy in general university faculty and found that research self-efficacy was lower than teaching. Lower levels of research self-efficacy were related to poor institutional support for research and the challenge of managing their workload (Ismayilova & Klassen, 2019). Horvitz et al. (2015) in a quantitative study explored higher education faculty's self-efficacy in teaching online classes. They identified prior experience, perception of student learning, and future interest in teaching online all played into self-efficacy levels. More information is needed to understand how self-efficacy relates to the motivation of senior physical therapy faculty to stay within their career.

Herzberg's two-factor theory of motivation describes how individuals' attitude toward work is influenced by a two-dimensional paradigm of motivators and hygiene factors (Alshmemri et al., 2017; Herzberg, 1966). In his groundbreaking book *Work and*



the Nature of Man, Herzberg (1966) described motivators as certain factors such as advancement, the work itself, possibility for growth, responsibility, achievement, and recognition. According to Herzberg, these factors are motivators because they are instrumental in motivating individuals to achieve superior performance and higher levels of job satisfaction. Hygiene factors influence an employee's potential dissatisfaction with their job and relate to preventable and environmental issues that describe the context in which the job is performed (Herzberg, 1966). Hygiene factors included interpersonal relations, salary, company policies and administration, supervision, and work conditions (Alshmemri et al., 2017).

At its core, the two-factor theory describes two fundamental principles about human nature: individuals will avoid unpleasant experiences and seek opportunities for psychological growth (Herzberg, 1966). The two factors of motivation which encompasses human nature to seek out opportunities for personal growth are separate and distinct from hygiene factors or dissatisfiers (Herzberg, 1966). For example, when factors that worsen the hygienic environment of a job are present, an individual will likely report higher levels of dissatisfaction. When those hygienic factors are improved, the individual will report no dissatisfaction versus satisfaction. The same can be true for motivators. When present, the individual is likely to report increased satisfaction. When motivators are absent, the individual is likely to report no satisfaction versus dissatisfaction.

Herzberg's two-factor theory has been applied to college and higher education settings (Ghazi et al., 2013) and a variety of other health care work settings, such as nurses and nurse practitioners (Alshmemri et al., 2017). Ghazi et al. (2013) applied

Herzberg's theory when evaluating job satisfaction in a public university setting, finding fulfillment of hygiene factors and motivating factors contributed to reports of work satisfaction. This contrasts with Herzberg's initial theory, which states that minimizing hygienic factors does not lead to increased satisfaction but only reduces the presence of dissatisfaction (Herzberg, 1966). Kacel et al. (2005) found similar findings when applying Herzberg's theory to job satisfaction in nurse practitioners, where both motivators and hygienic factors related to job satisfaction and were not mutually exclusive. However, Russell and Van Gelder (2008) found that members of an International Transplant Nursing Society reported work satisfaction linked to motivational factors, as described by Herzberg. Variability exists in understanding the true influence of hygienic factors associated with job satisfaction. However, consistency in studies using Herzberg's theory shows that motivational factors positively correlate with satisfaction. Additionally, many of the studies used to explore Herzberg's theory used a quantitative research design (Kacel et al., 2005; Russell & Van Gelder, 2008), which limits the ability to explore in more depth the experiences of the participants (Ravitch & Carl, 2021). A qualitative research design would increase the understanding of how Herzberg's two-factor theory could be used to help explore and understand factors associated with job satisfaction.

### **Literature Review of Related Concepts**

Shortages of physical therapy faculty are an ongoing problem within physical therapy education. The earliest study exploring factors related to job turnover in physical therapy faculty was by Radtka in 1993. Using a quantitative design, Radtka (1993) found

10% of faculty resigned within their 1st year reporting low salary, high job stress, and behavioral intentions to leave as main reasons for leaving physical therapy education. Harrison and Kelly (1996) used a quantitative design to investigate career satisfaction in junior physical therapy faculty, finding 85% of participants were satisfied but reported feelings of loneliness, anxiety, and challenges with the heavy workload. Themes from these early studies highlight satisfaction and job turnover during 1993-1996 were related to intrinsic and extrinsic factors. Since the studies in the early 1990s, the landscape of physical therapy education has changed to include online education, accreditation changes, and growth of the professional degree. The following section will review key changes that occurred to the profession and influenced the job requirements and workload for physical therapy educators.

### **Evolution of Physical Therapy Faculty Requirements**

Findings from Radtka (1993) and Harrison and Kelly (1996) show issues related to faculty turnover are longstanding. The earliest reports of faculty shortages emerged in the 1940s due to the rapid growth in physical therapy education programs and the importance of trained physical therapists to meet the needs of society (Pinkston, 1986). The APTA recognized the need to address faculty shortages and created a task force to investigate the issue and create recommendations. Findings from the taskforce recommended \$3.8 million would be required over a lifetime to support the development of qualified faculty and ultimately the funding was not provided (Magistro, 1987). Faculty shortages meant fewer students could matriculate into physical therapy programs and ultimately fewer practitioners were available in the workforce. The effects of both

faculty and physical therapist shortages led to the creation of new occupations such as cardiorespiratory therapists and occupational overlap from occupational therapists and athletic trainers to meet patient needs (Magistro, 1987). Components contributing to longstanding faculty shortages include changes to the physical therapy degree, an increasing number of programs, and the expected retirement of one third of the current physical therapy faculty population by 2029 (Salamh et al., 2019). The following sections will address how changes to these factors influenced faculty shortages and how the requirements of physical therapy faculty evolved and accompanied changes to the profession.

### ***Development of the Physical Therapy Profession***

Physical therapy started in response to multiple poliomyelitis outbreaks (Moffat, 2012). The outbreaks in 1894 and 1916 were most instrumental in driving the need for development of the profession (Moffat, 2012; Plack & Wong, 2002). During this time, initial training for physical therapists was provided by physicians and orthopedic surgeons in the form of apprenticeship and included instruction in massage, muscle training, exercise, and physical education (Daniels, 1974; Elson, 1964; Plack & Wong, 2002). In addition to addressing post-poliomyelitis impairments, physical therapy was in growing need to help restore functional mobility to injured veterans in World War 1 from 1917-1919 (Moffat, 2012; Plack & Wong, 2002). In 1917, the United States Army created a formalized 3-month training program to address the physical needs of wounded soldiers (Plack & Wong, 2002). Students enrolling in the training program must have received previous education in exercise or nursing and after completing the program

earned the military title of “reconstruction aide” (Elson, 1964; Moffat, 2012; Plack & Wong, 2002). Non-military schools for physical therapy training opened in 1918 where 13 new physical therapy education programs were created and lead to a certificate at the completion of the program (Plack & Wong, 2002).

As newer programs opened, the curriculum changed with increasing durations to a 6-month program with 620 hr of education, although curricular length varied across programs (Plack & Wong, 2002). Educators of these programs included trained reconstruction aides and physicians (Elson, 1964; Moffat, 2012). Additionally, the programs were housed within hospitals, which, depending on the hospital setting (Daniels, 1974; Moffat, 2012), had some influence on the curriculum content (Plack & Wong, 2002). In the early development of physical therapy education programs, minimal documentation on requirements for faculty members exists beyond experience in health care.

The poliomyelitis epidemic, World War I, and World War II drove the need for trained professionals to assist individuals with disabilities leading to a growth in physical therapy programs. With the quick growth in physical therapy educational programs, limited quality oversight threatened the integrity of the newly formed profession. In 1921 the American Women’s Physiotherapy Association was established to help develop and monitor standards within the profession (Moffat, 2012; Plack & Wong, 2002). The name of the association was changed to the American Physiotherapy Association in 1922; leaders established the first minimum standards for physical therapy education curriculums. The standards included a 9-month program with 1,200 educational hr (Plack

& Wong, 2002). Despite the recommendations for minimum standards, significant variability in physical therapy education existed and was largely influenced by the needs of the physicians teaching the courses and the settings which housed the program (Plack & Wong, 2002). The contents of the programs included a large focus on technical skills and training (Plack & Wong, 2002). Support for the profession to expand beyond technical skills led to the first physical therapy baccalaureate program offered by New York University in 1927 (Plack & Wong, 2002).

Growth of the physical therapy profession was accelerated by World War II from 1941-1945 and continued poliomyelitis outbreaks, which required trained health care providers to meet the needs of patients (Plack & Wong, 2002). In order to enforce minimum standards for physical therapists, the American Physiotherapy Association called on the AMA to be the accrediting body for all physical therapy schools (Hazenhyer, 1946). In 1936 the AMA became the accrediting body for physical therapy educational programs and established the essentials for an acceptable school for physical therapy technicians and accredited all 13 schools (Plack & Wong, 2002). Along with accreditation standards, the AMA had standards for educators within the physical therapy programs which included “instructors should be qualified through academic preparation and experience to teach the subjects assigned” (Hinman & Brown, 2017, Introduction). The AMA accreditation standards for physical therapy faculty were one of the first defined and enforced requirements for physical therapy educators.

With the adoption of the AMA essentials criteria, accredited schools had to demonstrate compliance in the following areas of organization, faculty, plant,

requirements for admission, clinical facilities, resources, administration, publications, and minimum curricular standards (Plack & Wong, 2002). By the 1960s, most programs had transitioned away from being housed within hospital settings to physical therapy programs being developed and offered within college or university settings (Daniels, 1974). During this time, the degrees offered shifted from a certificate to a baccalaureate degree in physical therapy. Some leaders in the profession advocated for the progression of physical therapy beyond the baccalaureate degree leading to the development of a master's program and the first advanced master's program from New York University in 1942 (Plack & Wong, 2002).

As the complexity of patients treated by physical therapists began to grow with medical advancements such as heart transplants and various surgeries, so did the need for more advanced training in physical therapy. To meet the needs in 1960, the APTA and House of Delegates raised the minimum standard for physical therapy education from a certificate to the baccalaureate degree. However, not too soon after the minimum standard was increased, the APTA resolved that by 1990, all graduating physical therapy programs would be required to provide a post-baccalaureate degree (Plack & Wong, 2002). In 1992, the University of Southern California offered a transitional program from master's to doctorate level of training (Plack & Wong, 2002). In 2000, the House of Delegates adopted a resolution that by 2020, all physical therapy programs will offer a doctoral degree in physical therapy (APTA, n.d.).

With the rapid changes in training, curriculum criteria, and degrees offered, the requirements of the faculty also evolved. Early training of physical therapy technicians

was done by physicians and some trained physical therapists, but the education was customized to meet the physicians' needs to support the specific type of patients (Plack & Wong, 2002). Qualifications for physical therapy faculty grew from graduating from a physical therapy program in the early 1900s to the implementation of the AMA recommendations in 1936 (Plack & Wong, 2002). Along with the APTA and AMA standards for physical therapy faculty, many leaders within the physical therapy profession advocated for physical therapy faculty to be engaged in scholarly research to progress the profession (Bliss et al., 2018). With the growing needs and complexities of patients treated by physical therapists, the advancement of the physical therapy degree to a doctorate, and the advocacy of leaders within the community along with accrediting bodies, the requirements for physical therapy faculty were created.

### ***Influences of Accreditation on Faculty Requirements***

Accreditation in physical therapy education has played an important role in standardizing the curriculum and expectations of a graduating physical therapist. In 1928, prior to a standardized curriculum and accreditation requirements, leaders in the physical therapy profession expressed concern regarding variability in the knowledge and clinical skills of graduating physical therapists (Graham, 1928). During that time, influential leaders in the American Physiotherapy Association called for a standardized curriculum, program length, and prerequisite education to include a background in physical education or nursing across all programs (Graham, 1928). In 1928, the American Physiotherapy Association instituted the *Minimum Standard for Schools of Physical Therapy* which described a set number of hours for specific course content and recommended a 9-month



program of 1,200 hr (Gwyer et al., 2003; Jones, 1928). As the profession and number of physical therapy programs continued to grow, the APTA faced financial and human resources challenges in approving and enforcing accreditation requirements (Nieland & Harris, 2003). In 1933, the APTA requested assistance from the AMA with accreditation efforts (Nieland & Harris, 2003). The AMA instituted the *Essentials of an Acceptable School for Physical Therapy Technicians* which required curriculums have 1,200 total program hours and 400 of those hours dedicated to clinical education (Gwyer et al., 2003). The AMA was the only accreditation agency from 1936 to 1956 for physical therapy education and would submit accreditation findings to the APTA Executive Committee prior to an action (Harris et al., 2018; Nieland & Harris, 2003). This shared partnership in accreditation of physical therapy educational programs assisted in elevating the standardization of curriculums and the consistency in the quality of a physical therapy graduate.

As medical advancements occurred from the early 1900s to the early 2000s so did the requirements for health care management. Physical therapy education evolved to include more content to reflect the needs of society. Another change that influenced the evolution of accreditation in physical education was in 1967 with the establishment of the physical therapist assistant (PTA) program (Nieland & Harris, 2003). The AMA did not adopt the PTA program within its accreditation umbrella leading to the APTA petitioning to the National Commission on Accreditation in 1968 to be an accreditation agency (Nieland & Harris, 2003). In 1977, the U.S. Department of Education granted the Commission on Accreditation in Education, later changed to CAPTE, as an accrediting

agency for both physical therapy and physical therapy assistant programs (Nieland & Harris, 2003). In 1979, CAPTE became the only accreditation agency recognized by the U.S. Department of Education for physical therapy program accreditation, removing the AMA from the accreditation process. Having sole accreditation ability allowed for the APTA to make changes to standards for physical therapy education as needed and include the physical therapy assistant program within its accreditation reach (Harris et al., 2018).

Additional changes to the academic standards for physical therapy faculty were also reflected in accreditation requirements. Leaders in the profession emphasized the need for more scholarship from academic physical therapy faculty to support the needs and outcomes of physical therapy (Bliss et al., 2018). Major changes to accreditation requirements that impacted faculty happened in 1990 when CAPTE implemented the *Evaluative Criteria for Accreditation of Physical Therapists Education Programs* (Harris et al., 2018). This new teaching criteria required assessment of teaching effectiveness, research and scholarship activities, service activities, administrative responsibilities, and clinical education and practice roles (Harris et al., 2018). In addition to accreditation changes, physical therapy programs moved away from being located within a hospital setting and were now part of universities (Harris et al., 2018). This shift to universities and higher education settings lead to additional requirements for research, typically associated with requirements for promotion and tenure opportunities (Jensen, 1988).

Accreditation standards for scholarship and teaching continued to increase with each revision to CAPTEs' accreditation requirements (Harris et al., 2018). A later update

in 1996 to the accreditation criteria increased the requirements for core faculty to have a post-professional degree and all core faculty had to demonstrate a scholarship record (Harris et al., 2018). Shortly after the release of the updated accreditation guidelines were put in effect, the most cited accreditation criteria that was in violation by physical therapy programs was the ability of faculty to meet the scholarship criteria (Harris et al., 2018). In 2006, an updated accreditation guideline broadened the definition of scholarship and mandated at least 50% of core faculty had to have a post-professional, academic doctorate (Harris et al., 2018). The requirement of post-professional degrees and academic doctorates was in response to many programs hiring new graduates to fill their open faculty positions, despite their lack of clinical experience (Harris et al., 2018). In 2009, CAPTE updated their accreditation requirements to state all programs would be transitioning to a doctorate in physical therapy by 2016 (Harris et al., 2018).

Along with scholarship requirements, the 2016 CAPTE update to accreditation standards regarding teaching load for a full-time core physical therapy faculty stated, 50% of allocated time be dedicated to the umbrella term of teaching (Deusinger et al., 2018). Additionally, accreditation requirements for full-time physical therapy faculty included 50% of all core faculty within a program hold an academic terminal degree (PhD, EdD, or similar) and actively work on a scholarly agenda with at least one publication every 2 years (Deusinger et al., 2018). Despite accreditation standards for scholarship, physical therapy programs are still repeatedly cited for not meeting faculty qualification criteria. In the 2019-2020 accreditation review cycle, 51.9% of all physical therapy programs had earned at least one citation for lack of faculty qualifications and/or

faculty shortages across all programs in the United States (Brueilly et al., 2022). Service to the institution can vary depending on the mission statement and values of the institution (Majsak et al., 2022), but typically involves meeting service needs within the institution and community. Service needs can range from a specific number of committee assignments, ad hoc task force requirements, or engagement in volunteer opportunities within the community.

### **Research on Physical Therapy Faculty Shortages**

The ongoing physical therapy faculty shortages have been a source of recent interest in the literature (J. L. Barrett, Mazerolle, & Nottingham, 2019; J. L. Barrett, Mazerolle, & Rizzo, 2019; J. L. Barrett et al., 2020; Varnado et al., 2021). The increased research dedicated to addressing physical therapy faculty shortages is also influenced by the expected retirement of one third of the current physical therapy faculty (Bliss et al., 2018). Shortages of physical therapy faculty will be amplified when this population retires in the next decade (Bliss et al., 2018; Edwards et al., 2022; Salamh et al., 2019). Senior faculty are unique in that they have experienced working as a core physical therapy faculty during substantial reform in the profile of an academic professoriate. The need for strategies to address the physical therapy faculty shortages are prudent to help minimize the impact of one third of the current workforce retiring. The following sections summarize what is currently known regarding physical therapy faculty shortages and how previous authors have approached the topic of physical therapy faculty shortages along with their findings.

### ***Research on Job Satisfaction Among Physical Therapy Faculty***

In a quantitative study, Varnado et al. (2021) surveyed 223 physical therapy programs regarding job satisfaction of junior physical therapy faculty. The authors found junior physical therapy faculty were challenged with transitioning from the clinical world to academia with reports of increased stress and loneliness in junior physical therapy faculty. These findings are similar to an earlier study by Harrison and Kelly (1996), which also quantitatively compared job satisfaction in junior physical therapy faculty in a tenure track and found that 83% of respondents were satisfied and 51% intended to stay in academia for the rest of their career. Varnado et al. found that of those within a tenure track place of employment, 59.2% planned to remain in academia for the rest of their career. Additional overlaps between findings in the study by Harrison and Kelly and Varnado et al. are job satisfaction was positively correlated with institutions that promote a work–life balance, collegiality, intellectual stimulation from colleagues, and institutions where junior physical therapy faculty have access to senior physical therapy faculty. Job satisfaction among junior physical therapy faculty appears influenced by level of academic degree achievement, tenure status, institutional support, and collegiality with coworkers.

A dearth of information exists regarding recent investigations into career satisfaction and decisions to remain in academia among physical therapy faculty. The recently cited Varnado et al. (2021) article is one of very few recent publications investigating physical therapy faculty satisfaction. In contrast, allied health professions such as nursing faculty are also experiencing shortages in faculty (Bultas et al., 2022;

Gazza, 2019; Jarosinski et al., 2022; Jeanmougin & Cole, 2023; Richards & Kieffer, 2022; Ruth-Sahd & Grim, 2021). Although the nursing faculty shortages derive from a different path than physical therapy, information from research looking into faculty shortages could help guide future research associated with satisfaction in allied health professionals, such as physical therapy. Li et al. (2019) assessed nursing faculty's decisions to leave academia citing noncompetitive salaries, challenging workloads, and lack of a work-life balance as key reasons for leaving. Frustrations over salaries (Dalby et al., 2020; Frisbee et al., 2019) and challenges with workload management (Singh et al., 2021) were further substantiated as reasons to leave academia in additional research investigating nursing faculty shortages. Other factors identified among nursing faculty that related to decisions to leave academia included older, PhD-prepared faculty who were dissatisfied with their job (Lee et al., 2022) and institutions with a lack of faculty support (Wendler et al., 2021). While these factors were identified in nursing faculty, future studies could utilize these findings to help understand job satisfaction and decisions to stay in academia among physical therapy faculty.

