ABSTRACT

MYERS, KATHERINE D. Educator Identity Formation of the Clinical Instructor in Physical Therapy: A Qualitative Exploration. (Under the direction of Dr. Susan Barcinas.)

Clinical education experiences are an integral aspect of Doctor of Physical Therapy professional training curricula, with physical therapist clinicians volunteering to serve as clinical instructors (CIs) during these experiences. Professional identity, or how one sees themselves as part of a profession, can impact commitment to one's professional roles, and there is minimal research that explores the unique professional identity of clinicians who choose to engage as CIs across their career. While the clinician identity has been examined in physical therapy literature, the educator identity of clinical instructors has not, leaving a gap in understanding how a clinician integrates the clinician and educator role into their professional identity. Using Social Cognitive Career Theory and social-relational identity theory as frameworks, this study sought to understand the multiple aspects of professional identity formation of experienced clinical instructors. Utilizing an interpretive qualitative approach, semi-structured one-on-one interviews were performed with 13 experienced CIs. Interview data was analyzed using a multi-cycle coding process, using the constant comparative method. Analysis revealed that participants had diverse perspectives on their professional identity and viewed the act of being a CI as supportive to a clinician-first identity. From the data, one overarching theme and four subthemes, emerged to help understand the interplay between motivations to teach and the development of an educator identity: Organizational Influence; Hidden Identity; Symbiotic Roles, Commitment to Profession, and Community Matters. Explicitly incorporating professional identity formation into future professional development opportunities, as well as considerations of the impact of organizational culture on clinician engagement as CIs are important future steps to address the needs of the clinical education community.

Educator Identity Formation of the Clinical Instructor in Physical Therapy: A Qualitative Exploration

by
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A dissertation submitted to the Graduate Faculty of
North Carolina State University
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

Educational Leadership, Policy, and Human Development

Raleigh, North Carolina
2024

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DEDICATION

To my family who supported me throughout this journey. To my beautiful boys, James and Xander, thank you for all the hugs, kisses, cuddles, and words of encouragement. I am so lucky to be your mom. To my hubby, Jason, you knew I could finish this, even on days I doubted myself. I love you.

BIOGRAPHY

Katherine (Katie) Dierdre Myers was born April 17, 1979 in Washington, DC and was raised in Silver Spring, MD. She attended Ithaca College where she received her Bachelors in Clinical Science in 2001 and Master of Science in Physical Therapy in 2002. After graduating, Katie moved to Chicago, IL where she practiced as an inpatient acute care physical therapist for 8 years, first at RML Specialty Hospital and then Northwestern Memorial Hospital (NMH). It was at NMH where she began on the path of clinical education, first serving as a clinical instructor and then taking over as Site Coordinator of Clinical Education (SCCE) for the acute care physical therapists. Seeking continued professional development, Katie enrolled part-time in University of South Alabama's online Transitional Doctor of Physical Therapy Program in 2006 and achieved her DPT degree in two years. When she and her husband moved to Colorado in 2010, she continued her acute care practice and her role as CI and SCCE at University of Colorado Hospital in Aurora, CO.

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Katie holds leadership positions both within and outside the Duke DPT community. She is now the Co-Director of Clinical Education with the DPT program and also became the Assistant Director of Curriculum in 2023. Katie co-leads the Education Research Innovation Lab at Duke DPT, offering mentorship to emerging education researchers and creating a dedicated space to further the pursuits of education researchers at Duke. She also serves as the inaugural Vice Chair of Internal Affairs for the American Council of Academic Physical Therapy's Clinical Education Commission, serving as a liaison between the Commission and other ACAPT entities.

Katie resides in Hillsborough, North Carolina with her husband, Jason, their two sons, James and Xander, and their two dogs, Stout and Ellie.

ACKNOWLEDGMENTS

There are many people to thank for supporting me throughout this endeavor. Without my community of friends, family, scholars, and colleagues I would not be where I am today.

To my advisor and committee chair, Dr. Susan Barcinas. Thank you for your time and mentorship as I moved along the PhD path. Your support has meant so much to me. Additionally, I want to thank my committee members, Dr. Jayne Fleener, Dr. Soonhye Park, and Dr. Kyle Covington. I greatly appreciate your willingness to contribute your time, expertise, and support along the way.

To each of my study participants, thank you for giving your time to this study and for sharing your unique and important perspectives. Our profession is better because of dedicated CIs like you.

To Jason Myers, my husband and life partner. Thank you for the constant reminders that each step I took in this process was another closer to the finish line. Thank you for being my advocate, support, and friend, and, of course, the very best editor to ever work for free.

To all my family, who supported me even when they couldn't understand why I needed another doctorate degree. A special thank you to Maggie, for the daily morning texts and encouragement; Jim and Barb, thank you for the occasional boosts courtesy of your favorite vineyard; And Dad and Peggy, thank you for always checking in and encouraging me when I needed it most.

To my Duke DPT community, thank you for your never-ending support. It means so much to me to know my friends and coworkers believe in me and my work.

To Catherine and Amanda, we each started our journeys at different times but our friendship and support of each other has carried me through. Thank you for the writing dates, the supportive texts, and the cheerleading along the way.

To the amazing graduate students, faculty, and friends I have met, I am thankful for each of you. A special thank you to Eboni and Miranda, we have been together each step of this journey. I am so grateful to have been able to learn and grow with both of you and can't wait to celebrate our successes together.

And finally, a thank you to Mom. As with all things in life, I know she was pushing me, guiding me, and sending me love throughout this process. I love you and miss you, Mom, and I hope I make you proud.

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CHAPTER 1: INTRODUCTION

This chapter describes the significant role of the clinical instructor in physical therapist education and the challenge to their professional identity formation when navigating the dual role of educator and clinician. The importance of professional identity formation in the health professions is emphasized and the lack of research specific to the physical therapy field with regard to the professional identity of clinical instructors is highlighted. The purpose and significance of the study are described, and key terms to understanding the study are included.

Background

Clinical education is integral to physical therapist professional education programs, also known as Doctor of Physical Therapy (DPT) programs. The Commission on Accreditation in Physical Therapist Education (CAPTE) requires that DPT programs include a minimum of thirty weeks of full-time clinical education experiences (CEE) in their curriculum (Commission on Accreditation in Physical Therapy Education, 2020). Most academic programs, however, exceed that minimum number. The average program includes thirty-five weeks of CEE, and some programs include as much as fifty-six weeks in their curriculum (Commission on Accreditation in Physical Therapy Education, 2022). Overall, the amount of time spent in the clinical environment accounts for approximately one-third of the entire curriculum.

All health professions training programs include a portion of time spent in the clinical environment where practicing clinicians in their respective fields supervise, teach, and mentor students. In professions such as physical and occupational therapy, often referred to as allied health professions, a licensed clinician, referred to as a clinical instructor (CI) supervise and teach students. These clinicians practice at a clinical site external to the academic program and are affiliated with, but not employed by, the academic program.

By comparison, the medicine and nursing fields structure their training differently. In these fields, it is typical for clinicians who supervise students to hold a faculty appointment within an academic program and the official title of "clinical educator" (Monrouxe, 2010). This is an important distinction because the clinical educator faculty appointment specifically denotes a dual role of clinician and educator. In contrast, a physical therapy clinical instructor (CI) does not typically have the same advantages of employment by the academic program and an accompanying official faculty appointment. Instead, physical therapy clinicians serve as CIs voluntarily, under the direct supervision of their clinical facility and under distant oversight by the academic program.

Despite the critical role a CI plays in the development of future physical therapy practitioners, there are minimal requirements to serve as a CI. CAPTE standards only require that CIs have a minimum of one year of licensed clinical experience and are "effective role models and clinical teachers" (Commission on Accreditation in Physical Therapy Education, 2020). In contrast, faculty employed by the academic DPT program must undergo formal evaluation on a regular basis, including evaluation of teaching effectiveness and the development of a professional development plan linked to their formal evaluation. While CAPTE assigns the word "faculty" to clinical instructors in the CAPTE standards, referring to CIs as "clinical faculty," the fact that the academic program does not employ them means they are not held to the same standard of preparation and effectiveness as faculty employed by the academic institution (Bilyeu et al., 2021).

Clinical instructors must be able to teach effectively to properly train students in the clinical environment, and previous research has identified specific skills required of CIs that would denote them as "experts" or "effective" (Buccieri et al., 2013; Coleman-Ferreira et al.,

2019; Weatherbee et al., 2008). However, CAPTE requires academic programs to be able to describe how CI effectiveness is being met but provides no further guidance or standards about what defines effective clinical teaching. Academic programs are thus left to individually determine their criteria for CI effectiveness and to design opportunities for CI professional development. Similarly, the clinical sites where the educational experiences occur have the option, but not the requirement, to set standards for the clinicians that serve as student educators. Ultimately this means that the physical therapy profession relies on CIs that are held to no uniform standard of teaching effectiveness to oversee a significant portion of a DPT students' training while providing minimal opportunities for professional development and no official professional recognition of the educator role.

Given this context, why would physical therapy clinicians volunteer to serve as CIs? The most commonly cited reason clinicians provide is a desire to "give back" to the profession (Davies et al., 2011). This type of internal motivator is enough for some but is insufficient for producing and maintaining the number of CIs the profession requires (Fairbrother et al., 2016; Lewis et al., 2021). Unfortunately, there are few external motivators for a physical therapist to be a CI. Specifically, there is usually no formal title or faculty appointment given to these individuals by the clinical site or the academic program. CIs typically do not receive additional pay or recognition at their workplace (Lewis et al., 2021; Wilkinson et al., 2021).

Importantly, the voluntary nature of the role results in a clinician serving as a CI intermittently and often inconsistently (Buccieri et al., 2013; Coleman-Ferreira et al., 2019). Clinicians step into the role of CI and immediately must balance the learning needs of their students while also continuing to meet organizational expectations of patient care and clinical

productivity (O'Brien et al., 2017). They do so often with little guidance from their clinical site and receive little recognition of the challenging nature of the dual role of educator and clinician.

Navigating multiple roles as a professional is not atypical; however, the ways in which an individual's roles and responsibilities align with their profession and their personal goals can impact one's development of a professional identity (Adams et al., 2006). Identity is a dynamic concept, understood to develop in an iterative process, and involves an understanding of self in relation to others and in specific social and cultural contexts (Gee, 2001). Identity within the context of a profession is known as professional identity. Professional identity involves one's ability to fulfill the functions of the profession, the specific knowledge pertaining to the profession, and personal identification as a member of a specific profession (Fitzgerald, 2020). A more succinct definition of professional identity is offered as "the attitudes, values, knowledge, beliefs, and skills shared with others within a professional group" (Adams et al., 2006). Professional identity formation (PIF) is a continuous process within the health professions, influenced by personal values, mentorship, environmental factors, and professional experiences (Cruess et al., 2019).

The professional identity of healthcare providers defines the essential knowledge, skills, and role delineation necessary for safe and effective patient care (Brown et al., 2000). Research into PIF of health care providers focuses mainly on the practitioner aspect of the profession and the development of beliefs, attitudes, and skills associated with clinical care. This type of PIF research has deepened the understanding of the identity formation processes of clinicians and resulted in the integration of concepts of PIF into professional training program curricula (Cruess et al., 2014).

A clinician may hold several professional identities, and one or more of those identities may be the prominent identity depending on the context (Monrouxe, 2010). For many clinicians, these identities include that of practitioner, educator, or researcher. These multiple identities often compete and are influenced by many factors, including the clinical environment, personal values, and the perceived value ascribed to different roles by the profession (Sabel & Archer, 2014). Clinician-educator identity formation is particularly challenged due to a lack of recognition of the importance of the clinician-educator role (Sabel & Archer, 2014). Research in the medicine and nursing fields shows that professional identity is associated with a commitment to the roles and responsibilities associated with the educator role and the continued development of skills and knowledge (Cantillon et al., 2016). Physician and nursing clinician educators who develop an educator identity may be more inclined to engage with faculty development initiatives and to seek mentorship, contributing to the development of teaching skill and expertise (Sabel & Archer, 2014).

Statement of the Problem

The practitioner identity of a healthcare provider is described across health professions and is well understood to be important to the clinician's development as a safe and effective practitioner. However, the same understanding of the clinician-educator identity is less clear, despite the crucial role these educators play in developing the next generation of patient care providers.

Research surrounding the educator identity of clinicians has largely been restricted to the medicine and nursing fields. Studies within those fields have explored the impacts of personal beliefs, clinical environments, and professional values on PIF (Cantillon et al., 2019; Holden et al., 2012; Kerr & Macaskill, 2020). Recognition of the unique PIF of clinician educators in these

fields has impacted the training and supports for these individuals, particularly by informing professional development initiatives (Higgs & McAllister, 2007; Steinert et al., 2019).

The same exploration of PIF in clinical instructors has not occurred in physical therapy. A recent scoping review explored the development of clinical teacher identity in the clinical workplace (Cantillon et al., 2019). Of the 34 studies included, only two specifically focused on the physical therapy clinical instructor. While the studies in medical education and nursing can help to inform the physical therapy profession, the difference in training, CI role, and title limit the ability to translate existing research to physical therapy. Importantly, the clinical instructor role is typically intermittent, with CIs repeatedly transitioning in and out of the educator role when they voluntarily choose to serve as CI. This means that clinicians do not hold a permanent title of clinical instructor or clinical educator, and they must choose to step into that role each time. That is a very different structure from other professions in which clinicians hold a permanent educator position and their career trajectory is intertwined with a defined clinician-educator pathway (Byram et al., 2022).

The lack of research into the PIF of physical therapy clinical instructors results in a gap in our understanding of how to best train, support, and sustain this crucial position in physical therapy education. Educators with a strong identity are found to enjoy their teaching role more and to actively participate in faculty development (van Lankveld et al., 2021). Without an understanding of how clinical instructors develop an educator identity, academic programs, clinical sites, and the physical therapy profession cannot sufficiently develop clinicians to be excellent CIs who remain committed to their educator role.

Purpose

The purpose of this study is to expand the understanding of the clinical instructor's experience as an educator and to explore the educator identity formation of clinical instructors in the physical therapy field. Specifically, this study seeks to understand how clinical instructors integrate an educator identity into their broader professional identity and how the clinical instructor role is viewed as an aspect of their broader career path. While previous research within the physical therapy field has focused on skills and attributes required of expert clinical instructors as well as barriers and supports to the provision of clinical education experiences in general, there remains a gap in research that explores how clinicians identify as educators and the impact that identity has on their professional identity formation and their commitment to the CI role. Using an interpretive qualitative approach, this study seeks to understand how clinical instructors understand their professional identity and their career choices.

The goal of this study is to contribute in two ways to physical therapy clinical education: expanding our understanding of the professional identity of physical therapists and proposing mechanisms to support the development of clinicians as educators in meaningful and effective ways. Professional identity research has focused largely on the clinician or patient-care provider aspect of physical therapists' identity despite the significant number of clinicians who serve as clinical instructors throughout their careers. At the same time, identity formation research, particularly that of clinician educators, has grown in health profession fields outside of physical therapy. This study seeks to bring the two approaches to understanding professional identity formation in physical therapy together.

Understanding how CIs develop an educator identity will also contribute to professional development initiatives for clinical instructors. As the number of academic DPT programs grows

in the United States, clinical instructors must be well-prepared and supported to successfully educate future physical therapist practitioners. Further, understanding of the professional identity of clinical instructors specifically can contribute to efforts for more formal recognition of the contribution these clinicians make to the creating a workforce of effective physical therapist providers.

Research Questions

This study seeks to understand the professional identity formation of clinical instructors. The study was guided by the following research questions:

- What influences a clinician to incorporate the clinical instructor role into their career pathway?
- How do clinical instructors experience educator identity formation?

Significance of the Study

The number of Doctor of Physical Therapy programs in the United States continues to rise, from 230 accredited programs in 2015 to 261 programs in 2020, with over 50 additional programs in some stage of development or candidacy status (Commission on Accreditation in Physical Therapy Education, 2022). This increase translates into a sustained increase in the number of programs seeking placements at clinical sites. Consequently, the number of clinicians needed to serve as clinical instructors is rising as well, without a subsequent increase in the availability of training and development opportunities for these essential educators (Recker-Hughes et al., 2010).

The American Council of Academic Physical Therapy (ACAPT) recently recognized the challenges facing academic programs with regards to clinical education. ACAPT convened the Clinical Education Placement Process Task Force in 2018 to address issues surrounding the

recruitment of clinical sites to host physical therapy students for clinical education experiences. They found that the availability of clinical placements for health professions students has not matched the demand from academic programs (American Council of Academic Physical Therapy Task Force, 2020). Research surrounding the clinical instructor role and factors that challenge clinicians to serve as CIs identify significant barriers such as productivity expectations (O'Brien et al., 2017), a lack of training (Recker-Hughes et al., 2015), and organizational culture (Wilkinson et al., 2023). The number of CIs needed to support physical therapy education continues to grow while the challenges they face to remain in an educator role also grow, and efforts to support and sustain the CI role remain stagnant.

The studies in medicine and nursing surrounding clinician educator identity can inform the exploration of the clinical instructor educator identity formation but cannot serve as the basis for decisions about CIs and physical therapy education. The difference between physical therapy and these professions is too great, particularly surrounding timing and length of clinical education experiences, the faculty roles in didactic and clinical training, and the training of clinician educators.

As academic programs continue to rely on clinical instructors to support student training, understanding the link between the educator identity formation of clinical instructors and their lived experience of clinical teaching contributes to developing support structures for the clinical instructor role. Currently, reasons to serve as a clinical instructor come largely from internal motivation and a sense of altruism to “give back” to the profession by helping to prepare the next generation of clinicians (Hall et al., 2016; Wilkinson et al., 2021). Without external incentives found in fields like nursing and medicine such as faculty positions or additional payment, physical therapy education will continue to rely on clinicians with an internal drive to serve as

CIs. Identity formation is impacted by many factors, but it in itself is an internal process that determines how one sees themselves. Clinicians who develop an educator identity are more likely to commit to the role long-term, including a commitment to professional development as an educator (Beauchamp & Thomas, 2009; van Lankveld et al., 2021).

The findings of this study will provide further insight into the experiences of clinical instructors in physical therapy education, with a specific focus on the factors that impact the CI as they navigate the dual role of educator and clinician. This will contribute to the development of support and training for the clinical instructor to facilitate commitment to the educator role as part of their professional identity. Continuing education and immersive training experiences are critical to the PIF of practicing clinicians (Moseley et al., 2021). Training beyond the entry-level degree contributes to PIF through access to mentorship and feedback (Welch et al., 2017). Connecting the educator and practitioner identity for clinical instructors may support the same type of immersive training experiences and the need for mentorship and feedback for clinical instructors to develop their skills as educators and sustain their commitment to the educator identity.

Key Terms

Physical therapist education program: Education comprised of didactic and clinical education designed to assure that students acquire the professional knowledge, skills, and behaviors required for entry-level physical therapist practice.

Clinical education: The portion of a physical therapy education program curriculum where students participate in formal, supervised experiential learning in the clinical environment. The purpose is the development and application of relevant skills, knowledge, and behaviors in

preparation for independent practice (American Council of Academic Physical Therapy, 2022a; Commission on Accreditation in Physical Therapy Education, 2020).

Clinical education experiences: Experiences that allow students to apply and attain professional knowledge, skills, and behaviors within a variety of clinical environments and with patients across the lifespan. The experiences are part of the education program's clinical education curriculum (American Council of Academic Physical Therapy, 2022a)

Clinical instructor: The physical therapist who is responsible for directly instructing, supervising, and assessing the physical therapist student during clinical education experiences. The physical therapist must have one year of full-time (or equivalent) post-licensure clinical experience (American Council of Academic Physical Therapy, 2022a; Commission on Accreditation in Physical Therapy Education, 2020).

Clinical education site: A health service agency or other setting in which clinical education experiences are provided for physical therapist students. The clinical education site may be, but is not limited to, a hospital, agency, clinic, office, school, or home and is affiliated with the education program through a contractual agreement (American Council of Academic Physical Therapy, 2022a).

Clinician educator: A physician or nurse who holds a position with responsibilities in clinical care and trainee education. The clinician is active in professional practice, engages in education scholarship, and may serve as a consultant to other health professionals on education issues (Sherbino et al., 2014).

Summary

Clinical instructors serve a key role in training the next generation of physical therapists, supporting up to one-third of the curriculum in most Doctor of Physical Therapy programs.

Unlike clinician educators in fields such as medicine and nursing, CIs navigate the dual role of educator and clinician without the benefit of an identified professional title or faculty appointment, professional recognition, or consistent opportunities for educator professional development.

Research into the professional identity formation of clinician educators in other fields has resulted in a deeper understanding of the supports needed to foster a sustained commitment to the role of educator. The same exploration has not occurred in physical therapy. This study explores how clinical instructors describe their educator identity as part of their professional identity and the connection between educator identity and professional development. This chapter has provided an overview of the key issues surrounding the exploration of educator identity in physical therapy. In the next chapter, the theoretical foundations of identity formation will be reviewed, and a description of the conceptual framework of this study will be described. Additionally, I will review recent literature surrounding professional identity formation in the health professions, including clinician educator identity.

CHAPTER 2: REVIEW OF LITERATURE

Introduction

This chapter reviews the literature, previous studies, and theoretical frameworks related to clinical education, clinical teaching, and professional identity formation. To provide context for this examination, the chapter begins with a description of physical therapist clinical education, including the overall curricular structure, requirements, and stakeholders involved. The clinical instructor's role, preparation/training, and known challenges and support to their role as an educator will be described. Exploration of professional identity formation issues will take a social-cultural lens and a review of identity formation in the health professions will be included. Specifically, the applicability of James Gee's identity theory, Etienne Wenger's Community of Practice, and Lent's Social Cognitive Career Theory to the exploration of identity formation in health professions education will be discussed. The chapter will include literature from across the health professions, and it will be evident that the fields of medicine and nursing have done more extensive work in exploring issues related to the clinical educator. The absence of the same exploration in physical therapy literature will expose the gap in understanding professional identity formation in the physical therapist clinical instructor.

