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Achieving Competence: Clinical Instructors' Perspective

Kimberly W. Coleman-Ferreira
Nova Southeastern University

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by

Kimberly W. Coleman-Ferreira

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy

Nova Southeastern University
College of Health Care Sciences
Physical Therapy Department

2015

NOVA SOUTHEASTERN UNIVERSITY
Health Professions Division
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We hereby certify that this dissertation, submitted by Kimberly Ferreira, conforms to acceptable standards and is fully adequate in scope and quality to fulfill the dissertation requirement for the degree of Doctor of Philosophy in Physical Therapy.

Melissa Tovin PT, MA, PhD — 10-5-15
Dr. Melissa Tovin, PT., MA., PhD — Date
Chairperson of Dissertation Committee

Shari Rone-Adams — 10/05/15
Dr. Shari Rone-Adams, PT, MHSA, DBA — Date
Member, Dissertation Committee

Aaron Rindflesch PT, PhD, NCS — 10/05/15
Dr. Aaron Rindflesch, PT, PhD, NCS — Date
Member, Dissertation Committee

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Approved:

Dr. M. Samuel Cheng, PT, MS, ScD
Director, Physical Therapy Ph.D Program

10-5-15
Date

Dr. Madeleine A. Hellman PT, MHM, Ed.D
Chair, Physical Therapy Department

10/5/15
Date

Dr. Stanley H. Wilson, PT, Ed.D, CEAS
Dean and Associate Professor
College of Health Care Sciences

10/5/15
Date

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Abstract

Purpose: The profession of physical therapy uses physical therapist clinical instructors to educate students in the clinical education portion of the curriculum. The requirements to become a clinical instructor are minimal and non- specific regarding formal training and development. A variety of educational opportunities is available to clinical instructors, but the evidence in the physical therapy literature is conflicting regarding the effectiveness of these programs. Additionally, no previous research regarding the meaning of competence, nor the pathway to achieving competence as a clinical instructor was found. Therefore, the purpose of this study was to describe the experience of achieving competence as perceived by clinical instructors who have chosen different paths toward becoming effective CIs. **Methods:** This study utilized phenomenological methodology to explore the meaning of clinical instructor competence and the experience of achieving competence from the perspectives of the clinical instructors themselves. Data was collected through the use of focus groups, semi-structured interviews and written statements. Data was analyzed for themes using thematic analysis. **Participants:** A purposive sample of twenty-nine physical therapist clinical instructors was recruited to participate in five focus groups, each group consisted of 5-7 participants. **Results:** An overarching theme of "Empowerment" emerged from the data analysis of the transcriptions and field notes. This overarching theme was supported by eight themes which resonated across the five focus groups. These themes were 1: The meaning of competence, 2: "My first student", 3: Finding the way, 4: Feeling supported, 5: A fork in the road, 6: Barriers to achieving competence, 7: The "ah-ha" moment, 8: "Ongoing road". **Conclusion:** The results of this study provide a description and interpretation of the meaning of clinical instructor competence and the journey of achieving competence. These findings can inform and empower clinical instructors on their own journey to competence. CCCEs may also find a deeper awareness of the meaning of competence and the importance of providing support for CIs. The physical therapy education community and it's professional bodies can also be informed by these findings in establishing a definition of clinical instructor competence. As well as give direction to future efforts and programs designed to prepare clinicians to effectively educate students in the clinic setting.

Acknowledgments

It is a delightful privilege to finally put in writing the gratitude that has been in my heart throughout my pursuit of the PhD. I would like to acknowledge those who played pivotal roles in my dissertation. First and foremost, I am thankful to my God for the refining fires of this journey and His faithfulness to His promises.

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Additionally, I am thankful for my supportive faculty and staff at Andrews University who carried extra loads and kept the department running in my absence. I am also thankful for supportive friends and extended family who encouraged and prayed for me regularly. And last, but certainly not least, to my family who cheered me on and supported me unconditionally on this journey. To my husband, Kevin, for carrying more than your load with joy and unselfishness and believing in me when I did not. To my children, Seth and Madalyn, for enduring all the moments when my "homework" trumped your wants, but hopefully not your needs. I know you are just as happy as me that I am done my "disrotation". Thank you for your patience and encouragement.

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CHAPTER 1: INTRODUCTION

INTRODUCTION

Competence is defined as the “possession of a required skill, knowledge, qualification or capacity.”[1] Currently, no standardized process or evaluation exists to determine the competence of physical therapist clinical instructors (CIs). Despite the lack of standardization, clinical education is an integral part of physical therapist (PT) education, and the Commission on Accreditation in Physical Therapist Education (CAPTE) requires all physical therapist programs have a minimum of 30 weeks of full time clinical education (CE). Within the clinical setting, CIs are directly responsible for the instruction and education of student physical therapists during CE experiences.

The journey to competence as a clinical instructor appears to begin as a physical therapist student. The development of the ability to educate others is a required part of the curriculum content in all accredited physical therapist programs on the authority of the Commission on Accreditation in Physical Therapist Education Evaluative Criteria. According to these criteria, the curriculum must include content and learning experiences in the behavioral sciences such as teaching and learning, and facilitate students' ability to “effectively educate others using culturally appropriate teaching methods that are commensurate with the needs of the learner (CC 5.26).”[2] CAPTE does not dictate the amount of time or credits necessary to reach these established criteria. Each individual program determines the depth and breadth of the content; they must exhibit evidence of achieving the standards upon program evaluation. In theory,

every physical therapist (PT) graduate possesses the ability to educate others, including their patients, family members, caregivers, peers, other professionals, and students.

Theory and practice are two different actualities, which raises the question, 'who determines if a clinical instructor is equipped to educate?' According to CAPTE evaluative criteria, it is incumbent upon the Director of Clinical Education (DCE) to determine if the clinical education faculty meet the needs of the program by evaluating, at a minimum, the clinical education provided by clinical instructors.[2] The process and tools used to evaluate clinical education faculty are open to interpretation with only minimal specific standards noted in CAPTE's evaluative criteria. For example, clinical education faculty must "have a minimum of one year experience and be effective role models and teachers (Element 4O)."[2] There are, however, no standard tools used across programs to evaluate even these minimum standards, nor a way to be certain that these minimum standards sufficiently prepare all CIs to be an effective, competent clinical educator.