### **Challenges for Physical Therapy Faculty**

To meet the needs of ongoing shortages in physical therapy education, many programs have opted to hire clinicians with minimal experience in academia (Deusinger et al., 2018; Pagliarulo & Lynn, 2002; Tobin & Taff, 2020). Challenges for these individuals include transitioning to requirements of teaching, scholarship, and service (Pagliarulo & Lynn, 2002; Zipp et al., 2015). While clinical care has its own set of challenges, many individuals who are transitioning into academia from the clinic, have

not been exposed or instructed in how to manage the roles of scholarship, teaching, and service (Zipp et al., 2015). Other novice faculty may have some experience with education by way of being an adjunct faculty, guest lecturer, or a clinical instructor in physical therapy, but likely have not had the opportunity to manage the requirements of a full-time physical therapy faculty member. Despite the level of exposure to teaching, full-time faculty are challenged with limited experience in managing the roles and responsibilities required in academics.

In a qualitative study exploring the perceptions of junior athletic training and physical therapy faculty in their level of preparation for a full-time faculty role, J. L. Barrett et al. (2020) found individuals were most prepared for the teaching and scholarship portions of the job, but not administrative and service. An important consideration is that participants in the J. L. Barrett et al. study all had obtained an academic doctoral degree (PhD, EdD, or similar). Within the 2021 aggregate data from the accreditation agency CAPTE, 46% of the current physical therapy faculty (n=3096) had a PhD and 14% had a different professional degree such as an EdD or DSc (CAPTE, 2021). While the study by J. L. Barrett et al. offers some insight into how novice physical therapy faculty may feel regarding level of preparation, it does not encompass the entire physical therapy faculty population due to omitting those without academic terminal degrees.

In a qualitative study, J. L. Barrett, Mazerolle, and Nottingham (2019) explored how junior physical therapy and athletic training faculty balanced their workload of research, scholarship, and service. The authors found that junior faculty reported

spending most of their research release time on teaching preparation, with 70% of the faculty in the study reporting difficulties in managing the workload of teaching, scholarship, and service. Challenges with satisfying teaching requirements for physical therapy faculty are further enhanced by growing rates of student enrollment, leading to higher teaching requirements and larger class sizes (Deusinger & Landers, 2022; Dickson & Taylor, 2021).

Recruitment of clinicians to meet faculty shortages is not a new concept in health care (Grassley et al., 2020). Other allied health care professions have experienced faculty shortages for different reasons than physical therapy (Hoffman, 2019). For example, the previously mentioned shortage of nursing faculty has limited the number of nurses available in the clinic and hospital settings (Hoffman, 2019). Similar to physical therapy, some of the shortages in nursing faculty have been reduced by recruiting expert clinicians to transition into academia, allowing for more students to be admitted into nursing programs (Hunter & Hayter, 2019). In a meta-analysis review by Grassley et al. (2020) that explored qualitative studies regarding clinicians' transition from the clinic to academia, a key finding was job satisfaction for novice nursing faculty was negatively impacted by faculty feeling unprepared for the workload requirements associated with teaching, scholarship, and service. While findings from Grassley et al. reflect the experience of nursing faculty, the findings are similar to results from J. L. Barrett, Mazerolle, and Nottingham (2019) where workload management and preparation were key issues reported in novice physical therapy faculty. Although Grassley et al. explored



novice nursing faculty, understanding the transitional experience from other health care professions can aid in modeling a transitional experience for physical therapy faculty.

### **Challenges for Allied Health Faculty**

Physical therapy education is one of many health professions that have experienced challenges with faculty shortages. Early reports of nursing faculty shortages date back to 1990, when a lack of educational resources were cited as an initial challenge with retaining faculty (Berlin & Sechrist, 2002). The following section explores factors associated with nursing faculty shortages and what is currently known regarding factors influencing nursing faculty retention. Although this section explores a different health field than physical therapy, it may assist in identifying issues that are similar to physical therapy and help in understanding the shortages of physical faculty from a different lens.

In 2020, the American Association of Colleges of Nursing (AACN;) reported an 8% vacancy of nursing faculty leading to the denial of 12-35% of nursing school applicants secondary to a lack of faculty staffing (Richards & Kieffer, 2022). The need for nursing faculty is projected to increase by 22% by 2028 as existing faculty are nearing the age of retirement (Mazinga, 2020). Mazinga (2020) identified that more than 70% of the full-time nursing faculty are more than 45 years old, indicating that as this group of individuals nears retirement age, the shortages of nursing faculty will increase significantly. Work-related issues reported by nursing faculty that negatively influence their decision to stay in academia include noncompetitive salaries, increased workload, and poor work–life balance (Li et al., 2019; Richards & Kieffer, 2022).

Measures to address the nursing faculty shortage include funding for prospective teachers to achieve a higher academic degree. The AACN has launched initiatives to help fund prospective nursing faculty in pursuing their master's and doctoral education if they agree to teach for 4 years after receiving the diploma (Harris, 2019). Additionally, Richards and Kieffer (2022) quantitatively explored the predictability of job and mentoring satisfaction regarding retention intention in full-time nursing educators. The authors found a statistically significant relationship between satisfaction and retention. These findings are further substantiated by Gurkova et al. (2021), who also found a positive statistically significant relationship between satisfaction and retention in full-time nursing faculty. Despite efforts to help provide financial support to prospective teachers and findings that suggest improved satisfaction can lead to improved retention, more research is needed to understand what influences satisfaction and the long-term impact of AACN funding for prospective nursing faculty.

Boamah et al. (2022) quantitatively investigated to what extent work demands influenced nursing faculty's intentions to stay and career satisfaction. The authors found that increasing challenges with work–life balance increased reports of burnout and intent to leave academia. Factors related to work–life balance were workload, long work hours, variability in work schedules, and clinical work requirements. In addition to work–life balance, reports of workplace incivility among nursing faculty have also influenced nursing faculty retention (Sherrod & Lewallen, 2021). Sherrod and Lewallen (2021) found that older nursing faculty reported higher occurrences of incivility than younger faculty, which contrasts with other studies indicating the opposite (Eka & Chambers,

2019). While workplace incivility appears to be related to intentions to stay in academia among nursing faculty, it is not perfectly correlated and warrants more investigation.

Findings from research exploring nursing faculty shortages show that satisfaction positively influences retention (Richards & Kieffer, 2022). Satisfaction can include many factors, and while more information is needed to conclude which factors directly relate to retention, there does appear to be some overlap with studies exploring physical therapy faculty satisfaction. Overlapping factors of work–life balance, mentorship, and collegiality appear to be reported as meaningful components of satisfaction in both physical therapy and nursing faculty (Richards & Kieffer, 2022; Varnado et al., 2021).

### **Challenges for Physical Therapy Faculty With Achieving a Scholarly Agenda**

Most researchers studying efforts to retain physical therapy faculty have focused on junior physical therapy faculty (J. L. Barrett, Mazerolle, & Nottingham, 2019; J. L. Barrett, Mazerolle, & Rizzo, 2019; J. L. Barrett et al., 2020; Varnado et al., 2021). Rationale for focusing on novice physical therapy faculty is related to evidence that new faculty report the highest stress with achieving scholarship demands (Pagliarulo & Lynn, 2002) and report challenges with managing the teaching workload (J. L. Barrett, Mazerolle, & Nottingham, 2019). For physical therapy faculty members, scholarship requirements include that 50% of the faculty hold an academic doctoral degree and, depending on the requirements of the university, may involve more than what is recommended by CAPTE (Santasier & Wainwright, 2018).

Scholarship is a requirement for promotion and often higher academic ranks are required to produce more publications to advance or obtain tenure (N. Barrett et al., 2019;

Cahn, 2019; Myers et al., 2020). While requirements for faculty promotion vary depending on the institution, scholarly efforts are often perceived as more important than teaching and service (McKiernan et al., 2019). J. L. Barrett et al. (2020) highlighted that junior faculty with an academic doctoral degree typically report reduced difficulty with transitioning to the roles of teaching and scholarship. In addition to accreditation, promotion, and tenure requirements, scholarship among academicians is encouraged by the APTA as a way of contributing to evidence that physical therapy is justified and necessary for patient care (Romig et al., 2011; Rowland et al., 2020).

In a quantitative study looking at factors that influence scholarship productivity in physical therapy faculty, Myers et al. (2020) found academic rank, highest earned degree, and institution type positively influenced scholarship productivity. Physical therapy faculty with an academic terminal degree, higher academic ranks (Associate and Professor), and a research Carnegie classification were more likely to have produced higher amounts of scholarship. The Carnegie classification helps categorize institutions in specific types (Doctoral, Masters, Baccalaureate, Baccalaureate/Associates, Associates, Special Interests, and Tribal Institutions) and further distinguishes the potential volume of research expected at the institution (Rowland et al., 2020; Sonne et al., 2019). Myers et al. found the effect size for academic rank and highest earned degree to be moderate, indicating the magnitude of influence these two factors have on scholarly activity among physical therapy faculty, is moderately strong (Kinney et al., 2020). However, the effect size for the Carnegie classification's influence on scholarly productivity was low to moderate, indicating the magnitude of this factor to influence scholarly activity to be low.

Rowland et al. (2020) quantitatively investigated institutional and programmatic characteristics that influenced scholarly productivity among physical therapy faculty. The authors found participants working in institutions with a research Carnegie classification and greater square footage dedicated to research, produced more scholarship than other institutions. Variability with the effect size in associating Carnegie classification and scholarly productivity existed among the study by Myers et al. (2020) and Rowland et al. Findings from Myers et al. showed a low to moderate effect size for Carnegie classification and scholarly productivity. However, Rowland et al. reported a high effect size related to a research Carnegie classification and scholarly output. Despite the variability in the influence of the type of institution and scholarly productivity found in Myers et al. and Rowland et al., individuals with exposure to research through an academic terminal degree program or higher academic rank, often achieved more scholarly products.

Despite accreditation requirements for scholarly activity and scholarship achievements being a requirement for promotion and tenure, 21% of core physical therapy faculty report being actively engaged in scholarship (Becker et al., 2019). In a quantitative study, Becker et al. (2019) looked at professional network structure and composition in predicting scholarly activity of junior physical therapy faculty over the course of a year. The authors found that junior physical therapy faculty members with low density and less interconnections between individuals within the professional network led to higher scholarship productivity. In the study by Becker et al., a lower density professional network refers to a more open-ended environment where participants

within the network do not closely know each other and are less interconnected. Despite attempts to mitigate the short duration of the study, a limitation of the study by Becker et al. was observation of scholarly activity over the course of a year was likely not enough time to truly capture the impact participating professional networks can have on scholarly activity. Gaining an understanding from senior physical therapy faculty members regarding the influence of professional networks on scholarly activity might reveal how these resources have been used to achieve scholarship demands.

Participation in professional networks can have benefits in scholarship productivity. Becker et al. (2021) explored through a qualitative grounded theory approach using interviews to determine how junior physical therapy faculty create their professional networks and work with individuals within their established networks to produce scholarship. The authors found junior physical therapy faculty were motivated to seek out professional networks to improve scholarly activity. Strategies used to develop a professional network included reaching out to co-workers, cold calling, contacting individuals from prior jobs, and unplanned encounters to develop their network. The authors also found that participants reported time, funding, individual and institutional factors were associated with challenges in developing their professional network. However, when assessing the outcomes from participating in professional networks individuals stated peers in their group helped provide feedback, encouragement, opportunities to meet new people, and increased opportunities for additional scholarship. Professional network development appears to positively impact scholarship and provide opportunities for support and encouragement in junior physical therapy faculty members.

More information is needed to understand the role of professional networks in the contribution to job satisfaction and decisions to stay in academia within physical therapy faculty.

### **Influences of Mentorship on Job Satisfaction and Retention of Higher Education Faculty**

Mentorship in academic medicine has positive benefits in career satisfaction and retention (Farkas et al., 2019). The role of mentorship in improving health care faculty reports of job satisfaction and retention is not new to health care academia and has been studied heavily among nursing faculty (Beiranvand et al., 2022; Cole et al., 2020; Dahlke et al., 2021; Gentry & Johnson, 2019; Foster & Hill, 2019; Miner, 2019; Ortiz, 2021; Ransdell et al., 2021; Sodidi & Jardien-Baboo, 2020). Limited information regarding the role of mentorship among physical therapy faculty exists and would be helpful to understand factors associated with job satisfaction and retention. N. Barrett et al. (2019) explored the perceptions of junior and senior physical therapy faculty members' experience with participating in a mentorship program through a qualitative design using an open-ended survey to collect data. The mentorship program was unique in that the protégé initiated and directed many aspects of the mentorship program regarding scheduling meetings and pursuing different topics of interest with their mentor. The authors found that both mentor and protégé felt the experience was positive and helped in developing their professional skills in the areas of teaching, scholarship, and service. A limitation to this study is that the time frame was limited to a year and does not provide

any indication if participating in a mentorship program had any impact on their decision to stay in academia or their satisfaction.

Mentorship can take many forms and at its core is providing support as an individual transitions into a new role (N. Barrett et al., 2019). J. L. Barrett, Mazerolle, and Rizzo (2019) explored a general form of organizational mentorship with junior physical therapy faculty when they participated in an orientation and socialization during their transition into their new role as faculty members. The authors found many new faculty commented on how attending an orientation and receiving some guidance about the university and their role helped them feel more confident, made them feel welcome, helped them understand the expectations of their new role, and provided an opportunity to meet other faculty before classes started. A limitation of this study is that it provides a short-term look into the benefits of orientation and collegiality and does not track the participants longitudinally to see if the orientation impacted their retention or decisions to stay in academia. More information is needed regarding characteristics of mentorship that are meaningful in influencing retention and job satisfaction for physical therapy faculty.

Of the available evidence exploring physical therapy faculty retention, most focus on junior physical therapy faculty. This participant selection is beneficial in that it provides insight into the experiences of novice faculty but is limiting as it does not assess if interventions to improve retention impacted their decision to remain in academia. Understanding the perspectives from senior physical therapy faculty who have lived through changes in accreditation standards, changes to the professional degree, and requirements of a physical therapy faculty member would help in understanding what



strategies are beneficial in managing a workload and what coping mechanisms, if any, contributed to the retention of these faculty members. Despite a growth in recent literature exploring factors related to physical therapy faculty retention, limited knowledge remains regarding the role of mentorship and factors associated with job satisfaction and retention warranting future studies to consider these areas of research.

In addition to limited research available regarding physical therapy faculty retention, most of the available studies used a quantitative approach to address their research question. A limitation to this approach is it does not provide the opportunity to answer the how and why questions from participants' perspectives (Hensen et al., 2020). The research question in this proposed study utilized a how question to address senior physical therapy perspectives regarding workload management throughout their career warranting the use of a qualitative design (Jacobsen, 2021; Kamper & Thompson, 2022; Klem, Bunzil, et al., 2021; Klem et al., 2021a,b; Klem, Smith, et al., 2021). Additional knowledge acquired from this qualitative approach and investigating a population that has not been readily explored, is to gain a deeper understanding of physical therapy faculty retention and this study may assist in helping to reduce the job shortages observed among physical therapy faculty.

### **Summary and Conclusions**

Shortages of physical therapy faculty have been an ongoing problem since the 1940s. The increased demand for skilled health care professionals to meet the needs of society regarding the poliomyelitis epidemic, World War I & II, and the advances in medicine and surgery all contributed to the need for physical therapists. In addition to the

needs of society, changes to accreditation standards and the professional designation of a physical therapist also contributed to the increased requirements placed on physical therapy faculty further adding to continued challenges with physical therapy faculty shortages. Of the available studies regarding physical therapy faculty satisfaction, a majority have focused on junior physical therapy faculty finding increased reports of loneliness (Varnado et al., 2021) with transitioning to academia and increased time spent on teaching preparation compared to other requirements of service and scholarship (J. L. Barrett, Mazerolle, & Nottingham, 2019). Another challenge for physical therapy faculty is meeting the demands of scholarship as accreditation standards are frequently not met regarding achieving the required scholarly agenda (Brueilly et al., 2022). Mentorship appears to have positive benefits in improving satisfaction and scholarly productivity in junior physical therapy faculty members (N. Barrett et al., 2019), but a gap in the literature exists regarding what components of mentorship are most important for impacting decisions to remain in academia. Many studies have quantitatively focused on junior physical therapy faculty to address the shortages of physical therapy faculty; however, few studies have explored the perspectives of physical therapy faculty members regarding retention. Of the available qualitative studies, the participants were junior physical therapists, which does not offer information regarding their actual decisions to stay in academia. A qualitative study exploring the perspectives of senior physical therapy faculty was warranted to gain a deeper understanding of how this population has managed their workload throughout their career and possibly offer strategies for junior

physical therapy faculty to improve retention and address the problem of shortages in physical therapy faculty.

### Chapter 3: Research Method

The purpose of this qualitative study was to explore the perspectives of senior physical therapy faculty regarding how they had balanced their workloads of scholarship, teaching, and service throughout their career and what resources they utilized that directly contributed to the longevity of their career. The research paradigm central to this study was a constructivist worldview in which the participants were viewed as having constructed meanings based on their experiences in certain situations (see Creswell & Creswell, 2018). I also applied Bandura's self-efficacy theory and Herzberg's two-factor theory of motivation to gain a deeper understanding of senior physical therapy faculty retention. Knowledge gained from exploring senior physical therapy faculty perspectives may be used by stakeholders to help improve junior physical therapy faculty retention and reduce the number of physical therapy faculty shortages.

I used a basic qualitative research design to explore how senior physical therapy faculty balance their workload and what resources they utilized that directly contributed to the longevity of their career. In this chapter, I will describe how I addressed the research question, how I developed the interview protocol, and what procedures I followed to uphold quality and rigor. Major sections included in this chapter are devoted to the research design and rationale, the role of the researcher, methodology, and issues related to trustworthiness.

#### **Research Design and Rationale**

The central concept of this study was senior physical therapy faculty perceptions regarding workload management to help support physical therapy faculty members'

retention in academia. The following research question underpinned this study: How do senior physical therapy faculty balance their workload as required by the university and accreditation body to remain in their teaching position? I used qualitative methodology to explore the perspectives of senior physical therapy faculty regarding their experience with workload management throughout their career. A qualitative methodology was appropriate given that the research question focused on the perceptions of the participants (see Creswell & Creswell, 2018; Jacobsen, 2021). Qualitative researchers seek to understand the meaning individuals assign to a given situation, experience, or problem (Creswell & Poth, 2018). Because the research question was focused on understanding the perspectives of senior physical therapy faculty regarding retention, a qualitative tradition was the most appropriate.

Within the qualitative research tradition, a basic qualitative design was the most appropriate because it allowed me to understand the meaning that participants had constructed around a central concept (see Merriam, 2009). In this study, the central concept was senior physical therapy faculty perspectives regarding workload management throughout their career. A basic qualitative design was pertinent because the research question did not center on a specific phenomenon or one individual case but rather on the understanding of how senior physical therapy faculty had made sense of their experience working in academia and how they had navigated their career to remain in academia. Other designs such as a phenomenological design were not appropriate given that these designs focus on a specific event or phenomenon (Creswell & Poth, 2018), which was not consistent with the research question in this study. Additionally, the

research question did not address participants' understanding of a specific culture such as with ethnographic studies (Creswell & Poth, 2018). The research question in this study was used to explore the perspectives of the participants in an open-ended manner without the rigidity of additional dimensions required in alternative qualitative research designs (Merriam & Tisdell, 2015).

### **Role of the Researcher**

My role as the researcher was to design the instrument for data collection; recruit and interview participants; and transcribe, code, and analyze the results. I developed an interview protocol (see Appendix A) that I used to gather data. In the Instrumentation subsection of the Methodology section, I will describe in further detail the development of the interview protocol and how it relates to the research question and literature. I did not have any supervisory relationship or position of power with the participants. The individuals were recruited using purposeful sampling through a national database, the Physical Therapist Educator member directory. This directory included a list of all 2,900 physical therapy educators who subscribed to the education section of the APTA at the time of data collection. Individuals included in this registry were professional colleagues teaching at physical therapy institutions across the United States. Professional colleagues at my place of employment were included in the directory and expressed interest in participating in my study; however, I did not hold a supervisory relationship or position of power over any colleagues that would cause concern for coercion or conflict of interest.