Overview of Physical Therapist Clinical Education

Physical therapist education program (PTEP) curricula include a didactic and a clinical component. The didactic component includes courses and learning experiences occurring in the classroom or laboratory environment. These courses introduce the foundational knowledge, skills, and attitudes (KSAs) required of a physical therapist and are typically taught by individuals with a faculty position, either as full-time (core) faculty or associated (adjunct) faculty (Commission on Accreditation in Physical Therapy Education, 2020). The clinical

education portion of the curriculum provides the opportunity for students to apply the KSAs learned in the classroom to real-world, clinical settings. These settings may include private clinics, hospitals, schools, or home environments. Academic programs affiliate with clinical entities external to the academic institution in an externship model, where students are placed at clinical sites for their clinical training under the supervision of licensed physical therapists.

The clinical education component can account for up to one-third of a PTEP's curriculum (Commission on Accreditation in Physical Therapy Education, 2022). The two core models of clinical education found in PTEP include full-time CE and integrated clinical education (ICE) experiences. Integrated clinical education refers to short-term clinical experiences that align specifically to the didactic coursework offered in the curriculum (American Council of Academic Physical Therapy, 2018; Hakim et al., 2014). Full-time clinical experiences allow the student to be fully immersed in the clinical environment for a minimum of 35 hours per week and can range in length from four to sixteen weeks long (Commission on Accreditation in Physical Therapy Education, 2022). Accreditation standards require a minimum of thirty-weeks of full-time clinical education experiences, however there is wide variation across PTEPs with regards to the total number of weeks, as well as the timing and length of the clinical experiences. No model of clinical education, including length, timing within the curriculum, or type of setting, has been shown to result in superior educational outcomes (Lekkas et al., 2007).

Regardless of variation in structure and timing of clinical education, CEEs are central to a student's translation of theory to practice and to the development of professional values and attitudes (Ottenheijm et al., 2008; Patton et al., 2018). Clinical experiences positioned early in the professional education curriculum support the development of communication and interpersonal skills (Mai et al., 2014), enhance self-efficacy (Littlewood et al., 2005), and

provide context for later learning (Weddle & Sellheim, 2011). Students perceive the value of CEE to include participation in direct patient care, the opportunity for reflection and discussion, and immediate feedback in developing skills and knowledge (Milanese et al., 2013).

Clinical education is an example of experiential learning, which allows the student to apply knowledge and engage in real-time reflection (Kolb, 1984). Experiential learning theory supports the notion that deep learning requires more than mere knowledge transfer from one individual to another but occurs through experience and intentional reflection (Dewey, 1938). In this type of learning, learning occurs not just by doing or merely participating in an experience but by the opportunity for discussion, reflection, and application of concepts, and the focus is on the learning process, not just the outcome of the learning (Yardley et al., 2012). Principles of experiential learning emphasize the importance of the instructor in facilitating this process by identifying learning opportunities and posing questions to challenge understanding and beliefs throughout the experience (Wurdinger & Carlson, 2010).

Within CEE, students are not just passive recipients of knowledge or mere observers of practice. Students actively engage within the clinical setting, interacting with patients and other providers and integrating into the practice field's culture (O'Brien et al., 2017). In this regard, clinical education is an experiential learning activity in which situated learning occurs. As described by Lave and Wenger (1991), situated learning theory contends that participation and interaction between the learner and the environment or community contribute to learning. Students must be “invited” into the learning space by an instructor who intentionally structures the experience to increase the student’s participation in the required roles and responsibilities.

Thus, students in CEE require teachers who can facilitate student learning in a meaningful way. In most health professions, those responsible for supervising learners in clinical

education are licensed practitioners in the respective fields who teach, mentor, and assess students throughout the experience. In physical therapist education, this individual is known as the clinical instructor. The clinical instructor is responsible for facilitating student learning and has a crucial role in the development of future practitioners.

The Clinical Instructor

Learning outcomes in clinical education are greatly impacted by the effectiveness of the clinician leading the clinical experience (Berkhout et al., 2018; Buccieri et al., 2013; Plack, 2008). In medical and nursing education, the term "clinician educator" is often used to refer to this practitioner, while physical therapist education uses the designation of "clinical instructor" (CI). Beyond just the title, there are significant differences between the medical and nursing models of clinical education and physical therapist education that greatly impact the clinician's role as educator. Within medicine and nursing, clinicians involved in clinical education typically hold a faculty appointment within an affiliated academic program and often hold an official title of "Clinician Educator" (Sabel & Archer, 2014). Specific post-licensure training pathways exist to train clinician educators in medicine (Heflin et al., 2009), and faculty development initiatives specifically target the physician or nurse clinical educator (Higgs & McAllister, 2007; Snook et al., 2020; Williams & Dewey, 2019). Overall, these models support a clinician who is recognized in a formal educator role as part of an academic program and afforded opportunities to develop their skills and attributes in that role.

In contrast, clinical instructors in physical therapy education are typically positioned outside of the formal academic education environment and must only meet minimal requirements to serve in this important role. Physical therapists are eligible to serve as a CI if they have one year of post-licensure clinical experience and are considered an effective "role model and

clinical teacher" (Commission on Accreditation in Physical Therapy Education, 2020). These clinicians are not directly employed by an academic program; instead, each academic program establishes an affiliation with clinical sites where clinicians who choose to serve as a CI are employed. Academic programs must meet CAPTE's accreditation standards with regard to CI effectiveness, but each academic program is allowed to determine its specific mechanisms for ensuring its affiliated CIs are "effective teachers." This can contribute to variations in the teaching practices of CIs across the country (Recker-Hughes et al., 2014).

Previous research indicates that CIs acquire teaching skills primarily through experience and not solely through formal training or professional development (Buccieri et al., 2011; Coleman-Ferreira et al., 2019). While CIs are expected to be "effective teachers," the American Physical Therapy Association (APTA) recognizes only one national CI training program: the Credentialed Clinical Instructor Program (CCIP). The APTA website describes the CCIP as "intended for health care workers who work primarily in a clinical setting and are interested in developing their teaching skills (APTA, n.d.). The CCIP is a voluntary credentialing program and is the predominant method of CI training in physical therapy education, but there is mixed evidence on its impact on teaching effectiveness.

Weatherbee et al. (2008) analyzed student ratings of their CIs on an adapted version of the Nursing Clinical Teacher Effectiveness Inventory (NCTEI), comparing CCIP-credentialed and non-CCIP-credentialed CIs. They found no significant differences in scores between the two groups, finding only a positive correlation between years of CI experience and aggregate NCTEI scores. (Housel et al., 2010) compared student ratings of CCIP-trained CIs with non-CCIP-trained CIs and found that credentialed CIs scored higher on the majority of the twenty-seven

criteria, however, only two of the criteria were statistically significant. The overall summative scores of the credentialed CIs were also higher than the non-credentialed CI.

These studies provide mixed evidence of the impact of the CCIP on CI effectiveness, particularly from the student perspective. Further, there remains a gap in the literature that seeks the clinician's perspective on the impact of the credentialing program on their self-efficacy as an educator or commitment to the role of CI. So, while the CCIP remains the predominant method of CI training, it remains a voluntary program, and academic programs and clinical sites do not consistently require it of their CIs (Recker-Hughes et al., 2014).

The lack of training opportunities and minimal requirements for CIs is concerning as clinical instructor characteristics and behaviors can significantly impact a student's experience in clinical education. Students perceive interpersonal skills and instructional methods to be key characteristics of effective CIs (Morren et al., 2008). Giving constructive feedback, creating space and time for questions and discussion, and clearly articulating clinical reasoning and decision-making processes are important teaching skills that positively impact the student experience (Rindflesch et al., 2013). However, research exploring the link between CI characteristics and student experiences predominantly relies on the student perspective (Dahlke et al., 2012; Jochemsen-van der Leeuw et al., 2013; McCallum et al., 2016). While student perceptions are important to consider, their validity in fully defining the role of the CI and what makes an effective CI is limited due to the potential for bias (Bilyeu et al., 2021).

Given the limitations around formal training and feedback for physical therapist clinical instructors, what motivates these individuals to take on this role? Motivators to serve as a CI have been studied only sporadically in physical therapy. Gwyer (1993) found that CIs rated intrinsic factors such as altruism and intangible rewards such as intellectual stimulation highest

amongst factors influencing their decision to continue to serve as a CI. More recent studies have corroborated these earlier findings, reinforcing that intrinsic factors serve as the predominant motivator for clinicians to volunteer as CIs (Davies et al., 2011; Wilkinson et al., 2023).

Findings from studies outside of physical therapy support the notion that intrinsic motivators are a significant reason clinicians serve as educators. A sense of duty to support the profession and a desire to teach are cited in the physician assistant literature exploring this topic (Gonzalez-Colaso et al., 2013; Hudak et al., 2014a) Similarly, studies from occupational therapy and nurse practitioner fields find clinicians desire to "give back" to the profession and are influenced to teach by their own positive experiences during clinical training (Boyce et al., 2022; Varland et al., 2017). However, these studies also find extrinsic benefits and motivators have a significant impact which is different from what is found in similar physical therapy studies. Clinicians note the ability to earn continuing education credits (Gonzalez-Colaso et al., 2013) and access to educational resources and support from the affiliated academic program (Hudak et al., 2014a) as important motivators to teach.

Clinicians from across health professions experience common challenges to the clinical supervision of learners. Clinicians perceive a higher stress level associated with clinical teaching due to increased administrative burdens (Rodger et al., 2012). Additionally, previous experiences with difficult students can negatively impact the willingness to supervise future students (Davies et al., 2011). Adequate time to teach, high caseload, and clinical productivity demands negatively impact clinician willingness to teach and their overall experience as educator (Boyce et al., 2022; Davies et al., 2011). These types of factors indicate that the organizational culture in which the clinician is teaching can either be a support or a barrier to clinical education. (Wilkinson et al., 2023) found that, while clinicians may be motivated to serve as a CI by strong intrinsic factors,

aspects of the organizational culture, such as productivity demands and the overall attitude towards education, can serve as a barrier, resulting in difficulty soliciting volunteers to serve as CIs.

Our current understanding of the CI's responsibilities and the motivators and barriers to their participation in clinical education is informed by studies across health professions. However, research on CI teaching behaviors largely relies on student perceptions, while studies exploring barriers and facilitators to the CI role typically use surveys to gain a broad perspective across clinicians. Qualitative studies that offer an in-depth understanding of clinical instructors' experiences would help identify specific ways to support clinicians in the transition to the role of educator and sustain their commitment to the role. This type of exploration is occurring outside of the physical therapy field, with a specific focus on understanding what it means to one's professional identity, confidence, and career goals to hold the dual role of clinician and educator.

The Dual Role of Clinician and Educator

The clinical instructor or clinician educator designation indicates an individual functioning within two roles: the clinician and the teacher. Professional roles are typically defined by expected knowledge, skills, and attitudes that indicate whether someone is meeting the defined expectations for that particular role. These expected behaviors can be defined as competence (Verma et al., 2006). For the clinician educator, competency as a practitioner is well-defined through professional standards and established competency frameworks for clinical practice. However, competency as an educator may be more ambiguous, with defined educator competencies varying across health professions. The ambiguity in expectations contributes to tension between the dual role of educator and clinician.

Defining competence in any context indicates that specific knowledge and skills are expected of an individual's role. Epstein & Hundert (2002) offer a definition of competence that is specific to the health care context: "the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values and reflection in daily practice for the benefit of the individual and community being served" (p. 226). This definition includes expected behaviors and indicates that internal elements such as motivation and values contribute to competence. Competency frameworks, clinical practice standards, and professional values offer the specific knowledge and behaviors needed to demonstrate competence across health professions (Batt et al., 2020). With well-defined thresholds for competence, a clinician can more easily describe their roles, responsibilities, and professional expectations as practitioners.

In contrast, the educator aspect of the same clinician's roles and responsibilities may be less easily defined and described. In studying how medical educators perceive their role and identity as educators, (Sabel & Archer, 2014) found that physicians had difficulty describing specific qualifications or characteristics of a medical educator and attributed this to a lack of professional definition of this role. Physical therapy clinical instructors see themselves as guides for students and identify the importance of behaviors such as good interpersonal skills and ability to self-reflect (Greenfield et al., 2012; Greenfield et al., 2014). Descriptions of expertise in clinical teaching also offer the idea that expertise is attainable in this realm. However, without identifying specific behaviors, clinicians who engage as educators are left without a pathway for development.

Nursing education offers an example of how an established educator competency framework can assist in facilitating educator role identity and opportunities for faculty development. The National League for Nursing (NLN) Core Competencies for Academic Nurse

Educators was established in 2005 (NLN, 2022), providing a comprehensive and detailed description of the multiple contexts in which nurse educators function in the academic environment. In 2018, the NLN expanded the original competency framework to identify competencies for academic clinical nurse educators. These competencies have informed curriculum development in nurse educator pathways (Kalb, 2008), professional development initiatives, and nurse educator assessment tools (Halstead, 2018). Establishing educator competencies that integrate the nursing profession's core values supports the integration of a clinician and educator identity (Larson et al., 2013).

The physician medical education community has also begun to recognize the need for clear competency guidelines for their educators. The concept of "teaching as a competency" was first described by Srinivasan et al. (2011). The research team used a multi-modal approach to identify six core competencies: medical/content knowledge, learner-centeredness, interpersonal and communication skills, professionalism and role modeling, practice-based reflection, and systems-based practice. The authors further delineated competencies based on educator roles, and suggested that by doing so, educators could more readily use the framework to reflect on the required skills they needed for their specific role.

Sherbino (2014) performed the first national study to formally define the clinician educator role and identify its core competencies. Through a consensus-building process, they identified seven core competencies of clinician educators in physician training: assessment, communication, curriculum development, education theory, leadership, scholarship, and teaching. Unlike the Teaching as a Competency framework, this competency was specific to the clinician educator, the first in medical education to do so.

The same work has only just begun in physical therapy education. Previous research described desired characteristics of CIs (Buccieri et al., 2013; Jensen, Nordstrom, et al., 2017; Kelly, 2007; McCallum et al., 2016; Tang et al., 2005) and sought CI perspectives on their own competence (Coleman-Ferreira et al., 2019). The first competency framework for clinical teaching in physical therapy was developed recently (Myers et al., 2022), delineating three domains and twenty-four competencies required for clinical instructors in physical therapy education. While competencies from outside of physical therapy can serve as a useful guide, identification of competence must be specific to the profession and context in which they will be applied (Batt et al., 2020; Bilyeu et al., 2021). Since the physical therapy clinical teaching competency framework is newly established, it is unknown if the same impact of a competency framework seen in medicine and nursing will occur in physical therapy education, including influencing professional development opportunities and positively impacting the integration of the clinician and educator identities.

However, as educator competencies continue to be developed and refined, there is increasing recognition that a clinician-educator or clinical instructor's behaviors, skills, and knowledge are unique and separate from those of a clinical practitioner. When considering the dual roles these clinicians hold, it’s important to consider the clinical and educational context in which they function. This context, which includes the educational structure of the profession and the clinical environment, varies considerably across professions, and can significantly impact the clinician.

In medicine, for example, clinician educators often hold an official faculty appointment within the academic program. As such, they are held to the typical standards applied to those with faculty appointments, including demonstration of contribution to teaching, research, and

scholarship within their academic program (Sabel & Archer, 2014). Their primary responsibilities, however, center around education and clinical practice. They may teach in the classroom or laboratory environment, as well as in the clinical setting, while also maintaining clinical practice responsibilities. In professions such as physical therapy and occupational therapy, clinicians serving as clinical instructors do not hold a permanent title that designates them as educators. When teaching students in the clinic, their clinical practice responsibilities remain in place, with little protected time for teaching (Greenfield et al., 2014).

Regardless of structure, clinical education experiences in all health professions education require clinicians to take on these dual responsibilities to train future practitioners. The tension between roles has been explored in medical education, where participation in clinical practice, education, and research roles are sometimes in opposition to each other or viewed in a hierarchical context. Clinician educators in medical education may view their teaching work as mere responsibilities that must be carried out rather than a professional role or identity (Levinson & Rubenstein, 2000). Medical educators require multiple levels of support to succeed in their role, including mentorship, training, and opportunities for promotion (Branch et al., 1997). Despite the fact that the needs of these educators have been recognized for decades, more recent research indicates that the dual role continues to be challenged.

Sabel & Archer (2014) studied early career medical educators who functioned in clinical or researcher roles. Using focus groups, they explored how medical educators define their role and identity and found that participants viewed their educator role as secondary to that of clinician or researcher. The participants also felt that the larger medical profession perceived the educator role as less valuable. Additionally, participants had difficulty describing specific qualifications or characteristics of a medical educator and attributed this to a lack of recognition

or professional definition of this role. While this study was not focused solely on clinician educators and included only physicians, it highlights how self-identity and social and professional relationships can impact one's sense of self as an educator.

The understanding of the complex nature of the dual role of a clinician educator is deepened when considering the dual role through the lens of professional identity and the clinician's sense of self as educator. When clinicians perceive that teaching is less important than other expected roles, such as research or clinician, it threatens the integration of their teaching role into their professional identity (Sabel & Archer, 2014). In medicine, clinician educators often face pressure to produce research and scholarship because those activities are seen as more prestigious by the academic and professional community (Hu et al., 2015; Kumar & Greenhill, 2016). Continued tension between competing roles and professional identities can result in negative sense of self and threaten commitment to the assigned roles (Monrouxe, 2010; Rees & Monrouxe, 2018).

Clinicians more successfully navigate the competing roles when certain supports are in place. External supports such as faculty development programs that focus on educator skills contribute to a sense of community and shared meaning in the role of educator (Jauregui et al., 2019). Clinicians with a sense of agency to resist negative perceptions of their teaching role and ignore issues of status within their profession can integrate their identities and experience less tension (van Lankveld et al., 2017).

While one can assume that physical therapy clinicians experience similar tensions between their dual roles of educator and practitioner, very few studies specifically explore this aspect of clinical education. Ong et al. (2019) conducted a qualitative study of physical and occupational therapists who served as clinical instructors (referred to as clinician educators in the

study) in Singapore and their perceived clinician and educator role identities. The authors found that clinicians saw importance in their educator role, but that self-efficacy and a low sense of competence initially hindered their perception of themselves as educators. The clinicians felt competent in their practitioner role but did not initially have the same confidence as an educator. Self-efficacy in their educator role grew with additional training and experience. This study is the first to specifically explore identity in the physical therapist clinical instructor, and the findings reinforce some of those found within the medical education literature, including the influence of organizational culture and self-efficacy in on a clinician's sense of self as educator. However, the study only included clinicians practicing in one regional health system which had an established program to support the development of clinician educators through professional development opportunities. An organizational culture that prioritizes education is not always the context in which CIs practice (O'Brien et al., 2017; Recker-Hughes et al., 2016; Wilkinson et al., 2023).

The medical community's perception of an educator role as less important or less valuable can perpetuate a structure where clinician and teacher are seen as separate roles, rather than integrated. The Association for Medical Education in Europe published a guide titled, "Supporting a teacher identity in health professions education" (van Lankveld et al., 2021). The guide offers eleven recommendations for the workplace environment and six recommendations for faculty development, all with the purpose of supporting the clinician educator in their role. The first three recommendations center around recognizing the value of clinical teaching: "recognize and reward teaching in career frameworks", "acknowledge teaching excellence in grants and awards", and "support a positive message about teaching" (p. 127). This guide is useful for those exploring clinician educator role and identity, particularly if focusing on external

factors that can motivate and support clinician educators such as workplace culture or training opportunities.

Research into the clinician educator role from the medical education field provides important information and perspective about challenges and supports these clinicians experience while navigating the dual role. This work highlights factors such as recognition, clinical environment, training, self-efficacy, and competence as influential to the clinician educator experience and sense of identity. However, research from other health professions cannot be fully translated to the clinical instructor in physical therapy due to the significant differences between the professions' training structure and environment.

Ong et al.'s (2019) investigation into the integration of the clinician and educator role in physical and occupational therapists is the first study to specifically explore identity integration of clinical instructors. While the study findings reinforced the importance of organizational culture and clinicians' sense of agency in navigating their roles, the authors acknowledge that the experienced clinician who successfully navigated the dual role was underrepresented in the study. A gap remains in understanding how experienced CIs describe their educator identity and how that identity is developed.

What is Identity Formation?

Identity formation can be explored from many different perspectives, and while identity is widely explored in the literature, it is difficult to identify a distinct definition of identity or identity formation. Research typically either explores identity by focusing on the internal and individual identity formation, or by focusing on identity of an individual as part of a group (Penuel & Wertsch, 1995). This latter approach serves as a basis for more recent identity exploration, placing an individual's identity formation in the context of a social environment

(Akkerman & Meijer, 2011). James Gee's (2001) theory of identity formation offers a framework to understand identity formation as a process by which social interaction and internalization of information and experiences both contribute to an individual's identity. Gee defines "identity" as being recognized as a certain "kind of person" in a "given context" (p. 99). As an individual's position within a given context shifts and evolves, so does their identity, resulting in a non-linear process of identity formation (Flores & Day, 2006; Gee, 2001).

The concept of communities of practice offers another framework from which to understand identity formation as a social-relational process. Communities of practice, first described by Etienne Wenger (1998), are formed by groups of people who share a common interest or experience and regularly interact to learn how to better address their shared experience. Within a community of practice, identity formation occurs through interactions with others and shared meaning-making from experiences. Communities of practice were originally described in the context of social and workplace learning and the concept has contributed to the understanding of professional identity formation across health professions (Cantillon et al., 2016; Jawitz, 2009; Plack, 2006; Woods et al., 2016).