The American Physical Therapy Association (APTA) recognized the lack of standardization and the need for providing direction to the profession for improving the quality of clinical education and clinical instructors. In 1990, the APTA established the Task Force on Clinical Education[3] in an effort to provide some standardization for training CIs (Figure 1). The task force developed a credentialing program that focused on enhancing the clinical education skills of teaching, instructing and mentoring. Additionally, the credentialed status affords the recognition CIs deserve for their contribution to clinical education.[3,4] The program requires each participant to successfully complete a comprehensive assessment in order to receive their status as a

credentialed CI. After development, implementation, testing and evaluation were completed, the program entitled APTA Clinical Instructor Education and Credentialing Program (CIECP) was launched by the APTA and was recently renamed the Credentialed Clinical Instructor Program (CCIP).[4]

In addition to the CCIP, the task force developed voluntary guidelines for clinical education sites, CIs, and Center Coordinators of Clinical Education (CCCEs). These guidelines contain minimums for quality clinical education and provide guidance in the development and advancement of sites, CIs and CCCEs. In conjunction with the guidelines, the task force developed self-assessment tools entitled “Guidelines and Self-Assessments for Clinical Education” (Table 1). These self-assessment tools allow the CI to evaluate their own preparedness as a CI.[5]

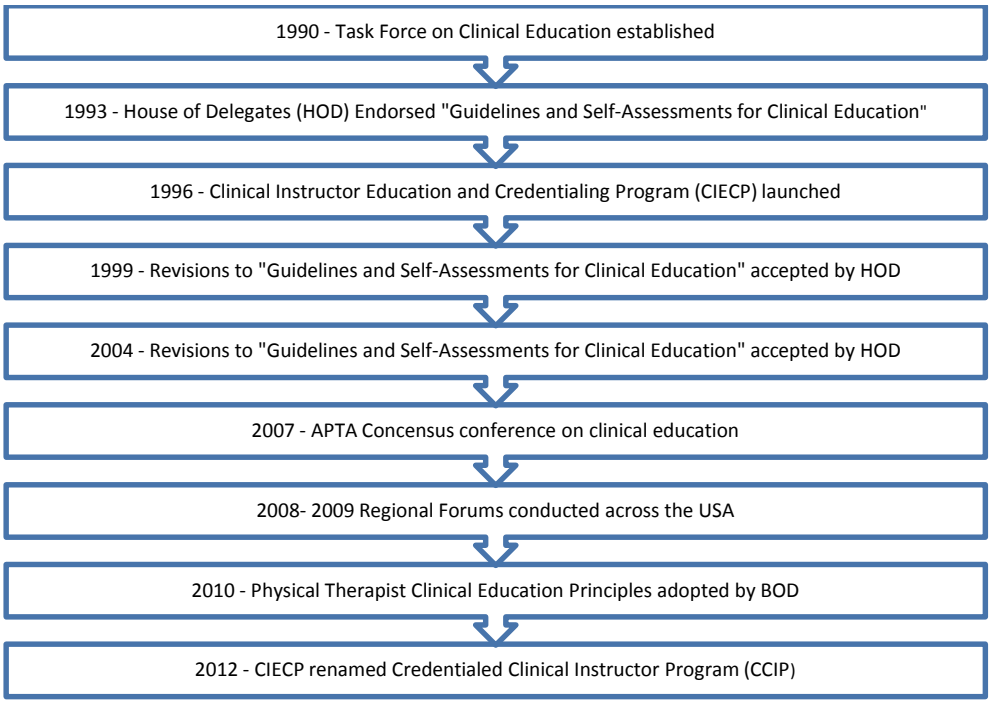

Table 1. Timeline of APTA Task Force on Education events

Despite the task force's efforts to improve clinical education through numerous guidelines and programs, the APTA recognized the need to develop standards in clinical education to meet the expectations of the Doctorate of Physical Therapy (DPT) degree and the goals of the APTA education strategic plan.[6] The APTA convened a consensus conference in 2007, which included 36 consultants who represented the necessary stakeholders in clinical education to develop a rich discussion about physical therapist clinical education.[6] From this conference, the APTA developed a draft of the consensus-based clinical education principles identified in the conference and then conducted regional forums across the United States in 2008 and 2009 involving approximately 1,000 individuals, leading to additional revisions. The revised document resulted in the Physical Therapist Clinical Education Principles (PTCEP), and in March 2010, the APTA Board of Directors (BOD) adopted the PTCEP. The APTA and the BOD intended the document to be a resource for academic and clinical educators, to provide guidance for decision making, and inspire further discussion and collaboration amongst stakeholders in clinical education. The PTCEP addresses the competence of a CI in the Clinical Instructor Performance Principles for Student-Patient Mentoring section of the document, which includes sixteen categories with examples and barriers acknowledged.[6]

The categories pertaining to competence of CIs in the PTCEP include, but are not limited to, teaching, communication and interpersonal skills.[6] The literature supports the importance of these skills and characteristics.[7-9] Communication, interpersonal skills, teaching and professional skills behaviors are characteristics identified by students as essential in CIs.[7] The literature also identifies themes that describe an

exemplary CI, as well as the importance of being a reflective individual.[9,10] Accurate self-assessment has also been linked with self-reflection and improvement as a CI.[11]

An important question is: does CI competence increase with credentialing and self-assessment? Only in the last several years have studies been published regarding the effectiveness of credentialed versus non-credentialed CIs. These studies have looked at the students' perception of effectiveness of credentialed vs. non-credentialed CIs, as well as empirical data showing outcomes of students who have had credentialed vs. non-credentialed CIs. There is inconsistency in the results of the studies. Some of the studies' findings indicate no difference in effectiveness or behaviors between credentialed CIs and non-credentialed CIs, and conclude that CIs reach a level of effectiveness over time and with experience as CIs.[12,13] Other research findings suggest that outcomes of student clinical education (i.e., student skills) showed greater improvement for credentialed CIs.[9]

These minimal standards may not sufficiently prepare CIs to feel competent. According to Recker-Hughes et al[14], there was a statistically significant difference between CIs' perception of their current level of knowledge and desired level of knowledge for teaching DPT students. Most CIs felt their knowledge was less than adequate, however, DPT-prepared CIs were more likely to perceive their knowledge as more than adequate.[14] Competence is the possession of a skill.[1] If these minimal standards do not sufficiently prepare all CIs, how do they obtain the skills to be an effective, competent CI?