A potential source of bias in this study is my personal experience as a physical therapy educator. My experience in this position might subconsciously create preconceived conclusions or if left unaddressed could have led to misinterpretation of the data. Given my experience in the role as a full-time physical therapy faculty member, I took the following steps to mitigate the risk of bias throughout the research study. I created an audit trail to document the thinking process and the formation of conclusions regarding coding and themes (Creswell & Poth, 2018). The audit trail was performed by logging information onto a Word document immediately after the interview. In addition, a spare notebook was available in case spur of the moment thoughts about the data or reflections about the participants spontaneously arose. The notebook was stored in a locked cabinet and the Word document was saved on a password protected computer. All information written in the notebook was transferred into the Word document in chronological order based on the time that the notes were written at the end of each week. More information about the audit trail will be covered in the Issues of Trustworthiness section later in this chapter.

Additionally, reflexive journaling was used throughout the data collection and analysis phases of the research study (Ravitch & Carl, 2021). Reflexive journaling allowed for me to examine my implicit assumptions and preconceptions regarding how my bias influenced research decisions (Korstjens & Moser, 2018). This strategy helped in reducing the influence of bias as reflexive journaling offers the opportunity to keep in touch with my beliefs, biases, and thoughts regarding the findings throughout the study (Ravitch & Carl, 2021). Reflexive journaling occurred immediately after the audit trail

after each interview, after each coding cycle, and after the development of themes. The reflexive journal was kept on a Word document in a password protected computer.

The data were collected using semistructured interviews with open-ended questions. Interviews were conducted via the internet communication software Zoom. All interviews were recorded, with audio content only, to allow for transcription and coding. After the interview had been conducted, transcription and coding performed, member checking was performed whereby the participant received a copy of the preliminary findings with the opportunity to correct or clarify any of the findings (Candela, 2019). Member checking assisted in content validity and further helped reduce bias in the understanding and analysis of the findings as it offers the opportunity for the participant to respond and clarify the interpretation of the findings (Candela, 2019). Participants received a follow-up email from me of the thematic analysis results and a copy of the interview questions for their review. I provided one week for the participants to offer any clarification or changes to the interpretation of the transcription and analysis. Findings from this study are presented in Chapter 4.

## **Methodology**

The following section reviews the participant selection, instrumentation, procedures for recruitment, participation, and data collection, along with the plan for data analysis.

### **Participant Selection Logic**

The population in this study was senior physical therapy faculty members. The inclusion criteria for participation in this study included individuals must be a full-time



physical therapy faculty member, working in a physical therapy program or institution, and have continuously worked in physical therapy education in a full-time capacity for at least 4 years. Individuals who are in administrative or leadership positions were excluded as the workload for individuals in these positions does not reflect the same demands as a full-time physical therapy faculty member. To ensure compliance with inclusion criteria, prospective participants were asked to complete a brief survey of three questions via Google Forms (see Appendix B). The link to the survey was included in the invitation email sent to the Physical Therapist Educators member directory.

Inclusion criteria questions asked on the brief survey included

1. "Are you working as a full-time physical therapy faculty member within a physical therapy program or institution? If *Yes*, please proceed to question 2. If *No*, end questioning."
2. "Have you been working in a full-time physical therapy faculty position at a physical therapy program or institution for the past 4 consecutive years? If *Yes*, continue to question 3. If *No*, end questioning."
3. "Is the following statement true: I do not work in an administrative role within my program or institution. If *Yes*, they will receive the informed consent information. If *No*, end questioning."

Individuals who answered "yes" to all three inclusion criteria questions were included in the participant pool. Individuals included in the participant pool were provided with the informed consent and the following options, "I Consent" or "I do Not Consent".

Participants that chose "I Consent" were asked demographic information such as their

age, number of years teaching, gender, current ranking in physical therapy education, and highest earned school degree. In addition, the participant was asked to provide their name and email address and was informed they would receive a follow-up email from me to schedule a date and time to conduct the interview via Zoom. Individuals who answered “no” to any of the inclusion criteria questions or chose “I do Not Consent” were excluded from the participant pool. Participants who had been excluded from the study received a message notifying them they were not eligible to participate. Appendix C shows an example of the message the participants received when they were ineligible to participate.

I used a purposeful sampling strategy to select individuals for this study.

Purposeful sampling was appropriate for this qualitative study because it allowed me to deliberately select individuals with specific knowledge about the topic of investigation (see Ravitch & Carl, 2021). To recruit participants using a purposeful sampling strategy, after obtaining approval from Walden University's Institutional Review Board (IRB), I emailed individuals listed in the Physical Therapist Educator member directory to request their participation in my study (see Appendix D). At the time of data collection, this directory contained the contact information for 2,900 members in the Education section of the APTA. Its membership is comprised of educators in academic, clinical, and community settings with a high density of faculty in physical therapy programs within the United States. The invitational email contained a URL for the brief three-question inclusion criteria survey. If the individual met all the inclusion criteria and consented to participate in the study, they were asked to provide their name and email, which I used to schedule the interview. All information provided by potential participants was maintained

in a confidential manner in compliance with IRB requirements. To adhere to these requirements, I will store all participant information, audio recordings, and transcription information in a password-protected cloud storage device for 5 years. After 5 years have passed, the information will be deleted.

Nine individuals participated in this study. The number of participants was appropriate for this basic qualitative design as the group of individuals were more defined in that the participants were all full-time, senior physical therapy faculty making the population more homogenous (Hagaman & Wutich, 2017). Guest et al. (2020) recommended at least six interviews to reach saturation with less than 5% of additional information or themes adding new information after the sixth interview. The study included nine participants to ensure saturation. Reaching saturation not only depends on the number of interviews to reach a point of no new insights or themes, but also, is about the complexity in the study design and heterogeneity of the participants (Hagaman & Wutich, 2017). Hagaman and Wutich (2017) explored how many interviews were needed to identify multiple occurrences of themes from different interviews. The authors found that the most common themes were identified within the first three to five interviews. Within ten interviews, the same themes were repeated by different participants indicating limited new insights or information occurred after the tenth interview. Another factor that supported the use of 8 to 10 participants is the lack of cross-cultural analysis or variables that might add to the complexity of the study and would thus require more interviews to reach saturation (Hagaman & Wutich, 2017). Hennink et al. (2017) explored how many interviews were needed to reach code saturation indicating nine interviews were

appropriate with more than half of the codes identified after the first interview. The authors discussed that fewer interviews are needed to reach saturation when the objectives are focused, the population is well defined, and when using semistructured interviews all of which are characteristics of this study.

### **Instrumentation**

The data collection instrument that was used in this study was an interview protocol (see Appendix A). I created the instrument to align with the research questions. The interview protocol sufficiently answered the research questions as it contained 14 questions that were built around Herzberg's two-factor theory and Bandura's theory of self-efficacy. Additionally, the interview protocol was derived from the article by J. L. Barrett, Mazerolle, and Nottingham (2019) which qualitatively explored junior physical therapy and athletic training faculty perspectives on the workload of a full-time faculty position. Given the similarity in understanding the perspectives of physical therapy faculty regarding workload, many of the questions utilized in the current study were derived from similar questions in J. L. Barrett, Mazerolle, and Nottingham's article. The following section will describe how the interview protocol questions were created using Herzberg's two-factor theory on motivation, Bandura's theory of self-efficacy, and J. L. Barrett, Mazerolle, and Nottingham's article.

### ***Researcher-Developed Instruments***

Herzberg's two-factor theory on motivation assisted in structuring the interview questions for the interview protocol to align with the research question. Specifically, Herzberg's two-factor theory aligns with the research question, which focused on how

senior physical therapy faculty have remained in academia. Herzberg's two-factor theory described motivational and hygienic factors that influenced an individual's satisfaction with an occupation (Alrawahi et al., 2020; Herzberg, 1966), which relates to the motivational factors of the participant to remain in academia. Another interview protocol question relating to the research question asked how long the participant has been a physical therapy faculty member followed by the perceived benefits, challenges, and beliefs regarding their work as a physical therapy educator. These interview questions related to understanding the participant's description of potential motivators or hygienic factors associated with working in physical therapy education.

The second component of the research question focused more specifically on how faculty balance their workload. This was structured around Bandura's theory of self-efficacy (1977). The research question asked how the faculty balance their workload to remain in their position. The interview questions related to work balance in the research question are specific to the participant's perspectives on their skills fulfilling each of the three requirements of a physical therapy faculty member: teaching, scholarship, and service. Bandura's theory of self-efficacy aligned the interview protocol with the research question because the interview questions were focused on understanding the individual's beliefs regarding their ability to complete the three required roles as a full-time physical therapy faculty member. The ninth interview question addressing the research question asked how the participant balances their workload and how their ability to balance their workload has changed over time. This interview question was derived from the study by J. L. Barrett, Mazerolle, and Nottingham (2019), which qualitatively explored junior

physical therapy faculty members' ability to balance their workload. This question was applicable to this study as I was seeking to explore a similar topic of workload management in a different health care population.

Questions included in the interview protocol that further address the research question include, what are key resources utilized by senior physical therapy faculty that are related to the longevity of their career are also derived from the study by J. L. Barrett, Mazerolle, and Nottingham (2019). The authors asked participants what advice they would give to new hires entering their role into physical therapy and athletic training education. Additional interview questions included in the protocol to address the research question asked what advice senior physical therapy faculty would give to junior physical therapy faculty to help them be successful in managing their workload. This related to the research question in that it asked participants what suggestions they would offer new hires in order to help retain them as a faculty member. J. L. Barrett, Mazerolle, and Nottingham explored junior physical therapy faculty's perceptions of what are meaningful pieces of advice for new hires. The interview questions related to the research question asked what resources were most helpful in directly contributing to their longevity in their career.

To further address the research question, the interview questions asked what strategies the individual has used to manage their roles as a faculty member and if one of the strategies is more useful than others. This stems from the article by J. L. Barrett, Mazerolle, and Nottingham, where the authors asked participants the same question regarding strategies the participants have used to retain their role as a faculty member. J.

L. Barrett, Mazerolle, and Nottingham explored perspectives of junior physical therapy faculty, which was limited in that junior physical therapy faculty have minimal experience in managing their workload and role as a faculty member. This study asked a similar question to that from J. L. Barrett, Mazerolle, and Nottingham but to a participant pool with more experience and longevity as a faculty member.

The second interview question further addressed the research question by asking what advice the participants would give to junior physical therapy faculty to help them manage their workload. This question is derived from the article by J. L. Barrett, Mazerolle, and Nottingham and was included to help gain a deeper understanding of what junior faculty can do now to improve the longevity of their career. The last interview question asked the participants to include an artifact that directly influenced their decision to stay in academia. This question was helpful in gaining a deeper understanding of what has influenced their retention in academia. Additionally, asking participants to provide an artifact intended to improve the credibility of the study with triangulation.

### **Procedures for Recruitment, Participation, and Data Collection**

Participants for this study were recruited through the Physical Therapist Educator membership directory. This directory has the contact information of over 2,900 members in the education section of the APTA, which largely includes physical therapy faculty members. I have received acceptance from the Physical Therapist Educators membership directory to use their database for this research study. After IRB approval, I sent an invitation email (see Appendix D) to the Physical Therapist membership directory with an invitation to participate in this study. Included in the invitation email was the link to

the Google Forms inclusion survey (see Appendix B) that contained the three questions for meeting the inclusion criteria. If the participant answered “yes” to all three inclusion questions, they were then prompted with the informed consent information. Only individuals who clicked “I Consent” were taken to the following screen which asked for their name and email address. Only participants who clicked “I Consent” and provided their contact information (name and email address) were contacted by myself via email to schedule a time to conduct the interview. If they answered “No” to any of the inclusion criteria questions or clicked “I do not consent,” their survey ended, the participant was informed they were not eligible to participate, they were not contacted by myself, and they were excluded from the study.

Appendix C provides a visual of what the participant saw when they were ineligible to participate. The inclusion criteria survey was conducted through Google Forms. Information was password protected and will be destroyed 5 years after the completion of the study in compliance with the approving IRB. Included in the informed consent, participants were reminded participation was voluntary and they could quit at any time during the study. All participants who selected to consent to participation were contacted, up to the first 10 participants.

Issues with low recruitment were addressed by resending the invitational email to the Physical Therapist member directory after 1 month had passed. Appendix E shows an example of the follow-up email requesting participation in the study. After the first invitation to participate in the study was sent, the desired number of participants volunteered for the study and no additional invitational email was required.



The semistructured interviews followed the interview protocol (see Appendix A) and were approximately 60-min in duration. Audio data was recorded for transcription, coding, and thematic analysis. At the completion of the interview, participants were instructed that I would send a summary of the preliminary findings from their interview for their review via email. Participants were informed that they had 1 week after the preliminary findings have been sent to provide feedback or clarification regarding the results. In the follow-up email, participants were reminded to send an artifact of something meaningful that had directly related to their retention. The request for an artifact was included in the interview protocol and was intended to be used to triangulate the data. All data collected was stored in a password protected cloud storage system. No follow-up interviews were required for this study.

### **Data Analysis Plan**

After each interview was completed, I transcribed the data. While personally transcribing the data takes more time, Castleberry and Nolen (2018) recommend the researcher become familiar with the data by manually transcribing to help during data analysis. The data was analyzed using open coding, axial coding, and thematic analysis. Open coding is the process of using an open-minded approach to drive the development of codes from raw data (Blair, 2015). A benefit to using open coding is that the codes are developed directly from the raw data making the conclusions about the content and meaning less affected by bias (Blair, 2015). Saldaña (2021) stated coding must be appropriately aligned to address the research question, ontological, and epistemological framework of the study. The research question in this proposed study was centered on

exploring the perspectives of the senior physical therapy faculty. Open coding was appropriate for data analysis as this form of coding allowed for an open-ended approach that was guided by the research question and the purpose of the study (Thomas, 2006). This is different from other forms of data analysis where a priori expectations or models can guide the coding process (Thomas, 2006). Given the purpose and research question in this study, a more open-ended approach to coding was appropriate to capture the perspectives of the participants and stay true to the data.

After the completion of the open coding process, I used axial coding to review the identified codes assessing for relationships, similarities, and differences (Ravitch & Carl, 2021) and categorize the findings to develop core codes (Williams & Moser, 2019). Additionally, I looked at how the coded information related back to the research questions and used reflexive journaling to minimize my bias in interpreting the data. Axial coding was used to identify relationships between open codes and create linkages between the data (Blair, 2015). The identified axial codes were then consolidated into themes (Castleberry & Nolen, 2018). After the themes were identified, they were used, in conjunction with the conceptual framework, to address the research question (Castleberry & Nolen, 2018).

The open and axial coding process was performed by hand as Saldaña (2021) recommended novice qualitative researchers use manual coding to minimize the risk of missing meaningful information. For this reason, data analysis software was not used. Discrepant cases can arise during data collection and analysis, identifying varying perspectives from different participants (Ravitch & Carl, 2021). If discrepant cases

occurred during the study, I addressed them by reflecting on my potential bias or misunderstandings regarding how the data was being interpreted. Open coding and member checking by sending preliminary findings help confirm that the information identified from their interview accurately portrays the participant's perceptions.

Discrepant cases are a tool to challenge any preconceived notions or biases present during the data analysis procedures and I presented the data in my results. For each theme I intended to provide a discrepant case that presents the range of variation in experiences (Ravitch & Carl, 2021). Discrepant cases show varying perspectives and are helpful in showing the whole picture of different beliefs and attitudes as they relate to the two research questions.

### **Issues of Trustworthiness**

#### **Credibility**

The following measures assisted in ensuring credibility within the proposed study. Throughout the data collection and analysis phase, I created and updated a reflexive journal to keep track of my impressions, biases, conceptions, or confusions regarding the data and my interpretation of the information. The reflexive journal was a Word document and was performed after each interview, after each coding cycle, and after thematic analysis. Reflexivity was recognizing my role in influencing my participants' answers, recognizing my biases in interpreting the data, and trying to remain open and objective about understanding the meaning behind what the participants were telling me (Ravitch & Carl, 2021).

In addition to reflexive journaling, I used member checking, where I sent the preliminary findings to my participants to get their feedback to make sure the data were not misunderstood or incorrectly interpreted. This step improved credibility because it allowed participants the ability to play a role in ensuring accuracy and credibility of the interpretation of their statements (Creswell & Poth, 2018). This also gave the participant an opportunity to identify what may be missing in the interpretation of their statements, adding valuable input for the source (Creswell & Poth, 2018).

Another measure taken to improve the credibility of the study was to monitor and ensure saturation has occurred during the data analysis phase of the study. This occurred through close monitoring of the codes and themes that emerge and looking for the repetition and eventual point where no new information was gained. Guest et al. (2020) discussed that saturation can occur in as few as six interviews with fewer than 5% of additional themes added after the sixth interview. The study interviewed nine participants. After the first eight participants were interviewed, data transcribed, and coded I looked for evidence of saturation such as the themes that were being repeated and no new information obtained. After eight participants, one additional individual was included as saturation was achieved.

### **Transferability**

Transferability relates to the generalizability of the findings to broader contexts and is improved by providing detailed data and an understanding of the context in which the data were derived (Ravitch & Carl, 2021). For this study, the background and literature review thoroughly described the context in which shortages in physical therapy

education developed. The study continued to explore aspects related to faculty shortages by gaining rich detail regarding the perspectives and context in which the participants described their experiences. I provided detailed and contextually rich information to support my interpretation of the data to improve the transferability of the findings. A thick description was further addressed by the research protocol, which asked multiple times for the participant to expand on their answer by providing examples. In addition to adding contextual information in the study, I added a thick description by describing details of the participants. A thick description was included by adding interconnecting details such a physical description and quotes in my analysis (Creswell & Poth, 2018). In order to provide a thick description, I had a notepad next to me during the interview, and after the data was transcribed, I added any additional descriptions or details to help during the analysis phase to a notes column on the transcription (Creswell & Roth, 2018).

Additionally, the transferability of the findings was increased with the recruitment strategy for this study. The recruitment of participants for this study was through a national database of physical therapy educators. Using this database increased the variability in prospective participants which broadened the diversity and experiences of potential participants assisting with transferability of the results.

### **Dependability**

The dependability of a study is the ability of the findings to be identified if the study were repeated with the same participants in the same context (Shenton, 2004). To improve dependability within this study, a thorough description of the research design and implementation was provided for future researchers to use to guide how the study

was performed and how the results were generated (Shenton, 2004). In addition to a thorough explanation of the design and implementation, an audit trail was utilized to record the research path throughout the study. The audit trail added to the rigor of the study as it showed a link between the data and my interpretation of the results. The benefit of including an audit trail was it offered the opportunity for an outside reviewer to see the rationale for the decisions made throughout the study and the conclusions drawn from the information (Carcary, 2020).

The audit trail was performed by logging information onto a Word document immediately after the interview. As mentioned earlier, the audit trail included logging information onto a Word document after each interview stating the date, time, where the data was collected, how much time it took, the participants information, and any additional thoughts about the data. A formal log was kept after each interview on a Word document and saved based on the participant's contact information and date. In addition, a spare notebook was available in case spur of the moment thoughts about the data or reflections about the participants spontaneously arose. At the end of the week, dedicated time was allotted to transferring the audit log from the written journal to a Word document. The audit trail added to the dependability of the study by helping improve the reliability of the findings (Korstjens & Moser, 2018).

In addition to an audit trail, triangulation was used to further improve the dependability of the study. Triangulation is the process of using multiple data points to validate the findings (Creswell & Poth, 2018). This study used interviews and requested

participants provide an additional data point of a meaningful artifact to triangulate the findings and provide multiple data sources for review.

### **Confirmability**

Confirmability is the extent to which I worked to minimize my bias throughout the study. To minimize bias and enhance confirmability I applied reflexivity throughout the data collection and analysis phases through self-reflection during my reflexive journaling. Reflexivity is the process of recognizing how the intrinsic values, beliefs, experiences, and biases can influence my ability to understand the perspective of the participants and appropriately interpret their view as it related to the research question (Palaganas et al., 2017). The use of reflexive journaling was performed after each interview to allow for a period of self-reflection regarding potential influences in how I perceived the participant's answers. Reflexive journaling was on a Word document and occurred after each coding cycle. This improved confirmability by examining my own preconceived biases or assumptions regarding the interpretation of the findings (Korstjens & Moser, 2018). Additionally, to improve confirmability I transcribed and read multiple times the transcripts before progressing to the coding and further analysis phases so I could be close to the data and make sure I was not misunderstanding the information.