Professional Identity

Professional identity is defined as an individual's understanding of what it means to be a member of a particular profession (Rees & Monrouxe, 2018). It encompasses a given profession's knowledge, skills, values, ethics, and group identity (Fitzgerald, 2020). One's professional identity is influenced both by personal values and the context or environment in which the individual is functioning (Beauchamp & Thomas, 2009). The environment includes the people and groups in which one is interacting and the roles and responsibilities one holds. Thus, professional identity can be viewed as a form of social identity, whereby individuals

"compare and differentiate themselves from other professional groups" (Stern & Rone-Adams, 2006)(Adams et al., 2006, p. 56). These interactions between groups within the professional realm contribute to an individual's professional identity formation.

In healthcare, practitioners often function in interdisciplinary environments, and an understanding of one's role, as well as confidence in that role, contributes to the development of distinct identities of each group (Adams et al., 2006). How one develops a professional identity has become of increasing interest in healthcare education, with the recognition that a strong professional identity can contribute to increased confidence, commitment to the profession, and reduced clinician burnout (Monrouxe, 2010; Turner & Knight, 2015). A recent shift in medical education has placed professional identity formation as an explicit educational objective, rather than a hidden or implicit outcome of professional training. A 2010 report from the Carnegie Foundation Report on the Future of Medical Education asserted that professional identity formation should be a pillar of medical education (Irby et al., 2010). Over the last decade, professional identity formation has become increasingly embedded within medical education training, and there has been a greater focus on understanding what experiences impact when and how a trainee sees themselves as a professional (Cruess et al., 2014; Cruess et al., 2019).

Cruess and colleagues (2015) offer a description of professional identity formation of medical students and residents that depicts an individual entering medical school or residency with a partially formed personal identity influenced by personal characteristics and past experiences. The trainees then undergo a process of professional socialization through experiences in their program and exposure to communities of practice and social interactions. The physician's initial professional identity is formed through this professional socialization process and is integrated with their existing personal identity. In that study, professional identity

formation is depicted as a linear process, influenced by many factors, and provides a useful lens to recognize the multiple factors that influence professional identity formation of physician trainees. Further work has emphasized that professional identity formation is a non-linear and on-going process that occurs throughout a physician's career and is impacted by mentorship, professional development, and reflective processes (Moseley et al., 2021).

Literature from medical education can inform our understanding of professional identity formation of all health professionals, however, the context and environment in which each profession is functioning is unique and has an impact on the development of a professional identity. A recent scoping review by Mak et al (2022) aimed to identify the scope and range of professional identity formation literature specific to rehabilitation professionals. The results of the scoping review were consistent with much of the research in medical education, however the study added to the discourse around professional identity formation by identifying the impact that public perception of a profession can impact professional identity formation. If a health profession is seen as less valuable to patient care as compared to others, or there is limited understanding of the contributions the profession can make to the healthcare team, professional identity can be threatened (Atherton et al., 2017; Beddoe, 2011).

Professional identity formation becomes even more complicated when an individual holds multiple positions within a profession, each with distinct roles, responsibilities, and recognition. Beijaard et al. (2004) reviewed teacher identity literature and found that teachers can hold multiple sub-identities within their professional identity. These sub-identities can be more or less prominent in given contexts or situations. Difficulties in navigating multiple professional identities can lead to identity dissonance (Monrouxe, 2010). Identity dissonance is the experience of conflict between two senses of self (Delaney, 2015), and this type of dissonance has been

described in studies exploring the role of the medical educator (Sabel & Archer, 2014; van Lankveld et al., 2021). Identity dissonance can result in negative emotions, including frustration and low self-worth (Monrouxe, 2010). In contrast, those with a well-established sense of their professional identity and sub-identities develop greater self-efficacy beliefs and commitment to their position (Canrinus et al., 2011). Clinical instructors maintain dual roles of clinician and educator, resulting in a more complex professional identity than that of an individual who primarily engages as a clinician. While we may understand that clinician professional identity is influenced by multiple factors and experiences, we do not have the same understanding of the educator identity formation of physical therapy clinical instructors, despite the importance of their position in physical therapy education and the need for continued commitment of clinicians to serve in that capacity. Further understanding of how clinical instructors' dual identity develops, is reinforced, and its impact on the physical therapist's overall professional commitment is needed.

Career Development and Social Cognitive Career Theory

The clinical instructor role in physical therapy is intermittent and largely voluntary. No defined "clinician educator" career pathway exists across the profession. Therefore, clinicians who repeatedly serve as CIs are doing so by their own choice and often on an intermittent basis. Previous research surrounding the experienced clinical instructor has focused on their expertise, qualifications, and competence. However, beyond the identification of intrinsic motivations, there has been no in-depth exploration into other factors that influence a clinician's commitment to the CI role as part of their professional pathway. Further, no studies have specifically addressed how serving as a CI influences a physical therapist's professional identity formation and their overall career choices.

Once again, looking to medical education provides guidance on how these same questions have been addressed outside of physical therapy. One way in which clinical educator identity formation and career development has been explored in medical education has been through the application of Social Cognitive Career Theory (SCCT). First described by Lent et al., (1994), SCCT offers a framework to explore career pathways and has been applied to studies across many professions and sectors to understand how and why individuals make decisions regarding their career.

To understand SCCT's utility in exploring career development, reviewing Bandura's (1986) social cognitive theory (SCT) is important. SCT emphasizes how behavior and learning occur through bidirectional interaction between the individual and their environment. A key component of SCT is the concept of reciprocal determinism, which suggests behavior is influenced by three factors: personal factors (e.g. beliefs, attitudes, and self-efficacy); behavioral factors (e.g. skills and habits); and environmental factors (e.g. culture, physical environment, and people). Social cognitive theory extends Bandura's original social learning theory by emphasizing personal factors, particularly self-efficacy. Self-efficacy refers to the belief in one's ability to perform a particular task or behavior successfully, and according to SCT, people are more likely to engage and persist in behaviors they think they can successfully perform.

Social Cognitive Career Theory builds upon the fundamental principles of SCT and applies them to the context of career choice and development. The theory is centered around three linked constructs: self-efficacy beliefs, outcome expectations, and goals (Lent et al., 1994). Self-efficacy beliefs answer the questions "Can I do this?", while outcome expectations address the consequences of a behavior or choice. Goals are linked to self-efficacy and outcome

expectations as an individual will set goals consistent with their confidence in their capabilities and the anticipated outcomes.

Since its introduction in 1994, SCCT has evolved and expanded as understanding of career development models have expanded (Lent & Brown, 2019). The original SCCT career choice model has been modified to focus on career satisfaction, integrating the original three domains with personality, cognitive, and environmental variables (Lent & Brown, 2006). This includes the match between an individual's interests, values, and abilities, and the demands and rewards of their work environment. The original model has also been used to explore career management, with a focus on behaviors such as career exploration and decision-making that are used to thrive in work environments across one's career (Lent et al., 2016).

Consistent across all SCCT models is the element of self-efficacy, and this aspect of the SCCT has been posited as the key element of SCCT. Analysis of the SCCT variables, however, demonstrate that self-efficacy is intricately related to other constructs within the model (Lent & Brown, 2019). There is a strong relationship between self-efficacy and interest development (Sheu 2010), but outcome expectations are also a significant contributor to career choice and goals. This means that the decision by an individual to pursue career activities and pathways is influenced strongly by the anticipation of positive outcomes and not just by self-efficacy. Lent et al were not the first to use Bandura's work to develop career theory. Krumboltz et al. (1976) developed a social learning theory of career selection and posited that environmental factors primarily influence career decisions. In this perspective, career choice is influenced by observation of the behaviors of family, friends, peers, and colleagues. Additionally, the ability to identify and pursue available opportunities in one's environment contributes to a more satisfying career. Certain elements of Krumboltz's theory are evident in SCCT, but SCCT's emphasis on

personal and cognitive factors set it apart. SCCT offers a framework to explore individual career choices and pathways more holistically.

Application of SCCT in Medical Education

Early applications of SCCT in medical education research explored factors associated with development of physicians in research-scientist roles in academic medicine. Bakken et al. (2006) found that pursuit of clinician research pathways was challenged by low self-efficacy, ill-defined personal goals, and conflicting demands associated with the dual roles academic physicians may hold. O'Sullivan et al. (2009) also used SCCT as a framework to explore the motivations of physicians in entering academic medicine, specifically focusing on research pathways. These studies provide useful examples of how SCCT can be useful in framing studies centered around transition into new roles in medical education. However, their focus on those in more research-focused pathways reinforces the notion that academic medicine is primarily research-oriented and limits their applicability to clinicians who pursue other educational avenues.

More recent studies in medical education recognize the importance of understanding the clinician-educator role in academic medicine and use SCCT as a framework to explore different factors associated with a teaching-oriented role. Kumar et al. (2011) applied SCCT to explore factors that influenced physicians to choose to enter academic medicine with a primary goal of teaching, rather than through a pathway that primarily emphasized research or clinical practice. Participants described challenges to navigating the clinician-educator role as a career pathway, including perceptions that a teaching role was not as legitimate in academic medicine as research-oriented roles and a lack of recognition or reward for excelling in the educator position. However, participants described a sustained interest in engaging as a clinician educator,

motivated largely by a personal interest in teaching and an intrinsic belief in the value of their role to the profession at large.

Other studies have also reinforced the influence of personal values, self-efficacy, and anticipation of positive outcomes on the development of clinician educators in academic medicine. Thomas et al. (2020) used SCCT as a framework to investigate factors that contributed to career development of medical educators. The investigators found that participants described multiple professional identities, and the clinician and educator identities merged as their career progressed. Early success as an educator contributed to a "launch" into a medical education career, building self-efficacy. A unique finding in this study was that participants identified the importance of repeated episodes of success over the course of their career reinforced their self-efficacy and their commitment to the educator pathway. This finding is consistent with the conclusions of Lent & Brown (2019) who identified that career interest is influenced not just by past experience, but by the perception that past experiences contribute to one's self-efficacy or view of one's own capabilities. Byram et al. (2022) also found that self-efficacy and positive outcome expectations reinforced physicians' commitment to the clinician educator role. In their study, the investigators explored the impact of participation in a professional development program designed specifically for clinician educators. Through a longitudinal, qualitative investigation, they found that participation in the program resulted in increased self-efficacy. Additionally, participation in the program resulted in a community of practice of educators, providing opportunities for mentorship and role-modeling. This positively contributed to outcome expectations of the clinician educators who viewed their role more positively.

These studies exploring factors associated with the clinician educator role in medicine have similar findings, including the importance of environmental factors, personal values, and

self-efficacy beliefs on the development of clinician-educators and their commitment to their role. How the teaching position is perceived by others in the environment and within the larger context of the profession influences the choice to pursue a clinician educator role in academic medicine and the commitment to the role over time is influenced by the opportunity for support along the way and the recognition and rewards associated with the role. The studies also demonstrate the influence of these factors on the professional identity formation of clinician educators and the merging- or competition- of the dual role of clinician and educator.

Synthesis and Future Research

Professional identity is key to an individual's sustained commitment to their roles and responsibilities within a given profession (Monrouxe, 2010). Within the health professions, clinician professional identity formation occurs through the integration of personal identity and professional socialization processes, as well as experiences, knowledge acquisition, and professional values (Andrew et al., 2009; Cruess et al., 2015). Perceptions also influence clinical professional identity, and can include the self-perception of one's profession in the broader context of the healthcare environment, and the views of others toward their role (Mak et al., 2022).

As we focus in on the clinician educator within the health professions, we find the same influences of educator professional identity formation. Research within medical education demonstrate that environmental and professional issues threaten clinician educator identity, and clearly defined roles, professional recognition, and opportunities for professional development support it (Cantillon et al., 2016; van Lankveld et al., 2021). Research surrounding clinical instructors in physical therapy mostly avoids the exploration of educator identity formation, focusing instead on perceptions of role (Greenfield et al., 2012; Meyer et al., 2019), expertise

(Buccieri et al., 2011), and competence (Coleman-Ferreira et al., 2019; Myers et al., 2022). Recent survey research into the values and motivators of CIs reinforces the argument that intrinsic factors and organizational culture influence a physical therapist's role as CI (Wilkinson et al., 2023), but minimal qualitative studies exist that specifically look at the unique professional identity of clinical instructors.

The current structure of physical therapy education places a heavy burden on the CI to successfully teach, assess, and mentor future physical therapist practitioners in the absence of consistent support, training, and recognition. Practice settings where clinical teaching occurs are extremely variable in physical therapy. According to the American Physical Therapy Association (2017), approximately 30% of physical therapists practice in private outpatient clinics not associated with a health system or academic medical center. Other practice settings include hospitals, home-health, school-systems, and wellness centers. Supports for clinical instructors to develop as educators vary across settings, yet clinicians continue to choose to serve as a CI.

It is also important to note that CIs serve as educators intermittently, typically dropping in and out of the CI role rather than in a sustained and on-going teaching position like that of a clinician educator in medicine. If, as Thomas et al. (2020) found, repeated positive experiences reinforce commitment to the educator role, then the question arises as to what happens when those experiences are inconsistent or significantly spread out over time. Additionally, if positive experiences with previous students reinforce a CI's motivation to serve in the role, what happens when there are negative experiences with students? How do these experiences impact the CI's self-efficacy and expectations surrounding their role as an educator?

Social cognitive career theory offers a useful framework to examine clinical instructor professional identity, by explicitly linking the role of CI to the clinician's overall career

pathways. To date, no physical therapy education studies utilize this approach. Research surrounding the CI often isolates their role as educator from their role as clinician examining motivators, perceptions of expertise, and educator competence as separate from that of a clinician. Only recently has research begun to uncover the shared meaning CIs hold between their clinician and educator roles (Ong et al., 2019). The authors in this recent study suggested that future work should examine personal and environmental factors that contribute to CI sense of self and perceptions of roles.

The specific constructs of SCCT offers the opportunity to examine new perspectives on why a physical therapist commits to the role of CI. While previous research identifies environmental variables as impactful to CI experiences, no studies examine the interplay of self-efficacy, personal interests, and career goals, with environmental and personal factors in the development of CI educator identity. SCCT provides a framework to specifically explore the link between environment and the choice to serve as a CI, focusing on how self-efficacy and outcome expectations develop in the absence of formal structures and pathways for educator development.

CHAPTER 3: METHODS

Introduction

This chapter will introduce the research methodology for this basic qualitative interpretive study exploring the clinical instructor's professional identity formation as an educator. A qualitative approach allows for a deeper understanding of how both personal and environmental factors impact the CI's development of an educator identity, and how identity influences career trajectory. The applicability of qualitative research to this type of study will be discussed in depth. The research methodology will be described, including the sampling methods and study participants, data collection procedures, data analysis methods, and issues of trustworthiness and ethics.

Research Questions

This study sought to understand the professional identity formation of clinical instructors using social identity and social cognitive career theory as a theoretical framework. The study aimed to answer the following research questions:

- What influences a clinician to incorporate the clinical instructor role into their career pathway?
- How do clinical instructors experience educator identity formation?

Research Design

This study utilized an interpretive qualitative approach to explore the identity formation of experienced clinical instructors. Qualitative research is guided by the basic notion that meaning is socially constructed through individual or group interactions with the world (Merriam & Tisdell, 2016). In contrast to positivist or quantitative research which seeks to define or measure one specific reality, qualitative inquiry embraces the philosophy that multiple realities

exist. This study sought to understand the way in which physical therapist clinicians make meaning from their experiences as educators by exploring how personal and environmental factors interact and influence identity. Therefore, an interpretive qualitative approach is appropriate for this study as it seeks to understand experiences. It is distinguished from critical or postmodern approaches that have additional goals of emancipation or deconstruction (Lather, 2006).

According to Merriam & Grenier (2019), all qualitative research shares the same central characteristics. First, qualitative research is exploratory in nature and does not seek to identify causal relationships. In this study, the purpose was to explore how clinicians understand their professional identity and how critical aspects of identity formation influence career decisions and behaviors. The study did not seek to establish the cause-and-effect relationship between identity and career trajectory, but rather to explore how clinical instructors interpret their own experiences and decisions.

Another characteristic of qualitative research is that the researcher is the primary instrument for data collection and analysis (Creswell & Poth, 2018; Merriam & Grenier, 2019). Unlike a survey instrument, a human can adapt as a study unfolds, revising and updating interview questions as needed or analyzing data simultaneously to data collection so that adjustments can be made to allow for a more robust understanding of the phenomenon. While qualitative researchers know what topic or phenomenon they are exploring, they do not know what will be discovered or what the final analysis will be (Merriam & Tisdell, 2016). Therefore, simultaneous data collection and analysis allows for the data to lead the investigation, with the researcher adjusting approaches as the study continues.

This inductive process is another central characteristic of all qualitative inquiry, where findings are derived from the data in the form of themes, categories, or theory rather than by testing deductively derived hypotheses (Merriam & Grenier, 2019). An inductive approach is most appropriate when there is insufficient theory or existing research to explain a phenomenon (Denzin & Lincoln, 2000). This study aimed to gather data to build an understanding of clinical instructor professional identity because no theory or evidence exists that fully encapsulates all aspects of the CI identity in the context of physical therapy education.

An interpretive qualitative study incorporates all of these central characteristics and is focused on understanding how participants make meaning of their experiences (Elliott & Timulak, 2005). Data collection methods allow for discovery of people's perspectives and worldviews, typically through in-depth interviewing (Denzin & Lincoln, 2000). Data analysis is inductive in nature and results in the identification of recurring themes, and the product is a rich description of the findings. The methods described in this chapter align with the fundamental characteristics of an interpretive qualitative study.

Researcher Positionality

I am a current Director of Clinical Education with over 10 years of experience in the position and nearly 20 years of experience within clinical education. I have previously served as a clinical instructor, and in my current position, I interact with and support clinical instructors as they teach the DPT students from my academic program. I chose to study the professional identity formation of clinical instructors because of my strong passion for supporting excellence in clinical education and my belief that clinical instructors are a significantly undervalued and under-resourced stakeholder in physical therapy education.

My academic program affiliates with over 200 clinical sites, and I have the opportunity to engage with CIs from various settings, organizational cultures, and backgrounds. I have encountered CIs who are passionate about teaching and commit to teaching students over and over again, but what drives these clinicians to engage as a CI is still unclear. When searching for answers in the literature, I found that the concept of an educator identity in clinician educators had been explored in other professions but was largely absent in physical therapy.

My insider status in clinical education means that I bring an awareness of clinical instructor experiences, but it also means that I have assumptions and biases that I needed to be aware of as I embarked on this research. Based on the literature and studies done in the medical education field, I entered this research with an assumption that professional identity formation is integral to one's ongoing commitment to their profession, their role, and striving for excellence in their role. This assumption had the potential to impact the questions I asked in the interview and data collection stage, as well as in analysis of the data. Thus, it was important for me to be constantly aware of the presence of my assumptions and mitigate the influence on my research study.

Awareness and management of one's own biases and assumptions is also known as bracketing. Some qualitative approaches such as descriptive phenomenology, contend that bracketing, or setting aside, preconceptions is essential to the trustworthiness of the research process (Moustakas, 1994). However, another term offered by Vagle (2018) is "bridling" (p. 14) which emphasizes that reflexivity and employing epoche is an on-going process where the researcher's understandings and judgements may fluctuate in their influence on the research process, but are, in essence, helpful in guiding the research and seeking depth of understanding. Throughout my study, I found myself recognizing that my understanding of physical therapy

education and my experiences as a CI and a DCE were helpful at times, but also needed to be put to the side so I was fully open to engaging with and exploring the perspectives of my participants. I employed multiple strategies to maintain trustworthiness throughout the research process, which are discussed in detail later in this chapter, Overall, my experiences and keen understanding of the context of clinical education allowed me to explore the experiences of clinical instructors in a deep and meaningful way.

Data Collection

The primary source of data was one-on-one, semi-structured interviews conducted via Zoom, a virtual teleconferencing platform. Interviewing is a common form of data collection in qualitative inquiry as it allows for in-depth exploration, particularly in interpretive studies where participant perspectives and experiences are sought (Rubin & Rubin, 2012). Participants were sent the informed consent form via email prior to the scheduled interview. The consent form was reviewed at the beginning of each interview and verbal consent was obtained.

Participants

The units of analysis for this study were physical therapist clinicians with a shared experience of voluntarily serving as a clinical instructor over their careers to this point, with a specific focus on the experienced CI. However, no consistent definition of what makes a CI "experienced" currently exists. In previous research, clinical instructors may be described as "experienced" based on their years of clinical experience, the number of years since they began serving as a CI, or the number of students they have supervised over the course of their career (Coleman-Ferreira et al., 2019; Greenfield et al., 2012; Myers et al., 2022). Additionally, the CI role is intermittent, and clinicians may serve as a CI in a wide variety of timelines, from once per year to multiple times per year (Recker-Hughes et al., 2014). Therefore, the inclusion criteria

centered on the number of students a clinician had supervised rather than years of overall experience. To be included, participants must have been a licensed physical therapist in the United States and have served as a clinical instructor for a minimum of five full-time physical therapy students in separate clinical experiences.

The inclusion criteria also allowed for diversity within the sample by not defining clinical practice setting or specific years of experience. Maximum variation within a sample contributes to descriptions of variations among the sample that have emerged in adapting to different conditions (Patton, 2015). In interpretive research, multiple perspectives contribute to a deeper understanding of the phenomenon of interest, particularly by examining the relationship between the participants and their environment (Willis, 2007).

Sampling

Sampling methods in qualitative research aim to recruit participants who are able to contribute to the understanding of the phenomenon of interest (Patton, 2015). In this way, qualitative sampling approaches differ significantly from quantitative research where sampling strategies are based on randomized, probability-based methods to ensure the generalizability of findings (Creswell & Poth, 2018). In qualitative inquiry, the sampling approach is purposeful and not random, so the researcher can access participants who can best describe the phenomenon of interest.