While teaching, communication and interpersonal skills are essential to CI competence, clinical competence in the area of practice is also important. Recent

changes to CAPTE evaluative criteria no longer include clinical competence as a requirement, but according to Ellen Price, Lead Accreditation Specialist for PT programs it is the burden of the CCCE and clinical instructors to evaluate and assess the clinical competence of the CI.[15] Formal and informal training provide maintenance and development of clinical competence. Continuing professional development through informal and formal opportunities is a lifelong commitment, as indicated by Bennet et al.[16]

The literature reveals how physical therapists perceive this lifelong commitment to continuing professional development, and they also consider many variables when pursuing continuing education, including the quality of the continuing education, monetary impact, geographic location, formal versus informal, timing and socialization.[17-19]

PROBLEM STATEMENT

A thorough review of the literature has revealed a gap in the evidence regarding competence of clinical instructors. CAPTE demands proof of competence for CIs associated with accredited programs, and the APTA has attempted to improve the quality of CIs by the development of courses, guidelines, self-assessments and standards. Nevertheless, there is no definition of competence, and the journey of achieving competence through the eyes of the CI is unclear.

Another problem is the unknown effect of minimal standards and limited prerequisites on the CIs journey to competence. While CAPTE provides oversight of the accreditation of physical therapy education programs, minimal standards exist in PT education for teaching and assessment skills, as well as prerequisites for becoming a

CI. Determination of clinical instructor competence is up to the interpretation of the Director of Clinical Education in the PT programs. Current research in clinical education supports the importance of CI continuing education and professional development, as well as effective teaching skills and accurate self-assessment.

And finally, while the literature does identify some important traits for CIs, as well as a recent theoretical model for clinical teaching based on analysis of expert CIs,[20] the journey from novice to expert CI and the CIs perspective of this journey was not found in the literature.

RELEVANCE AND SIGNIFICANCE

CAPTE's evaluative criteria for entry-level programs require curriculum content related to teaching and learning, and curricular experiences that educate students on how to educate others effectively. CAPTE also requires the DCE to assess the clinical education portion of the PT program, including the competence of the clinical education faculty, namely CIs and CCCEs.[2] According to CAPTE,[2] currently there is no exact path or standardized measure to determine competence of CIs. Each program interprets 'competence' and defends their interpretation during the accreditation and reaccreditation processes. Tools to assist programs in curriculum planning are available from the APTA, including Guidelines and Self-Assessments for Clinical Education, the PT Clinical Education Standards document, and the CCIP. As noted earlier there are inconsistencies in the published research regarding the effectiveness of the CCIP.[12,13,21]

Experience and training may have an impact on CIs ability to effectively educate students in the clinical setting. Good teaching skills are a strong contributor to

successful clinical education.[7,9] Continuing professional development and continuing education are avenues toward improving clinical and teaching skills, and achieving competence as a CI. Many factors, strategies, and experiences contribute to the process of becoming a competent CI. However, the path to successful clinical teaching is not well-understood, nor is the overall impact of these factors, strategies and experiences. Understanding the meaning of competence, as experienced and perceived by CIs who have chosen different paths toward becoming effective CIs, may provide clarity and direction for future efforts and programs designed to prepare clinicians to effectively educate students in the clinic setting.

RESEARCH QUESTION

The aim of this phenomenological study was to describe and interpret the lived experience of achieving competence as a clinical instructor, from the perspectives of the clinical instructors themselves. This study sought to answer the following guiding questions:

1. What is the meaning of "competence" for clinical instructors?
2. What is the lived experience of achieving competence as a clinical instructor?
3. What meaning do these experiences have for CIs?

DEFINITION OF TERMS

American Physical Therapy Association (APTA) – A national professional organization that represents physical therapists and physical therapist assistants in the United States of America.[22]

Commission on Accreditation in Physical Therapist Education (CAPTE) – An "accrediting agency that is nationally recognized by the US Department of Education

(USDE) and the Council for Higher Education Accreditation (CHEA). CAPTE grants specialized accreditation status to qualified entry-level education programs for physical therapists and physical therapist assistants."[23]

Center Coordinator of Clinical Education (CCCE) – Individual with clinical education experience, with strengths in communication, interpersonal skills, organization, an interest in students and a knowledge of the facility. Preferably an experienced Physical Therapist however other non-physical therapy professionals with the aforementioned skills may be a CCCE.[5]

Clinical Education (CE) – Clinical component of Physical Therapist education which takes place in a variety of clinical settings away from or outside of the academic institution. CE comprises at least 45% of the PT curriculum and is critical to developing competent, entry-level practitioners.[2]

Clinical Education Faculty – "The individuals engaged in providing the clinical education components of the curriculum, generally referred to as either Center Coordinators of Clinical Education (CCCEs) or Clinical Instructors (CIs)."[2]

Competence – "possession of a required skill, knowledge, qualification or capacity."[1]

Continuing Education – Education for professionals beyond formal entry-level education.[18]

Credentialed Clinical Instructor Program – A course "for health care providers who work primarily in a clinical setting and are interested in developing their teaching abilities. Participants will explore different aspects of the clinical learning environment and will learn skills and techniques necessary to provide a structured and effective learning environment for students. The goal is not to improve individual clinical skills,

but to develop and each refine participant's ability to teach, instruct, and guide the development of his or her students."[4]

Director of Clinical Education (DCE) – "The core faculty member(s) responsible for the planning, coordination, facilitation, administration, monitoring, and assessment of the clinical education component of the curriculum. The ACCE/DCE(s) is/are the faculty member(s) of record for the clinical education courses."[2]

Physical Therapist Clinical Education Principles (PTCEP) – Document published by the APTA, in 2010, on standards in clinical education; based on a consensus conference in 2007 and feedback from regional forums held in 2008 and 2009.[6]

Physical Therapist Clinical Instructor/Clinical Instructor (CI) – Physical Therapist directly responsible for the clinical education of the student physical therapist at the clinical site having at least one year of clinical experience with demonstrated clinical competence.[5]

Physical Therapist Clinical Performance Instrument (CPI) – An instrument developed by the APTA which is a voluntary standardized valid tool used by Physical Therapist Programs to assess student performance during clinical education experiences. This tool was initially developed and field-tested in 1997 and significant revisions were made and field-tested in 2006. The CPI is available online; online training and assessment are required of the student and the clinical instructor to utilize this tool.[24]

SUMMARY

The literature supports the importance of the CIs role in clinical education, as well as the need for continuing education, professional development, effective teaching skills and accurate self-assessment. Despite the APTA's development of education and assessment tools for CIs, the path to achieving competence is not clear. Understanding of the experience of becoming competent, from the CIs perspective, is also lacking. This study explored the lived experience of achieving competence as a CI, from the perspectives of clinical instructors themselves.