I needed to recognize my role as an educator might influence my beliefs and understanding regarding physical therapy faculty shortages and managing a workload. To improve confirmability of this study, I was mindful to reflect on how the participants' responses were interpreted, paying special attention to not misrepresent information based off my experience. I performed member checking where participants were

provided with the preliminary findings and allowed them a period of 1 week to respond with any clarification to my interpretation of their responses. Providing member checking with each participant further assisted in reducing misrepresentation of the data and enhancing confirmability of the results.

### **Ethical Procedures**

Participants were recruited through the APTA Academy of Education membership directory. I am a member of the directory and have received approval from the education membership personnel to use their directory to recruit participants. The directory contains the email addresses for individuals who are members in the academy and by signing up for the directory these individuals have requested to receive emails regarding potential participation in research studies related to physical therapy education. After I received IRB approval, I sent an email to members listed on the directory inviting them to participate in my study (see Appendix D). For those interested in participating, a link to the brief inclusion criteria was provided on the invitation email (see Appendix B). Only participants who answered “yes” to all three of the inclusion criteria questions were sent the informed consent. Participants had to click “I Consent” to progress forward with the study. After the participant clicked “I Consent” they were prompted to enter their contact information including their name and email address (see Appendix F). Those who answered “No” or “I do not Consent” were excluded from the study by having the survey end and they were not contacted to participate in the study.

Data was collected through semistructured interviews using the interview protocol. The audio portion of the interview was recorded and stored in a password



protected, cloud storage device for 5 years. After the 5-year period, the information was permanently deleted. All transcribed material, reflexive journaling, information related to coding and data analysis was stored on the researcher's home computer which was password protected. Participant identity was deidentified to maintain confidentiality. Additionally, the interview questions were general and not specific enough to reveal any personal information that could compromise the confidentiality of the participant. After 1 month, if participant recruitment was low, I planned to send an additional invitation email to the physical therapist membership directory to recruit additional participants until a maximum of 10 participants was reached (see Appendix E). The desired number of participants was reached within the first month and no additional invitation email was sent. No one besides the researcher had access to the participant's data or the participant's personal information.

Throughout the study, participants were informed that their participation was voluntary and at any time they could request to withdraw, stop the interview, reschedule the interview, or omit any or all of their responses. Participants were informed at the end of the interview that they will receive a preliminary report of my findings and they will have the opportunity to clarify or alter any of the interpretations in the findings. Adverse effects were not anticipated given the nature of the study and research topic.

Other ethical considerations were that I am a member of the physical therapy educational database and there was the potential for participants to be work colleagues or acquaintances where I may already have a pre-existing professional relationship. This potential ethical conflict was minimized as I do not hold a position of power or authority

within the physical therapy educational institution. Despite not having a position of authority within the institution, potential participants may have been concerned regarding how my professional relationship could change given their decision to participate or not participate in my study. To reduce this concern, I reminded all participants that their participation was voluntary, and they could choose to withdraw at any time without penalty or fear of retaliation. In addition to my verbal reminder, the informed consent also stated their rights as a participant included the right to decline or withdraw at any time without penalty or repercussion.

### **Summary**

This chapter started with an introduction and reviewed the research design and rationale, the role of the researcher, the methodology, the data analysis plan, issues of trustworthiness, and ethical procedures for the proposed study. This qualitative study used a basic qualitative design, semistructured interviews following an interview protocol, inductive coding, and thematic analysis to answer the research question regarding how senior physical therapy faculty members' perspectives balance their workload. Participants were provided with the preliminary findings and offered the opportunity to clarify any of the findings before the final results were interpreted. The following chapter describes the results.

## Chapter 4: Results

The purpose of this qualitative study was to explore the perspectives of senior physical therapy faculty regarding how they had balanced their workload throughout their career and what resources they utilized that directly contributed to the longevity of their career. The research question for this study concerned how senior physical therapy faculty balance their workload as required by the university and accreditation body to remain in their academic position. In this chapter, I will describe the research setting, present participant demographics, discuss the data collection and analysis processes, provide evidence of trustworthiness, and present the results of the data analysis.

### **Setting**

Participants in this study were employed as full-time physical therapy faculty members at a university that graduates students earning a Doctorate in Physical Therapy degree. Participants reported different structures within their university system, such as a hybrid program, programs that admit students once a year, programs that accept students three times a year, and programs where individuals only had to demonstrate successful completion of their workload in two of the three domains of academia (teaching, scholarship, and service). During the interviews, some participants mentioned changes happening at their university, such as changes in personnel and leadership—for instance, one participant discussed how a new director had recently started at their program. Other organizational conditions that were discussed included changes in staff and faculty, and one participant stated that there were new faculty at their program as they lost many personnel during the COVID-19 pandemic from 2020 to 2022. Other factors associated

with the setting mentioned by the participants were changes to the organization of their program and to their role in their service commitments. One participant was in the middle of running for a position of leadership to fulfill one of their service requirements. It is important to mention the variability in programs in which the participants were employed to highlight that some of the workload challenges might have been influenced by the university setting in which they were employed. More discussion on this potential influence is included in the Limitations of the Study section in Chapter 5.

I conducted all interviews virtually using Zoom software. Conducting the interviews virtually allowed me to schedule around the participants' availability and to easily record the audio of the interviews. All interviews were scheduled using my Walden email account, and participants were provided the Zoom link immediately after they had confirmed their interview date and time. On my end, the interviews were conducted in a private room without anyone in the space who could overhear the information being shared by the participant. The participants all appeared to be in private rooms without distractions, but there were two occurrences of the participant being interrupted by someone coming into their room during the interview. All audio recordings were stored in a password protected device for data transcription.

### **Demographics**

Twelve participants completed the survey sent out to the Physical Therapy Educators listserv. One of those individuals was ineligible because they held an administrative role at their university. Two of the individuals who completed the survey did not respond to the email I sent requesting that they schedule an interview. Nine total

participants were included in the study. This section describes the demographic data, including the age, gender, total years teaching, and highest earned degree of participants. Participants ranged in age from 31–40 to 61–70 years old. Table 1 shows the breakdown of the participants' ages.

**Table 1**

*Participants' Ages*

Age range	No. of participants
31–40	1
41–50	2
51–60	4
61+	2

Table 2 shows the gender breakdown of the participants.

**Table 2**

*Participants' Gender*

Gender	No. of participants
Female	6
Male	3
Nonbinary	0
Prefer not to answer	0

Table 3 provides a comparison of the total number of years teaching and the total number of years teaching full-time. The total number of years teaching asked during the demographic screen did not distinguish between the total number of years teaching full-time versus part-time. However, during the interviews, the participants were asked how many years they had taught full-time.

**Table 3***Participants' Total Number of Years Teaching*

No. of years teaching	Total years teaching	Total years teaching full-time
4–9	0	2
10–15	6	5
16–21	1	2
22–25	1	0
26–30	0	0
31+	1	0

*Note.* The total number of years the participants had taught included part-time and full-time teaching.

The last piece of demographic data collected was the participant's highest earned academic degree. Table 4 shows the highest earned academic degree reported by the participants.

**Table 4***Participants' Highest Earned Academic Degree*

Academic degree	No. of participants
Professional/clinical doctorate degree (DPT)	3
Master's degree (MA, MS, or MPT)	1
Academic doctoral degree (DHSc, EDD, PhD, or similar)	5

*Note.* DPT= Doctor of Physical Therapy; MA= Master of Arts; MS= Master of Science; MPT= Master of Physical Therapy; DHSc= Doctor Health Sciences; EDD= Doctor of Education; PhD= Doctor of Philosophy.

**Data Collection**

In collecting the data, I followed the procedures described in Chapter 3 without any alterations to the plan or unforeseen circumstances. Upon receiving IRB approval

(no. 05-23-23-0980666) on May 22<sup>nd</sup>, 2023, I posted a study invitation on June 2<sup>nd</sup>, 2023, to the physical therapy educators' listserv. As described in Chapter 3, the invitation contained information regarding the study and a Google Forms link that interested individuals could use. The link took prospective participants to a form that provided the inclusion screen, and if they met all the inclusion criteria, they were provided the informed consent information. In order to be eligible, participants must have answered "yes" to all inclusion screening questions and clicked on the "I Consent" button after reading and signing the informed consent. Twelve individuals completed the survey. However, only 11 were eligible for the study. One individual held an administrative position and was ineligible to participate. The participant received a message informing them of their ineligibility. Eleven respondents were eligible for the study as they answered "yes" to the three questions and consented to the study by clicking "I Consent" for the informed consent. They were then asked to provide demographic data regarding the total number of years in academia, age, gender, and highest earned degree, which was further described in the demographics section. After the respondent completed the demographic data, the survey was complete, and I was notified via email of the survey completion.

Emails were checked daily and responded to within 24 hr via email to set up a 1-hr virtual interview. Two respondents who completed the survey and consented did not answer my follow-up email to schedule their interview. A week went by without hearing from the two participants. After waiting a week, an additional follow-up email was sent to set up their interview time. After the completion of 2 weeks and not hearing back from

the two respondents after the second attempt to schedule an interview, they were removed from the potential pool of participants. After hearing back from the rest of the respondents through email, an interview date and time was provided to the participants with a Zoom link and password via email. Data collected at the time of the interview followed this procedure. When the participants logged onto Zoom, they were greeted with an introduction and a request for permission to record the audio of our interview for transcription and data analysis purposes. All interviews were semistructured and followed the interview protocol (see Appendix A) outlined in Chapter 3. At the conclusion of the interview, the participants were thanked for volunteering and informed that I would be following up with them to have them review and approve the preliminary findings from the study.

A total of nine participants were included in the study. Data were collected through virtual interviews using Zoom software. All nine participants appeared alone in a room throughout the interview. The data collection instrument used to guide the semistructured interviews was an interview protocol consisting of 14 questions. As described in Chapter 3, only one interview was conducted per participant, and the questions followed the interview protocol. All nine interviews took place from June through July 2023. The interview times ranged from 45 min to 2 hr 17 min. The audio portions of the data were recorded through the videoconferencing software Zoom and saved to my password protected computer for transcription purposes. Throughout the interviews there were two different occurrences of the participant's spouse interrupting the interview to ask the participant a question. The interruptions lasted less than 30 s, and



in both instances, the participants resumed the interview without much disturbance to their train of thought or apparent focus.

After each interview, an audit trail and reflexive journal entry was logged with ideas that came to mind regarding the interview. After completing the audit trail and reflexive journal, the audio recordings were used to transcribe the data. Periodically during the transcription process, I included additional notes in my reflexive journal.

After the interviews were transcribed, I coded and categorized the data and identified emergent themes and preliminary findings. In September 2023, I sent the participants a two-page summary of the preliminary findings to confirm that the information was consistent with the participants' thoughts and feelings and was correctly interpreted. The participants were asked to return the preliminary findings with any alterations within a week. Six of the nine participants responded to the preliminary findings without any corrections or alterations to the results.

### **Data Analysis**

The inductive process to move from coded units to a larger representation of the data in categories and themes involved a basic qualitative approach using open coding, axial coding, and thematic analysis. After completing the interviews and transcribing the data, the information was organized using Microsoft Excel software. Individual Excel workbook sheets were created for each participant containing their interview transcript and the coded data from their interview. Another Excel workbook sheet was created that included all participants' responses to each question and the associated codes to easily recognize how participants answered questions and the associated codes. Additional

Excel worksheets included a list of the codes, code definitions, the categories and associated codes, and the emergent themes and subthemes as they linked to the categories.

To begin the coding process, each transcript was read individually along with reviewing my notes from the interview, audit trail, and reflexive journal. For some interviews, articles that may be related or associated with statements the participants made and what was also known about those topics in the literature were reviewed. As I coded the participants transcripts, I frequently looked back at previous codes and definitions to ensure the codes were applied consistently. A total of 75 open codes were identified.

During the open coding process, a column was created dedicated to journaling in the Excel workbook for each participant. I used this column to provide reflexive journaling regarding my thought process for the codes and to address my feelings and biases as I read the participants' answers. This column helped me understand how I was feeling in response to what the participant stated and how it might impact my interpretation. The information was used to help mitigate my bias impacting the codes identified and later the categories and themes.

After completing open coding, I progressed to axial coding. To complete the axial coding process all of the responses and associated codes were placed on one Excel worksheet where I could look at how participants answered each question and the frequency of the codes assigned to passages within a given question. Codes that reappeared multiple times were written down and grouped together. For example, the

codes “time management”, “organization”, “prioritization”, “set boundaries, “defined schedule” were all grouped together and placed in the category “organizational strategies”. This category reflected strategies that participants used to balance their workload and were frequently reported during their interview, especially in response to the question, how do you balance your workload? A total of 11 categories were identified that represented different groupings of codes. No codes were included in more than one category. If a code appeared to fit multiple categories, I looked back at the transcripts to further clarify the context in which the participant was describing the information related to the code and chose the best category that represented that information. After I identified the categories, I looked at how the categories related to answering the research question, how do senior physical therapy faculty balance their workload to remain in academia? In considering the research question and the 11 categories, three themes emerged. A subtheme emerged for both Theme 1 and Theme 3.

During data analysis a discrepant case did emerge regarding the participant’s discussion about how they balance their workload. Although discrepant, the data were included in the analysis by using the information to present a different perspective regarding how senior physical therapy balance their workload. The discrepant case will be discussed later in the chapter under the Results section.

### **Evidence of Trustworthiness**

#### **Credibility**

Credibility is the assurance that the study tests what it claims to test (Shenton, 2004). This component of trustworthiness was upheld through providing a detailed

description of the research methods, specifically how the interview protocol questions were created using examples from the literature (Shenton, 2004). Additionally, the credibility was addressed in this study by providing a detailed description regarding how the data analysis was performed and through the use of a reflexive journal. I used the reflexive journal to keep track of my personal thoughts and how I made connections from the data to the code. Reflexive journaling happened after each interview and frequently during data transcription and data analysis. During data analysis, reflexive journaling occurred by including a notes section next to the codes. The notes included information about the data and a summary at the end of each question regarding what the participant stated, which helped improve credibility. Additionally, member checking used during this study helped address issues of credibility by allowing the participants the opportunity to verify that the findings were accurate and a true portrayal of what they had intended during their interviews. All nine participants received a two-page document of the preliminary findings for their review. They were also provided the list of interview questions for reference as they verified the preliminary findings. Six of the nine participants responded stating they approved of the findings without any corrections or edits; all other participants did not respond.

### **Transferability**

Transferability is the extent to which the results can be applied to a different group of people in a similar context and situation (Shenton, 2004). To improve transferability, I have provided thick detail in the Literature section of Chapter 2 regarding the problem that was addressed in this study. This thick detail allows readers

the ability to have an in-depth understanding to guide their judgement if the results from my study can be applied in a similar situation (Shenton, 2004). Transferability was also addressed in the methodology section regarding rich details about the sampling procedures and patient population. To provide more context regarding the patient population included in the study, demographic information regarding age, gender, total number of teaching years, and highest earned academic degree were collected.

### **Dependability**

Dependability is the degree to which the study results would be repeated if the study were conducted again with the same participants, in the same context (Shenton, 2004). Measures to improve dependability included in this study were a detailed description of the research design and an audit trail. A rich detail of the research design provides an understanding of how the study was performed so that it could be repeated (Shenton, 2004). Rich design detail discussed in the methodology section included the inclusion criteria and rationale for exclusion, discussion of how the interview protocol was created, and the data analysis procedure flowing from open coding to axial coding, to thematic analysis.

### **Confirmability**

Confirmability is the extent to which the findings are a result of the participant's meaning and experience, rather than my bias and opinions (Shenton, 2004). In order to reduce my bias in the data analysis and results, a few measures were discussed in Chapter 3 and performed during the study. The first was a reflexive journal that was kept and utilized after each interview, during and after data transcription, and throughout data

analysis. Many times, I would write about how I was feeling in response to a participant's statement to make sure when I coded the material, I could be aware of how their answer made me feel. I found that after writing out how I felt, I could be more objective and aware of my biases as I read and reflected on the participant's answers during data analysis.

Another measure included in the study to improve confirmability was the use of member checking. After the preliminary findings emerged, I sent each participant a copy of the findings and asked them to look over the information and respond with any changes or alterations that may not match their feelings or experiences. Participants were also provided a list of the interview questions to assist in their ability to recall their statements.

An audit trail was performed after each interview and a reflexive journal was kept after performing the audit trail and during data transcription and analysis. The importance of keeping detailed records of the interviews and the researcher's emerging thoughts helps the reader understand how connections and interpretations were made during data analysis to ultimately end up with the results. Including an audit trail, reflexive journal, and member checking contributed to reducing my bias in the interpretation of the results and improving the confirmability of the findings.

## **Results**

Three themes emerged from the data analysis that address the research question, which was, How do senior physical therapy faculty balance their workload as required by the university and accreditation body to remain in their teaching position? The primary

themes encompass how participants used (a) organizational strategies, (b) support, and (c) self-advocacy to balance their workload. Theme 1 led to a subtheme that it can be challenging to balance the workload of a full-time physical therapy faculty member. Theme 3 led to a subtheme that physical therapy faculty appear motivated by internal and external factors to remain in academia.

### **Theme 1**

Senior physical therapy faculty balance their workload by using organizational strategies and maximizing the overlap between workload requirements. Organizational strategies are related to time management, prioritization, and maximizing the overlap of each teaching requirement in a full-time workload. Maximizing the overlap between workload requirements refers to a faculty member's ability to work on one domain of their job and have that domain influence or satisfy workload requirements for another domain of their workload. The following sections provide more detail about how faculty utilize organizational strategies and maximize their role to balance their workload.

Components of organizational strategies include time management, prioritization, and maximizing their role. Time management strategies include defining their schedule with blocking time for specific tasks, putting meeting and deadline information on a calendar, and using to do lists. For example, in response to the question how do you balance your workload P4 stated,

I have my calendar, I never used to. I used to have this calendar forever, but I never used it because I could remember what I needed to do. I cannot anymore; it has to be on a calendar, or it didn't happen.

Utilization of electronic calendars was also mentioned by P3, who, in responding to the same question about how they balance their workload, stated, “So I think the electronic calendar pretty much works, and I have it on my phone, so I look at it both on the computer and then on the phone that helps.” Other important time management strategies include setting boundaries with their time by defining what task will be achieved during specific times and creating a workspace where interruptions during defined times will be minimal. Setting boundaries and blocking time was described by P2, who stated,

Set aside that time and don't feel bad about closing your door and saying you have a meeting or schedule it as a meeting or whatever you call it on whatever calendar that your administrative assistant has, find a way to take that time to do that. Same thing for scholarship, if you're trying to develop a partnership or get out in the community or have a mentor meeting or whatever, put those in your calendar. They are as important as I have class this time and a mentor meeting this time, and then, you know, combine it with something.

Another organizational strategy faculty discussed to help balance their workload is prioritizing tasks. Prioritization was described as weighing what tasks needed to be completed first and allocating time and effort to completing those tasks before others. P6 described their application of prioritization by stating,

I have to take time from something to be able to do the other thing, so like right now it is very research heavy like data collection, processing, so am I taking time away from prepping for every lecture I give and revising labs every time and



coming up with new cases, yeah I am probably not spending as much time doing that right now because again you got to take time from somewhere.

Prioritization was also discussed as an organizational strategy by P9 when they stated, I picture it as a balance, and I only have so much time, so if I have to give more to this bucket for the next couple of months, these other ones are going to have to cut down and usually the bucket of health goes out first so yeah I just have to recheck in with myself, see where I am at, see what I am in, see if I am starting to feel way behind and I am not able to get my daily stuff, everything is flagged on my daily list that I am looking at you know stuff like that then I have to try to figure out how to go about it.