There are many approaches to purposeful sampling. These include typical case selection, deviant case selection, homogenous sampling, and convenient sampling (Patton, 2015). Purposeful criterion-based sampling allows sampling with a specific focus on achieving some aspect of similarity across participants. However, this does not mean that variation or diversity of a different characteristic within the sample cannot also be achieved. This study used a

purposeful, criterion-based sampling approach to select experienced clinical instructors while achieving maximum variation across a range of clinical practice settings and years of experience.

Recruitment

There is currently no single database or repository that identifies all active clinical instructors in physical therapy education. Therefore, recruitment used Doctor of Physical Therapy (DPT) program Directors of Clinical Education (DCE) as gatekeepers. The DCE is the core faculty member responsible for developing, conducting, and coordinating the clinical education program at a DPT program and serves as the direct liaison between the academic program, the clinical site, and the individual clinical instructors (McCallum et al., 2018). Additionally, the majority of DPT programs have over three hundred clinical education agreements with clinical sites (American Council of Academic Physical Therapy, 2022c). Therefore, the DCE is uniquely positioned to have knowledge of those CIs who have supervised students from their academic program over time.

The recruitment process included multiple steps and occurred over a span of two months (Figure 3.1). An initial recruitment message (Appendix A) was sent to DCEs at accredited Doctor of Physical Therapy Programs in the United States requesting recommendation of an affiliated clinical instructor. At the time of the recruitment, there were over 250 accredited DPT programs in 49 states and Puerto Rico. Just as there is no database of all active clinical instructors in the United States, there is also no single database that includes the contact information for DCEs at each academic program. The contact information for DCEs was mined from the public-facing website of accredited DPT programs within the United States. The aim of recruitment for this study was to achieve maximum variation within the criterion-based sample.

Utilizing DCEs from across the country offered the opportunity to recruit participants from various regions and practice settings.

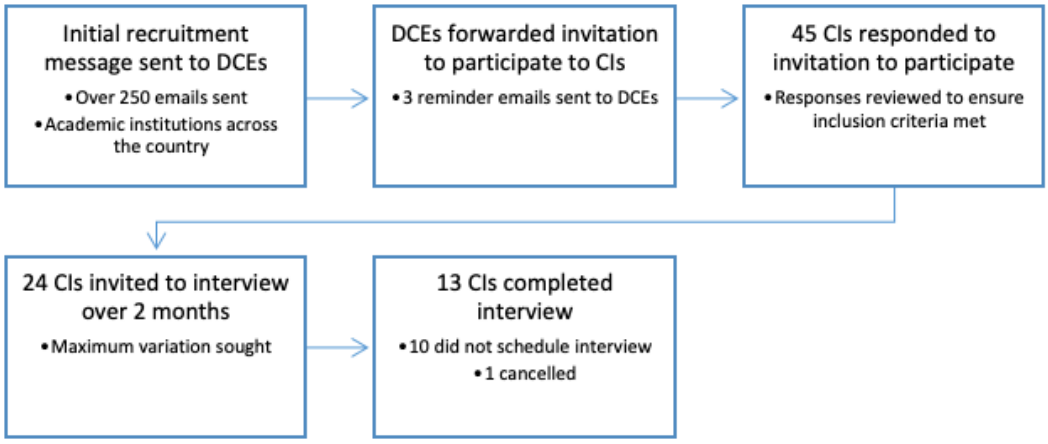

Figure 3.1. *Recruitment Process.*

The recruitment message included a description of the study and the inclusion criteria. In qualitative inquiry, it is important to recruit participants that have experienced the phenomenon (Patton, 2015). To further identify the experienced CI, the researcher requested DCEs use their professional judgment by asking the following questions: Whom would I consider a clinical instructor who consistently engages in clinical education with my program?

The DCE was asked to forward the invitation to participate (Appendix B) to recommended CIs. The invitation to participate included the study purpose, inclusion criteria, and requirements for participation (participation in an interview.) The invitation also included a link to an online screening questionnaire. Any clinician interested in participating was requested to complete the questionnaire (Appendix C) to indicate their interest. The questionnaire requested the following information: years of clinical practice experience, practice setting, number of students supervised, and geographic region.

The recruitment message was sent to DCEs three times over the course of two months. Multiple messages were sent to solicit participants to represent a variety of practice settings and geographic region. A total of 45 clinical instructors submitted the questionnaire indicating their interest. Of those, one was found to be ineligible because the respondent had not supervised more than five full-time physical therapist students. Another respondent did not provide an email address for follow-up.

Over the span of two months of data collection, the researcher contacted 24 participants to schedule an interview. Participants were selected from respondents to achieve maximum variation in the sampling. Recruitment was an iterative process. Invitations were sent to clinicians on an on-going basis over the two months as interviews were being conducted. There was some difficulty in confirming interviews with those who were invited. Ten clinicians did not respond to the researcher's email requesting to schedule the interview. Fourteen clinicians initially confirmed an interview date, however one ended up cancelling the interview and did not reschedule. Recruitment of participants continued until suspected data saturation occurred, which ultimately resulted in the completion of thirteen interviews.

The thirteen clinicians who participated in the study represent practice settings across the continuum of care, populations across the lifespan, and multiple geographic regions (see Table 3.1). A wide range in years of practice is reflected in the participants, with the majority of participants having ten or more years of experience as physical therapist. The number of students supervised also represents a diverse range, with only two participants meeting the minimum criteria of 5 students and the majority having supervised twelve or more students thus far in their career.

Table 3.1. *Participant Demographics.*

Participant	State	Years of practice	# of full-time students	Clinical practice setting	Population	CCIP[a]
1	Oregon	25	50+	OP[b] orthopedics	Adult	Y
2	Indiana	34	15	IP[c] acute care	Adult	Y
3	North Carolina	12	15+	OP orthopedics	Lifespan	N
4	California	7	12	OP sports	Adult	N
5	California	7	5	IP acute care	Adult	Y
6	Nevada	9	12	OP orthopedics	Adult	Y
7	Florida	28	15+	IP acute care	Adult	Y
8	Colorado	10	7	IP acute care	Adult	N
9	Colorado	21	5	Skilled Nursing	Adult	Y
10	Colorado	15	20+	IP Rehab	Adult	Y
11	Tennessee	24	15	OP orthopedics	Adult	Y
12	New York	13	24	OP neuro	Lifespan	Y
13	Idaho	14	13	OP ortho/neuro	Pediatrics	Y

[a]*Credentialed Clinical Instructor Program;* [b]*Outpatient;* [c]*Inpatient*

Informed Consent

Before each interview, each participant was emailed the consent form for review (see Appendix D for informed consent language). The informed consent included the purpose of the study, the data collection process, data storage, and confidentiality. At the start of each interview, the researcher verbally reviewed the consent information with the participant and provided the opportunity for questions. The researcher emphasized that the participant had the right to refuse to answer any question or terminate the interview at any time. The participant was reassured that all data would be deidentified and their identity would not be linked to any quotes from the dissertation or other disseminated work from this research. Participants were requested to avoid using specific names of colleagues, employers, and academic programs, but were again assured that all transcript data would be deidentified to protect their identity and others. Participants then provided verbal consent to participate in the study.

Interviews

An interview protocol with 17 main questions and multiple probing questions guided the semi-structured interview with each participant. Table 3.2 includes examples of interview questions and their relevance to each research question. The full interview protocol can be found in Appendix E. An interview protocol provides structure to the interview while allowing for opportunities for probing and further understanding of concepts brought up by the participants (Rubin & Rubin, 2012).

The interview questions were designed to maintain focus on the research questions and were guided by the theoretical frameworks of social identity theory and social cognitive career theory. Questions that aligned with social identity theory sought descriptions of experiences, perceptions of self, and the influences of social and environmental supports and barriers on engagement in professional roles. Participants were asked about their own understanding of professional identity and the meaning the participants assign to their experience of teaching. Interview questions aligning with SCCT sought participant perspectives on motivations, goals for teaching, and confidence.

During the interview, information collected in the screening questionnaire was also confirmed and expanded upon to gather a full picture of the clinical practice environment in which the participants were functioning. Interviews were conducted in a semi-structured, conversational format. Participants were encouraged to provide examples and detailed descriptions of experiences to contribute to richer descriptions.

Table 3.2. *Examples of Interview Questions.*

	Information sought	Related interview questions
Research Question 1: *What influences a clinician to incorporate the clinical instructor role into their career pathway?*	• How did the participant become a CI? • What does the participant identify as motivators? • What barriers exist to the CI role? • What supports exist for the CI role? • How does the opportunity to serve as a CI influence career decisions? • How does confidence influence the on-going commitment to being a CI?	• How did you come to be a clinical instructor? • Tell me a little bit about how your work environment influences your decision to be a CI. • What do you enjoy about being a CI? • Tell me a little bit about how self-confidence matters to your decision to be a CI. • Can you tell me a bit about your career path and how you've made decisions along the way?
Research Question 2: *How do clinical instructors experience educator identity formation?*	• What is the participant's understanding of the concept of professional identity? • How does the participant describe their own professional identity? • In what ways does the participant view themselves as an educator? • How do others influence the participant's own professional identity?	• When you talk to colleagues, how important is it that they know you are a CI? What do you want them to know about it? • What does "professional identity" mean to you? • What does it mean to you to be an educator? • In what ways do you feel you are part of an educator community?

Interviews were recorded via the Zoom platform to capture both video and audio. While it is ideal to conduct interviews for qualitative research in the participant's natural setting (Creswell & Poth, 2018), the Zoom platform allows for interviews to be conducted in a time and place that is convenient for the participant, affording the researcher the opportunity to collect data on participant affect, facial expressions, and non-verbal communication. (Archibald et al., 2019) This allows review of verbal and nonverbal messages conveyed by the participant and fully capture the interactions between interviewer and participant. (Roulston, 2010) points out

that in qualitative inquiry, “all is data” (p. 12) and all aspects of the interview are subject to analysis. The recorded interviews were transcribed for analysis.

Data Analysis

To the extent possible, data analysis occurred simultaneously with data collection. This allows the researcher to identify when data saturation has occurred, and further data collection is unnecessary. In this study, the researcher made initial notes after each interview, including identification of new concepts described, as well as reinforcement of concepts or experiences described by previous participants. While coding did not begin until after the completion of the thirteenth interview, the interview memos provided the researcher the opportunity to identify concepts, trends, and/or themes that guided the study as it unfolded (Merriam & Tisdell, 2016). Prior to analysis of data, participants were given the opportunity to participate in member checking of their interview transcript, with the focus on providing additions or clarifications to their original statements if necessary. Participants were instructed to contact the researcher with any revisions, and any clarifications or edits requested by the participant were made to the transcript prior to analysis.

Data analysis followed a multi-cycle coding process informed by grounded theory, using an constant comparative method. The constant comparative method of analysis was originally developed by Glaser and Strauss in the 1960s and is commonly used in grounded theory research, but is also particularly useful for studies that are exploratory in nature (Charmaz, 2006). The method involves comparing new data to previously collected data, revising emerging categories and themes as necessary as the study unfolds.

While the purpose of this study was the interpretation of participants’ experiences and not the development of a theory, the analytic methods found in the grounded theory approach

provided a systematic approach to reveal patterns of meaning within the data. Grounded theory is characterized by the absence of pre-set hypotheses, the discovery of categories and themes from the data, and the use of the constant comparative method of analysis (Charmaz, 2006). Data analysis in this study was inductive in nature, with the intent to examine the data without any pre-determined codes or hypothesis in order to be fully open to the participants' experiences and perspectives.

Analysis of interview data occurred in multiple steps, or cycles. Prior to initial coding, each interview transcript underwent a preliminary reading, with the researcher making initial jottings and reflections. The researcher wrote a memo after each initial review of each transcript. After initial jottings and reflections were completed for all transcripts, the researcher then wrote a reflective memo to identify common concepts across all jottings and potential initial codes.

Next, first cycle, or open coding, occurred. Each transcript was read line-by-line and initial codes were assigned to units of data. Throughout this initial coding, the researcher maintained a focus on identifying segments of data that were relevant to the study purpose by constantly referring back to the research questions and asking herself, "Does this help me understand the experience or the identity of a CI better?" Maintaining a focus on the study purpose throughout the coding process is important to prevent the research from being distracted by irrelevant data (Chenail, 2012). The codes identified in the first transcript served as a guide and starting point for subsequent transcript reviews (Obling, 2020).

Both descriptive and in-vivo coding was used in this study. Descriptive coding, whereby short phrases or words are used to identify the basic aspect of the unit, is helpful in studies with multiple sources of data to assist in categorizing and indexing data (Saldana, 2013). In-vivo coding allows the participants' voices to be reflected directly in the data analysis, which is

important in qualitative research whereby participant experiences and perceptions are central to the study. First cycle coding continued with another review of each transcript, this time using process codes to examine the data through the lens of process, participant choices, and passage of time. Miles et al. (2014) describe first-cycle coding as an opportunity to examine data through multiple layers, providing the opportunity to uncover new perspectives on participant experiences. As first cycle coding continued, initial codes were modified, eliminated, or combined into new codes as connections between codes were identified (Lincoln & Guba, 1985). At the completion of this first phase of coding, initial codes had been reduced from over 100 different codes to 42. An excerpt from the final first-level codebook is found in Appendix F along with an example of the progression of the codes, including collapsing and modification of codes in Appendix G.

Following open-coding, second-level coding, or axial coding, was utilized to organize the data into groups or categories. In this step, analysis focuses on identifying patterns that indicate relationships and connections between data. These connections result in grouping of codes and data points together to develop categories (Miles et al., 2014). During this second-level coding, the researcher examined the initial codes from multiple perspectives. The codes were analyzed through the lens of social identity theory and social cognitive career theory, seeking groupings that aligned with the key domains of these theories. Additionally, the data was analyzed with a specific focus on the participants' perspectives on the concept of professional identity and how they described their own. Throughout this coding process, the researcher examined the codes to identify patterns or groupings of common codes or concepts.

The result of this second level coding was 11 categories (see Table 3.3). Each category encompassed multiple codes and the grouping within each category reflected a pattern or

relationship amongst the codes (see Table 3.4). The researcher then reviewed each transcript, coding segments of data to the categories, revealing the frequency with which each category was reflected in the data (see Table 3.5).

Table 3.3. *Categories and Definitions.*

Category	Definition
Am I an educator	Identifying as an educator or questioning whether that is right word
Connecting practitioner and teacher confidence	Confidence as a CI is spoken about as connected to clinical confidence; reciprocal relationship
Seeing the value in teaching	Personal growth, professional growth/development occurs through teaching
Influencing the profession through teaching	Giving back means preparing therapists who will do best for patients, will represent the profession well
Organizational influence	Organizational culture either supports or creates barriers to clinician to be CI and/or develop as educator
Alignment of values and goals	Personal values align with goals for being a CI
Developing as teacher through experience	More opportunities to teach, taking students repeatedly leads development of skills, approach to teaching
Teaching as a professional goal	Long-term goal to continue to engage as CI and/or to teach in academic program
Protecting students ("don't be that person")	Desire for students to feel positive towards their experience; being better as a CI than others
Value of community and mentorship	Benefits of having others to connect with to support being a CI and a clinician; mentorship matters as a clinician and as a CI
Reinvigoration and connection to profession	Feeling a sense of rejuvenation by teaching; combats burnout; feeling more connected to profession of PT

Table 3.4. *Categories and Associated Codes*

Codes	Categories										
	Am I an educator?	Connecting practitioner/ teacher confidence	Seeing the value to self in teaching	Influencing the profession through teaching	Organizational influence	Alignment of values and goals	Developing as teacher through experience	Teaching as a professional goal	Protecting students	Value of community and mentorship	Reinvigoration and Connection to Profession
Access to Professional Development as CI					x		x				
CCIP for professional development					x			x			
Aligning values with professional role				x		x					
Bridging experience as clinician and CI							x				
Mentorship as clinician matters										x	
CI role enhances clinical practice			x								x
Community matters					x					x	
No cohesive clin ed community					x					x	
SCCE identified in system											
Confidence as CI		x									
Connecting clinical confidence with teaching		x									
Developing as a CI through experience							x				
Early Experiences as CI							x			x	
Not planning to be a CI	x										
Taking a chance on being a CI early in career		x									
Educator is not the right word	*x*										
Enjoyment in teaching			x			x					
Finding support from academic program										x	
Future Plans in Education								x			
Giving back to profession				x							
Giving back to profession- making it better				x							
Goal as a CI- exposing students to something new				x					x		

Table 3.4 (continued).

Goal as a CI- giving students good experience									x		
I'm a clinician first	x										
Incentivizing the CI role			x		x						
Influence of Past CIs on Teaching							x				
Influencing student development									x		
Intentionality in teaching							x				
Learning from your student			x								x
Organizational culture barrier to education					x						
Patient centered professional identity						x					
PTs are movement experts	x										
Reinvigoration through teaching											x
Self as educator	x										
Student-centered CI									x		
Organizational culture- supportive of clinicians					x						
Organizational culture- supportive of education					x					x	
Time dimension- readiness to teach		x									
Time- confidence increases over time		x					x				
Time- enjoyment over the years								x			x
Value- lifelong learning						x					

Table 3.5. *Frequency of Categories by Participant (P).*

Category	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	TOTAL
Am I an educator?	2	1	3	0	3	2	1	2	1	1	4	2	1	23
Connecting practitioner and teacher confidence	1	2	2	2	3	3	3	3	3	1	4	2	1	30
Seeing the value to self in teaching	4	3	4	1	2	1	3	1	2	1	3	2	3	30
Influencing the profession through teaching	4	1	2	2	3	1	2	1	2	1	2	1	1	23
Organizational influence	3	2	4	3	4	3	2	2	3	5	3	3	2	39
Alignment of values and goals	2	2	1	3	1	2	2	3	4	3	4	2	2	31
Developing as teacher through experience	1	1	0	2	0	2	2	5	1	3	1	3	0	21
Teaching as a professional goal	1	1	3	1	0	1	0	1	1	1	0	1	0	11
Protecting students ("don't be that person")	1	1	1	1	2	2	1	1	1	1	3	0	4	19
Value of community and mentorship	2	2	1	2	5	3	1	2	0	2	1	4	2	27
Reinvigoration and connection to profession	1	0	1	1	1	1	0	2	1	1	1	2	1	13

The final phase of analysis aimed to provide an interpretation of the data collected. At this phase in grounded theory research, the goal would be to develop a theory. In this study, the goal was to provide interpretation and identify larger themes in the data that represent the participants' experiences. A theme is not just a description of the data but represents the essence of the phenomena and answers the research questions (Saldana, 2013). Analysis resulted in identification of one overarching theme, Organizational Influence, and four subthemes: Hidden

Identity, Symbiotic Roles, Commitment to Profession, and Community Matters. A full explanation and description of the results is provided in Chapter 4.

Methodological Rigor: Trustworthiness

Trustworthiness of findings in qualitative research refers to the confidence a reader can have in the meaningfulness and accurate representation of the data as it is presented (Lincoln & Guba, 1985). Lincoln and Guba offered a description of naturalistic inquiry in 1985 that was based on axioms that demonstrated how this type of inquiry differed from quantitative type of inquiry and thus required a different way to addressing issues of rigor. These axioms included acknowledgement that in naturalistic inquiry realities are socially constructed and influenced by context; that generalization should not be sought but rather that application of findings may be possible in different contexts; and that relationship between the researcher and participant is interactive so that the researcher cannot fully distance themselves from the data.

Based on these axioms, Lincoln and Guba developed four criteria, encompassed by the term trustworthiness, for judging naturalistic inquiry: credibility, transferability, dependability, and confirmability. They suggested credibility corresponds to internal validity, transferability to external validity, dependability to reliability, and confirmability to objectivity. Credibility refers to the believability of the results. In other words, do the findings capture what is really there? Transferability references the ability to apply the findings to similar situations or contexts. Dependability speaks to whether the results are consistent with the data collected, and confirmability addresses whether the results are accurate and reasonably free from researcher bias.

In this study, trustworthiness was enhanced in multiple ways (Table 3.6). First, the researcher employed epoche throughout the research process, using reflective journaling and

memoing as an aide to bring awareness to existing biases and assumptions that may be influencing the process. An example of the researcher's reflective journaling can be found in Appendix H. Additionally, member checking occurred prior to the initiation of data analysis. Participants were given the opportunity to review the interview transcript for accuracy and to provide further details or explanations. Finally, to enhance the dependability of findings, an inquiry audit was performed with an expert in qualitative methodology reviewing the research design and findings.

Table 3.6. *Establishing Trustworthiness.*

Criteria	Methods employed during study
Credibility	Member checking, reflective memoing
Transferability	Thick, rich descriptions; maximum variation of sampling
Dependability	Researcher reflexivity; Expert audit
Confirmability	Reflective journaling; Expert audit

Summary

This chapter provided a summary of the methodological approach used in this research study. An explanation of basic interpretive qualitative research design was provided, supporting the application to this study that aimed to interpret how clinical instructors make meaning of their professional identity and their experiences as clinical instructors. The description of the methodology included an explanation of the recruitment and sampling strategy that allowed for targeting of those CIs who have consistently chosen to engage as educators and were able to speak about their experiences in depth. The use of the constant comparative method for data analysis enhanced methodological rigor and accurate representation of the participants' voices.

CHAPTER FOUR: RESULTS

This chapter will describe the findings related to clinical instructor professional identity and motivations to engage as a clinical instructor over time. The purpose of this research study was to understand how clinical instructors integrate an educator identity into their broader professional identity and how the clinical instructor role is viewed as an aspect of their broader career path. The study was guided by the following research questions: 1) What influences a clinician to incorporate the clinical instructor role into their career pathway? 2) How do clinical instructors experience educator identity formation?