CHAPTER 2: REVIEW OF LITERATURE

INTRODUCTION

Clinical education experience is an essential part of most healthcare professional education programs and clinical instructors play a vital role in the education of their students. In the field of physical therapy, clinical education experiences (CEE) constitute a large percentage of the curriculum, signifying the programs' identification of the vital role clinical education experiences play in becoming a competent entry-level Physical Therapist (PT). These clinical education experiences take place in the "real world" with "real PTs" who function as Clinical Instructors (CIs) supervising the students' experience while in the clinical setting. Clinical instructors report to Center Coordinators of Clinical Education (CCCE) in the clinic and to Directors of Clinical Education (DCE) or Academic Coordinators of Clinical Education (ACCE) at the university.

As introduced in the previous chapter, several voluntary tools and resources have been developed over the years to assist in educating the CI, however still today there remains no standard procedure or requirement for gaining, proving or maintaining competence as a clinical instructor. This chapter will define the clinical education experience and clinical instructor as they pertain to health professions. A review of PT CI demographics is presented as well as clinical instructor requirements in PT and other health professions. A comprehensive review of the literature on clinical instructor effectiveness, the expert CI and clinical instructor development is presented. The chapter closes with a review of current efforts in the PT profession for innovation in clinical education and a conclusion.

CLINICAL EDUCATION EXPERIENCE

The American Physical Therapy Association (APTA) defines clinical education experience (CEE) as the portion of the curriculum that immerses the student in the "real-life" PT practice environment, facilitating student learning by applying classroom knowledge, skills and developing professional behaviors. These clinical education experiences take place in a variety of PT practice settings for varying durations of time, including part-time and full-time experiences.[25] Though there are differences in the structure of clinical education experiences, other health professions also identify the experiences as those that take place in the "real world", outside of the classroom or laboratory setting, which allow students to apply knowledge and skills to real patients.[26-31]

As noted in the previous chapter, the Commission on Accreditation of Physical Therapy Education (CAPTE)[2] mandates students have a minimum of 30 weeks of full time clinical education (Evaluative Criteria CC-6), and a depth and breadth of experiences across the lifespan and continuum of care in common PT practice settings (Evaluative Criteria CC-4).[2] The transition from baccalaureate and master's to the doctor of physical therapy (DPT) degree played a major factor in the increased time required in clinical education.[32] Today, clinical education experiences occupy an average of 45% of the total program length as compared to 26% in the early years, 1918 through the 1950's, of the profession.[33,34]

CLINICAL INSTRUCTOR

CAPTE defines a PT clinical instructor as a licensed physical therapist who engages in the clinical education component of the curriculum by supervising and

instructing the PT student in the clinical environment. CAPTE indicates a CI should demonstrate clinical competence in their area of practice as well as effective clinical teaching skills including evaluation, assessment and documentation of student performance.[2] Although the title varies in other health professions, instructor/preceptor/supervisor/fieldwork educator/clinical faculty, there is a consensus that the individual is a licensed professional in their field and provides a learning experience for the student in the clinical environment.[2,26,28,29,31]

PT Clinical Instructor Demographics

Over the years, the characteristics of CIs have transformed; several studies reveal the changing appearance of PT clinical instructors (Table 2). A noteworthy increase of nearly 15% occurred in the number of CIs possessing a doctorate of physical therapy, versus a bachelor or master's degree, in a 2008 study by Recker-Hughes et al[14,35], as compared to studies in the previous ten years.[12-14,32,36] The professions' transition to the Doctor of Physical Therapy (DPT) as the accepted entry-level physical therapist degree, is likely the cause for the increase in the DPT as the highest earned degree.

Other areas of change in CI demographics include years of experience as a clinical instructor, credentialing and specialty certification status. CAPTE evaluative criteria requires CIs have a minimum of one year experience, however some programs report students are assigned CIs with less than one year experience. Since 2004, the CAPTE aggregate program data *Fact Sheet* has shown a decrease in the number of programs reporting students who had a clinical instructor with less than one year experience, which suggests improved adherence to CAPTE expectations for CIs (Table

3).[33] The same *Fact Sheet* shows in 2012-2013 48.3% of CIs were APTA credentialed clinical instructors and 22.4% held some type of certification like APTA clinical specialist (Table 4).[33] Similarly, several studies including CI demographics reveal 21-46% of CIs are APTA credentialed.[12-14,32,35,36] This infers more CIs are pursuing credentialing or programs are seeking credentialed CIs to supervise the clinical education experiences. However, there could be a change partially due to calculation differences. In the annual report, CAPTE asks programs what percent of clinical instructors are credentialed; if programs report percentages as total number of CIs for the academic year, and count each clinical education experience rather than individual CIs, a CI who has served more than once that academic year may be counted again resulting in a potentially different statistic.

Table 2. Physical Therapist Clinical Instructor Highest Earned Degree

Survey/Study Year	1965-66[37]	2000-01[32]	2006[38]	2008[12]	2008[13]	2008 & 2010[14,35]
n=	2402 PTs	230 CIs	599 CIs	112 CIs	158 CIs	497 CIs/CCCEs
Degree - Baccalaureate	98%	56%	52.3%	59.6%	38.6%	37.1%
Masters	No report	43%	43.7%	34.0%	52.5%	47.5%
Doctoral	N/A	0.43%	1.3%	0.9%	0.04%	15.2%

Table 3. Percentage of PT Programs with Clinical Instructors with <1 year of Clinical Experience

Survey/Study Year	2004-05	2006-07	2007-08	2009-10	2010-11	2011-12	2012-13
(# of programs)n=	208	208	207	218	225	217	219
< 1 year Clinical Instructor Experience	8%	6.5%	6.1%	6.5%	6.3%	1.4%	4.7%

Adapted from CAPTE 2012-2013 Fact Sheet Physical Therapist Education Programs[33]

Table 4. Credentials and Specialty Certifications of Clinical Instructors							
Survey/Study Year	2000-01[32]	2006[38]	2008[12]	2008[13]	2008[14] 2010[35]	2011-12[33]	2012-13[33]
Credentialed CIs	23.48%	21%	31%	46%	31.3%	45.3%	48.3%
Specialty Certifications	97%	30%	4%	13%	6.3%	22.4%	22.4%

CLINICAL INSTRUCTOR REQUIREMENTS

Physical Therapy

The level of PT clinical instructor experience and training varies significantly; only minimal specific standards are noted in CAPTE's evaluative criteria. For example, clinical education faculty must be a licensed physical therapist and "demonstrate clinical competence in the area of practice in which they are providing clinical instruction."[2] This current CAPTE requirement mirrors the recommendation made nearly four decades ago by Margaret Moore, then APTA Education Section President, that a clinical instructor should have at least one year of experience, have some teaching and supervisory experience, and completed an orientation and training program for clinical instructors.[39] Despite the professions advancement to the DPT, it appears no change has taken place in requirements for the role of the CI according to CAPTE standards.