An organizational strategy that faculty used to meet their workload demands of teaching, scholarship, and service was to maximize the overlap of how each role can feed into the other. For example, P2 stated,

Well, I try really hard to study what I teach, and so the research, you know that research part, I think new faculty coming in should really look at what is your teaching load and what are you are interested in teaching. You should probably study that because you know it makes sense. Then the service part should connect to that. So, I taught service learning, I developed connections with this community group that I used in my classroom and then you can also study that. So, I really feel strongly that there are too many new faculty members who have those three things in totally different realms, and they don't connect them, so it is three huge different things that you are doing where as you can even connect two

of those, then it is really giving you some time back and helping you with that balance. So, I really think that we need to do a better job of teaching faculty which service projects to get involved in and how to study what they are teaching; I think we need more of that.

The participant described the ability to manage their workload by making one project fit multiple domains of the workload requirements to reduce their workload burden.

Maximizing their role and role overlap was also discussed regarding the ability to align a faculty member's strengths with their workload and requesting to perform roles in service or other job domains that play to the individual's strength. In this next quotation, P8 was responding to the question, what strategies do you use to manage the various roles and expectations as a faculty member. The participant stated,

So, we have all done our Meyers and Briggs, and we have done our assessments, and when we are assigned committees, that is something I have found that helps me manage is making sure that the committees that we are on I shouldn't be on the research committee. Someone else shouldn't be on the wellness committee because you have to generate ideas, that is me, I am an idea generator, but I shouldn't be on the detail-oriented committee because that is not my skill set. So, once we shifted people around, I think that made a difference to optimize what was easier. The faculty role is hard. However, if we are on committees that align with our skill sets and we are on committees that optimize our skills then it is not a big lift.

The participant is describing how their selection for different committee work to fulfill the service role is improved when it aligns with their skill set and their personality strengths, which help reduce the potential burden of their workload.

### ***Subtheme***

Senior physical therapy faculty describe balancing their workload as the most frequently reported challenge in being a faculty member. When asked what the biggest challenges are with being a physical therapy faculty member six out of the nine participants stated balancing the workload requirements of being in academia as a challenging aspect of the job. This is articulated in the following responses, P1 stated,

The first thing that comes to mind is workload. I think just that balancing what 40 hr a week really looks like, especially in a hybrid setting where you don't always have set hours and it's 30 min here and 60 min here and that adds up when you are doing that throughout the day, throughout the week.

In this example, the participant describes the challenges of defining their workload and the added challenge of understanding what the workload looks like in a unique environment such as hybrid setting. When asked the same question Participant 6 stated, “

I am still pretty bad about balance, by balance I think when you are working full-time, getting your PhD, trying to do research, raising a family, it is pretty challenging to have a good balance between all those things and I don't claim that I am doing it right at all, I think things are lacking in all those domains honestly since I have taken it all on, so stive for balance.

Participant 7 also discussed the challenges of balancing their workload in the following statement,

Probably the biggest thing for me would still be scholarship, so if I look at what I've done and when things get busy and the university gets busy and they ask for volunteers for help on certain committees and maybe it's a personality flaw but I tend to say yes to most things at work, so committee assignments got busy, teaching load got busy, so what was sacrificed was my own scholarship, and that is not always the best in the academic world for your own progression through ranks.

The challenges of balancing the faculty workload were mentioned by Participant 9 who stated,

Trying to find a balance between your own health your family's time, and your new humungous family including students at time and trying to give you want to give to them but you don't want to take too much from the other areas either so I think finding the balance between those is always a challenge and you fluctuate a little more here and sometimes grab from here and sometimes you are way over and it is a constant shuffle.

Specific challenges to balancing their workload included individual-related and institution-related challenges. Individual-related challenges relate to challenges reported by the participant regarding challenges to their job that are related to personal feelings and experiences. Lastly, institutional-related challenges are difficulties encountered by the participant that relate to institutional or university challenges.

Individual-related challenges are workload management issues that are specific to the individual. These challenges can be further categorized into transitional challenges and current challenges. Transitional challenges are issues reported by the individual that were related to some of the difficulties many individuals experienced when transitioning from the clinic to academia. These challenges included reports of being fearful, uncomfortable in their role, not fully understanding their role, lack of experience in academia, feeling isolated, overwhelmed, and not feeling like they had a voice in decisions regarding their job and the institution. These challenges appeared to be an important part of their growth in their role as when asked how they worked through these challenges to remain in academia many reported reaching out to faculty in the form of unofficial mentorship for help.

Another type of challenge identified was institution-related challenges, which are workload management issues that refer to difficulties expressed by participants regarding problems at an institutional level. Communication appeared to be a factor related to challenges in managing their workload as some reported difficulties with understanding their role and requirements within specific domains of their job. For example, the service domain appeared to be the most frequently cited domain where six of the nine participants reported the workload requirement was nebulous and not clearly defined. This is articulated by P1 who stated,

So, I think at our university this is something that is really a big question mark.

Where some people have a significant amount of service and some people have

literally nothing. Because when we talk about service we talk about committees or a task force or whatever that might be.

Additionally, P4 described the challenge with defining service by stating, “I think that is a grey area you know you just say you have 60% this, 15% that and 10 this.” P5 described the lack of clarity with fulfilling the service requirement in the following quotation,

I think they want an unrealistic amount [of service], now service to the university, sure I am glad. The count to me is very nebulous, well do they count I go to white coat, do they count graduation, okay I go to graduation does service count, I mean I’m on the committee I think that is service too.

This quotation highlights the point that it can be unclear what amount of service is fulfilling the workload requirement.

Communication regarding the expectations for their role within a given domain is important as it can be challenging to know if you are meeting that requirement or lacking, thus impacting a faculty member’s ability to properly manage their workload to meet the requirements for their institution and promotion and tenure. Additionally, many faculty reported being placed on a committee without understanding the purpose of the committee and didn’t have people to turn to for more information. When asked did you always believe in yourself with regards to fulfilling the service role, P8 stated,

No, I had no idea what to do when I started because nobody told me what they were for I had no idea. They gave me the student conduct committee I was there for like 2 years and they were like you are now the chair of it and I was like “I

don't know what you are supposed to do" so a lot of self-teaching like other stuff. So, like curriculum it was given to me before we moved in the position that we are in right now and the boss at the time pretty much would just give me assignments that I didn't understand and tell me to do them. I had no idea why I was doing them, and I wouldn't do them because I don't like to do things that don't matter but there never was any mentoring or understanding the purpose of it of what we are aiming for and then he left, and we had to do our first CAPTE reaccreditation and I learned really fast.

Communication and not fully understanding the faculty roles is also described by P9 who stated,

Honestly the academic ones [committees] I was walking down the hall and I hadn't had my first class yet and my boss said "Oh I am going to make you chair of the new hiring committee" and I was like oh I don't know what that is, I don't know what they do I have never been on a committee and then she was gone. So that was kinda learned by fire and then it was committee, committees, committee after that, which wasn't terrible, I mean timewise it wasn't ridiculous but at least I learned a lot about the university. I had no idea about all the different avenues at a university it was helpful to get a behind the scenes view of the different parts that I still pull on some of those things you know today as far as old committees that I was in.

Both participants helped highlight how they were able to learn through accreditation the role of service and teach themselves about what their workload requirements were for

service. The participants are also highlighting the importance of communication, as likely the time spent figuring out the role of service could have impacted their time allocated to other aspects of their workload, making it challenging to manage their other roles of teaching and service.

Another example demonstrates the impact of communication, specifically with regards to the service role of their occupation. Here P5 described how they were able to be successful in the role of service after learning more about what the requirements were for the committees they were assigned.

I think service was easier than scholarship as soon as I recognized what was the intent of the committee and was the output that the university needed so once the expectations were known I think from a service then I did ok.

## **Theme 2**

The second theme that emerged was related to support. Faculty reported support in the form of unofficial mentorship and using their network of connections to help better define their role in certain domains of academia or collaborate with others to help them achieve a task or reduce their workload burden. Additional support that was discussed was the role of prior experience in supporting their ability to perform their job and support from their administrators to help them balance their workload along with external resources outside the university.

Unofficial mentorship refers to the participant seeking out mentorship from colleagues and network connections to help understand their role and meet the demands of their job. This form of mentorship is not provided in a formalized program through the



university and relies on faculty members reaching out to people inside and outside their university for support and assistance to perform and manage the three roles of academia, teaching, scholarship, and service. All of the participants reported not being exposed to a formalized mentorship program when they transitioned into academia but would seek out people for assistance in understanding how to perform the roles of teaching, scholarship, and service. In the following quotation P1 described their journey with getting comfortable with the research portion of the job, they stated,

I think the only other thing I would say is just leaning on your colleagues and figuring out and even when another researcher joined the university she was very confident and I was like oh this girl knows her research I am going to try and ride her coat tails a bit and we ended up doing a research project together we did a platform presentation, we had a publication, it was fantastic and I was in my PhD so I didn't feel as comfortable doing my own research. So I really needed a mentor, so I found someone who was really strong in research and paired up with them and our interests aligned in research too so that helped.

In the next example, the participant described how they worked through the challenge of maintaining a scholarship agenda, P6 stated,

I basically teamed up with a highly experienced author in physical therapy at a different university, I have a great preexisting working relationship with this person, like 12 years now so I trained with him for years on all of the software and how to run biomechanical research and him and his team like his PhD students or former PhD students helped and the university did help fund training

for that so that is how I got myself going. Obviously, I just used people who knew what they were doing, I mean it's different because they are not on campus but they use a similar software so that was helpful.

Another participant described the importance of mentors when asked about the strategies they use to manage the various roles and expectations of a faculty member. P2 stated,

Partnerships and mentors so I have never been afraid to ask someone for help or for their advice so I believe that you should not have just one mentor I think you need several mentors you know a research mentor, you know someone who knows the politics of the university to give you a tutorial about what is going on in that, I definitely needed mentors for that tell me why, tell me what is going on. We would go to faculty senate meetings like what is that about, get the history of things. You need mentors in scholarship, you know you have got to figure out who knows the right way to pose a research question because if you don't do the design and question right you are going to get really stuck as you move along. So, a solid person to get you started, the basics. I guess I would say you need a mentor in the basics of all that stuff, basics of teaching, classroom management, oh my gosh you definitely need a mentor for that you will come up upon some things where you are like what do you do when your students do X, I've had that, you need mentors in the basics of all of those things and then as you progress through your career you need mentors that are further along always someone ahead of you that can give you advice for how they got there.

When participants were asked what advice they could give to junior physical therapy faculty, having access to a mentor to help them manage and understand the different roles of teaching, scholarship, and service was the most recommended advice. In the following quotations, participants highlight examples of statements regarding the importance of mentorship for junior physical therapy faculty. P9 stated, “I would try and get good about reaching out to someone if you haven’t been given a mentor to help you through that process that has been through that process.” P5 stated,

Search out a mentor if a mentor doesn’t come to you like I said I pulled in a colleague, do you want to write here I have an idea, come to a colleague I have an idea about this, so that’s why I’m usually last author I don’t need any more publications go ahead you can be first and second author I did that with other people and so then I just I’m an idea person that guides our directions and edits you know and brainstorms but the other people do more of the work and then they can be first author, so find a mentor to work with.

Another suggestion for junior physical therapy faculty to receive mentorship as a part of their onboarding process is described in the following statement by P7,

Hopefully whatever organization the person is going into has some very formal onboarding if not then ask for more formal onboarding it takes a while to learn those things and if we leave junior faculty up to themselves to figure it out I think many will leave and maybe that is the purpose of your study trying to figure out why folks don’t stay and I think that is probably much of it.

Recommendations for mentorship were also described in the following statement by P9, “I think they (junior faculty) should have a formal mentorship onboarding program. I think it would help so much for their burnout.”

Other forms of support described by the participants that helped them manage their workload were prior experience, external resources, and administrative support. Prior experience relates to previous exposures participants had in education, teaching, or other that helped support them in their academic roles and in managing their workload. This was described by P1 in response to the question what are your perspectives about your skills as a teacher?

So, the transition to teaching, which was easier because I had a bunch of teaching experience, but I felt deserving because I know how hard I worked to get there.

But still the first couple of years teaching you are just questioning everything you are working with senior faculty who all PhDs are, EdD, they have a ton of research so it can be overwhelming.

This quotation helps conceptualize that for some the transition from the clinic into full-time academia can be difficult, but prior experience in teaching, which P1 had as a lab assistant for 3 years before coming full-time, helped in this transition. Understanding the roles that faculty members have in each of the domains of their workload can help with the transition into academia and ultimately reduce the strain with managing a workload. Workload balance and retention were also improved through faculty members seeking external resources, such as tools or additional information, outside of the university's

resources. P2 described how they looked outside their university for resources to help them be successful in their role as a faculty member.

I went to Combined sections meeting and started attending education section meetings, which I had never done before that. So, I learned how to teach from the education section and from students telling me and then from being a student. And I took a lot of what I liked as a student and brought it into the classroom. So, I did some really you know strange innovative things that the students weren't used to doing because that's what my teachers had done that, I really appreciated so I tried to you know think out of the box.

External resources were also described by P1 and who in response to the question what resources were valuable and contributed to the longevity of your career stated, "I think that is the most helpful resource are the self-help books and audio books that I listened to and read." P8 also described books as a helpful resource contributing to the longevity of their career recommending *Make it Stick*, *Master Adaptive Learner* as key books that helped support them in their career.

Administrative support in assisting faculty to manage their workload included the importance of managers and directors to be aware of how heavy their employee workloads are before assigning them additional roles. This is articulated by P6 who stated,

Well my teaching load was really high for years like I think 80% for awhile and then it came down to 50 something or sorry 60 I don't remember I was in lots of labs and so overtime I've been pulled out to get me to a normal level but just I

think if nothing was said, honestly it was a coworker that went to my boss who said you need to pull her out she is struggling, you know trying to do my PhD and research and teaching load still 70% anyways cause I was like I don't want to leave people high and dry by being pulled out of lab but yeah I think it was pretty obvious I was in way too many classes trying to do all that plus get my PhD it was too much.

This was also discussed by P9 who, in response to a discussion about defining service and tracking workload stated, "If they are not going to track it [service workload] they are not going to remember, it has to be you that points it out and says something has to give and I can't this isn't manageable."

Other aspects of administrative support that were mentioned as it related to helping faculty manage their workload included the importance of managers and directors to allow faculty to have flexibility within their work schedule and faith in their employees that they will get the work done. This is articulated in the following quotations. P4 stated, "The biggest resource is perhaps the 30,000 foot resource is for the people managing you to have some faith in your ability and give you those lead ways to be able to execute your job." P4 also mentioned administrative support that helped with managing their workload included funding for training such as the new faculty seminars, workshops, and continuing education opportunities, and funding for equipment.

Another aspect of support that was discussed by five out of the nine participants was the importance of collegiality in the workplace as participants stated this was a key

resource related to their retention. In this quotation, P9 answered the question what is a key resource related to retention,

I think others, other faculty, my peers my colleagues ones that were more experienced, ones that were newbies that were still teaching me things they have a different way of presenting the material and that is a much more clear way than I have been presenting so I think learning from my colleagues is the best resource.

Collegiality was also described by P2 who stated,

Other people, I would not be doing this if I didn't have other people to ask questions, to support...other people I don't believe you can silo yourself off or you know people outside of physical therapy too, I'm talking don't just stay in your physical therapy silo use other people, help other people, use other people, form a support system. In my work, my dissertation work was on psychological resilience and one of the most important pieces is social support. So, I just think that this just makes us all stronger and it helps us get through the day if you give back, you can ask someone to help you and you don't feel bad getting help it is a really important piece of staying in this for the long game.

In this quotation the participant highlighted the importance of not being isolated and working with other people to stay in the position.

Support was reported regarding collegiality but also with support at home with spouses helping the faculty member regulate their workload. Other avenues of support mentioned that assisted faculty members in balancing their workload was support from the administrative leadership in helping faculty regulate their workload and not exceed

their workload in any one of the scholarship, service, and teaching domains. In this quotation, P3 described how they balance their workload and articulated how both the support of their spouse and administration help them feel supported in regulating their workload.

If you asked me that in an interview I would be like, I am a go getter and I just need to make sure I don't overextend myself and these are the things that I am doing to do to not overextend myself so if you are managing me, I would be like help me manage that. I would say my husband is one of my filters if you [administrative leadership] want to be one of those filters I am going to get those things done for you, but I need that shaping to make that happen.

While support from unofficial mentors, colleagues, family members appeared to be reported favorably in helping faculty members balance their workload, those who lacked support reported the lack of support contributed to challenges with managing their workload. These challenges were described in Subtheme 1.

### **Theme 3**

The third theme that emerged from the data were faculty utilized self-advocacy strategies and the flexibility in their work schedule to balance their workload. Senior faculty members enforce their workload and time boundaries through advocating for their time and 'saying no' when the workload exceeded their available time. Their ability to advocate for their time and 'say no' to other colleagues and administrative figures allowed them autonomy in the management of their workload. Additionally, participants who demonstrated self-advocacy also discussed the skill of self-evaluating their abilities



to manage their workload. The ability to self-advocate and regulate the volume of work in each of the domains (teaching, scholarship, and service) appeared to be an important theme for many as described in the following quotations. P4 described the ability to say no in the following quotation, “I have learned to say no to taking on new things until I can finish what is on my docket and it is very hard for me to say no because I want to help everyone.” The ability to advocate for themselves was also articulated by P9 who stated,

I just think I have gotten to the point where I can say no, I might say it too much now I might need to swing back a little, say no and take the other parts just as important as what they are asking me to add to my plate and then hopefully it makes it work. So, I think finding your voice to be able to say that and realize it is not healthy and it is not going to sustain.

Flexibility in workloads and time allocation to complete tasks is also important as faculty described being able to work at designated times that fit with their work–life balance assisted in their ability to complete tasks and manage their workload. In the following quotation P7 described the importance of flexibility in their ability to balance their workload throughout their career. They stated,

One benefit of the job would be the independent ability to manage when I am working. So, what the university has received from me over the years was working beyond the typical full-time hours but doing those extra hours when my kids went to sleep and that sort of thing.

P2 also described the importance of flexibility as it related to their perceived benefits to being a faculty member by stating, “The first thing that comes to mind for what I work in is my flexibility in teaching, so I appreciate my schedule, my flexibility.”

### ***Subtheme***

Some qualities regarding motivation emerged when looking at the data related to self-advocacy. Participants described internal and external motivators regarding what they found beneficial and satisfying regarding their job. Internal motivators related to aspects of their job and personality that were intrinsically motivating and yielding positive feelings about their work. These included intellectual stimulation, opportunities to learn new things or work through interesting challenges, feeling passionate and good about the job they are doing, and feeling like they are growing within their role as a faculty member. This is articulated by P2 who stated,

I actually really looked forward to learning. So, every time you teach something you have to learn it. You have to learn it in a different way and different perspectives then teaching it so it really helped my clinical practice to be a teacher because it got me back into the stuff I wouldn't be doing if I was a clinician.

Internal motivation was also articulated by P3 who in response to the question, what are the perceived benefits regarding being a full-time faculty member stated,

I want to get up every day and do it kinda like I did when I first worked in pediatrics. I wanted to get up and work with kids every day. So, I think number one is the benefit of that, the second benefit that I really like is that you are afforded the time to actually dig into topics and learn about them. I think that was

always hard to do when I was a full-time therapist. I did it but it was always on my own time and now it is part of it is baked into how you do the work you should teach with evidence, so I have time to spend in the evidence.

External motivators relate to factors outside of the individual that influence their motivation and retention. These included student interactions where faculty were positively influenced by interacting and educating students. This is described in P2's response to the question regarding perceived benefits to being a faculty member,

Student interaction. That is really what would make me say I want to do this full-time. The rewards that I got from teaching and the, I don't know the looks on the students faces, their comments to me about how much a difference it made, that is what really drove me to do it full-time. It certainly was not the desire to be on committees and to do research and you know those are the things that kinda came along with it. It was definitely the students and the interaction that I just really valued.