Findings are presented in three sections in the chapter. First, I provide a description of the participant demographics, describing how the sample reflects the physical therapy profession. The next section includes the participants' understanding of what professional identity is and how they would describe their own. A comparison across participants offers an overview of the diversity in perspectives on the concept of professional identity. Finally, the main theme and four subthemes are described. Throughout the chapter, the participants' own words are central to the description of the findings, and exemplar quotes are included.

Demographics

The 13 participants in this study reporting practicing in settings across the continuum of care and with a variety of patient populations. Full demographic data is presented in Table 3.1. The demographic make-up of the participants with regards to practice settings reflects the larger profession's breakdown of settings in which physical therapists practice. A slight majority of participants represented the outpatient setting which is the largest practice setting in physical therapy, making up approximately 60% of the physical therapist workforce according to American Physical Therapy Association (APTA) membership data (American Physical Therapy

Association, 2023). The rest of the participants identified as practicing in the inpatient setting, which, again according to APTA membership data, is the second most common practice setting for physical therapists in the United States. Home-health is a practice setting not represented in this sample, although two of the participants identified as having some experience practicing within that setting.

The sample represents a wide range of years of practice experience (7-34 years). The minimum years of experience as per the inclusion criteria was 5 years, and the study aim was to seek the perspectives of experienced CIs so there was no maximum or cap on years of experience. With no singular database or source of information on CI demographics in the United States, it is difficult to compare the sample to the profession. However, previous studies that utilize some definition of 'experienced' for their CI sample included CIs with an average range of 8-13 years of clinical experience (McCallum et al., 2016).

Participants also indicated a wide range in the number of students supervised over their career so far. In examining the relationship between years of experience and number of students supervised, one cannot make a conclusion that the greater number of years practicing will definitively result in a greater number of students supervised. This aligns with the intermittent nature of the CI role in physical therapy as described in previous chapters.

The geographic distribution of the sample is diverse and represents 6 of the 9 regions designated by the Commission on Accreditation in Physical Therapy Education (CAPTE) (Table 4.1). CAPTE does not report on the number of clinical instructors by region but does provide data on the number of accredited and candidacy Doctor of Physical Therapy (DPT) programs within each region. Three geographic regions are consistently reported by CAPTE to have the highest number of DPT programs: South Atlantic, Mid-Atlantic, and East North Central

(Commission on Accreditation in Physical Therapy Education, 2022). Four participants represent these regions. The most participants, however, practiced in the Mountain region which has the lowest number of DPT programs. Without a report that indicates clinical instructor numbers across geographic regions a conclusion cannot be made regarding whether this sample accurately represents the distribution of CIs across the United States.

Table 4.1. *CAPTE geographic regions[a] and participant representation.*

Region	States included	# of DPT Programs	# of participants
South Atlantic	DE, DC, FL, GA, MD, NC, PR, SC, VA, WV	57	2
Middle Atlantic	NJ, NY, PA	53	1
East North Central	IL, IN, MI, OH, WI	44	1
West South Central	AR, LA, OK, TX	31	0
West North Central	IA, KS, MN, MO, NE, ND, SD	29	0
Pacific	AK, CA, HI, OR, WA	28	3
New England	CT, ME, MA, NH, RI, VT	19	0
East South Central	AL, KY, MS, TN	17	1
Mountain	AZ, CO, ID, MT, NV, NM, UT, WY	15	5

[a]*Data extracted from CAPTE Aggregate Program Data 2022*

Participant Understanding of Professional Identity

Participants had varying perspectives on the concept of professional identity and how they described their own professional identity. The participants were intentionally not provided with an operational definition of professional identity to capture their unique perspectives and understandings. To first understand each participant's understanding of professional identity, participants were asked, "What does professional identity mean to you?" As a follow-up question, each participant was then asked "How would you describe your own professional identity?"

The ways in which participants defined professional identity varied from a focus on self to a focus on society. Some participants viewed professional identity as being about how they viewed themselves as physical therapists. Others defined professional identity as how society or

other professions viewed physical therapy as a profession. When describing their own professional identity, almost all participants focused on the type of clinician they viewed themselves as. Only two participants (P1 and P6) included any aspect of being an educator in their description. Table 4.2 provides a comparison across four participants in how they defined professional identity and how they described their own.

The absence of the educator role in their initial descriptions of their own professional identity was also evident when asked how important it was for others to know they were a CI. Some participants were clear that they would not talk about being a CI when speaking to other therapists.

> *I don't think it's important that they know I'm a CI. Most people that are other PTs don't ever ask that. I don't feel like, I don't think anyone's ever asked me that, or I've never initiated that, saying, I'm a PT and oh, I'm a CI. (**Participant 12**, outpatient neuro)*

> *I don't think it's anything I offer up about my own practice as a PT or career where I'm at. (**Participant 5**, inpatient acute care)*

Some factors, such as their role within the larger organization, or whether they had been a CI recently, influenced whether a participant felt their service as a CI would be important for others to know or visible to others.

> *I think, amongst my staff, I'm also known as like a regular mentor. So I don't think anyone would be surprised that I'm also a CI, because it obviously kind of crosses over. I think it's good to know, cause I think it does speak to my comfort and accessibility to teach. (**Participant 8**, inpatient acute care).*

*[Being a CI] doesn't come to mind until somebody mentions it. But yes, it depends on when you ask me. If you ask me around the time I've had a student then…then yeah, it comes to mind. But right now, I haven't had a student since February. And unless I am filling out a form or thinking about being an instructor, I'm not really thinking about being an instructor. (**Participant 13**, outpatient pediatrics)*

With probing, participants recognized that being a CI was an integral part of their professional role and their future professional path. This will be discussed further in the next section, thematic findings.

Table 4.2. *Perspectives on Professional Identity (PI).*

	Understands PI to be…	**Participant reflection**	**Describes own PI as…**	**Participant reflection**
Participant 3 (outpatient ortho)	Who am I as a therapist?	*"It means, who am I as a therapist. My professional identity is not my identity, but it is how I want to be viewed in my role."*	Focused on the patient	*"My professional identity is… really patient, focused care, caring for the individual, caring about what happens in my patients' lives, and how I can figure out ways to make a difference in their life because they're coming to see me for help."*
Participant 5 (inpatient acute care)	What do other people think of my profession?	*"What other people in society that have nothing to do with my profession think of my profession. And I guess more specifically in the hospital setting, how other clinicians see us, see me."*	Coordinator of care	*"My professional identity I would describe, I'm an acute care PT; I take pride in being able to help sick people get home. I take pride in being a coordinator of care."*
Participant 6 (outpatient ortho)	Who am I within my profession?	*"Who do I see myself as in my profession? And amongst other professions. Am I a hot pack grabber, a tech director, an aide director, a soft tissue swisher? Or am I going to really take responsibility and ownership of the opportunity that I have."*	Apex of healthcare and education	*"But so for me, currently, my professional identity is a patient advocate, patient case manager, specialist referral coordinator, and educator in addition to being an actual treater of musculoskeletal, neurological dysfunction. So that's the profession identity that I have is at the apex of health care, not less than other specialties."*
Participant 8 (inpatient acute care)	How I represent my profession to others	*Professional identity, I think it's how I represent my profession and also how I've invested in my profession. And I think in terms of how have I built up my clinical expertise? And or how have I then demonstrated or presented that?*	Advocate for physical therapy profession	*"I would say, I'm definitely an advocate for my profession. I am definitely a subject matter expert in a lot of cases. That's kind of how I've spoken about myself in that way when I'm in meetings with administration or people above me.*

Thematic Findings

Data analysis yielded significant findings, culminating in the identification of a singular overarching, main theme and four distinct subthemes. The main theme, Organizational Influence, and the four subthemes of Hidden Identity, Symbiotic Roles, Commitment to the Profession, and Community Matters, help to answer the two research questions (Table 4.3) and shed light on the intricate nature of the clinical instructor's perception of self as an educator, as well as the myriad factors that can shape a clinician's decision to assume the role of a CI throughout their career.

Table 4.3. *Research Questions and Related Themes*

Research Question 1: What influences a clinician to incorporate the CI role into their career pathway?	**Research Question 2: How do CIs experience educator identity formation?**
Organizational Influence	Organizational Influence
Symbiotic Roles	Hidden Identity
Commitment to the Profession	Symbiotic Roles
Community Matters	Community Matters

Each theme is delineated and described in Table 4.4, including its corresponding definition, as well as specific properties inherent to each theme, providing a detailed examination of the multifaceted elements encapsulated within the identified themes. To enhance the richness of these findings, participant quotes have been incorporated into the sections below. These quotes serve as a reflection of the participants' voices and experiences, offering a deeper connection to the lived realities of clinicians as they navigate the complexities of their roles as educators in a clinical setting.

Table 4.4. *Thematic Definitions and Properties*

Theme	Definition	Properties
Main Theme		
Organizational Influence	Characteristics of the organization have an influence on the extent of a clinician's engagement in clinical education over time	• Policies and practices of organization • Internal structures of organization • Resources available to clinicians • Connections to academic programs • Presence of other CIs • Incentives to serve as CI • Productivity expectations as challenge or support • Alignment of organizational values with personal values • Organizational culture explicitly supports clinical education
Subthemes		
Hidden Identity	Educator identity is not fully visible; not always included in description of self as a physical therapist or in description of professional identity	• Clinician-first mentality • Disconnect from the title of "educator" • Self-awareness • How others see me • What I want others to know about me as a PT
Symbiotic Roles	Clinician and Clinical Instructor roles are intertwined and support development of each other	• Experience • Confidence • Excellence in patient care • Holding one's self accountable • Enthusiasm for the profession • Preventing burnout • Future plans in education
Commitment to Profession	Motivation to be a CI is driven by a desire to make the profession of physical therapy better	• "Giving back" to the profession • Advancing the profession by preparing students well • Protecting students from poor role modeling
Community Matters	Connections to other people within and external to organization contributes to sense of self as educator	• Opportunity to connect to other CIs formally and informally • Building confidence through connection to others • Utilizing others to support student experience

Main Theme: Organizational Influence

The organizational culture and environment served as a backdrop to the participants' stories and experiences. Characteristics of the organization, the people within the organization, and the overall culture influenced how a clinician stepped into the role of CI, their continued commitment to clinical education, and their ability to develop as a clinical educator and as a clinician.

Participants described becoming a CI initially due to organization policies and the influence of supervisors and mentors. For some, they were unsure as to whether they were ready to be a CI or even wanted to be a CI but were strongly encouraged to do so or, in some cases, even required to.

> *I was voluntold! So, I was a new kid on the block at that job... I was just there two or three years, and they were taking students consistently, and I think they just all took turns. It was just kind of like, you're getting a student this day. And I was like, oh, okay. (**Participant 11**, outpatient orthopedics)*

> *They really give us the option of whether or not we as an individual, are okay with taking students. It's not something that feels forced and it's not something that is discouraged. (**Participant 3**, outpatient orthopedics)*

> *We work very closely with our local school where we take a lot of students; we take students from elsewhere as well. But it is a general expectation that you're taking students regularly. (**Participant 8**, inpatient acute care)*

Participants identified organizational culture and values as influential in their continued engagement with clinical education. An explicit culture of lifelong learning, including opportunities to develop as clinicians through continuing education support, as well as support of clinical education across the continuum aligned with the participants' values.

> *So, I'd say, compared to most companies, at least, the ones I'm familiar with and have been a part of, there's a much greater focus on not only having students and doing our part for the next generation of PTs, but also educating people once they're here as well. (**Participant 4**, outpatient sports)*

> *In regard to the health system supporting education and stuff, they definitely reimburse for continuing ed courses. They reimburse for certifications. Even if you wanted to switch into a slightly different career path within the health system, after your graduation, they'll reimburse you for that. So they very much are open to support. (**Participant 12**, outpatient neuro)*

> *It's like, you guys kinda figure out what you want to do as a clinic, who you want to be as a community, how you want to give back to the community and how many students you want to get. Do you want to do that? If you're not interested in that, what are you interested in? Because we want to develop you in the areas that you want to develop type of thing. (**Participant 3**, outpatient orthopedics)*

> *So with our company we just have a strong culture of clinical education. We're trying to start up a residency program. We've got a well-established fellowship track…So I think*

*the company knows that it asks a fair amount of its therapists but is willing to put in what is necessary to give the therapist the tools to be successful in that environment. (**Participant 1**, outpatient orthopedics)*

In contrast, the ability to engage in clinical education was threatened for those participants who described working in organizations where education was not a priority. The absence of support in the form of infrastructure, professional development, or the recognition of the time required to teach resulted in clinicians having to step away from the CI role.

*I think that we used to be focused a lot more on education, and now I think we are focused far more on productivity. So education has unfortunately gone by the wayside… Because even in our acute care setting, the productivity standards have gone up so much. Good luck getting a bathroom break, let alone trying to teach somebody. (**Participant 10**, inpatient rehab)*

*I thought, I want to get students because I've been taking them up in [previous location]. I enjoyed it very much. Then [it] was impossible to have students because [the clinical facility] was just a mess. (**Participant 6**, outpatient orthopedics)*

*So the good thing is still the cases are good for the student to observe or to learn. The not so good thing is the productivity, because it's a [skilled nursing facility]; It's productivity. I don't think I can take a student right now at this rate. (**Participant 9**, skilled nursing facility)*

Internal structures such as an identified SCCE and an established student program curriculum created pathways to connect clinicians to academic programs, identify opportunities for clinicians to serve as a CI, and to receive support in the face of challenging situations.

> *If you want to be a CI, I think you just talk with the SCCE and kind of do an interview and kind of chat about why you want to be a CI. (**Participant 4**, outpatient sports)*

> *So I do all the interviewing of the students that are interested in [and experience at the site] and if they're a good candidate, try to pair them up with what therapists I think they're going to match best with and be best with.. And then out of those therapists, I've already talked to the therapist to decide, okay, are you interested in picking a student or not? Do you want one or two a year? So everyone's on the same page as to what is affected. If they don't want a student, they don't have to take one. (**Participant 12**, outpatient neuro)*

> *But yeah, if I had brought [student performance] up as a concern to my manager and I wasn't getting support, or if I had brought this up as a concern to the student's school and I wasn't getting support, then I think it would've changed how I thought of that whole situation. But I felt okay about it because we were all working together, and it was very collaborative, and it was fine. (**Participant 13**, outpatient pediatrics)*

The way in which organizations scheduled students with CIs also served as both a barrier and a facilitator for clinicians to participate as CIs. Further, the intermittent nature of the CI role emerged as influential to how connected some participants felt to the sense of self as an educator.

*Just because we're a large staff, it doesn't work out that you have students every single year. But I would say, I have historically had a student probably every other year. And then I do a lot of the part-time things as well. There's some exposure, short term clinicals that I usually will do in between. (**Participant 8**, inpatient acute care)*

*Right now, I haven't had a student since February [7 months prior]. And unless I am filling out a form or thinking about being an instructor, I'm not really thinking about being an instructor. (**Participant 13**, outpatient pediatrics.)*

Some participants found that defined titles or responsibilities related to education within their organization resulted in a more prominent connection to the educator role. For example, participant 1 held a specific clinical education title within the organization while Participant 11 held a general role of mentor and educator, in addition to being a CI.

*Definitely, the clinical education component for me has become very. very central to my identity as a physical therapist at this point. ….my identity, I think, is found more in trying to steer our profession from a clinical education perspective. (**Participant 1**, outpatient orthopedics)*

*I spend a lot of time, even with my staff, really to develop them in their skillset. Everybody, somebody new I meet with every week for an hour, and everybody we meet once a month for an hour just to do clinical questions, nonclinical questions. So I would hope that [the staff] [see me as an educator]. That's my goal anyway. (**Participant 11**, outpatient orthopedics)*

Organizations that incentivized participating in clinical education had a positive influence on participants' on-going commitment to the CI role. Incentives may be linked to promotion within the organization, or incentives may come in the form of support such as time to perform the duties and responsibilities required of a CI.

> *[Organizational leadership] value being a clinical instructor as one step towards being a leader within a company, and it helps your potential merit increase for the year and things like that, you know. So they recognize the value of being a clinical instructor, and the folks that are clinical instructors what they do for the company and their overall engagement within the clinic, and they value that and so it's something that we promote. (**Participant 1**, outpatient orthopedics)*

> *Yeah, we had a more structured, clinical ladder type thing. It was something that I was working towards. So [being a CI] was an option, but also like an opportunity, I would say. (**Participant 8**, inpatient acute care)*

> *Students are definitely valued. You know, there's productivity everywhere- but if we have a student, we are all automatically given a bump in our productivity for the decrease in productivity we'll probably have with students. (**Participant 2**, inpatient acute care)*

Subtheme 1: Hidden Identity

While all participants were experienced CIs who had engaged in teaching multiple times over their career thus far, the predominant way in which they saw themselves as professionals and described their professional identity revolved around themselves as clinicians. Participants indicated a strong connection to their identity as a physical therapist practitioner and patient

advocate. When asked how they would describe what they do as physical therapist to those outside of the profession, all of the participants focused on their responsibilities in patient care and did not include education of students, although some did include patient education in their description.

> *I would say I'm an acute care PT, and I work with a lot of geriatrics getting people moving after an injury or an incident and really just trying to get people back on their feet again. Mobility is a really big thing for what I do. And I'm a motivator, because a lot of people are where they are because they make bad decisions, and I need them to make better decisions because I can't fix anyone without their buy-in. (**Participant 7**, inpatient acute care)*

> *I usually say I work with, most of my kids have developmental disorders or neurodevelopmental or movement disorders of some sort. And I work with children and their families to improve their mobility. (**Participant 13**, outpatient pediatrics)*

> *If I were to describe what it is that I do is I will work with someone based on where they are and focus on decreasing their pain and improving their mobility so that they can get back to doing the things that they want to do with a lot less difficulty, if no difficulty at all. (**Participant 3**, outpatient orthopedics)*

The notion of being an educator, and not just a patient educator, did not emerge for most participants until probed or questioned specifically. For many of the participants, the term "educator" did not seem to resonate.

*I think that's what is, I mean, we are educators, but I think in my head that is in a formal, not in a clinical setting. Have no idea why. (**Participant 11**, outpatient orthopedics.)*

*I never would have chosen that word [educator]. I wouldn't have chosen that word if you had asked me to describe how I am as a CI or anything. Like I don't think I used the word educator at all in this interview. (**Participant 5**, inpatient acute care)*

Some participants even acknowledged that the interview itself was the first time they had spent time reflecting on their role as a clinical instructor and their sense of themselves as educators. Participant 5, while discussing his views of himself as an educator was asked why he might call himself an educator, and his response was *"Now? Well because of this discussion!"* Another participant commented on how the opportunity to talk about themselves as a clinical instructor had increased their own awareness of the enjoyment they feel when teaching:

*You know, you don't really have time to reflect. You don't think about things like [being an educator] until somebody asks you. And I mean, it's not that I don't know, but it's like you don't even think about it until somebody or you don't remember until somebody asks you, because I've always known it. But it's like a reminder when someone asks you a question. (**Participant 3,** outpatient orthopedics)*

While most of the participants did not describe being a CI or an educator initially as part of their professional identity, almost all the participants saw their CI role as directly linked to their overall identity as a physical therapist. Participant 12 (outpatient neuro) stated: "*I don't think I'd really want to be a PT without being a CI.*" Participant 6 (outpatient ortho) went so far as to state: *"I wouldn't take a job if I couldn't be CI. I want more students. I want 2 at a time, 12*

months a year." Future professional plans included not just continued development as a clinician, but also continued engagement as a CI and student educator.

> *I just want to keep treating patients and along the way I'd like to reach students and encourage them to see the patient as a real person. (**Participant 2**, inpatient acute care)*

> *I think I've developed a reputation as a good [CI], and I think that's very important to my professional identity that I'm not just a good PT but I'm a good PT teacher. And that there are many people in my organization that have experienced that, and I'm proud of that. So I would not want to not do that. (**Participant 7**, inpatient acute care)*

> *But in the future, I would like to go back and pursue more, taking in more students. (**Participant 9**, skilled nursing facility)*

Subtheme 2: Symbiotic Roles

Participants saw the role of CI as supportive of their clinical responsibilities and vice versa. The connection between excellence as a physical therapy practitioner and the act of being a clinical instructor was clear amongst the participants. Not only did participants find being a CI enjoyable and fulfilling an innate desire to teach, but they also recognized that by doing so they were advancing themselves as practitioners.

> *And also you're going to learn from the student. I mean, these are doctorate level students. They know a lot more than I do about a lot of things and so you can learn from them. So I feel like it can keep you up to date and keep you fresh, but also keep you accountable. (**Participant 2**, inpatient acute care)*

*I always tell my students too, it's a two-way street…I want you to teach me what is the latest thing that you're being taught, and then I teach you information from being in a clinical setting, but you teach me the more didactic portion things that have changed the past 15 years. (**Participant 10**, inpatient rehab)*

Confidence in themselves as clinical instructors seemed to evolve with experience. Most participants described feeling unequipped to be a CI initially because they did not feel confident or prepared as a clinician.

*And so I was like, well, I probably shouldn't be taking students if I'm still sucking as a clinician and I'm still trying to learn the ropes as a clinician, get some tools in my toolbox before I attempt to teach a student… And so my thought was, I need to be more confident in my role as a clinician before I intend to be an instructor. (**Participant 13**, outpatient pediatrics)*

*I questioned just being a newbie to the profession myself. I was like, how much can I really teach somebody when I'm figuring it out myself? So I think I kind of had that mind frame going into it. (**Participant 10**, inpatient rehab)*

*I think the first time I had a student I think I was in my second year, so I think at that time it was proposed to me as an option, and I think my thought process was it was a good opportunity to kind of see what I knew. Because I think when you're still fresh, it's intimidating to take a student because you are still kind of like learning yourself. (**Participant 8**, inpatient acute care)*

However, confidence in their ability to offer a positive experience to students grew as their confidence in their own clinical skill set grew. While participants recognized "repetition" with students (or serving as a CI multiple times) contributed to their confidence, for many that confidence was bolstered by developing as effective practitioners and realizing that could offer a positive experience to students.