The APTA Board of Directors has approved *Guidelines for Clinical Education*[40] with the intent of providing direction and guidance in the development and enhancement of clinical education, including clinical instructors. The document represents current practice and future ideals in PT clinical education including identification of minimal guidelines as well as ideal guidelines to foster growth.[40] These guidelines represent the position of the APTA however, are not requirements of CAPTE. Although guidelines are

available and consensus conferences have resulted in *Physical Therapist Clinical Education Principles,*[6] clinical education experiences across all PT programs vary in quality and lack consistency.[41]

Other Health Professions

Many health professions have minimal standards and requirements of clinical educators similar to the PT profession.[42] Licensure in the respective profession is an expectation of the corresponding accrediting body in the professions of athletic training, medicine, nursing, occupational therapy and speech-language pathology.[26,28,29,31,43] Similar to physical therapy, the establishment of a minimum of one year of practice experience is required by the American Occupational Therapy Association (AOTA).[28] In contrast to physical therapy, the American Speech-Language-Hearing Association requires at least two years of clinical experience beyond the clinical fellowship year; medicine and nursing do not state a minimum experience requirement.[26,29,43] Adherence to the respective education program policies and procedures including collaboration between the clinical educator and academic program for professional development and assessment is also an expectation of some of the accrediting bodies.[28,29,31,43] The AOTA has a Fieldwork Educators (FWE) Certificate workshop to assist in the development of FWEs, however this is not a requirement.[44]

CLINICAL INSTRUCTOR EFFECTIVENESS

The effectiveness of clinical instructors in physical therapy and other health professions is a well-published topic. Many authors agree on traits that lead to success as an instructor and those that may result in less than optimal experiences. This section on clinical instructor effectiveness will further explore what makes effective CIs

based on the categories of interpersonal skills, teaching behaviors, professionalism, and professional skills. A summary of the skills and behaviors are included in Table 5.

As early as 1976, Moore and Perry[39] asserted successful learning experiences were a result of skills and behaviors in the following areas: a positive atmosphere accepting of the student, an evaluation process that facilitates ongoing assessment or performance and adequate feedback, and a clinical instructor with at least one year of experience who has some teaching and supervisory experience and has completed an orientation and training program for clinical instructors.[39]

Faculty in other professions also resonates with the need for skills and behaviors in each of these areas. Assisting students in developing learning outcomes and arranging learning experiences, providing a positive environment where learning outcomes can be reached, evaluating the students' performance by facilitating, guiding and critiquing, and affirming or clarifying students' perceptions are all essential characteristics of clinical teachers as agreed upon by 99-100% of the 2,218 nursing faculty surveyed by Ard et al.[45]

Students similarly identified effective clinical educators with high scores in four categories: professional competence, interpersonal relationships, personality characteristics and teaching abilities. Ineffective teachers scored low in all four categories with personality and interpersonal relationships being the lowest.[46] Recent graduates have also identified knowledge, interpersonal skills and teaching strategies as attributes of good clinical educators.[47] Additionally, effective clinical educators are able to manage the interplay of the three phases of clinical education: preparation, teaching and evaluation.[47]

Table 5. Skills, Behaviors and Characteristics of Effective Clinical Instructors

Category	Characteristics of CI	Sample Indicators
Interpersonal Skills[7,20,46-60]	Demonstrates a sincere desire to teach	Enthusiasm for teaching[41,60-63]
		Makes time for students[41,60-63]
	Communicates effectively	Communicates expectations clearly[52]
		Sense of humor[53]
	Creates positive learning environment	Openness[48]
		Correction without belittling[48,54]
		Trusting/caring environment[55-59]
		Connection with student as an adult[53]
		Encourager[56,57,60]
Teaching Behaviors[41]	Facilitates a variety of learning opportunities	Plans experiences in different settings and with different members of the healthcare team[54,64]
		Provide challenging patient interactions[56]
	Varies teaching style	Adapts teaching to student learning style[45,65,66]
		Adapt style based on situational needs[67]
		Engages student with varying levels of questioning[9,41,48,64,68]
	Engages student as adult learner	Treats student like adult not child[53]
		Allows student to develop own ideas and style
		Encourage self-directed learning
		Hold student accountable[41]
	Teaches self-assessment and reflection[9,41,45,64,69-71]	Gives constructive timely feedback[47,54,72-74]
	Evaluation and Assessment of student performance[41,50,75-80]	Timely, accurate completion of CPI[41]
		Collaboration with PTEP and CCCE to enhance students outcomes
	Engenders autonomy	Create opportunities for successful experiences to build student confidence[81]
		Allow for "safe" mistakes to be made[53,64,73]
		Trust student and value them as a team member[81]
		Facilitates student decision making and clinical reasoning[41,67]
		Insightful understanding of student need for supervision[73]

Table 5. Skills, Behaviors and Characteristics of Effective Clinical Instructors *continued*		
Professionalism [9,46,54,60,82]	Role model	Receives constructive feedback[73]
		Commitment to lifelong learning[14,41,73]
		Models APTA Core Values[41]
		Promotes a comprehensive team approach to patient care[41]
		Self-assesses and implement change[6,36,75]
	Continual self-improvement	Seek feedback on teaching performance[41]
		Seeks professional development opportunities to improve teaching skills[41]
Professional skills[41,83,84]	Demonstrates competence in clinical practice[2]	Uses patient-focused, outcomes-oriented, evidence based practice[41]

Interpersonal Skills

No matter the format of clinical education, the presence of effective interpersonal skills in a clinical instructor appears to be of primary concern among students in PT and other health professions. Students rate communication and interpersonal skills as more important than professional skills indicating that attitude, not professional ability, is crucial to students.[7,46,48,49]

Effective interpersonal behaviors and skills include openness,[48] facilitating a trusting and caring relationship,[55-59] respect,[54] optimism,[59] a sense of humor,[53] connecting with the student as an adult not just as an instructor,[53] encourager,[56,57,60] integrity,[60] and once again good overall interpersonal skills.[20,47,50,51] Additionally, correcting students without belittling them, communicating expectations clearly in a non-threatening manner are also noted by students and CIs, as desirable teaching characteristics.[48,52]

Students seem to desire the development of a meaningful interpersonal relationship with instructors and those instructors who exhibit genuine interpersonal skills appear to ease the anxiety students experience in the clinical environment.[49,59]

The research clearly shows faculty, students, and clinical educators believe interpersonal skills are an essential component of effective clinical instructors.