Another external motivator described regarding motivation was the recognition and legacy that being a faculty member afforded. Leaving a legacy was mentioned by P1 who stated in response to perceived benefits of being a full-time faculty member,

I mean I love teaching, I love teaching about what I do and you know about helping people who've been hurt and about being passionate about rehabilitation and about teaching people about you know we are going to be the next generation of physical therapists so I do really enjoy that.

Leaving a legacy as an external motivator was repeated by P4 who stated,

The most overarching driver of me as an educator is to leave a legacy of people who appreciate certain things you know the nuance of practice, the in between the lines thing that I can teach them that only a very few driven people really can get.

Promotion and tenure were also external motivators for helping faculty choose which domains to focus on regarding balancing teaching, scholarship, and service. Certain universities have requirements for what you will need to be promoted and to receive tenure. Faculty focused their attention on completing these tasks, especially within the scholarship domain, which linked to their prioritization and workplace balance.

### **Discrepant Cases**

A discrepant case did emerge from one participant during the interview. In response to the question, how do you manage your workload, the participant described not having any challenges with managing their workload and that balancing their workload was easy. The participant stated,

Workload is easy, balance as far as I'm concerned. I mean my university does give you this day off 1 day a week so I'm able to do that if I didn't I had to be there 5 days a week and if I was being micro managed like I think some of the faculty feel, you have to sign out all of that stuff I wouldn't that would drive me insane, I get my work done, we all work sat and Sundays you know we work we are on our schedule, we don't mind doing what we do on Saturday and Sunday but if you are going to make me be there at work 8 hr a day Mon -Fri then I can't

do this I can't have the freedom to do my research, yeah, that would so my university is good about that I hope that doesn't change.

This is different than the other participants in that all of them, with the exception of this individual, described balancing their workload as challenging, even after being in academia for at least more than 4 years. The discrepant case was included in the analysis and considered a different perspective on how individuals balance their workload.

### **Summary**

Three themes and two subthemes emerged from the data regarding how senior physical therapy faculty balance their workload to remain in academia. Senior physical therapy faculty use organizational strategies such as time management, prioritization, and maximizing their role to balance their workload. A subtheme emerged from Theme 1 in that a major challenge reported by senior faculty is balancing their workload. The second theme that emerged was that faculty utilize support in the form of unofficial mentorship and collegiality to help balance and manage their workload. Senior physical therapy faculty strongly recommend that junior faculty have access to an official mentorship program or reach out to form an unofficial mentor to assist in their transition into academia. The third theme that emerged is senior physical therapy faculty balance their workload through self-advocacy strategies to help them maintain autonomy over their workload schedule. A subtheme that emerged from this is that senior physical therapy faculty appear motivated by internal and external factors to persist in balancing their workload and remain in academia. In Chapter 5, I will interpret the findings, draw conclusions, and offer recommendations based on the findings.

## Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this qualitative study was to explore the perspectives of senior physical therapy faculty regarding how they had balanced their workloads throughout their career and what resources they utilized that directly contributed to the longevity of their career. I conducted this study because there is an ongoing shortage of qualified physical therapy faculty needed to meet the demands of a growing physical therapy educational system within the United States (Brueilly et al., 2022). Most researchers who have examined the ongoing shortages of physical therapy faculty in the United States have focused on the challenges junior physical therapy faculty face during their transition into academia (e.g., J. L. Barrett, Mazerolle, & Nottingham, 2019; J. L. Barrett, Mazerolle, & Rizzo, 2019; N. Barrett et al., 2019; Varnado et al., 2021). This study addressed a gap in the literature regarding how senior physical therapy faculty have successfully managed their workload to remain in academia. Findings from this study include three themes identifying that senior physical therapy faculty utilize organizational strategies, support, and self-advocacy to manage their workload. A subtheme to Theme 1 was that senior physical therapy faculty in the study reported balancing their workload as a challenge. An additional subtheme from Theme 3 emerged regarding faculty participants' use of internal and external resources for motivation to remain in academia. In this chapter, I will discuss the results in greater detail and in relationship to the literature. Additionally, I will review the limitations of the study, offer recommendations, consider the implications of the study, and provide a conclusion.

### **Interpretation of the Findings**

This section is organized based on the themes and associated subthemes that emerged from the data analysis as they relate to findings from the literature. In this section, I will review how the results from my study extend the knowledge and confirm previous findings from the literature. The first theme that emerged from the data analysis was that senior physical therapy faculty balance their workload by using organizational strategies and maximizing the overlap between workload requirements to remain in academia. Organizational strategies are related to time management, prioritization, and maximization of the overlap of each teaching requirement in a full-time workload. Findings from my study confirm the results from J. L. Barrett, Mazerolle, and Nottingham (2019), who explored junior physical therapy and athletic training faculty members' ability to find role balance as they transitioned into academia.

J. L. Barrett, Mazerolle, and Nottingham (2019) found that junior physical therapy and athletic training faculty reported using strategies for scheduling their time and separating their work and life roles to balance their workload. These findings are consistent with my study, where faculty reported using a defined schedule, prioritization, blocking time, and an electronic calendar as organizational strategies to manage their workload. An interesting finding in J. L. Barrett, Mazerolle, and Nottingham's study was that junior faculty reported challenges with where to allocate their time, not clearly knowing which domain required their prioritization. This finding was not reported by senior physical therapy faculty, suggesting that as a faculty member transitions from a junior to a senior faculty member, they develop the ability to prioritize which job domain

requires the most attention. Strategies regarding how faculty prioritize their time should be addressed in future research to better understand the development of organizational strategies in experienced physical therapy faculty.

A subtheme identified within Theme 1 included individual and institution-related challenges reported by the participants regarding their ability to manage their workload. Individual-related challenges are workload management issues that are specific to the individual. These challenges are further categorized into transitional challenges and current challenges. Transitional challenges are issues reported by the individual related to difficulties some individuals experienced when transitioning from the clinic to academia. J. L. Barrett, Mazerolle, and Rizzo (2019) explored the organizational socialization process for junior physical therapy and athletic training faculty transitioning into academia with their academic doctorate. The authors found that orientation activities and collegial work environments helped junior faculty familiarize themselves with the institution and their role as a faculty member. Participants from my study reported challenges with transitioning into academia. Given the many participants who reported balancing their workload as a challenge, administrative leaders might consider including information regarding workload balancing strategies in junior physical therapy faculty organizational socialization settings.

Institution-related challenges that emerged from my study were workload management issues that refer to difficulties expressed by participants regarding problems at an institutional level. Communication appeared to be a factor related to challenges in managing their workload, as some reported difficulties with understanding their role and



requirements within specific domains of their job. For example, the service domain appeared to be the most frequently cited domain, with six of the nine participants reporting their workload requirement to be nebulous and unclear. A repeated issue that arose when asked to describe their perspectives regarding service was that many participants stated they needed clarification regarding the expectations of their job. Myers et al. (2020) offered a historical perspective by noting the profession's difficulty in defining the requirements of what constitutes a faculty member. Myers et al. reported longstanding challenges in defining workload requirements and described the need for more clarity regarding the job requirements for physical therapy faculty. Results from my study emphasize this finding as one of the challenges reported with managing their workload included not fully understanding what requirements constitute meeting the different domains of their job. This was especially present as it relates to understanding the service domain of their job. Many participants expressed challenges with not fully understanding what their workload in this domain should include. This challenge, which impacts workload balance, should be explored with future studies as it might assist leaders in the profession in creating a clearer guideline for all programs and faculty regarding what constitutes service and how to provide a more explicit definition of this workload domain for faculty.

The second theme that emerged was related to support. Faculty reported support in the form of unofficial mentorship and using their network of connections to help better define their role in certain domains of academia or collaborate with others to help them achieve a task or reduce their workload burden. The importance of having support from a

professional network group to meet the scholarship demands of a faculty member's requirements is also mentioned in Becker et al. (2019). Becker et al. explored the ability to predict research productivity based on a faculty member's involvement in their professional network. Findings from Becker et al. found that network structure was the strongest predictor of scholarly productivity, with an open and less interconnected structure being the most effective for improving scholarly productivity. While the current study did not assess the network structure of the participant's professional network, many participants described the importance of making intentional connections with professionals aligned with their research interests. This study builds on Becker et al.'s results in emphasizing the influence a professional network can have on scholarly productivity to meet the demanding workload of faculty members.

In a subsequent study by Becker et al. (2021), the authors found that physical therapy faculty members utilize four main strategies to develop a professional network: prior connections, new acquaintances at their current institution, unplanned events, and cold calling. Multiple participants throughout my study reported utilizing the strategy mentioned by Becker et al. of seeking out individuals within their institution to assist in meeting their scholarly agenda. One participant noted that they intentionally reached out to people who could help them meet their scholarly demands and had similar scholarship interests. Establishing the right professional connections and developing a professional network appeared important in balancing their role and meeting the scholarship demands of their workload.

Findings from my study expanded on results found by Varnado et al. (2021), who explored factors related to physical therapy faculty satisfaction. While my study did not explore factors related to satisfaction, results showed that faculty found flexibility in their schedule, such that they could maintain a work–life balance, intellectual stimulation, and collegial support, as important factors related to their ability to balance their workload. These findings were reported in Varnado et al., and Harrison and Kelly’s (1996) study regarding important factors related to satisfaction. Results from Varnado et al. and Harrison and Kelly emphasized findings from Themes 2 and 3 identified in my research related to the importance of support and self-advocacy in balancing a workload. Further studies might explore the connection between the ability to balance their workload and satisfaction as there might be predictive factors that could provide insight into ways faculty can manage their workload to enhance their satisfaction.

When the participants were asked what advice they could give junior physical therapy faculty to help them balance their workload, the majority of participants stated access to a mentor or formalized mentorship program. The importance of mentors in assisting junior faculty in becoming acclimated to academia has been mentioned in the literature. N. Barrett et al. (2019) highlighted the benefits of participation in a formalized mentorship program for allied health professional faculty. The authors found participation in mentorship helped clarify junior faculty’s understanding of their role and provided an avenue for support and proteges to receive feedback regarding aspects of their role. While my study did not directly assess qualities that should be included in a mentorship program, given the high frequency of participants emphasizing mentorship as

a resource for junior faculty, further studies should explore the qualities necessary for an effective formalized mentorship program.

### **Applications to the Conceptual Framework**

Two theories ground the study in the conceptual framework: Bandura's theory of self-efficacy and Herzberg's two-factor theory of motivation. Both theories contributed to the analysis and interpretation of the results by addressing the research question from different perspectives. Bandura's theory of self-efficacy helped understand the internal motivators an individual might have to persist through the challenge of balancing their workload. Herzberg's two-factor theory of motivation assisted in understanding how external factors may have influenced participants' motivation to remain in academia and persist with balancing their workload. In the following paragraphs, more details are presented regarding how each theory contributed to the analysis and results of emergent themes and subthemes presented in Chapter 4.

In Bandura's 1977 work regarding the theory of self-efficacy he stated, "Given appropriate skills and adequate incentives, however, efficacy expectations are a major determinant of people's choice of activities, how much effort they will expend, and of how long they will sustain effort in dealing with stressful situations" (194). This theory contributed to the analysis and interpretation of the results in that most participants reported managing their workload as a challenge. When asked how they felt they managed their workload, the response was often "poorly." Despite workload balance as a continued challenge throughout a faculty member's career, individuals remain in this occupation, and that is likely where Bandura's theory of self-efficacy can illuminate

some understanding of how the individual has adapted to this challenge of balancing their workload to remain in academia.

In my study, Bandura's theory helped in the development of subthemes to Themes 1 and 3, specifically the individual-related aspects of motivation in response to challenges. In the subtheme to Theme 1, many participants expressed individual-related challenges regarding their ability to balance their workload due to role uncertainty, feeling overwhelmed, and reports of isolation. When asked how participants worked through the challenges, many described self-instructed performance strategies such as seeking help from a colleague, reading books to get more information, and seeking out resources from the APTA education section. According to Bandura's theory of self-efficacy, these strategies relate to performance accomplishments, which is one of the four major sources of information regarding expectations of personal efficacy. Other participants reported that their fears and individual challenges experienced when they first became a faculty member were reduced with experience. This relates to performance desensitization and performance exposure, also within the performance accomplishment domain of efficacy expectations. Using Bandura's self-efficacy theory helped to identify the subtheme to Theme 1 regarding negative feelings related to the internal, cognitive challenge of managing their workload. Bandura's theory of self-efficacy also helped in recognizing different types of coping strategies to overcome the challenge of balancing their workload through the performance accomplishment domain outlined in Bandura's theory.

While Bandura helps to explain the internal and cognitive process of working through the challenge of balancing a faculty workload, it does not fully capture other factors that influence motivation related to persisting in a challenging situation. Herzberg's two-factor theory of motivation also assisted in guiding the development of the subthemes to Themes 1 and 3, specifically related to the understanding of externally related factors that influence motivation, retention, and persistence. According to Herzberg's two-factor theory, specific job components influencing satisfaction and retention include opportunities for achievement, responsibility, advancement, recognition, growth in their role, and the work itself (Ghazi et al., 2013). When participants were asked about the perceived benefits of being a full-time faculty member, many discussed opportunities for growth and support to learn new things as contributors to their satisfaction. While balancing their workload appeared to be a major challenge reported by faculty in this study, Herzberg's theory helped identify external factors that participants reported regarding their job that likely contributed to their satisfaction and retention. Some of the satisfaction factors reported were opportunities for promotion, recognition, leaving a legacy, and validation. Although Herzberg's two-factor theory does not directly contribute to a faculty member's ability to balance their workload, it helped organize some of the data that assisted in organizing the information to identify the emerging themes and subthemes regarding the external motivators related to being a full-time physical therapy faculty member.

### **Limitations of the Study**

Potential limitations to trustworthiness include credibility, transferability, dependability, and confirmability. Although credibility was addressed through providing a detailed description of the research methods and information regarding how the interview protocol was developed through the literature, credibility could have been improved through having an expert in the field review the interview questions and provide feedback. Additionally, a potential limitation to credibility included the length of time participants waited before the preliminary report was sent to them for their review. Participants were provided with a two-page preliminary report of the findings 1 to 2 months after their interview, which may have impacted their recall of the interview. To reduce this potential limitation, I provided the participant with the interview questions for their reference.

Another potential limitation was related to transferability of the results. The participants included in the study were senior physical therapy faculty members who had been teaching in physical therapy education for the past 4 years in a full-time capacity. To that end, the generalizability of the results are limited to senior physical therapy faculty as the results most accurately portray their experiences and perceptions. While shortages of faculty in allied health professions exist, the results can only be applied to those within a physical therapy domain and other allied health professions should consider the experiences and perspectives of those in that health care setting.

Dependability was addressed through performing an audit trail and reflexive journal, a thorough description of the research design and implementation, and

attempting to include triangulation. All participants were asked if they had an artifact or data point that they could share that directly linked to their retention in academia. Many participants discussed books that they had read, faculty members that were meaningful to their retention, their academic terminal degree as artifacts that were related to their retention. Some individuals offered to send a mission statement that was meaningful to them but did not follow up and send the mission statement for review. The lack of data provided by participants made it so that I was unable to perform triangulation, which potentially limits the dependability of the study.

Another potential limitation is in the confirmability of the results. My role as a physical therapy faculty member is a limitation to this study as I have experience in a full-time faculty role, and I had biases regarding how to balance a workload. To mitigate this limitation, I utilized the reflexive journal to document when I recognized I had an opinion about what the participant was saying. I used bracketing techniques to recognize and minimize bias (Candela, 2019). Before I performed the data analysis, I reviewed my documented biases and continued to use the reflexive journal to keep track of how my biases may be influencing the results. Additionally, I sent the preliminary findings to all participants for their review to verify my interpretation was an accurate understanding of what they wanted to state during the interview.

### **Recommendations**

The scope of this study was to explore factors related to how senior physical therapy faculty manage their workload and remain in academia. During the study, participants described different aspects of their workload that warrant further



investigation that is outside the scope of this study. During my study many participants commented on not fully knowing the requirements to fulfill the service domain of their workload. Clarity with job requirements could assist in faculty having a better understanding of their role improving workload management. Future studies could explore senior physical therapy faculty's understanding of the requirements of the different domains within their workload. Additionally, future studies might explore how the profession and accrediting bodies define the service domain to provide guidelines for programs explaining the workload requirements in terms that are meaningful to faculty.

Another recommendation for future studies is to qualitatively explore how faculty prioritize their time to better understand the development of organizational strategies in experienced physical therapy faculty. Strategies for time management and organization appeared as a theme in my study and in J. L. Barrett, Mazerolle, and Nottingham's (2019) study, however, limited information exists regarding how junior physical therapy faculty develop the ability to prioritize specific information which assists in workload management. Getting more information regarding this topic could help program directors or mentors guide junior physical therapy faculty in developing these prioritization strategies early to help manage their workload.

My study did not specifically explore factors related to satisfaction in senior physical therapy faculty. However, further studies might explore potential connections between faculty members' ability to balance their workload and their level of work satisfaction. Given the high number of faculty that reported challenges with balancing

their workload, there may be predictive factors that could provide insight into ways faculty can manage their workload to enhance their satisfaction.

Mentorship was a frequently reported recommendation to provide junior physical therapy faculty as they transition into academia. Participants from my study emphasized the importance of having someone, or multiple people, to provide feedback and guidance regarding the different roles and responsibilities of a faculty in the early years of their career. The scope of my study did not extend into understanding what qualities of a mentorship program would be most effective and given the high frequency that mentorship was recommended, would be a topic for future studies to explore.

### **Implications**

Results from my study may provide positive social change in that I identified strategies faculty have utilized to successfully manage their workload and remain in academia. Senior physical therapy faculty utilize organizational strategies such as time management, prioritization, and maximizing their role along with support and self-advocacy to balance their workload. This is significant in that junior physical therapy faculty should have some exposure to these organizational strategies, support, and skills for self-advocacy to learn how to balance their workload. The following sections address how the findings from this study may contribute to the practice, theories, and social change.

### **Significance to Practice**

Results from this study may contribute to the practice of physical therapy education in that it addressed workload balance from the perspective of senior physical

therapy faculty. Findings from the study may contribute to positive social change in academia as it expands the understanding of workload management in experienced faculty. Strategies identified from this study show what successful individuals did to remain in academia and give insight into meaningful resources to help guide future generations of educators.

Findings from my study may have implications for leaders in physical therapy education. Leadership in physical therapy education can utilize this information to provide support and training regarding organizational strategies to physical therapy faculty. Specifically, leaders in physical therapy education should educate junior faculty regarding how to prioritize the work and balance their workload. As mentioned in Chapters 1 and 2, faculty retention is an ongoing socioeconomic problem and finding solutions for physical therapy faculty to be successful is important to address this problem.

Leadership personnel can also use this information to advocate for mentorship programs or a supportive orientation for junior faculty regarding how to successfully manage their workload and remain in academia. Improving the retention of junior physical therapy faculty is important as prolonged shortages threaten the quality of physical therapy student education and the ability of institutions to stay accredited. Resources that appeared meaningful from participants in this study were unofficial mentors, collegiality, flexibility in work schedule, and collaborative support from coworkers and family, and having the autonomy to advocate for their needs and allocation of their time to meet job demands. These findings suggest that administrators

and program directors should be cognizant of the importance of flexibility in a faculty member's work schedule and of the opportunity for mentorship within the three domains of academia.

### **Significance to Theory**

Herzberg's two-factor theory of motivation and Bandura's theory of self-efficacy were used to ground the study. Currently, little research has applied both theories in the understanding of workload balance and retention in health care higher education. This study contributed to the use of both theories to construct research and interview questions as well as in the analysis of the results. Both theories helped to understand the influence of individually and externally related factors involved in overcoming challenging situations and motivation to remain in an occupation. Further studies focused on workload management and occupational retention in health care academicians would benefit from this knowledge as these theories could be valuable in subsequent higher education research.