> *So when it came to [positive patient outcomes], like that was a confidence boost for me as a clinician. And it allowed me to have more confidence with training students if that makes sense. So like me training students Hey, this is what I tried. I know that this is what you learned. But hey, be confident in trying new things, because you may come up with something that nobody else has shown you that may help your patients. And so it's helped me to be more confident in training my students on new techniques or different thought processes to have. (**Participant 3**, outpatient ortho)*

> *But now, as I've practiced my profession for the years that I have ,I definitely use things the program, of course, but most of my education has come from being a student in this setting, being a CI in the setting, going to continuing education courses in this setting. (**Participant 5**, inpatient acute care)*

For the most part, participants found that mere experience with students was impactful for their development as educators. Ten of the participants had completed the Credentialed Clinical Instructor Program (CCIP), but beyond that, most participants did not pursue further professional development as clinical educators. This contrasts with their descriptions of how they developed as practitioners through post-professional education and continuing professional education opportunities.

*One, I have not really thought about [CI professional development] because of multiple reasons. One is more personal and time and energy that I would need to put into even, you know, thinking that. So it's like already hard for me to just keep up with CEUs in general. (**Participant 3**, outpatient orthopedics)*

*To be honest, I've never taken the CI course, mostly just because I've never felt I needed it. I know that's maybe a little arrogant. But I just feel like I have my style, and it works really well, and at least not that anyone's told me- any negative feedback as far as how my students have responded. (**Participant 4**, outpatient sports)*

Not only did being a CI benefit the participants in the practitioner realm, it also seemed to reinvigorate their excitement for their day-to-day responsibilities of being a physical therapist.

*But having a student, it's just a motivating factor; it's a motivation that is just very powerful for me. And it is unparalleled in anything else that I found. And so I love that feeling. I love the feeling of wanting to get to the clinic to help this person develop to the best of my ability because they're doing something that they're passionate about. (**Participant 6**, outpatient orthopedics)*

*What I enjoy most honestly is kind of what they bring to the clinic. Our clinics are small, so they bring an energy and an excitement and a freshness that just adds more joy to my work day. (**Participant 1**, outpatient orthopedics)*

Because I enjoy teaching, and as much as I love treating patients as well, there's a monotony to treating 60, 70 patients a week, in and out, just doing that for 40 hours a

*week for the rest of your life. So, for me there is an added joy professionally to having students; to being able to pass on my passions, pass on my knowledge, help bring them along into the profession. I just really enjoy it. (**Participant 4**, outpatient sports)*

For some, it helped to prevent a feeling of burnout by offering up new experiences and new perspectives brought by students.

*And it also makes you feel like you're doing something right or you're doing something purposeful. I think if you are having a student, because it kind of gives you that at the end of the day satisfaction that I made a difference in somebody's life. Not just, you're just not here for just doing what you're doing. (**Participant 9**, skilled nursing facility)*

*But once [the student] is a little bit more independent, it is a welcome break to kind of sit back and have somebody to bounce ideas off of or talk to someone about it. So yeah, I do think it helps combat some of the burnout that, especially in the neuro population, can easily happen. (**Participant 12**, outpatient neuro)*

Subtheme 3: Commitment to the Profession

Underlying the participants' descriptions of their motivations to teach and their decision to be a CI was a connection to the profession itself. Participants viewed their service as a clinical instructor as linked to the greater benefit of the physical therapy profession. The concept of "giving back to the profession" has been cited as a motivating factor for CIs in previous studies (cite here), and the participants in this study provided varying dimensions as to what giving back meant to them. For some, by engaging as a CI they are protecting the future of the profession by teaching good habits and effective clinical skills.

*[Being a CI] has kind of a greater reach and greater influence that can be, you know, more long lasting really, as we try to mold our profession towards you know, whatever vision we have as being ideal. (**Participant 1**, outpatient ortho)*

*But just being a part of that, hey, I love this profession. I love what I do. I want to show everyone the great aspects of what we do and how big a difference it makes in the lives of other people. So I think it's really to me is important to be a part of that. (**Participant 3**, outpatient ortho)*

*If you're not looking ahead into the future, and trying to see, okay, how can I make this facility better? This profession better when I'm not gonna be here forever? I've looked back now and I reflect on, okay, that's why our department head was so keen on us becoming a CI.. And that's why the CIs in our program have been doing it for decades now, yeah. (**Participant 5**, inpatient acute care)*

*This isn't your time, this is [the patient's] time. You have to give the best at each time. And then I always tell myself, when you leave the patient's room or you leave the patient, leave them at their better state than when you found them. That's what I always impart to my students. (**Participant 9**, skilled nursing facility)*

Preparing the next generation of practitioners to uphold a standard of excellence in the profession was viewed as a responsibility and as a motivator for some of the participants.

The ability to give up what is important to me to someone; like, I have a vision of what a good PT does, especially in acute care. I want to show them that and explain to them

*why. And then I want them to also understand that they have that responsibility then to pass it on. (**Participant 7**, inpatient acute care)*

*I do think it's definitely a piece of it, cause there's that one element of helping to create that next generation, and that's always something that I think about. You know, I think about my experiences as a student, or, you know, even just observing clinicians around me, and think about what are things that I can impart on the earlier generations to make sure that they have good habits. (**Participant 8**, inpatient acute care)*

*Oh it means the future of our profession relies upon educators. If we don't have that, then we're done, we're dead in the water. There is no future of our profession, there is no advancement of our profession without educators. So, I take pride in that, the most pride in that. (**Participant 6**, outpatient ortho)*

Participants were committed to providing students with good learning experiences and saw that by doing so, they were setting the students on a path to be good educators for students in the future. Many participants spoke of challenging experiences they had themselves as students and a desire to protect students from similar experiences. This notion of protection seemed to stem from both an intrinsic value to give back to students but also a recognition that their actions as CIs influences how their students may act as practitioners in the future.

*I didn't want to do it before I'd taken the training because I as a student felt like I had a couple of instructors who were not very good instructors. And my feedback was I could have been learning more, but I didn't feel like they were very good at teaching me. And so I didn't want to be that CI. (**Participant 13**, outpatient pediatrics)*

*And I was really like- now in hindsight, I'm really like, I don't want anyone else to have to have a crappy CI. And I know that probably doesn't happen all that often. But it does happen. And I'm like, I figure every student I take is one student less that has a chance of getting a crappy CI. (**Participant 4**, outpatient sports)*

*I know students don't necessarily always look forward to their acute care rotation but I wanna make sure that they enjoy it. And being a student is tough enough as is. Being student in a PT program with, you know, people's lives on the line more or less, it's scary enough, daunting enough as is. If I can do something that helps that, I feel better about myself. I like to know that they're going out into the workforce feeling better about themselves, and that's why I do it, and honestly it sounds super cheesy if I think about it, but if it wasn't for this- even if CEUs didn't count I'd still do it. (**Participant 5**, inpatient acute care)*

Subtheme 4: Community Matters

The impact of community emerged from the participant perspectives, emphasizing that peers, connections, and organizational support can be a facilitator or a barrier to engaging as a CI. Not all participants described having a community of educators or CIs in their clinical setting, but those that did sought support and feedback from other CIs both within and outside of their organization.

My current hospital is pretty big. There's anywhere from 20 to 35 PTs and PTAs on any given day, and they have students pretty much year round, so I'll ask other CIs, and just ask how things have been going, what was good for them, what wasn't, what kind of

*things did their students struggle with, do well. If there was any strategies that they learned that helped them specifically. (**Participant 5**, inpatient acute care)*

Other clinicians influenced participants' development as CIs throughout their career. This included how they started as a CI and their development as a clinician and an educator over the years.

*But I'm a very social person; I like to enjoy where I'm at and who I'm with, and what I'm doing, and all that. And that's why I think that my connection to my CI and the rest of the staff- going to work and enjoying being there was a huge turn-on for me and factor for me to go back there and start my career there. (**Participant 5**, inpatient acute care)*

Developing confidence as a CI was described as building from experience, but also influenced by feedback given by students and peers. Participant 11 described being vulnerable opened the door for direct feedback from her student.

*One of [my student's] first weeks, I was like, listen, this is my first time doing this, so please, I need feedback too. You know, what do you need, more or less, this is good, bad. And so that was very helpful. She was honest, so that was really nice. (**Participant 11**, outpatient orthopedics)*

Community and connections within the organization support the CI's ability to provide students with rich learning experiences. This was true for participants in both inpatient and outpatient settings.

*So there's a lot of interaction. They get to go to OT. So we're all always communicating, especially when we have students for different observations or if someone's caseload is low, like, Hey, go hang out with this person for the day. (**Participant 12**, outpatient neuro)*

*We have [Occupational Therapy], we have PT, we have [Physical Therapist Assistant] students. So they're always there all the time. And there is a group that is very supportive of each other. So if there's an OT, they're always going to want to spend a day with PT. And I'm probably the PT guy. My students are going to go with the OTs and the speech, and there are specific people that are the go-tos for that. So it's kind of a core group of, I'd say, 7 or 8 people that are really supportive of each other. (**Participant 7**, inpatient acute care)*

*And so the good thing about being a CI at my current job is that [we] have a good network as far as, Hey- we've been in neurosurgery ICU for X amount of weeks, [the student] would love to come to [Cardiothoracic] for a week. Do you mind taking them or do you mind switching with me so that I can be in CT and you can do this and so on and so forth. That way it's better for the students to get a more well-rounded experience. (**Participant 5**, inpatient acute care)*

Connections to academic programs expanded the CIs' community of support. These relationships emerged as influential in times of challenge, but also bolstered participants' confidence that the experience of being a CI would be positive. Both Participant 13 and 10 described the importance of a connection to the academic program as well as their direct supervisor when navigating challenges, while Participant 4 recognized the role of the SCCE in his organization to foster connections.

If I had brought [the student issues] up as a concern to my manager and I wasn't getting support, or if I had brought this up as a concern to the student's school and I wasn't

*getting support, then I think it would've changed how I thought of that whole situation. But I felt okay about it because we were all working together, and it was very collaborative and it was fine. (**Participant 13**, outpatient pediatrics)*

*So [the DCE] was the student's advisor that I first struggled with. So, I had used her a lot. We had had multiple conversations…Her and I had chatted quite a bit. She had even given me a few articles to look through to help guide me on pulling out that clinical reasoning piece, which is what the student had been challenged with. So, I had used her as a support system. (**Participant 10**, inpatient rehab)*

*I think for the most part, between our SCCE and the universities we've made partnerships with, they do a really good job, I think, of knowing what kind of student pairs well with what kind of CI and who those CIs are. (**Participant 4**, outpatient sports)*

Summary of Findings

No single, common pathway exists for CIs to reflect on and value their role as clinical educators. The results from this study go so far as to suggest that CIs may not be fully aware of their educator identity, at least until prompting. One reason for this is the fact that professional identity for CIs consists of multiple layers and perspectives (Figure 4.1). Central to all aspects of CIs' professional identity is a commitment to serve others and to function as a model for PTs within the healthcare ecosystem. This begs the question: Do CIs see themselves as clinician educators? While CIs do not always think of themselves in those specific terms, they do create connections between the work they do as CIs and their broader commitment to the PT profession.

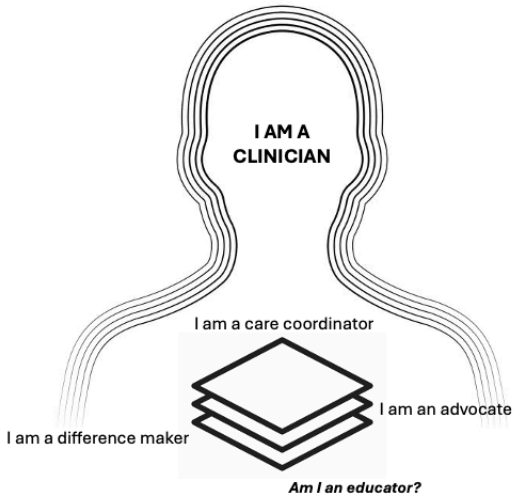

Figure 4.1. Layers of CI Professional Identity.

So, while educator identities may not be prevalent, CIs possess a strong clinician identity. This makes sense, as clinical care is the primary day-to-day focus of most working physical therapists. Generating positive patient outcomes requires PTs to be excellent practitioners. CIs' commitment to clinical excellence–a key aspect of their job–creates a fundamental link between good patient care and protecting the future of the profession because they can impart the same skills and knowledge to the next generation of physical therapist practitioners. Therefore, for some CIs a link exists between clinical identity and their role as a clinical instructor.

Unsurprisingly, CI confidence in their clinical skills correlated to their level of comfort with being a CI. In other words, as a clinician's confidence in their own abilities as a practitioner increase, so too does their confidence in their ability to be an effective CI. On a slightly broader level, when the CI felt they could provide a good example of what a PT's job entails, a corresponding increase in confidence in their ability to teach students occurred.

Chapter Five includes a deeper discussion of these initial findings, including the implication of these findings to the broader discipline of health professions education. The next

chapter also considers limitations of the present study and suggests avenues for future research on the topic of clinical instructor identity in physical therapy education.

CHAPTER 5: DISCUSSION

Introduction

This research study explores the professional identity of experienced clinical instructors, including how CIs incorporate an educator identity into their broader professional identity and how the CI role integrates into their overall career trajectory. This study was designed with the assumption that a clinician who served as a CI over a prolonged period developed an educator identity which, in turn, influences the clinician's motivations to engage in the CI role. This assumption is based on literature surrounding professional identity in health professions, teacher identity formation, social identity theory, and social cognitive career theory (SCCT).

This chapter provides a summary and an interpretation of the study findings as related to each research question and the theoretical frameworks guiding the study. Additionally, it offers implications of the findings on physical therapy education, including on CI professional development, clinical organizations, and academic programs. The chapter includes an acknowledgment of the limitations of the present study and concludes with suggestions for future research to continue to deepen our understanding of the clinical instructor's unique position within physical therapy education.

Discussion of Findings: Engaging as a CI Over Time

One aim of this study was to understand what influences a clinician to serve as a CI during their career. Social Cognitive Career Theory (SCCT) functioned as a foundation for this exploration because it provided a framework to understand the interplay between personal, social, and environmental factors that might influence an individual's career choices. SCCT has three main constructs: self-efficacy beliefs, outcome expectations, and goals. These three

constructs were evident in the participants' perspectives and experiences and help us to further understand why a clinician may repeatedly choose to be a CI.

Growth in Self-Efficacy

Self-efficacy is defined as an individual's belief in their capacity to perform in a way that is required to meet a specific goal or threshold (Bandura, 1994). Within the framework of SCCE, self-efficacy beliefs answer the question, "Can I do this?" (Lent et al., 1994). According to social cognitive theory, which underpins SCCT, people are more likely to engage and persist in behaviors they think they can successfully perform (Bandura, 1986). Thus, when applied to a career or professional context, if one's self-efficacy in a certain position or a certain role is high, then they may be more likely to choose that career pathway or professional role.

In this study, participants described their confidence as a CI increasing in parallel to their confidence as an effective physical therapy practitioner. While the participants used the term "confidence," this discussion uses the term self-efficacy. The concepts of confidence and self-efficacy are often used interchangeably, but they do differ in scope. Confidence is typically thought of as an individual's beliefs, whether positive or negative, in their own abilities across various roles or aspects of life, while self-efficacy is more task-specific and involves a person's perceived competence in particular situations (Bandura, 1986). While the participants used the term confidence, if we examine their descriptions, we can see that often they are referring more to self-efficacy as it related to their role as a practitioner or a CI.

Self-efficacy in clinical teaching skills can influence overall engagement as a clinical educator (Newstead et al., 2019), but there is less understanding of the source of those self-efficacy beliefs. In this study, participants articulated a connection between their belief in their effectiveness as a clinician and their ability to effectively teach. For some participants, there was

hesitancy and doubt to serve as a CI until they developed more clinical experience. However, once engaged as a CI, participants' ability to answer the question "Can I do this?" with a "yes" became stronger as they gained more experience over time. Multiple factors influenced the participants' self-efficacy beliefs, including positive or negative experiences in teaching, students' outcomes, and, seemingly most importantly, their belief in themselves as an effective clinician. This builds on previous research where participants viewed clinical competence as a prerequisite to being a CI (Ong et al., 2019), indicating that clinicians benefit from both clinical experience and continual reinforcement of their teaching effectiveness to bolster their self-efficacy.

Feedback from patients, students, and colleagues were important indicators of teaching effectiveness for CIs in this study. The participants did not consistently describe formal avenues for this type of feedback, particularly from students and colleagues. While the participants did not seem to identify this as a barrier, literature suggests that feedback and mentorship surrounding clinical teaching abilities is important for clinical educators' teaching practice (Jetha et al., 2016; Triemstra et al., 2021). So, if those avenues for feedback were more prevalent, CIs might be even more confident in their teaching abilities, thus reinforcing their commitment to the role. It's important to note, however, that in this study self-efficacy beliefs surrounding effectiveness in clinical care was also a key factor, and this seemed to come from simply seeing positive outcomes in their patients. Thus, clinical instructors may also benefit from feedback not only on their performance as teachers, but also as practitioners, to support their ongoing engagement as a CI.

Expecting a return on investment

In SCCT, outcome expectations refer to the expected consequences of a certain choice (Lent et al., 1994). In other words, an individual's choices surrounding their career and professional roles is influenced by what they expect to happen because of that choice. Applying this concept to the current study, one way to understand a clinician's choice to engage as a CI is to explore what they expect the outcomes or consequences of engaging as a CI might be.

Clinicians had increasingly positive expectations surrounding their experiences as a CI. Continued opportunities to teach reinforced these expectations. While most participants spoke about the internal sense of enjoyment teaching brought them, they also expected more than just a positive feeling. They expected to have tangible outcomes from being a CI, and this was an important reason for continuing to serve in this capacity. These outcomes included growing in clinical skills by learning from their students, reconnecting to the values of the profession, and, in some cases, receiving incentives from their organization related to their teaching role.

Learning from their students and increasing their effectiveness as a practitioner by teaching was important for the participants. Thus, their motivations went beyond the altruistic motivations typically ascribed to clinical teaching (Hudak et al., 2014b), and linked to their desire to remain effective as a physical therapist. Additionally, the experience of teaching helped the participants retain a feeling of connectedness to their profession overall, which, for some, reduced feelings of burnout. Interestingly, the perspective that engaging as a CI might help to combat burnout is a new finding in physical therapy education research. In fact, clinician burnout is one of the main barriers Site Coordinators of Clinical Education face when soliciting CI volunteers (Wilkinson et al., 2023). Reframing the experience of teaching to one that is positive

and provides benefits to clinicians, including a sense of reinvigoration, may be a key approach in addressing the challenge of engaging clinicians as CIs over time.

Previous studies cite rewards and recognition as motivators for clinical educators, including earning continuing education credit, formal awards and recognition from an academic program, career advancement through teaching, and financial compensation (Boyce et al., 2022; Gonzalez-Colaso et al., 2013; Ryan et al., 2013). In this study, however, not all participants described external incentives as a driver for their choice to be a CI. Those participants that had the opportunity for specific rewards or organizational support found those incentives to be important to their on-going engagement as a CI. For example, some participants described the presence of a clinical ladder structure or a support for meeting productivity expectations as helpful criteria in their willingness to serve as a CI. However, even the participants who did not receive incentive offers from their organization still described a desire and willingness to continue to be a CI, suggesting that the concept of rewarding CIs requires a deeper look at what is truly meaningful. Continued reliance on the intrinsic motivations of CIs, such as personal values and altruistic notions, instead of considering the dynamic interplay between internal and external motivators (Asher-Slimak et al., 2023) places the profession at risk for inconsistent clinician engagement in clinical teaching.

Achieving personal goals

According to Social Cognitive Career Theory, an individual's professional goals are linked closely to their self-efficacy beliefs and what they expect to get out of a specific experience or career pathway. As individuals achieve goals, their self-efficacy can increase, and they are likely to adjust their outcome expectations. As people gain new experiences, they will continue to redefine and modify their personal goals. This cycle within SCCT was apparent in

the participants' experiences and demonstrates another factor for why clinicians may choose to be a CI.

Study participants described an overall goal of providing a positive student experience and consequently contributing to the development of a well-prepared, patient-centered practitioner. Many clinicians focused on being a CI that students viewed in a positive manner. Often, participants linked this goal back to their own experiences as students where they described enduring suboptimal clinical education experiences. This goal intertwined with their own belief in being able to provide a positive student experience; if their self-efficacy was low, they were less inclined to be a CI because they did not think they could achieve their goal. However, as their self-efficacy grew with time and experience, so did their ability to meet their personal goal of "not being that person" (e.g. a bad CI), which reinforced their motivations to serve as a CI.

Personal feelings of self-efficacy were not the only factor influencing the participants' goals. The organizational culture in which the participants functioned as a CI also played a role in their setting, pursuing, and achieving their goal of being a CI. Those participants who described an organization that did not support clinical teaching did not feel that they could provide an optimal learning experience for a student. As a result, they did not pursue the CI role, or if forced to engage as a CI, these participants recognized the potential likelihood for not being able to support the student in the way they wished, which caused distress.

Conversely, participants who described an organizational culture with values that supported education felt more confident that they could meet their goal of providing a positive experience for students. However, the support described by participants was not always explicitly linked to being a CI. Some participants described their organization as supporting

lifelong education through attending continuing education courses, the existence of post-professional education programs, such as residencies, as well as a robust clinical education program for physical therapy students. Participants appeared to link an overall culture of support for education to a feeling of support in their role of CI. Previous research that explored or highlighted organizational culture as a factor in clinical teaching engagement largely focuses on the specific structures and supports for clinical education, such as protected teaching time for CIs or training and mentorship for novice CIs (Greenfield et al., 2014; Wilkinson et al., 2023). However, broader characteristics of an organization's approach to education across the continuum may be a helpful indicator of the level of support CIs may expect or experience on an ongoing basis.