Teaching Behaviors

In addition to interpersonal skills, a clinical instructor with essential teaching and instruction skills leads to higher quality clinical education experiences.[41] The research in PT and other health professions again supports these necessary skills and identifies effective teaching behaviors.

Demonstration of a desire to teach is an essential teaching behavior, which includes, showing enthusiasm for teaching and making one's self available to students.[41,60-63] Providing a variety of opportunities for students including exposure to different settings, patient populations, diagnoses, acuity level, and complexity, as well as different members of the healthcare team can enrich the clinical education experience.[54,64] The Clinical Instructor also plays a dominant role in constructing and leading the learning experience, which can facilitate or hinder students' decision-making, critical thinking and self-directed learning. The CI should be aware of and adjust their supervisory style and interactional techniques based on the students' needs.[67]

Successful clinical instructors also actively assess student performance and adapt teaching methods to student's needs.[65] Students are looking for teaching and learning experiences that cater to their learning style. CIs who consider students'

learning style and personality type in turn contribute to maximized learning experiences.[45,66] Good clinical teachers also make learning experiences out of ordinary situations.[83] Ordinary experiences can be extraordinary when CIs use questioning effectively. The student reaches a deeper level of critical thinking by the CI intentionally using a progression from lower-level to higher-level questioning techniques on the student.[9,48,64,68] This can be most effective when the clinical instructor fosters a safe environment that allows students to ask questions and make mistakes without fear.[53,73]

Students also desire their CIs to treat them like adults, not children,[53] and to trust them with more responsibility as they become more confident in their skills.[81] The effective CI recognizes the desires of an adult learner and engages the student as such by seeking their input on the learning experience and by holding them accountable for their own learning[41] as well as providing a balance of challenge and support.[56,58]

Teaching students how to self-assess and reflect[45,64,69-71] is another essential teaching behavior.[9] The CI promotes self-assessment through providing timely and constructive feedback,[47,54,72-74] reviewing and discussing students' strengths and weaknesses, and answering students' questions.[47,73] Questioning the student before, during and after patient interactions can also stimulate self-assessment.[41]

Another important component of assessment and necessary teaching skill is the evaluation and assessment of students. Effective clinical instructors evaluate students using a variety of information sources, and are timely, accurate, objective, and specific in their assessment.[41,50,75-80] In physical therapy, this includes completion of the Clinical Performance Instrument (CPI) and collaboration with the PT education program and the CCCE to enhance student outcomes.[41]

A final teaching behavior of effective clinical instructors is the ability to engender autonomy in students. This occurs by building students' confidence through successful experiences,[81] allowing students to make mistakes safely,[53,64] promoting students' involvement in patient care,[56] facilitating student decision making and clinical reasoning[41,67] and possessing an insightful understanding of students' need for supervision.[73] Also, clinical instructors who acknowledge students' positive actions boost the students' self-worth and confidence, which encourages them to continue with the experience.[81]

Professionalism

Clinical instructors spend a significant amount of time with students, and students view them as role models, be it positive or negative.[60,85] Both clinical instructors and students agree that modeling professional behaviors is an important part of effective clinical instructor performance.[9,46,54,60,82] Physical therapist clinical instructors demonstrate professionalism by modeling the *APTA Core Values* and promoting a comprehensive team approach to patient care.[41] No matter the clinical setting, crucial skills identified by athletic trainer clinical instructors are: legal and ethical behavior (92%), clinical skills and knowledge (74%), and interpersonal relationships (68%).[84]

As noted previously, positive teaching behaviors include giving students constructive feedback and teaching self-evaluation and reflection. Comparatively, accepting constructive feedback from students[73] and self-assessing[6,36,75] are also essential components of modeling professionalism. By self-assessing and making change, the clinical instructor is demonstrating a commitment to lifelong professional development. With the advancement of the profession and the change to the DPT,

clinical instructors without a DPT have felt less than adequately prepared to instruct DPT students; they also identified a deficit in knowledge and expressed a desire to gain more knowledge.[14]

Professional Skills

In the profession of physical therapy, CAPTE expects all clinical instructors to demonstrate clinical competence in the area of practice in which they are providing clinical instruction.[2] Clinical instructors who are able to combine pedagogical skills and clinical competence were found to have a tremendous influence on students.[83]

Providing patient focused care that is outcomes-oriented and evidence-based is also believed to be an essential characteristic for clinical instructors.[41] Evidence-based practice models a commitment to lifelong learning, as well as helps students develop clinical rationale for treatment by integrating current research into clinical practice.[73]

Summary of Clinical Instructor Effectiveness

Research in a variety of health professions reveals interpersonal skills, teaching behaviors, professionalism and professional skills are essential characteristics of clinical instructors. While most studies reveal interpersonal skills and teaching skills are most important characteristics of effective clinical instructors, a few studies found nursing students rated clinical competency as most important.[50,78] In one of these two studies however, the faculty members from the same programs identified interpersonal relationships as the most important characteristic.[50] Overall, the literature shows a comprehensive picture of the effective clinical instructor. However, the meaning of competence and the lived experience of achieving competence, from the CIs perspective, was not found.

EXPERT CI

The characteristics of an expert or exemplary CI are a culmination of the skills of effective clinical instructors. While the meaning of clinical instructor competence was not found in the literature, a very recent study by Buccieri et al[20] defined the "expert clinical instructor".