### **Significance to Social Change**

The findings from this study helped develop an understanding of where the physical therapy accrediting body CAPTE could investigate or provide further guidance for physical therapy programs. Many participants reported an uncertainty in what the accreditation requirements were for their role in the service domain and felt the profession should develop a more unified definition of this workload requirement. Having a clearer understanding of the requirements regarding service would help faculty understand the expectations for their job and advocate for when they are under or over

the job requirement threshold. Leaders guiding the physical therapy profession and accreditation should consider this information to help develop clearer guidelines for all physical therapy programs. This study helped to better understand the resources that are of value in managing the workload of scholarship, teaching, and service, which could aid in improved retention of qualified faculty to meet accreditation standards.

### **Conclusion**

The purpose of this study was to understand how senior physical therapy faculty balance their workload to remain in academia. An identified gap in the literature that was addressed by this study was that little is known regarding how senior physical therapy faculty have managed their workload to remain in academia. Three themes and two subthemes emerged from the data concluding that senior physical therapy faculty manage their workload through organizational strategies, support, and self-advocacy. Theme 1 lead to a subtheme of most physical therapy faculty report balancing their workload as challenging. Theme 3 lead to a subtheme that therapy faculty are motivated by internal and external factors to remain in academia. The most frequently recommended advice that senior physical therapy faculty provided for junior physical therapy faculty was to participate in a mentorship program or if one is not available, seek out a mentor(s) for the multiple domains of a physical therapy workload. This study helped to better understand the resources that are of value in managing the workload of scholarship, teaching, and service, which could aid in improved retention of qualified faculty to meet accreditation standards.

## References

- Alrawahi, S., Sellgren, S. F., Altouby, S., Alwahaibi, N., & Brommels, M. (2020). The application of Herzberg's two-factor theory of motivation to job satisfaction in clinical laboratories in Omani hospitals. *Heliyon*, 6(9), Article e04829. <https://doi.org/10.1016/j.heliyon.2020.e04829>
- Alshmemri, M., Shahwan-Akl, L., & Maude, P. (2017). Herzberg's two-factor theory. *Life Science Journal*, 14(5), 12–16. <https://doi.org/10.7537/marslsj140517.03>
- American Physical Therapy Association. (n.d.). *APTA 100 years 1921–2021*. <https://web.archive.org/web/20230425060615/https://centennial.apta.org/home/timeline/#story-903>
- American Physical Therapy Association. (2022). *Association profile*. <https://www.apta.org/apta-and-you/about-us/association-profile>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215. <https://doi.org/10.1037/0033-295x.84.2.191>
- Barni, D., Danioni, F., & Benevene, P. (2019). Teachers' self-efficacy: The role of personal values and motivations for teaching. *Frontiers in Psychology*, 10, Article 1645. <https://doi.org/10.3389/fpsyg.2019.01645>
- Barrett, J. L., Mazerolle, S. M., & Nottingham, S. L. (2019). Balancing the roles of a junior faculty member: Perspectives from athletic training and physical therapy. *Athletic Training Education Journal*, 14(1), 24–34. <https://doi.org/10.4085/140124>

- Barrett, J. L., Mazerolle, S. M., & Rizzo, J. J. (2019). Exploring experiences of organizational socialization among physical therapy and athletic training junior faculty members. *Journal of Physical Therapy Education*, 33(4), 273–281.  
<https://doi.org/10.1097/JTE.000000000000109>
- Barrett, J. L., Singe, S. M., & Diamond, A. (2020). Athletic training and physical therapy junior faculty member preparation: Perceptions of doctoral programs and clinical practice. *Internet Journal of Allied Health Sciences and Practice*, 18(3), Article 4.  
<https://doi.org/10.46743/1540-580X/2020.1876>
- Barrett, N., Murphy, A., Zechner, M., & Malenczak, D. (2019). Faculty mentorship in allied health schools: A program evaluation of a mentorship initiative. *Journal of Allied Health*, 48(2), 134–139.  
<https://www.ingentaconnect.com/content/asahp/jah/2019/00000048/00000002/art00011>
- Becker, B. J., Sayles, H., Woehler, M., Rost, T., & Willett, G. M. (2019). An investigation of professional networks and scholarly productivity of early career physical therapy faculty. *Journal of Physical Therapy Education*, 33(2), 94–102.  
<https://doi.org/10.1097/JTE.0000000000000094>
- Becker, B. J., Shope, R., Willett, G., Von Essen, S., & Kennel, V. (2021). Early career physical therapist faculty connecting with others for scholarly activity: A grounded theory study. *Journal of Physical Therapy Education*, 35(1), 3–11.  
<https://doi.org/10.1097/JTE.0000000000000161>

- Berlin, L. E., & Sechrist, K. R. (2002). The shortage of doctorally prepared nursing faculty: A dire situation. *Nursing Outlook*, *50*(2), 50–56.  
<https://doi.org/10.1067/mno.2002.124270>
- Beiranvand, S., Mohammad Khan Kermanshahi, S., Memarian, R., & Almasian, M. (2022). From clinical expert nurse to part-time clinical nursing instructor: Design and evaluation of a competency-based curriculum with structured mentoring: A mixed methods study. *BMC Nursing*, *21*, Article 10.  
<https://doi.org/10.1186/s12912-021-00797-8>
- Blair, E. (2015). A reflexive exploration of two qualitative data coding techniques. *Journal of Methods and Measurement in the Social Sciences*, *6*(1), 14–29.  
<https://doi.org/10.2458/v6i1.18772>
- Bliss, R., Brueilly, K. E., Swiggum, M. S., Morris, G. S., & Williamson, E. M. (2018). Importance of terminal academic degreed core faculty in physical therapist education. *Journal of Physical Therapy Education*, *32*(2), 123–127.  
<https://doi.org/10.1097/JTE.0000000000000054>
- Boamah, S.A., Hamadi, H.Y., Havaei, F., Smith, H., & Webb, F. (2022). Striking a balance between work and play: The effects of work-life interference and burnout of faculty turnover intentions and career satisfaction. *International Journal of Environmental Research and Public Health*, *19*(2), Article 809.  
<https://doi.org/10.3390/ijerph19020809>
- Brueilly, K. E., Hinman, M., Ritzline, P., & Feller, A. (2022). Characteristics of US-based physical therapist education programs cited for core faculty deficiencies in



2019-2020. *Physiotherapy Theory and Practice*, 39(9), 1–12.

<https://doi.org/10.1080/09593985.2022.2062691>

Bultas, M. W., Duenke, J. K., & Langan, J. C. (2022). Increasing faculty resources and student capacity through shared faculty expertise. *Journal of Professional Nursing*, 42, 129–133.

<https://doi.org/10.1016/j.profnurs.2022.06.014>

Cahn, P. S. (2019). Onramp to scholarship: Putting clinical faculty members on the path to academic productivity. *Journal of Continuing Education in the Health Professions*, 39(3), 218–222.

<https://doi.org/10.1097/CEH.0000000000000260>.

Candela, A. (2019). Exploring the function of member checking. *The Qualitative Report*,

24(3), 619–628. <https://doi.org/10.46743/2160-3715/2019.3726>

Commission on Accreditation in Physical Therapy Education. (2020). Core faculty determination table. <https://www.capteonline.org/faculty-and-program-resources/core-faculty-determination-table>

<https://www.capteonline.org/faculty-and-program-resources/core-faculty-determination-table>

Commission on Accreditation in Physical Therapy Education. (2021). Aggregate

program data. <https://www.capteonline.org/globalassets/capte-docs/aggregate-data/2020-2021-aggregate-pt-program-and-salary-data.pdf>

Caprara, G. V., Barbaranelli, C., Borgogni, L., & Steca, P. (2003). Efficacy beliefs as determinants of teachers' job satisfaction, *Journal of Educational Psychology*,

95(4), 821–832. <https://doi.org/10.1037/0022-0663.95.4.821>

Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinates of job satisfaction and students' academic

- achievement: A study at the school level. *Journal of School Psychology*, 44(6), 473–490. <https://doi.org/10.1016/j.jsp.2006.09.001>
- Carcary, M. (2020). The research audit trail: Methodological guidance for application in practice. *Electronic Journal of Business Research Methods*, 18(2), 166–177. <https://doi.org/10.34190/jbrm.18.2.008>
- Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? *Currents in Pharmacy Teaching and Learning*, 10(6), 807–815. <https://doi.org/10.1016/j.cptl.2018.03.019>.
- ChoosePT. (n.d.). *Why physical therapy?* American Physical Therapy Association. <https://www.choosept.com/why-physical-therapy>
- Cole, B., Zehler, A., & Arter, S. (2020). Role-reversal mentoring: Case study of an active approach to faculty growth. *Journal of Nursing Education*, 59(11), 627–630. <https://doi.org/10.3928/01484834-20201020-05>
- Coughlin, S.S. (1990). Recall bias in epidemiological studies. *Journal of Clinical Epidemiology*, 43(1), 87-91. [https://doi.org/10.1016/0895-4356\(90\)90060-3](https://doi.org/10.1016/0895-4356(90)90060-3)
- Cook, C. E., Landry, M. D., Covington, J. K., McCallum, C., & Engelhard, C. (2015). Scholarly research productivity is not related to higher three-year licensure pass rates for physical therapy academic programs. *BMC Medical Education*, 15, 148. <https://doi.org/10.1186/s12909-015-0431-1>.
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, quantitative, and mixed methods approaches* [5<sup>th</sup> ed.]. Sage.

- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* [4<sup>th</sup> ed.]. Sage.
- Dahlke, S., Raymond, C., Penconek, T., & Swaboda, N. (2021). An integrative review of mentoring novice faculty to teach. *Journal of Nursing Education, 60*(4), 203–208. Doi:10.3928/01484834-20210322-04.
- Dalby, K., Harris, R., & Vogelsmeier, A. (2020). Nurse faculty workload characteristics: A state-level survey. *Journal of Nursing Regulation, 11*(2), 12–19. [https://doi.org/10.1016/S2155-8256\(20\)30105-8](https://doi.org/10.1016/S2155-8256(20)30105-8).
- Daniels, L. (1974). Ninth Mary McMillan Lecture: Tomorrow now: The master's degree for physical therapy education. *Physical Therapy, 54*(5), 463–473. <https://doi.org/10.1093/ptj/54.5.463>
- Daumiller, M., Stupnisky, R., & Janke, S. (2020). Motivation of higher education faculty: Theoretical approaches, empirical evidence, and future directions. *International Journal of Educational Research, 99*, Article 101502. <https://doi.org/10.1016/j.ijer.2019.101502>.
- Deusinger, S. S., Hinman, M. R., & Peterson, C. (2018). Positioning academic physical therapy for excellence through contemporary accreditation standards. *Journal of Physical Therapy Education, 32*(2), 118–122. <https://doi.org/10.1097/JTE.0000000000000053>.
- Deusinger, S. S., & Landers, M. R. (2022). Storm clouds on the horizon: The 3 perils of unconstrained academic growth in physical therapy education. *Physical Therapy, 102*(7), 1–6. <https://doi.org/10.1093/ptj/pzac046>.

- Dickson, T., & Taylor, B. (2021). Faculty staffing patterns: Breadth and flexibility in professional physical therapy programs. *Innovative Higher Education*, 46, 499–518. <https://doi.org/10.1007/s10755-021-09546-w>.
- Dickson, T., Taylor, B., & Zafereo, J. (2020). Characteristics of professional physical therapist faculty and Doctor of Physical Therapy programs, 2008-2017: Influences on graduation rates and first-time national physical therapy examination pass rates. *Physical Therapy*, 100(11), 1930–1290. <https://doi.org/10.1093/ptj/pzaa148>.
- Edwards, D. N., Meyer, E. R., Brooks, W. S., & Wilson, A. B. (2022). Faculty retirements will likely exacerbate the anatomy educator shortage. *Anatomical Sciences Education*, 16(4), 1–11. <https://doi.org/10.1002/ase.2217>.
- Eka, N.G., & Chambers, D. (2019). Incivility in nursing education: A systematic literature review. *Nurse Education in Practice*, 39, 45–54. <https://doi.org/10.1016/j.nepr.2019.06.004>
- Elson, M. O. (1964). The legacy of Mary McMillan. *Physical Therapy*, 44(12), 1067–1072. <https://doi.org/10.1093/ptj/44.12.1067>
- Farkas, A. H., Bonifacino, E., Turner, R., Tilstra, S. A., & Corbelli, J. A. (2019). Mentorship of women in academic medicine: A systematic review. *Journal of General Internal Medicine*, 34, 1322–1329. <https://doi.org/10.1007/s11606-019-04955-2>.

- Foster, T., & Hill, J. J. (2019). Mentoring and career satisfaction among emerging nurse scholars. *International Journal of Evidence Based Coaching & Mentoring*, 17(2), 20–35. Doi:10.24384/43ej-fq85.
- Frisbee, K., Griffin, M. Q., & Luparell, S. (2019). Nurse educators: Incivility, job satisfaction, and intent to leave. *The Midwest Quarterly*, 60(3), 270–289. Retrieved January 10<sup>th</sup>, 2023 from <https://link.gale.com/apps/doc/A583693212/LitRC?u=anon~81638ae3&sid=bookmark-LitRC&xid=7321c52e>.
- Gazza, E. A. (2019). Alleviating the nurse faculty shortage: Designating and preparing the academic nurse educator as an advanced practice registered nurse. *Nursing Forum*, 54(2), 144–148. <https://doi.org/10.1111/nuf.12307>
- Ge, W. (2018). Meeting the challenges of instructor shortages: A blended teaching and learning model for a neuroscience course in a Doctor of Physical Therapy Program. (published abstract at CSM2015).
- Gentry, J., & Johnson, K. V. (2019). Importance of and satisfaction with characteristics of mentoring among nursing faculty. *Journal of Nursing Education*, 58(10), 595–598. <https://doi.org/10.3928/01484834-20190923-07>
- Ghazi, S. R., Shahzada, G., & Khan, S. (2013). Resurrecting Herzberg's two factor theory: An implication to the university teachers. *Journal of Educational and Social Research*, 3(2), 445–452. <http://doi.org/10.36941/jesr>
- Graham, L. H. (1928). Educational standards. *Physical Therapy*, 8(3), 4–7. <https://doi.org/10.1093/ptj/8.3.4>.

- Grassley, J. S., Strohfus, P. K., & Lambe, A. C. (2020). No longer expert: A meta-synthesis describing the transition from clinician to academic. *Journal of Nursing Education, 59*(7), 366–374. <https://doi.org/10.3928/01484834-20200617-03>.
- Guest, G., Namey, E., & Chen, M. (2020). A simple method to assess and report thematic saturation in qualitative research. *PLOS ONE, 15*(5), Article e0232076. <https://doi.org/10.1371/journal.pone.0232076>
- Gurkova, E., Miksova, Z., Labudikova, M., & Chockolkova, D. (2021). Nurses' work environment, job satisfaction, and intention to leave- A cross-sectional study in Czech hospitals. *Central European Journal of Nursing and Midwifery, 12*(4), 495–504. <https://doi.org/10.15452/CEJNM.2021.12.00019>
- Gwyer, J., Odom, C., & Gandy, J. (2003). History of clinical education in physical therapy in the United States. *Journal of Physical Therapy Education, 17*(3), 34–43. <https://doi.org/10.1097/00001416-200310000-00005>
- Hagaman, A. K., & Wutich, A. (2017). How many interviews are enough to identify metathemes in multisited and cross-cultural research? Another perspective on Guest, Bunce, and Johnson's (2006) landmark study. *Field Methods, 29*(1), 23–41. <https://doi.org/10.1177/1525822X16640447>
- Harris, J. (2019). Challenges of nursing faculty retention. *The Midwest Quarterly, 60*(3), 251–269. <https://link.gale.com/apps/doc/A583693211/EAIM?u=lirn55718&sid=bookmark-EAIM&xid=72e01be7>

- Harris, M. J., Hinman, M. R., Marcoux, B. C., & Swisher, L. L. (2018). Happy 40<sup>th</sup> year-you've come a long way, CAPTE! *Journal of Physical Therapy Education*, 32(1), 2–7. <https://doi.org/10.1097/JTE.0000000000000028>.
- Harrison, A. L., & Kelly, D. G. (1996). Career satisfaction of physical therapy faculty during their pretenured years. *Physical Therapy*, 76(11), 1202–1218. <https://doi.org/10.1093/ptj/76.11.1202>
- Hazenhyer, I. M. (1946). A history of the American Physiotherapy Association. *Physical Therapy*, 26(3), 122–129. <https://doi.org/10.1093/ptj/26.3.122>.
- Hennink, M. M., Kaiser, B. N., & Marconi, V. C. (2017). Code saturation versus meaning saturation: How many interviews are enough? *Qualitative Health Research*, 27(4), 591–608. <https://doi.org/10.1177/1049732316665344>
- Hensen, R. K., Stewart, G. K., & Bedford, L. A. (2020). Key challenges and some guidance on using strong quantitative methodology in educational research. *Journal of Urban Mathematics Education*, 13(2), 42–59. <https://journals.tdl.org/jume>
- Herzberg, F. (1966). *Work and the nature of man* (1st ed.). World Publishing Company.
- Hinman, M. R., & Brown, T. (2017). Changing profile of the physical therapy professoriate-Are we meeting CAPTE's expectations. *Journal of Physical Therapy Education*, 31(4), 95–104. DOI: 10.1097/JTE.0000000000000016
- Hoffman, D. M. E. (2019). Transitional experiences: From clinical nurse to nurse faculty. *Journal of Nursing Education*, 58(5), 260–265. <https://doi.org/10.3928/01484834-20190422-03>.