Discussion of Findings: Integration of an Educator Identity

This study sought to explore the integration of the educator identity as part of a CI's larger professional identity. Interestingly, clinicians in this study were clearly committed to being a CI and recognized the value it brought to themselves, their profession, their organization, and their patients. However, despite their commitment, the clinicians did not consistently recognize themselves as "educators" or describe a clear educator identity when discussing their professional identity. The participants did not all understand the concept of professional identity in the same way, resulting in diverse descriptions of professional identity across the group. The study findings deepen our understanding of the unique ways in which CIs view their position within the physical therapy profession and how their clinician and educator roles interact.

Social identity theory, including James Paul Gee's framework and Etienne Wenger's Community of Practice, emphasizes the pivotal role of social interactions, shared experiences, and group affiliations in shaping individual's identities and participation within specific

communities. Examining the findings of this study through the lens of social identity theory reveals that their organization, the CI's sense of connection to the profession, and the CI's overall experiences over time influenced their views of professional identity.

Gee (2001) describes identity as being recognized as a "certain kind of person" in a "given context" (p. 99). Participants in this study saw themselves primarily as clinicians and felt that others mainly saw them that way as well. However, context related to the timing of CI assignments and organizational culture, did appear to influence how the participants viewed themselves as professionals. Because the CI role was intermittent for most participants, based on the way in which their organizations scheduled students, some participants recognized that their sense of self as an educator was more prominent when they were actually teaching a student or had recently engaged as a CI. In other words, the longer the gap from the end of one CI assignment to the beginning of the next one, weakened participants' connection to the educator role. Similarly, the overall organizational culture influenced how prominently participants identified with their educator role. Organizations where education across the continuum was an underlying value supported clinicians in prioritizing their role as educators, which in turn, reinforced their sense of self as more than just clinical practitioners but as educators as well.

Overall, the absence of a well-formulated educator identity was evident for most of the participants. The label "Hidden" describes one of the thematic findings because many of the CIs didn't immediately identify their responsibilities in education when describing their professional identity. Many were reluctant to use the term "educator" and even clearly stated that they did not feel that was a label they would apply to themselves. With probing, though, participants were clear that being a CI was an integral and important aspect of their professional roles and their future as a physical therapist.

Professional identity is an individual's understanding of what it means to be part of a larger profession or a professional group, and encompasses a profession's knowledge, skills, values, and ethics. Participants described what it meant to them to be a physical therapist and what they do as physical therapists relative to patient care, but they did not consistently include the skills or knowledge specific to being a CI as part of that description. This indicates that the participants did not see clinical teaching as part of the larger profession. However, a link clearly existed between their commitment to being a PT and their role as a CI. Participants did not include "educator" or even being a CI as part of their description at first, but they also did not see themselves being physical therapists without also being a CI in the future. This interplay of identities–clinician and educator–helps to deepen our understanding of the professional identity of experienced CIs. The participants clearly identified as "clinician first", but by doing so, they were also communicating a commitment to being a CI. The participants linked being a CI to developing as an effective clinician, thus the clinician and educator identities are intertwined (Figure 5.1). The interconnectedness between the two is evident in CIs' development of self-efficacy, a commitment to excellence in both clinical and teaching roles, and a need for connection to others through mentorship, feedback, and sharing of resources.

Figure 5.1. Interconnectedness of Identities.

Recognizing the connection between the educator and clinician identities is important, but the risk to continued engagement in clinical teaching remains if the educator's identity remains hidden. A strong professional identity contributes to commitment to a professional role, including engagement in professional development, self-reflection, and overall progression of skills and knowledge (Canrinus et al., 2011; Rees & Monrouxe, 2018). There are recent efforts within the physical therapy profession to address the specific needs of clinical instructors through development of competencies (Myers et al., 2022), as well as specific professional development initiatives and strategic goals (Jensen, Hack, et al., 2017; Recker-Hughes et al., 2015). However, without a strong educator identity, there is a risk that even the most experienced and committed CIs will not see the need or value in these types of efforts since they do not align with their most visible professional identity.

Culminating Discussion: Deepening our Understanding of the Physical Therapist CI

Previous studies examining the motivations of clinical instructors in physical therapy education, as well as clinical educators in other health professions, highlight internal motivating factors that largely centered on feelings of enjoyment with teaching (Varland et al., 2017; Wilkinson et al., 2023) and a sense of professional obligation (Sevenhuysen & Haines, 2011). While the concept of "giving back to the profession" was apparent in the perspectives shared by this study's participants, the findings provide a more nuanced look at how self-efficacy, expected outcomes, and personal goals define what "giving back" may mean for clinical instructors.

Rather than simply seeing this motivation as an altruistic notion, clinical instructors actually find that by "giving back", they are also receiving something in return. They are giving back to the profession by training students to be effective practitioners who are committed to putting their patients first. To do so the CI must feel confident in their own clinical skills and feel

supported by their organization. CIs also expect to benefit from their clinical teaching role, most importantly by continuing to grow and learn as a clinician, but also potentially from incentives and supports offered by their organization.

At the heart of the participants' stories was a commitment to being an excellent physical therapist practitioner and serving their patients in the best way possible. CIs found that teaching students supported their commitment to excellence because they expected–and wanted–to learn from their students. By learning from their students, the CIs' clinical knowledge and skills naturally expanded, which they recognized as positively impacting their overall patient care. Thus, the notion of "giving back" went beyond just the student experience. Giving back ultimately fed into the broader concept of ensuring that patients across the profession received the care they deserved.

This commitment to the profession aligns with the strong "clinician first" professional identity the participants described. While most participants ultimately recognized themselves as educators, it was not the dominant identity. Professional identity formation is complicated when an individual holds multiple roles (Beijaard et al., 2004), each with distinct responsibilities and recognition. In studies in medical education and nursing, clinician educators describe competing identities and difficulty with identity dissonance (Monrouxe, 2010; van Lankveld et al., 2021; Woods et al., 2016). In this study, however, that same level of dissonance did not emerge. In fact, clinicians did not experience competition between their clinician and educator identities. Instead, there was overlap and symbiosis. One reason for this may be the lack of distinct roles between those individuals who are clinician-only, and those who serve as clinical instructors. Ultimately, patient-care responsibilities do not change when one becomes a CI, and there is no formal recognition of the CI role in physical therapy. This may contribute to less dissonance or

challenge in balancing these identities. However, it also may be why the educator identity is not as visible to CIs as it is in other professions.

Study Limitations

The study has several limitations that warrant consideration. First, the failure to explicitly define professional identity for participants led to an unexpected finding of a varied understanding of what professional identity was. For some participants, this study seemed to be one of the first times they reflected on this concept. A more structured approach, involving the provision of a general definition followed by participants' elaboration, may have yielded richer and more nuanced responses, particularly when exploring the integration of an educator identity within the broader professional identity construct.

Second, the inclusion of CIs with a broad range of experience from various practice settings is a double-edged sword. While it enhances the ability to generalize findings across diverse contexts, the study's findings should be cautiously applied to specific settings. Given the pressing issues of clinical placement capacity and anecdotal shortages of CIs in the profession, a more targeted approach focusing on specific settings may have provided insights that address the challenges faced by those settings more directly. The study's findings, while broadly applicable, may lack the granularity needed to inform targeted interventions in specific clinical education contexts.

Implications

Theory

Chapter Two provided a description of the theoretical frameworks underpinning this study. This included an explanation of Social Cognitive Career Theory and Social Identity Theory and the use of those theoretical frameworks to explore identity formation in the health

professions. This section discusses how this study's findings fit within the two frameworks and contribute to the literature surrounding identity research in the health professions.

Social Cognitive Career Theory. This study utilized Social Cognitive Career Theory to explore why clinicians engage as CIs repeatedly during their career. SCCT has been used in studies in other health professions, such as nursing and medicine, to explore clinical educator career choices and identity formation, however it has not been utilized in physical therapy education research as widely. Using SCCT as a framework for this study was suitable because it allowed for examination of CI motivations over time in a way that captured both internal and external factors. It offered a framework that guided the study process, including development of the interview protocol that reflected key constructs found in SCCT and social identity theory. Analyzing the data through the lens of SCCT and social identity theory allowed for connections and patterns to be identified that offered a deeper, more complex analysis of how identity influences a CI's motivation and choices.

SCCT has been used previously in research exploring clinician educator identity formation in medical education and nursing. This study expands the scope of using SCCT as a framework to explore clinical instructor identity formation and motivations in physical therapy education. The constructs of self-efficacy, outcome expectations, and goal setting are particularly useful in researching clinical instructor experiences and perceptions, particularly with the unique structure in which CIs function in physical therapy education. The intermittent nature of the CI role, the variety of clinical practice settings and organizational cultures, and the individual goals and values each CI brings to the experience are important to consider in research surrounding the physical therapist CI. SCCT provides a framework that researchers can use to tease out those elements from their sources and explore CI engagement at a deeper level. SCCT helps

researchers understand how a clinician engages as a CI, why they choose to do so, and what factors impact their experiences as a CI.

Social Identity Theory. Notably, the integration of an educator identity, explored through the lens of Social Identity Theory, emphasizes the influence of organizational culture and contextual factors on how participants perceive themselves as educators within a broader professional identity. The study enriches our understanding of experienced CIs' professional identity, revealing the nuanced interplay between clinician and educator roles and how this aligns with and extends SCCT's applicability in the field of clinical education.

This study utilized social identity theory to explore educator identity formation in clinical instructors. Gee's theory of four identities and Wenger's Communities of Practice were two approaches that guided this study. These frameworks were selected based on previous work in health professions that identified the importance of environment, mentorship, and organizational culture as important aspects of identity formation. While Communities of Practice theory is found in research in nursing and medical education examining the development of clinician educator identity, the same application has not occurred in physical therapy education.

This study focuses specifically on the clinical instructor, and findings suggest that the CI's work environment is a significant factor in how they view themselves, how others view them, and how they engage in the educator role. Wenger's Community of Practice has three main elements: domain, community, and practice (Wenger, 1998). In designing this study, there was an assumption based on previous research into clinical educators that experienced CIs would describe participation in a more well-defined clinical education community, which would include sharing information, experiences, and resources with other CIs. However, the participants did not consistently describe access to this type of community. Wenger points out that sharing the same

job or title does not automatically equate to a community of practice unless there is interaction, learning together, and engagement in shared practice. This was missing in many of these participants' stories, and for those that did indicate some aspect of community, the central focus remained as a member of a community centered around the clinician role.

It seems that clinicians who repeatedly engage in clinical teaching can develop a commitment to the role despite the lack of a well-developed community of practice for clinical educators. This leaves us wondering what the benefits might be of an intentional approach to developing a community of practice for clinical instructors. How would this type of community impact resource sharing, experiences, confidence and self-efficacy, and sustained commitment to both the profession and the CI role? Research exploring the impact of communities of practice shows the positive benefits to professional identity formation in health professionals (Cantillon et al., 2016; Woods et al., 2016), as well as development of practice knowledge and skill (Camden et al., 2017; Plack, 2006). Using Communities of Practice theory in future research, particularly in structuring interview guides and data collection methods, may further expand the understanding of how organizational culture, mentorship, and personal experience intersect to impact clinical instructor professional identity.

Practice

The physical therapy profession will continue to rely on clinicians to volunteer as clinical instructors as long as the current model of clinical education exists. As the number of Doctor of Physical Therapy programs grows in the United States, so will the need for clinical instructors. However, there are no statistics that describe the frequency with which clinicians engage as CIs over the course of their career, nor is there specific data providing insight into how many clinicians identify as active clinical instructors across the country. The American Council of

Academic Physical Therapy (ACAPT) created the Capacity and Innovation in Clinical Education Placement Process Task Force in 2022 to explore existing capacity for clinical education experiences. This was a direct result of the initial ACAPT Placement Process Task Force report that indicated the need for further understanding of the true capacity for student placements to address the ongoing issues of availability of clinical experiences for students to fulfill curricular requirements (American Council of Academic Physical Therapy Task Force, 2020). While the Capacity Task Force's final report will be released in 2024, the charge and purpose of the task force is indicative of an urgent issue in clinical education where there is serious concern that the number of CIs and clinical sites available to students may remain stagnant despite increasing demand. Therefore, it is increasingly important that we understand the "how" and "why" behind clinician engagement as CIs over time.

A strong professional identity has been linked to increased professional commitment (Monrouxe, 2010), including commitment to roles, professional development, and self-reflection. Previous studies in health professions describe a challenge to those individuals with dual roles, particularly clinician educators, in developing a strong professional identity that encompasses an educator identity (Cantillon et al., 2019; Ong et al., 2019). Studies suggest that without a well-defined educator identity, there is a risk for decreased commitment to the role, including a commitment to developing the necessary skills, knowledge, and competencies associated with the role (Steinert et al., 2019).

Initially, I anticipated that this study would reveal CI experiences that paralleled those experiences described in studies from nursing and medical education, with CIs describing competing identities and difficulties balancing dual roles. As this study unfolded, though, it became more evident that the study participants did not view themselves as holding dual roles or

competing identities. In fact, the professional identities described by the participants were clearly "clinician first." This clinician-first mentality did not preclude the participants from seeking out the CI position. In fact, the motivations to continue to serve as a CI over the years was strongly linked to a view that being a CI supported, and even enhanced, their sense of self as a clinician.

The thinking behind CI motivations and incentives for clinicians to be a CI have focused largely on rewarding or elevating the position as educator. However, the experiences of the CIs in this study suggest that CI motivation is not just about being seen as something more than a clinician. The motivation to teach students in the clinic is strongly linked to a desire to be an effective practitioner. This shift in thinking about motivation could impact how clinical organizations encourage staff to serve as CIs, how clinicians individually make the decision to teach or not, and how professional organizations describe and support the CI role.

Professional development is important for clinical educators to develop teaching skills and reinforce positive attitudes towards teaching (Steinert, 2014). Recently, clinical education faculty development has become a specific focus of physical therapy professional organizations, linking support for clinical instructor teaching skill to excellence in physical therapy education (American Council of Academic Physical Therapy et al., 2021). The American Council of Academic Physical Therapy incorporates continued faculty development, including for clinical instructors, as a specific criterion for excellence for DPT academic programs in their Excellence Framework for Academic Physical Therapy Framework (American Council of Academic Physical Therapy, 2022b). The American Physical Therapy Association continues to offer the Credentialed Clinical Instructor Program (CCIP) and has recently created "booster" modules in an effort to offer on-going training opportunities for clinical instructors (American Physical Therapy Association, 2024).

Despite the recognized importance of professional development opportunities for clinical instructors, participants did not consistently identify engagement in teaching-focused professional development as important to their own service as a CI. However, this may be because limited opportunities for specific CI professional development exist, and those that do have mixed evidence to support their efficacy (Housel & Gandy, 2008; Housel et al., 2010; McCallum et al., 2016). Additionally, with the CI role being intermittent and the clinician identity being the predominant professional identity, clinicians may not view professional development focused on teaching as worth the time and money. This study's findings indicate that if professional development is desired and necessary for CIs, then the profession requires a shift from solely emphasizing the development of skills as educators, to how development as an educator positively impacts a clinician's clinical practice.

Initiatives designed to support the development of clinical instructor skills and knowledge should also be designed with identity formation in mind. Professional development often focuses on a specific skill, but intentionally integrating identity into trainings and workshops could positively impact CI educator identity formation, thus enhancing their commitment to the role. Steinert et. al (2019) offer recommendations for addressing identity in professional development programs for clinical educators in medicine. These include specifically asking questions about identity during workshops, promoting reflection about professional identity and career choices, and creating opportunities to build a community of clinical educators. To date, there is no ongoing professional development opportunity for clinical instructors in physical therapy that specifically addresses identity formation nor offers continuing access to the CI community. While communities of practice for clinical instructors may exist sporadically within clinical organizations, developing a community of practice for clinical

instructors at multiple levels, including the clinical site, geographic region, and professional organization, could positively impact the educator identity formation of clinical instructors.

Research

This study expands our understanding of the unique experiences, perspectives, and motivations of those clinicians who choose to be clinical instructors in the physical therapy discipline. Future research into the professional identity of clinical instructors and motivations to engage as CIs should focus on several key areas to deepen our understanding and build on this study. First, given the significant influence of organizational culture on various aspects of CI experiences, motivations, and identity formation, future studies should delve into internal organizational structures that serve as supports or barriers for CIs. This includes looking more specifically at internal supports such as specific roles and titles, incentives and supports offered by organizations, and the intersection of organizational values with individual clinicians' values. Additionally, exploring the impact of mentorship within a clinical organization on CI engagement can provide valuable insights into creating more supportive environments.

The intermittent nature of the CI role emerged as another factor influencing participants' experiences and their sense of educator identity. Future research should investigate whether a more consistent role as a CI affects clinician professional identity. Understanding the differences in CI perspectives on educator identity when there is a more stable opportunity for serving as a clinician educator versus prolonged gaps in time could offer valuable insights into mitigating burnout risks and enhancing the overall engagement of clinicians in the CI role.

This study shed light on the concept of "giving back" to the profession from the CI perspective, emphasizing the long-term impact of positive student experiences on professional engagement as a physical therapist. Future research could delve deeper into understanding the

enduring effects of positive student interactions on clinicians' practices and their commitment to the profession, providing insights into strategies for fostering a sense of professional responsibility and mentorship.

Finally, while the study's broad participant representation across various practice settings enhances generalizability, there is a need for setting-specific research, particularly in inpatient environments. Given the challenges of capacity and anecdotal shortages of CIs in the profession, exploring the unique dynamics and challenges within specific clinical contexts can inform tailored strategies to address issues threatening the sustainability of the current clinical education model. Future research in these specific settings can provide targeted solutions to enhance the quality and continuity of clinical education.

Conclusion

One participant stated, “I don’t think I’d really want to be a PT without being a CI.” This statement captures the complex and layered professional identity of experienced clinical instructors. This study sought to explore the motivations behind a clinician’s decision to be a CI throughout their career, with the assumption that they are developing an educator identity along the way. The results revealed that the decision to be a CI is closely linked to a commitment to being an excellent physical therapist practitioner, but even those CIs with multiple years of experience do not necessarily see themselves as educators. It can be understood from the results that even the most experienced CIs hold a professional identity that is “clinician first”, but also recognize their service as a CI is paramount to their continued ability to be the type of clinician they want to be and want future physical therapists to be as well.

The diverse perspectives on professional identity combined with the thematic results provide a deeper understanding of how clinicians integrate the CI role into their professional

path. An organizational culture that supports education, strong self-efficacy beliefs, and expectations of positive outcomes from teaching contribute to continued engagement as a CI. In the absence of these, clinicians face challenges in clinical teaching. Additionally, their view of themselves as educator is even further compromised. As the physical therapy profession continues to grapple with the complex challenges facing clinical education, focusing on CI professional identity formation as educators through professional development and organizational culture may contribute to a more sustainable cadre of clinical educators in the profession.

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APPENDICES

Appendix A: Recruitment Message to DCEs

Dear Director of Clinical Education,

Your assistance is requested in completing important research in physical therapist education. I am a PhD Student at North Carolina State University, and my dissertation research is focused on exploring the professional identity formation of physical therapist clinical instructors. As a current Director of Clinical Education in a DPT program, I am keenly aware of the important role CIs play in clinical education. I am interested in exploring how experienced CIs develop an educator identity as part of their professional identity.

In order to access qualified, experienced CIs, I am seeking your assistance in identifying and recommending potential participants for this study. The inclusion criteria for the study include:

- Licensed physical therapist in the United States
- Has served as a CI for a minimum of five full-time physical therapy students in separate clinical experiences

I am seeking participants from a variety of practice settings and patient populations who represent diverse approaches to clinical teaching. If you know a CI who meets the above criteria, please forward them the attached invitation to join this study. Any questions about the study can be directed to me at the email below.

Thank you for your assistance and your time. Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

Katie Myers, PT, DPT
Phd Student, North Carolina State University
Kdmyers4@ncsu.edu
(720) 961-3457

Appendix B: Invitation Flyer to Participate for CIs

CLINICAL INSTRUCTORS NEEDED!

Are you an experienced CI?
Have you supervised at least 5 full-time physical therapy students?

You are invited to participate in a study exploring the professional identity formation of clinical instructors. This aims to answer the following:

- *How do clinical instructors experience educator identity formation?*
- *What influences a clinician to incorporate the clinical instructor role into their career pathway?*

As a participant, you will:

- Complete a brief online demographic questionnaire
- Participate in a 60-90 minute recorded, one-on-one semi-structured interview (in-person or on Zoom)

If you are interested in participating, contact the primary investigator with your name, contact information, years of experience, and current clinical practice setting:

Primary Investigator:
Katie Myers, PT, DPT
Kdmyers4@ncsu.edu
720-961-3457

This study has been reviewed and approved by the Institutional Review Board of North Carolina State University.

Appendix C: Recruitment screening questionnaire for prospective participants

(Questionnaire will be accessed via Qualtrics)

Thank you for considering being a participant in this study, **Educator Identity Formation of the Clinical Instructor in Physical Therapy: A qualitative exploration**. Please answer the following questions about your eligibility criteria, as well as to provide us with some general information about your institution to ensure that we have maximum variation in our sample. At the end of the survey, you will be asked to provide your email address so we may contact you to set up a day and time for an interview. If you meet the criteria, we will be in touch with you via email within 1-2 weeks to set up a day and time for the interview.