The role of the clinical instructor parallels the role of the physical therapist clinician in many aspects,[86] because of these parallels the literature on the expert physical therapist clinician must be considered when defining the expert CI. To understand fully the expert clinical instructor Buccieri et al[51] began with the available literature on the expert physical therapist clinician, specifically work of Jensen et al,[87,88] who defined and studied in depth expertise in physical therapy practice using a grounded theory design with 12 peer-designated expert PT subjects. The theoretical model that emerged included four dimensions of expert PT practice: knowledge, clinical reasoning, movement, and virtues. The knowledge was dynamic, multi-dimensional, patient centered and evolved as the therapist utilized a reflective process. Clinical reasoning involved reflection-in-action and collaboration with the patient and family, the therapist always viewed the patient as a person and a valued and trusted source of knowledge. Virtues of caring and compassion were a part of the high standards these PTs set for themselves and the traits they displayed. Finally, movement was a central focus, specifically on the return of function.[87]

Based on this theoretical model and definition of expertise in PT practice, Buccieri et al[51] began their quest to define an expert CI with a pilot study which identified the need for a bidirectional flow of acquisition of teaching and learning,

professional development and relationships skills as a PT and application of those skills after self-reflection as a CI. Then Buccieri et al[20] conducted a different qualitative study using a grounded theory approach to develop a theoretical model of CI expertise. Nine physical therapist clinical instructors participated in the study through semi-structured interviews. The model developed is one of expertise in action including the dimensions of teaching and learning, professional development, and relationships identified in the pilot study. Again, they found, expert CIs were reflective individuals, who reflected *for* action, the preparatory phase, *in* action, in real time, and *on* action, at the conclusion of the learning occurrence. They found the expert CIs used this reflection strategy to identify their own needs and the student needs, as well. They integrate relevant teaching strategies from the themes of professional development, teaching and learning, and relationships. Additionally, the expert CIs approached problem solving with a strategy similar to the APTA Patient Client Management Model found in the Guide to PT Practice.[20,89] This model includes examination, evaluation, diagnosis, prognosis, intervention and outcomes; the expert CI applied each of these phases to the clinical education experience. In each of these steps, the expert CIs used reflection, *for, in* and *on* action as they assessed the situation and moved forward to the next phase in the problem solving process. The authors advocate for the use of this model to facilitate clinical teaching skills in clinical instructors.[20] This study however, does not present the pathway to become an expert CI or the CIs' lived experience of becoming an expert.

CLINICAL INSTRUCTOR DEVELOPMENT

A considerable amount of literature in the health professions documents the characteristics of effective clinical instructors, and researchers have recently defined the

expert clinical instructor in physical therapy, but no literature was found to support the meaning of clinical instructor competence or the journey to competence from the CIs perspective. The quality of physical therapy clinical education experiences vary significantly partly due to the CIs competence and self-confidence in teaching.[41] Although no standardized path for achieving competence was found in the literature, resources are available to assist in the development of a clinical instructor. This section will review the resources available to PT CIs and present the evidence on the effectiveness of these resources.

Resources for Physical Therapist Clinical Instructors

The beginning stages of the development of teaching skills starts in the entry-level PT education program. The advancements of academic rigor in DPT education include the implementation of content focused on the ability of entry-level graduates to educate others, including patients, families and PT students. As a physical therapist, one is consistently educating patients and as a CI educating PT students. CAPTE *Evaluative Criteria* requires all curriculum to include content and learning experiences that teach students how to effectively teach and educate others.[2] Therefore, in theory, every physical therapist (PT) graduate possesses the ability to educate others, including future PT students. Theory is different than practice so to assist in the development of PT CIs multiple resources are available through professional bodies and education programs.

Credentialed Clinical Instructor Program

In 1996, the APTA created and launched the Clinical Instructor Education and Credentialing Program (CIECP), the program was later renamed the Credentialed

Clinical Instructor Program (CCIP).[3] This voluntary programs' goal is to enhance the clinical-education skills of Physical Therapists and Physical Therapist Assistants.

The program consists of 12 hours of classroom work and a three-hour practical assessment center. The content of the course focuses on the development of teaching skills including recognition of the parallels between the clinician and CI role, identification of learning styles and the students' readiness to learn, the stages of learning and the development of learning experiences, evaluation methods, how to manage the exceptional student and finally the legal aspects of clinical education.[4] Upon successful completion of the assessment center, the Credentialed Clinical Trainer grants the PT credentialed clinical instructor status. Once granted, no requirements exist to maintain the credentialed status. The CCIP course has proven to be desirable as there are now 42,680 credentialed PTs and 7,036 credentialed PTAs to date.[90]

Advanced Credentialed Clinical Instructor Program

To further the development of CIs beyond the basic CCIP level the APTA developed the Advanced CCIP. This course is a two-day program for physical therapists who have supervised and mentored at least one PT student. Professional development and best practice using the patient/client management model are the primary constructs of the course. Some of the expected outcomes of this course include the ability of a CI to teach students the following: application of professional standards, correct use of patient/client management model and evidence based practice, as well as the importance designing a professional development plan that promotes lifelong learning. Participants are also expected to understand the

relationship and distinctions between and among the APTA, Federation of State Boards of Physical Therapy, CAPTE and state and federal regulations.[91]

APTA Guidelines and Self-Assessment for Clinical Education

In addition to the credentialing course, are the *APTA Guidelines and Self-Assessment for Clinical Education* for clinical education sites, CIs and Center Coordinators of Clinical Education (CCCEs). These voluntary guidelines contain minimums for quality clinical education and provide guidance in the development and advancement of sites, CIs and CCCEs through a self-assessment tool which facilitates evaluation of preparedness to be a CI.[5]

APTA core documents

The APTA core documents[92] are the documents containing the fundamental doctrines of the profession and are essential to practice, research and education.[93] These documents are resources available to the clinical instructor through the APTA and include the *Core Values, APTA Code of Ethics for Physical Therapist*, *Standards of Practice for Physical Therapy,* and *Guide for Professional Conduct.* Some view the *Core Values* as essential to modeling professionalism and therefore an integral part of successful clinical instruction.[41]

Physical Therapist Clinical Education Principles

The *Physical Therapist Clinical Education Principles* (PTCEP)[6] endeavors to identify minimum standards and essential components for clinical education as it provides a resource for academic and clinical educators, and extensively outlines performance principles for clinical instructors. The APTA's goal is to raise the bar of expectations and qualifications of CIs, to provide guidance for decision making, and

inspire further discussion and collaboration amongst stakeholders in clinical education. The PTCEP extensively outlines the performance principles for clinical instructors to provide a guide for PT education programs and CIs themselves.[6]

Consortia

Consortia are also a source of support for the development of CIs. Physical therapist clinical education consortiums are groups of ACCE/DCEs, CCCEs, and CIs across the nation which offer professional development opportunities for CIs. For example, in the past, Florida Consortium of Clinical Educators offered a basic certification course for clinical instructors, however, that has been discontinued in an effort to support the APTA CCIP.[94] Texas still offers a two-part Clinical Instructor Certification Program, part I is a four part online module and part II is on-site education.[95] Many other clinical education consortiums offer workshops, educational sessions and current information via the web or in-person events in an effort to foster development of CIs.[96-98]