- Holzberger, D., Philipp, A., & Kunter, M. (2013). How teachers' self-efficacy is related to instructional quality: A longitudinal analysis. *Journal of Educational Psychology, 105*(3), 774–786. <https://doi.org/10.1037/a0032198>
- Horvitz, B. S., Beach, A. L., Anderson, M. L., & Xia, J. (2015). Examination of faculty self-efficacy related to online teaching. *Innovative Higher Education, 40*, 305–316. <https://doi.org/10.1007/s10755-014-9316-1>.
- Hunter, J., & Hayter, M. (2019). A neglected transition in nursing: The need to support the move from clinician to academic properly. *Journal of Advanced Nursing, 75*(9), 1820–1822. <https://doi.org/10.1111/jan.14075>.
- Ismayilova, K., & Klassen, R. M. (2019). Research and teaching self-efficacy of university faculty: Relations with job satisfaction. *International Journal of Educational Research, 98*, 55–66. <https://doi.org/10.1016/j.ijer.2019.08.012>
- Jacobsen, K. H. (2021). *Introduction to health research methods* (3<sup>rd</sup> ed.). Jones & Bartlett Learning.
- Jarosinski, J. M., Seldomridge, L., Reid, T. P., & Willey, J. (2022). Nurse faculty shortage: Voices of nursing program administrators. *Nurse Educator, 47*(3), 151–155. <https://doi.org/10.1097/nne.0000000000001139>
- Jeanmougin, C., & Cole, B. (2023). Preliminary development and validation of a peer mentoring needs assessment scale for novice nurse faculty. *Teaching and Learning in Nursing, 18*(1), 12–15. <https://doi.org/10.1016/j.teln.2022.11.012>



- Jensen, G. M. (1988). The work of accreditation on-site evaluators: Enhancing the development of a profession. *Physical Therapy*, 68(10), 1517–1525.  
<https://doi.org/10.1093/ptj/68.10.1517>.
- Jones, E. M. (1928). Reports of special committees. *Physical Therapy*, 8(2), 6–17.  
<https://doi.org/10.1093/ptj/8.2.6>
- Kacel, B., Miller, M., & Norris, D. (2005). Measurement of nurse practitioner job satisfaction in a Midwestern state. *Journal of the American Academy of Nurse Practitioners*, 17(1), 27–32. <https://doi.org/10.1111/j.1041-2972.2005.00007.x>
- Kahlke, R.M. (2014). Generic qualitative approaches: Pitfalls and benefits of methodological mixology. *International Journal of Qualitative Methods*, 13(1), 37–52. <https://doi.org/10.1177/160940691401300119>
- Kamper, S. J., & Thompson, B. L. (2022). Qualitative research: Linking evidence to practice. *Journal of Orthopaedic & Sports Physical Therapy*, 52(6), 408–409.  
<https://doi.org/10.2519/jospt.2022.0701>.
- Kinney, A. R., Eakman, A. M., & Graham, J. E. (2020). Novel effect size interpretation guidelines and an evaluation of statistical power in rehabilitation research. *Archives of Physical Medicine and Rehabilitation*, 101(12), 2219–2226.  
<https://doi.org/10.1016/j.apmr.2020.02.017>.
- Klassen, R. M., & Tze, V. M. C. (2014). Teachers' self-efficacy, personality, and teaching effectiveness: A meta-analysis. *Educational Research Review*, 12, 59–76. <https://doi.org/10.1016/j.edurev.2014.06.001>

- Klem, N., Bunzil, S., Smith, A., & Shields, N. (2021). Demystifying qualitative research for musculoskeletal practitioners part 2: Understanding foundations of qualitative research. *Journal of Orthopedic & Sports Physical Therapy*, *51*(12), 559–561. <https://doi.org/10.2519/jospt.2021.0113>.
- Klem, N., Shields, N., Smith, A., & Bunzil, S. (2021a). Demystifying qualitative research for musculoskeletal practitioners part 3: Phenomeno-what? Understanding what the qualitative researchers have done. *Journal of Orthopedic & Sports Physical Therapy*, *52*(1), 3–7. <https://doi.org/10.2519/jospt.2022.10485>.
- Klem, N., Shields, N., Smith, A., & Bunzil, S. (2021b). Demystifying qualitative research for musculoskeletal practitioners part 4: A qualitative researcher’s toolkit-sampling, data collection methods, and data analysis. *Journal of Orthopedic & Sports Physical Therapy*, *52*(1), 8–10. <https://doi.org/10.2519/jospt.2022.10486>.
- Klem, N., Smith, A., Shields, N., & Bunzil, S. (2021). Demystifying qualitative research for musculoskeletal practitioners part 1: What is qualitative research and how can it help practitioners deliver best-practice musculoskeletal care? *Journal of Orthopedic & Sports Physical Therapy*, *51*(11), 531–532. <https://www.jospt.org/doi/10.2519/jospt.2021.0110>.
- Korstjens, I., & Moser, A. (2018). Practical guidance to qualitative research. *European Journal of General Practice*, *24*(1), 120–124. <https://doi.org/10.1080/13814788.2017.1375092>
- Lee, Y., Aquino, E., Bishop-Royse, J., Spawn, N., & Webber-Ritchey, K. J. (2022). Predictors associated with new nursing faculty’s intent to leave nursing academia:

Teaching preparation in doctoral program, institutional supports, and job satisfaction. *International Journal of Nursing Education Scholarship*, 19(1), 1–12. doi:10.1515/ijnes-2021-0148.

Li, Y., Turinetti, M., & Fang, D. (2019). Special survey on vacant faculty positions for a cademic year 2018-2019. *American Association of Colleges of Nursing*. Retrieved January 10<sup>th</sup>, 2023 from <https://www.aacnnursing.org/Portals/42/News/Surveys-Data/Vacancy18.pdf>.

Magistro, C. (1987). Twenty-second Mary McMillan lecture. *Physical Therapy*, 67(11), 1726–1732. <https://doi.org/10.1093/ptj/67.11.1726>

Majsak, M. J., Hall, C. A., Kirsch, N. R., Krencicki, D. B., Locke, E., & Hyland, N. (2022). Physical therapy education program faculty challenges, concerns, and priorities during the COVID-19 pandemic: Looking back and moving forward. *Journal of Physical Therapy Education*, 36(2), 97–106. <https://doi.org/10.1097/JTE.0000000000000228>

Mazinga, G. (2020). NLN faculty census of schools of nursing academic year 2018-2019: Executive summary. *Nursing Education Perspectives*, 41(6), 388. <https://doi.org/10.1097/01.NEP.0000000000000748>

McKiernan, E. C., Schimanski, L. A., Muñoz Nieves, C., Matthias, L., Niles, M. T., & Alperin, J. P. (2019). Use of the journal impact factor in academic review, promotion, and tenure evaluations. *eLife*, 8, Article e47338. <https://doi.org/10.7554/elife.47338>

- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation*. John Wiley & Sons.
- Miner, L. A. (2019). Transition to nursing academia: A positive experience. *The Journal of Continuing Education in Nursing*, 50(8), 349–354.  
<https://doi.org/10.3928/00220124-20190717-05>
- Moffat, M. (2012). A history of physical therapist education around the world. *Journal of Physical Therapy Education*, 26(1), 13–23. <https://doi.org/10.1097/00001416-201210000-00005>
- Myers, B. J., Tudini, F. T., & Sawyer, S. M. (2020). Scholarly productivity among doctor of physical therapy faculty in the United States. *Journal of Physical Therapy Education*, 34(2), 172–178. <https://doi.org/10.1097/JTE.000000000000139>.
- Nieland, V. M., & Harris, M. J. (2003). History of accreditation in physical therapy education, *Journal of Physical Therapy Education*, 17(3), 52–61.  
<https://doi.org/10.1097/00001416-200310000-00007>
- Ortiz, C. P. (2021). Mentoring experiences of male faculty in nursing programs. *Nursing Education Perspectives*, 42(5), 310–314.  
<https://doi.org/10.1097/01.nep.0000000000000853>
- Pagliarulo, M. A., & Lynn, A. (2002). Needs assessment of faculty in professional-level physical therapist education programs: Implications for development. *Journal of*

*Physical Therapy Education*, 16(2), 16–23. <https://doi.org/10.1097/00001416-200207000-00004>.

Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66(4), 543–578. <https://doi.org/10.3102/00346543066004543>

Palaganas, E., Sanchez, M., Molintas, M. V., & Caricativo, R. (2017). Reflexivity in qualitative research: A journey of learning. *The Qualitative Report*, 22(2), 426. <https://doi.org/10.46743/2160-3715/2017.2552>

Peterson, C. A., & Umphred, D. A. (2005). A structured faculty development process for scholarship in young faculty: A case report. *Journal of Physical Therapy Education*, 19(3), 86–88. <https://doi.org/10.1097/00001416-200510000-00012>

Pinkston, D. (1986). Twenty-first Mary McMillan lecture. *Physical Therapy*, 66(11), 1739–1746. <https://doi.org/10.1093/ptj/66.11.1739>.

Plack, M. M., & Wong, C. K. (2002). The evolution of the doctorate of physical therapy: Moving beyond the controversy. *Journal of Physical Therapy Education*, 16(1), 48–59. <https://doi.org/10.1097/00001416-200201000-00008>

Radtka, S. (1993). Predictors of physical therapy faculty job turnover. *Physical Therapy*, 73(4), 243–251. <https://doi.org/10.1093/ptj/73.4.243>

Ransdell, L., Lane, T., Schwartz, A., Wayment, H., & Baldwin, J. (2021). Mentoring new and early-stage investigators and underrepresented minority faculty for research success in health-related fields: An integrative literature review (2010-2020). *International Journal of Environmental Research and Public Health*, 18(2), 1–35. <https://doi.org/10.3390/ijerph18020432>

- Ravitch, S. M., & Carl, N. M. (2021). *Qualitative research: Bridging the conceptual, theoretical, and methodological* (2<sup>nd</sup> ed.). Sage
- Richards, A. J., & Kieffer, J. (2022). Addressing the associate level nurse faculty shortage: Do job and mentoring satisfaction predict retention? *Teaching and Learning in Nursing, 18*(1), 219–224. <https://doi.org/10.1016/j.teln.2022.09.007>
- Romig, B., Maillet, J., & Denmark, R. M. (2011). Factors affecting allied health faculty job satisfaction. *Journal of Allied Health, 40*(1), 3–14.  
<https://www.ingentaconnect.com/content/asahp/jah/2011/00000040/00000001/art00002#expand/collapse>
- Rowland, D. M., Murphy, A. A., Manik, H. R., Lane, C. Y., Givens, D. L., Cook, C. E., & Garcia, A. N. (2020). Predictors of research productivity among physical therapy programs in the United States: An observational study. *BMC Medical Education, 20*, Article 216. <https://doi.org/10.1186/s12909-020-02133-1>.
- Russell, C. L., & Van Gelder, F. (2008). An international perspective: Job satisfaction among transplant nurses. *Progress in Transplantation, 18*(1), 32–40.  
doi:10.1177/152692480801800108
- Ruth-Sahd, L. A., & Grim, R. (2021). Nurse educators: Professional quality of life related to conditions of work effectiveness. *Nurse Educator, 46*(4), E55–E59.  
<https://doi.org/10.1097/nne.0000000000000950>
- Salamh, P., Roll, M., Figuers, C., & Covington, K. (2019). The development and implementation of a faculty development residency within physical therapist

education. *Journal of Physical Therapy Education*, 33(2), 103–107.

<https://doi.org/10.1097/JTE.0000000000000085>.

Saldaña, J. (2021). *The coding manual for qualitative researchers* (4<sup>th</sup> ed.). Sage Publications.

Santasier, A. M., & Wainwright, S. F. (2018). Physical therapists' pursuit of an academic doctoral degree: Strategies for success. *Journal of Physical Therapy Education*, 32(2), 130–137. <https://doi.org/10.1097/JTE.0000000000000052>.

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63–75. <https://doi.org/10.3233/efi-2004-22201>

Singh, C., Jackson, D., Munro, I., & Cross, W. (2021). Work experiences of nurse academics: A qualitative study. *Nurse Education Today*, 106, Article 105038. <https://doi.org/10.1016/j.nedt.2021.105038>

Sodidi, K., & Jardien-Baboo, S. (2020). Experiences and mentoring needs of novice nurse educators at a public nursing college in the Eastern Cape. *Health SA Gesondheid Journal of Interdisciplanry Health Sciences*, 25, 1–8.  
Doi:10.4102/hgasv25i0.1295.

Sonne, J. W. H., Dawson, N. T., & Smith, G. V. (2019). Research productivity of Doctor of Physical Therapy faculty promoted in the Western United States. *Scientometrics*, 119, 707–719. <https://doi.org/10.1007/s11192-019-03042-x>

- Stickney, L. T., Bento, R. F., Aggarwal, A., & Adlakha, V. (2019). Online higher education: Faculty satisfaction and its antecedents. *Journal of Management Education, 43*(5), 509–542. <https://doi.org/10.1177/1052562919845022>
- Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation, 27*(2), 237–246. <https://doi.org/10.1177/1098214005283748>.
- Tobin, M. F., & Taff, S. D. (2020). Self-reported stress and coping strategies of occupational therapy faculty employed at or graduated from a large midwestern united states university. *Health Professions Education, 6*(3), 406–410. <https://doi.org/10.1016/j.hpe.2020.05.006>
- Varnado, K. E., Bierwas, D. A., & Alexander, J. L. (2021). Exploring factors related to job satisfaction among junior faculty in US physical therapist education programs. *Journal of Physical Therapy Education, 35*(4), 270–278. <https://doi.org/10.1097/JTE.0000000000000199>
- Wendler, M. C., Vortman, R. K., Rafferty, R., & McPherson, S. (2021). What do novice faculty need to transition successfully to the nurse faculty role? An integrative review. *International Journal of Nursing Education Scholarship, 18*(1), 1–18. <https://doi.org/10.1515/ijnes-2021-0095>
- Williams, M., & Moser, T. (2019). The art of coding and thematic exploration in qualitative research. *International Management Review, 15*(1), 45–55. <https://prx-usa.lirn.net/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=bsx&AN=135847332&site=eds-live>



Zipp, G. P., Maher, C., & Falzarano, M. (2015). An observational study exploring academic mentorship in physical therapy. *Journal of Allied Health, 44*(2), 96–100.

<https://www.ingentaconnect.com/content/asahp/jah/2015/00000044/00000002/art00007>.

### Appendix A: Interview Protocol

1. Welcome, thank you for taking the time to volunteer to participate in my study. I am Amanda and the researcher conducting this study. I am a full-time physical therapy faculty member who is interested in addressing the ongoing shortage of physical therapy faculty across the United States.
2. The purpose of this study is to understand the perspectives of experienced, full-time physical therapy faculty members such as yourself regarding how throughout your career you have managed the workload of teaching, scholarship, and service. I will be interviewing yourself and about 9 other individuals to gain information for this project.
3. A few rules of the road for this interview. I want to remind you that this interview and your participation are completely voluntary and you can quit at any time during this interview or request to remove your answers from the study. In addition, if I ask a question that you don't want to answer or if you need to stop the interview at any time, just let me know. The time for this interview will be about 60 minutes, is that ok with you? Also, I will be audiotaping the interview and taking some notes. When we finish, I will transcribe the interview and create a list of preliminary findings, which I will send to you via email for your review. You can review my preliminary findings and make corrections that you see need to be made to make sure that we really capture what it is you wanted to say.
4. Confidentiality will be maintained throughout the entire study. What this means is, I will not use any of your personal information such as your name or any identifiers

that you might describe in your interview. If I use direct quotes, I will use a pseudonym to make sure your confidentiality is maintained. This study is in fulfillment of my dissertation and the final document or any subsequent publications with this information will maintain confidentiality. Do you have any questions?

**Research Question:** How do senior physical therapy faculty balance their workload of teaching, scholarship, and service to remain in their teaching position?

Interview Question 1. How long have you been a full-time physical therapy faculty member?

Follow-up question: Prior to teaching in a full-time capacity, what other teaching experience do you have?

Interview Question 2. What are the benefits to you of being a physical therapy faculty member?

Probing question: How do you feel like you have helped students? Examples?

Interview Question 3. What challenges do you experience with being a physical therapy faculty member?

Follow-up question: How do you work through challenges? Can you provide an example of when you have worked through a challenge?

Follow-up question: What resources do you find helpful to overcome challenges?

Interview Question 4. How do you feel about your work as a physical therapy faculty member, do you feel frustrated, satisfied?

Probing question: Can you give examples of when you felt either frustrated or satisfied?

Follow-up question to frustration: How did you work through that situation?

Interview Question 5. Please share with me aspects of your work as a physical therapy faculty member that are fulfilling for you.

Interview Question 6. What are your perspectives about your skills as a researcher to meet the scholarship demands of your job?

Follow-up question: How long have you felt this way?

Probing question: if participant reports positive perspectives: did you always believe in yourself with regards to this skillset? What experiences have you encountered that strengthened your belief in yourself?

Probing question: if participant reports negative perspectives: what are the barriers that limit your belief in yourself regarding research?

Interview Question 7. What are your perspectives about your skills as a teacher?

Probing question: if participant reports a positive perspective: did you always believe in yourself with regards to this skillset? What experiences have you encountered that strengthened your belief in yourself?

Probing question: if participant reports a negative perspective: what are the barriers that limit your belief in yourself regarding teaching?

Interview Question 8. What are your perspectives about your ability to provide service to the university?

Probing question: if positive perspective: did you always believe in yourself with regards to this skillset? What experiences have you encountered that strengthened your belief in yourself?

Probing question: if negative perspective: what are the barriers that limit your belief in yourself regarding service?

Interview Question 9. As a physical therapy faculty member, how do you balance your workload of teaching, scholarship, and service?

Interview Question 10. How has your ability to balance your workload changed over your career in academia?

Probing question if participant says it hasn't changed: What has contributed to your success in balancing your workload?

Interview Question 11. What strategies do you use to manage the various roles and expectations as a faculty member?

Interview Question 12. What advice do you have for junior physical therapy faculty in helping them manage the workload of teaching, scholarship, and service?

Interview Question 13. What is a key resource that you have utilized that directly contributed to the longevity of your career?

Interview Question 14. Do you have an artifact or data point that you wouldn't mind sharing that influenced your decision to remain in academia?

Follow-up question: do you feel comfortable sharing the artifact with me? It will be included in the study to further understand what are meaningful resources related to retention in academia.

Last question, do you know anyone who may be interested in the study?

Follow-up: If yes, would you be comfortable sharing their name and email so I may send them an invitation to participate?

Okay, that concludes the last of my questions. Is there anything else you would like to share with me on this topic that I haven't covered already with the interview questions?

Thank you very much for participating in my study. This concludes the interview, however, I will be contacting you through email and sending you my preliminary findings from your interview. These findings will be my understanding of the themes identified through your interview. You will have the opportunity to respond through email with any corrections or points of clarification to these findings. If you have any questions or concerns please email me. Do you have any questions? Thank you again, enjoy the rest of your day.

## Appendix B: Survey Items to Verify Participant Eligibility

## Participant Screen

\* Required

1. Are you working as a full-time physical therapy faculty member within a physical therapy program or institution? \*

*Mark only one oval.*

Yes

No

2. Have you been working in a full-time physical therapy faculty position at a physical therapy program or institution for the past four consecutive years? If Yes, continue to question \*

*Mark only one oval.*

Yes

No

3. Is the following statement true: I do not work in an administrative role within my program or institution. \*

*Mark only one oval.*

Yes

No

## Appendix C: Message Provided to Ineligible Participants

**Exclusion Statement**

Thank you for your willingness to participate in this study. Unfortunately, based on your responses you are not eligible to participate.

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Appendix D: Initial Study Invitation Sent to the Physical Therapist Educators Directory

## **Seeking Full-time Faculty Participants**

Are you a full-time physical therapy faculty member interested in sharing your experience in managing a full-time faculty member workload?

My study called:

“Workload Management Strategies Contributing to Senior Physical Therapy Faculty Retention in the United States”

seeks to explore the perspectives of senior physical therapy faculty in managing a full-time workload to assist in identifying resources to increase junior physical therapy faculty retention.

Participation in this study will involve a one 60-minute interview via Zoom. Confidentiality will be maintained throughout the study.

This research is a part of a doctoral study for  
Amanda Parrish, a Ph.D. candidate at Walden University

### **Volunteers must meet the following criteria:**

- Full-time physical therapy faculty member with at least four years, consecutive, full-time teaching experience working in a physical therapy educational institution.
  - Not currently working in an administrative role and have not held an administrative role in the past four years that would alter your workload from that of a full-time physical therapy faculty member.

To confidentially volunteer for the study please click the following link:

## Appendix E: Follow-up Email Sent to Members of the Physical Therapist Educators

Directory

## Still Seeking Full-time Faculty Participants

Are you a full-time physical therapy faculty member interested in sharing your experience in managing a full-time faculty member workload?

My study called:

“Workload Management Strategies Contributing to Senior Physical Therapy Faculty Retention in the United States”

seeks to explore the perspectives of senior physical therapy faculty in managing a full-time workload to assist in identifying resources to increase junior physical therapy faculty retention.

Participation in this study will involve a one 60-minute interview via Zoom. Confidentiality will be maintained throughout the study.

This research is a part of a doctoral study for  
Amanda Parrish, a Ph.D. candidate at Walden University

**Volunteers must meet the following criteria:**

- Full-time physical therapy faculty member with at least four years, consecutive, full-time teaching experience working in a physical therapy educational institution.
  - Not currently working in an administrative role and have not held an administrative role in the past four years that would alter your workload from that of a full-time physical therapy faculty member.

To confidentially volunteer for the study please click the following link:

## Appendix F: Demographic Questions and Request for Contact Information

### Demographics and Contact Information

Please answer the following questions regarding your age, gender, and years of experience. The last section asks you to enter your name and email so that you can be contacted to participate in this study. After submitting the form, you will be emailed within 48 hours by Amanda Parrish.

Age \*

20-30

31-40

41-50

51-60

61-70

71-80

80 +

Gender \*

Female

Male

Nonbinary

Prefer not to answer

Total years of teaching experience? \*

4-9 years

10-15 years

16-21 years

22-25 years

26-30 years

31+ years

Highest degree earned? \*

- Certificate or Associate degree
- Bachelor degree (BS or BA)
- Master degree (MA, MS, MPT)
- Professional/Clinical doctorate degree (DPT)
- Academic doctoral degree (DHSc, EDD, PhD, or similar)

Thank you for completing the survey. Please provide your name and email address. The lead researcher, Amanda Parrish, will contact you via email within 48 hours to schedule a date and time for the interview. \*

Short answer text

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