1. Are you a licensed physical therapist?
    a. Yes
    b. No

2. In which state do you currently practice as a licensed physical therapist?
    a. Open Text Response

3. How many physical therapist students have you supervised during full-time clinical experiences in your career? (Full-time clinical experiences are defined as a clinical education experience in which a student is engaged for a minimum of 35 hours per week.)
    a. Open Text Response

4. How many years have you been a licensed physical therapist?
    a. Open Text Response

5. Which of the following best represents your current practice setting:
    a. Outpatient/Ambulatory
    b. Inpatient Acute Care
    c. Inpatient Rehab
    d. Long-term care/Skilled Nursing
    e. Home Health
    f. School System
    g. Other [open text field]

6. Which of the following best represents the patient population you currently serve:
    a. Adult
    b. Pediatrics
    c. Across the lifespan

7. Please provide an email address so that we may follow up with you to schedule an interview.
    a. Open Text Response

Appendix D: Consent Form

NC STATE UNIVERSITY

Consent Form

Title of Study: Educator Identity Formation of the Clinical Instructor in Physical Therapy: A qualitative exploration **(eIRB #** 26048**)**
Principal Investigator(s): Katherine Myers, **kdmyers4@ncsu.edu**, 720-961-3457
Funding Source: None
NC State Faculty Point of Contact: Susan Barcinas, **susan_barcinas@ncsu.edu**, (919) 515-6298

What are some general things you should know about research studies?
You are invited to take part in a research study. Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate, and to stop participating at any time without penalty. The purpose of this research study is to gain a better understanding of the professional identity formation of clinical instructors and how the clinical instructor role integrates into physical therapist clinician career choices. We will do this by performing one-on-one interviews with experienced clinical instructors and analyzing the interview data to identity prevalent themes.

You are not guaranteed any personal benefits from being in this study. Research studies also may pose risks to those who participate. You may want to participate in this research because you want to contribute to physical therapy education. You may not want to participate in this research because you do not want to or cannot participate in interviews or share details of your own professional identity.

Specific details about the research in which you are invited to participate are contained below. If you do not understand something in this form, please ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If, at any time, you have questions about your participation in this research, do not hesitate to contact the researcher(s) named above or the NC State IRB office. The IRB office's contact information is listed in the *What if you have questions about your rights as a research participant?* section of this form.

What is the purpose of this study?
The purpose of the study is to understand the professional identity formation of clinical instructors and how the clinical instructor role integrates into physical therapist clinician career choices.

How many people will be in the study?
There will be approximately 15-20 participants in this study.

Am I eligible to be a participant in this study?

In order to be a participant in this study, you must agree to be in the study and meet the following criteria: 1) be a licensed physical therapist in the United States; 2) served as a clinical instructor for 5 or more students during full-time* clinical education experiences.
*A full-time clinical education experience is one in which a student is engaged for a minimum of 35 hours per week.

You cannot participate in this study if you do not meet the inclusion criteria.

What will happen if you take part in the study?

If you agree to participate in this study, you will be asked to do all of the following:

1. Participate in a one-on-one interview. The interview is expected to last 1-1.5 hours. The interview will be completed on Zoom and will be video and audio recorded through the Zoom platform.
2. You will have the option to review your interview transcript for accuracy. This is not a required aspect of participation and is completely optional. This activity is anticipated to require approximately 15 minutes of your time.

The total amount of time that you will be participating in this study is a maximum of 90 to 120 minutes.

Recording and images

If you want to participate in this research, you must agree to be audio-recorded and video recorded. If you do not agree to be audio-recorded or video recorded, you cannot participate in this research.

Risks and benefits

There are no anticipated physical risks associated with participation in this research.

There are no direct benefits to your participation in the research. The indirect benefits are self-reflection on professional identity and your role as a clinical instructor.

Right to withdraw your participation

You can stop participating in this study at any time for any reason. To do so, just stop any research activity that you are doing or contact the student researcher, Katherine Myers, at **kdmyers4@ncsu.edu** and 720-961-3457. You can also contact the faculty advisor for this research, Susan Barcinas, at **Susan_Barcinas@ncsu.edu** and 919-515-6298. If you choose to withdraw your consent and to stop participating in this research, you can expect that the researcher(s) will redact your data from their data set, securely destroy your data, and prevent future uses of your data for research purposes wherever possible. This is possible in some, but not all, cases.

Confidentiality, personal privacy, and data management

Trust is the foundation of the participant/researcher relationship. Much of that principle of trust is tied to keeping your information private and in the manner that I have described to you in this form. The information that you share with me will be held in confidence to the fullest extent allowed by law.

Protecting your privacy as related to this research is of utmost importance to me. There are very rare circumstances related to confidentiality where I may have to share information about you. Your information collected in this research study could be reviewed by representatives of the University, research sponsors, or government agencies (for example, the FDA) for purposes such as quality control or safety. In other cases, I must report instances in which imminent harm could come to you or others.

How I manage, protect, and share your data are the principal ways that I protect your personal privacy. Data that will be shared with others about you will be de-identified.

De-identified. De-identified data is information that at one time can directly identify you, but I will record this data so that your identity will be separated from the data. I will have a master list with your code and real name that I can use to link to your data.

Future use of your research data
Your information even with identifiers removed, will not be stored or distributed for future research studies.

Compensation
There is no compensation for participating in this study.

What if you have questions about this study?

If you have questions at any time about the study itself or the procedures implemented in this study, you may contact the student researcher, Katherine Myers, at **kdmyers4@ncsu.edu** and 720-961-3457. You can also contact the faculty advisor for this research, Susan Barcinas, at **Susan_Barcinas@ncsu.edu** and 919-515-6298.

What if you have questions about your rights as a research participant?
If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact the NC State IRB (Institutional Review Board) office. An IRB office helps participants if they have any issues regarding research activities. You can contact the NC State University IRB office at IRB-Director@ncsu.edu, 919-515-8754, or fill out a confidential form online at https://research.ncsu.edu/administration/compliance/research-compliance/irb/irb-forms-and-templates/participant-concern-and-complaint-form/

Consent to participate

By electronically signing this consent form, I am affirming that I have read and understand the above information. All of the questions that I had about this research have been answered. I have chosen to participate in this study with the understanding that I may stop participating at any time without penalty or loss of benefits to which I am otherwise entitled. I am aware that I may revoke my consent at any time.

☐ **Yes, I want to be in this research study.**

Name_____

Today's Date _____

☐ **No, I do not want to be in this research study.**

Thank you.

Appendix E: Interview Protocol

Thank you for participating in this study. The purpose of this research is to explore the professional identity formation of clinical instructors and to understand what influences a clinician to serve as a clinical instructor. This interview will last approximately 60-90 minutes. I am recording the interview so that it can be transcribed for analysis. You are welcome to pause or terminate the interview at any time. If there are any questions that you do not feel comfortable answering, please just let me know and we will move on. Once we have completed the interview, the interview will be transcribed and you will have the opportunity to review the transcript in order to revise or add to any responses that you shared. I may also contact you if I have any questions or areas that warrant further exploration. I want you to feel comfortable speaking freely and openly during this interview. Any specific comments from the interview will not be attributed to you individually. I also ask that, if you refer to another individual during our conversation, please refrain from using their name.

Do you have any questions? Prior to the interview, you provided electronic consent. Can you reconfirm your consent verbally to participate in this research study and interview today?

So, we are going to begin just by talking about you as a physical therapist.

1. How did you come to be a PT?

2. Tell me about where you work *(a-b prompts if not included in participant response)*.
    a. Describe your setting; patient population; the leadership structure of your clinical organization
    b. How would you describe your organization relative to education and students?

3. How did you come to be a clinical instructor? *(a-d prompts if not included in participant response)*
    a. What made you want to do it?
    b. When you pursued PT as a career, did you also want to be a CI?
    c. Tell me about your first experience as a CI
    d. Did you do anything to prepare yourself when you began as a CI? What about now?

4. What do you enjoy about being a CI?

I'd like to talk a little bit about being a CI fits with your self-confidence, your personal and professional goals, your career plans, and your practice environment.

5. Tell me a little bit about your confidence in your current position. *(a-d prompts if not included in participant response)*
    a. How has your confidence grown over time?
    b. How would you describe your confidence relative to your role as a clinician? As a CI?
    c. What experiences have you had that have built up your confidence?
    d. Tell me a little bit about how self-confidence matters to your decision to be a CI.

6. Let's talk about your career path. Can you tell me a bit about your career path and how you've made decisions along the way? *(a-c prompts if not included in participant response)*
    a. How has being a CI fit in with this trajectory?
    b. What kinds of things have you done to support your career?\
    c. What kinds of experiences have you sought out that are specific to your educator role?

7. Tell me a little bit about how your work environment influences your decision to be a CI.

8. In what ways do you feel you are part of an educator community? *(May include discussion about clinical site, professional organization/community, amongst peers.)*

9. Would you recommend being a CI to others? Why or why not?

Let's switch gears a bit. We are going to talk about how you see yourself as a PT and as a CI.

10. When you talk to people outside of the profession, how do you describe what you do? What is important for them know or not know?

11. When you talk to colleagues, how important is it that they know you are a CI? What do you want them to know about it?

12. Tell me about those who have been influential to you in how you see yourself as a PT? *(a-b prompts if not included in participant response)*
    a. Who have your mentors or role models been?
    b. How have others influenced you as a CI?

13. What does it mean to you to be an educator? *(a-b prompts if not included in participant response)*
    a. In what ways do you see yourself as an educator?
    b. How do you think others view you? Are you seen as only one thing- clinician, educator, administrator?

14. What does "professional identity" mean to you?
    a. How would you describe your professional identity?

15. When you think about yourself as a professional, where does being a CI fit in?
    a. How does being a CI fit into your future professional plans?

16. Some people might say that being a CI isn't a primary role of a physical therapist. How do you feel about that?

17. Is there anything else you'd like to share that we haven't discussed?

Appendix F: Excerpt from initial codebook

Code	Definition	Sample quotes
Educator is not the right word	Describes a disconnect between the word educator and sense of self as either clinician, CI, or both	P3: I'm a clinician that educates. Because even though I love the educator- the hey, I want to show you these things, I still am not- I don't consider myself a oh, I'm an educator. P5: But I wouldn't have chosen that word if you had asked me to describe how I am as a CI or anything. Like I don't think I used the word educator at all in this interview. P13: It [title of educator] doesn't come to mind until somebody mentions it.
Enjoyment in teaching	Describes specific aspects of teaching that bring enjoyment and CIs see as contributing to their enjoyment of teaching Examples: • "a-ha" moments • Seeing students develop their own ideas • Gratitude from students	P4: I like the "Ah ha!" moments that students have. I feel like that's really kind of fun when they're like- you know, you're going over something on the whiteboard. And then, like an hour later, you're with the patient, and they're like, Oh, that's what you're talking about! I see it now! And so I like those "Ah ha" moments a lot. Honestly, that's a big part of it. P9: But when the aha moment of that student's eye, you see, I think that's very rewarding for me because I'm not just doing a job. It's a profession. It's an art, it's science and art. P1: So when they start to put together a process that allows them to solve new problems, you know, not just know information and stuff. But so I guess maybe that's the generic 'watching them grow,' but more specifically to see them develop a process to solve problems.
Giving back to profession	Giving back to the profession by supporting clinical education Examples: • creating enthusiasm for the profession which increases student commitment to the profession	P1: So there's a lot of selfish reasons, but also, externally, you know, we recognize as a company what we can offer the profession and want to give back. P3: So it's definitely one of those things that has become a passion of mine to help to teach the next generation of or- it's not even that I'm like, oh, I'm giving them something they can't get somewhere else. But just being a part of that, hey, I love this profession. I love what I do. I want to show everyone the great aspects of what we do and how big a difference it makes in the lives of other people. So I think it's really to me is important to be a part of that. P9: So I really wanted to be a role model and then encourage more students to take the physical therapy profession. So I think I just

		want to spread that word. It's a very, I mean, it's really humbling profession.
Giving back to profession- making it better	Subnode of giving back to profession- more specifically making the profession better by impacting students positively	P1: This has kind of a greater reach and greater influence that can be, you know, more long lasting really, as we try to mold our profession towards you know, whatever vision we have as being ideal. P6: Oh it means the future of our profession relies upon educators. If we don't have that, then we're done, we're dead in the water. There is no future of our profession, there is no advancement of our profession without educators. P7: The ability to give up what is important to me to someone; like, I have a vision of what a good PT does, especially in acute care. I want to show them that and explain to them why. And then I want them to also understand that they have that responsibility then to pass it on.
Goal as a CI- exposing students to something new	Describes a goal of being a CI as teaching or exposing students to something unexpected Examples: • Exposure to different treatment approach • Introducing new practice setting • Filling in "gaps" from didactics	P11: So I feel like that's the education piece, bridging that what it is on paper into how it presents in real life and how to handle people. I don't think you learn that a lot in PT school. Some people just need to be heard. Some people need to get their knee flexion measured three times every session. Some people need, I think. So that would be maybe how I see myself as an educator. This is kind of real life. P3: So, some of those things, because you don't really learn progressions in school; that's where you learn it- in your clinicals. So I am doing what I wanted to do, which was teach, but I'm just teaching on the back end. P4: I like passing on some of the areas I have passions for- specifically for treating- that I know we don't always get as much of an education on in school; as far as advanced exercise prescription, concussion stuff, lot of the advanced sports rehab type stuff. I know, at least at [alma mater] we didn't get that a lot. So, I like being able to pass that along to students so that's kind of my passion project.
Goal as a CI- giving students good experience	Describes a goal for their service as a CI for students to have a positive experience; Examples: • may refer to being better than other CIs • not being a "bad CI"	P8: I think at the end of the day, I think I still provided a good experience, and I think that's what I would hope students walk away with P4: I don't want anyone else to have to have a crappy CI. And I know that probably doesn't happen all that often. But it does happen. And I'm like, I figure every student I take is one

		student less that has a chance of getting a crappy CI. P13: I don't sit back and watch and shut up until the end of the internship because I want, my student goal of being a CI is for my student to leave here saying, thank you so much. I learned a ton. And if my student doesn't leave here saying that, I'm like, how could I have done better? And so that's where I want the student to say at the end, that was a good experience. I learned a lot. I would recommend that experience.
I'm a clinician first	When describing professional identity, clinician is primary aspect of description, does not include educator or CI in initial description	P5: My professional identity I would describe, I'm in acute care PT; I take pride in being able to help sick people get home. I take pride in being a coordinator of care. P3: I'm a clinician first. I'm all about wanting to make sure my patients are good first, and then on top of that, I'm like, Hey, I got a student. I want to show you the great side of PT and what we can do for people.

Appendix G. Example of First-Level Code Progression

October 23, 2023- Example of initial codes related to reasons to be a CI

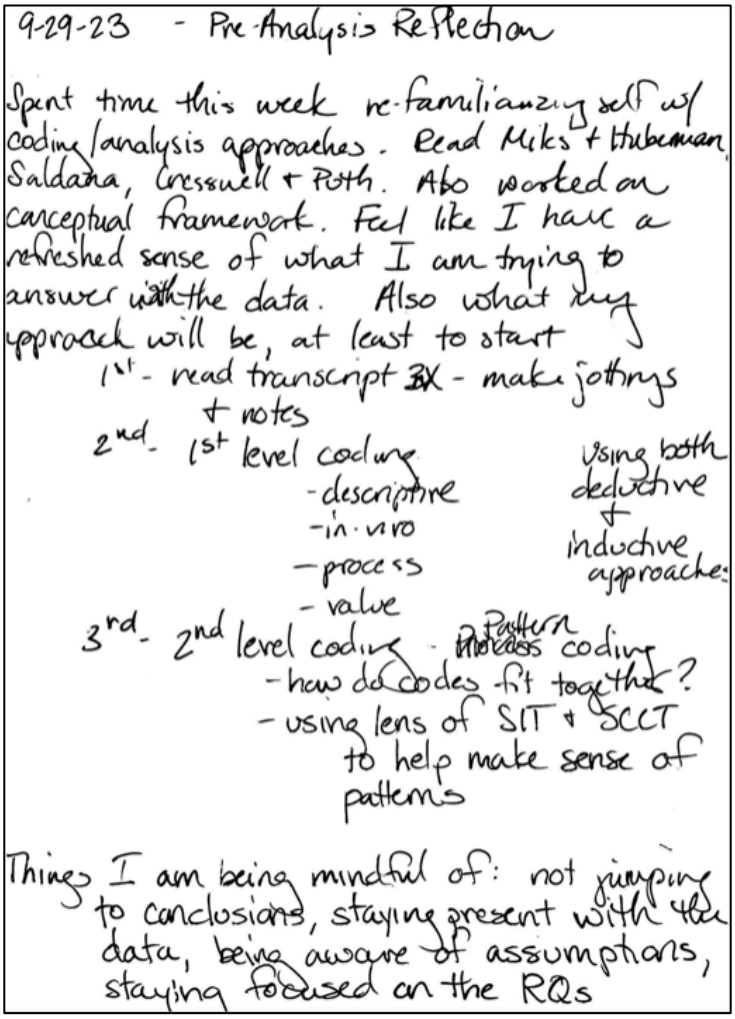
Code	Definition	Notes/reflections
Teaching makes me feel smart	In-vivo code. Enjoyment of teaching related to feeling smart when having a student.	
You can learn from your student	Students contribute new ideas, new evidence and can advance practice.	
Two-way street	In-vivo code; subside for learning from students. Expectation of CI that they will teach student but student will bring new knowledge	Can combine with learn from student; maybe reciprocal relationship? Value to self as clinician?
Being a CI adds challenge to your day	Being a CI is not easy; adds challenge to your day-to-day; could include discussion of need to be prepared for this. Or that this is a positive or negative aspect.	Some spoke about this in a way that was positive, some negative.
Being a CI prevents boredom	Provides new challenge in a good way; variety to the day to day	These seem to be related; could be one code- reinvigoration? Staying engaged?
Combatting burnout	Being a CI helps to combat feelings of burnout, breaks up monotony, increases engagement in practice	
Enjoyment of job increases as a CI	Being a CI impacts clinician's enjoyment of their job overall.	
Reinvigorating self as clinician	Being a CI, engaging with students, brings out excitement, reinvigorates self as clinician	Connection to themselves as practitioner- more specific to patient care
Students bring energy	Describes enjoyment of being a CI linked to students bringing new energy, excitement, etc to the clinic setting; Ci expects this and contributes to motivation to be a CI	
Teaching adds something more to job	Being a CI adds something positive to clinician's typical job; breaks monotony; describes an aspect of joy that keeps CI engaged in job overall	See above- goes with staying engaged or reinvigoration
Teaching is most enjoyable aspect of job	Clearly feels that teaching is most enjoyable, positive aspect of being a PT/clinician/practitioner	

November 4, 2023: Revised codes

Code	Description
Reinvigoration through teaching	Some feeling of reinvigoration, renewed energy by being a CI Examples: • feeling of renewed commitment to profession, • energized approach to clinical care recommitment to role as clinician
Enjoyment in teaching	Describes specific aspects of teaching that bring enjoyment and CIs see as contributing to their enjoyment of teaching Examples: • "a-ha" moments • Seeing students develop their own ideas • Gratitude from students
CI role enhances clinical practice	Describes a link between being a CI and an improvement or change in clinical practice; linking to patient care in a positive way Examples: • Making evidence-based clinical decisions • Being able to talk to patients better Keeping up to date with evidence
Learning from your student	Through teaching, a clinician can learn new concepts, update evidence based knowledge Examples: • Fresh ideas • Recognizing that DPT training is different than when they were a student Reciprocity/two-way street

Appendix H. Examples of researcher reflections

Completed in researcher journal:


9-29-23 - Pre-Analysis Reflection

Spent time this week re-familiarizing self w/ coding/analysis approaches. Read Miles + Huberman, Saldaña, Cresswell + Poth. Also worked on carceptual framework. Feel like I have a refreshed sense of what I am trying to answer with the data. Also what my approach will be, at least to start

1st - read transcript 3X - make jottings + notes

2nd - 1st level coding
- descriptive
- in-vivo
- process
- value

Using both deductive + inductive approaches

3rd - 2nd level coding - Pattern coding
- how do codes fit together?
- using lens of SIT + SCCT to help make sense of patterns

Things I am being mindful of: not jumping to conclusions, staying present with the data, being aware of assumptions, staying focused on the RQs

11/11/23

Coding - Second level

Starting with SIT + SCCT - how are the key constructs of these theories found in the codes

Grouping [SIT] - professional develop
educat. values - Alignment of values/goals
how do others see me? how do I see myself? - Role perception
cofacet - Organizational culture
[SCCT] - Mentorship (also SIT)
self-efficacy - Building confidence
goals - Professional goals
outcome expect. - Seeing value
reflection - Professional growth
goals - Influencing profession

Some of these seem narrow (e.g. professional development) - looking at codes now thru pattern recognition - what patterns are emerging in the data?

[11 categories]

1) Am I an educator? (8) Developing thru experience
2) Connecting clinician + teacher confidence (9) Reinvorgation
3) Seeing the value in teaching (6) Teaching as profess. goal
Influencing the profession
5) Organizational influence (10) Protecting students

Looking at patterns - see relationships to Social identity theory and SCCT. Will create descriptions/definitions for each.

Next Steps:
Go back through codes - how do they relate to categories? Are there categories w/ just one code?
Look at data through lens of categories
- How strongly are they represented in the data?

What emerging larger themes do I see?!

Participant 10- initial jottings and reflections (completed in Nvivo)

Community of practice- even if this doesn't look the same across participants, each of spoken about the impact of either having or not feeling connected to a community. For P10, she seems to be quite isolated as the only CI in her unit and not having others to connect with in her facility, but her support and connection to education comes from the link to academic programs and accessing resources outside of her direct environment.

This participant referenced her working environment and [lack of] support for being a CI throughout the interview. It was different than what other participants had described so provided an alternative way of describing impact of culture. There are aspects of this interview that may be tangential to this study, but not sure yet.

Similar things to other interviews:
-link between self-efficiacy as a clinician and readiness to be a CI
-building expertise as a clinciian supports being a better educator
-choice to be a CI is influenced by the organizational culture

New(ish) concept:
-lifelong learner as a personal value- modeled by previous CIs and current coworker