PT education programs

ACCEs and DCEs also facilitate the professional development of CIs by way of mentoring them through difficult situations encountered during clinical education experiences, as well as presenting current information, in-services, and other methods of education to the CI as part of the partnership expectations between facilities and the university.[41] Clinicians value practical knowledge and using practical knowledge to facilitate the application of technical knowledge is a strength of most DCEs.[38] This strength allows the DCE to mentor CIs in the development of learning experiences.[99]

Some education programs are not leaving the development of CIs to post-graduation and have explored models of integration of clinical teaching into the entry-level curriculum. One PT program that uses third year students as clinical instructors for second year students during integrated clinical education experiences in a pro bono clinic on the campus, found second year students became more aware of the role of the clinical instructor and more familiar with the process of evaluating clinical teaching. And, third year students' increased awareness of their potential role of CI and desire to be a CI someday, it also contributed to their appreciation of CIs.[100]

Summary of Resources

Multiple resources are available to the clinical instructor through the APTA, consortiums and PT education programs. The resources available through the APTA include the *Core documents, Physical Therapist Clinical Education Principles, APTA Guidelines and Self-Assessment for Clinical Education, APTA Vision Statements' Guiding Principles*, *APTA Strategic Plan, APTA Education Strategic Plan, APTA Credentialed Clinical Instructor Program and the APTA Advanced Credentialed Clinical Instructor Program*. However, competencies and outcome measures related to these or any other education programs are not required of clinical instructors. Additionally, the use of these resources is voluntary and clinical instructors often have limited formal preparation to be a clinical educator.[41]

Effectiveness of Resources

Several authors have attempted to measure the effectiveness of the resources for PT clinical instructors. Understanding the impact of CI training in relation to student evaluation may support the effectiveness of some training resources.

Evaluation

The ability to perform an accurate and timely evaluation of student performance is an essential characteristic of the effective clinical instructor.[41] The development of a CIs ability to evaluate is part of the CCIP and the Clinical Performance Instrument (CPI) training module. The CPI is an outcomes-based assessment tool used to evaluate a student's performance in the clinical setting. Vendrely and Carter[101] found training has an influence on CIs evaluation of students using the CPI. Thirty-four licensed PTs, who desired to become clinical instructors, were divided into four groups: CIECP training, CPI training, CIECP and CPI training, and no training at all. Results revealed CIs who were trained in the CCIP and the CPI training had a statistically significant difference in scoring of the safety criterion as compared to CIs who had CPI training only.

Credentialed versus non-credentialed Clinical Instructors

One of the goals of the APTA in creating the CCIP was to provide standardized education for clinical instructors, however, the effectiveness and necessity of credentialing is debated in the literature. A few studies have found credentialed clinical instructor performance is rated higher than non-credentialed CIs. Housel et al[102] used a double-blind cohort design to identify the difference in effectiveness of CIs using the students' assessment of the credentialed vs. non-credentialed CI. Students evaluated their CI using the *New England Consortium of Academic Coordinators of Clinical Education Student's Evaluation of a Clinical Education Experience* tool. A significant difference was found in two of the 27 categories, although credentialed CIs scored higher in 22 of the 27 categories. The results were then analyzed in summation and the credentialed CIs scored significantly higher than the non-credentialed. Again, in

another study by Housel and Gandy[21] a significant interaction was found between student outcomes for those who had credentialed versus non-credentialed CI's. The interaction was found from midterm to final evaluation, and it showed that the students who had a credentialed CI had greater improvements in their skills than students who had a non-credentialed CI. However, limitations to the study include: (1) no baseline measurement of the students' performance, (2) a significant disparity in the length of clinical education experience, from 3-20 weeks, and (3) the question "was there a statistically significant difference in the amount of change over time or the rate of progression from midterm to final in the different groups?"[21] was not the authors' original research question.

Other authors have found no significant difference between credentialed and non-credentialed clinical instructors. For example, Morren et al[12] studied the association between CI characteristics and students' perceptions of CI effectiveness. Over three clinical education experiences, 112 pairs of CIs and students, participated in the study. Students scored the CI's performance using the *Physical Therapist Student Evaluation*[103] (PTSE) at the end of each clinical education experience. The PTSE is designed to assess the entire clinical education experience, including clinical instructor performance, from the students' perspective. Students complete the PTSE and then review the results with their CI while still on the clinical education experience. In this study, once the student returned to campus, they verified the scores with the DCE and were permitted to revise the PTSE if necessary. A significant difference was found between the original and the revised scores. There was no significant positive association between the student-CI PTSE assessment scores and the CIs

characteristics; however, there was a strongly significant positive effect on four of the 21 PTSE items of clinical instruction for CIs who were APTA credentialed CIs versus those who were not credentialed. Authors conclude, although there was no association between a CIs characteristics and more effective instruction, the APTA credentialed CIs did score significantly higher on some of the teaching skills perhaps due in part to the CCIP course focusing on those particular instruction skills. A limitation of the PTSE is the ceiling effect of the tool, which may have affected the scoring.[12]

The influence of CI effectiveness, based on training, was also tested by Wetherbee et al.[13] Subjects included 158 fulltime PT students, 73 credentialed CI's, and 85 non-credentialed CI's. An adapted form of the Nursing Clinical Teacher Effectiveness Inventory (NCTEI) was the survey tool, with a focus on the top five general areas needed to be an adequate physical therapist. A multiple linear regression was implemented to examine demographic variables. The data analysis revealed no significant difference between the levels of degree the CI held, years as a CI, student to CI ratio, or credentialed vs. non-credentialed CI's. However, there was a positive correlation between the number of years the PT functioned as a CI and the NCTEI score (r_s=0.18, P = .03) suggesting that years of experience is more positively associated with effective teaching behaviors. Although no significant difference was found between credentialed versus non-credentialed CIs, a significant difference was found in average number of students the CI instructed per year. The credentialed CI instructed more students per year with an average of three versus the non-credentialed instructing an average of two students per year.[13]

Limitations of this study include student's personal biases regarding their CIs; however, the authors are confident that this is accounted for with the excellent internal consistency of the adapted NCTEI. The ability of students to accurately rate their clinical instructor may be questionable. The authors suggest that perhaps the academic faculty would be able to more accurately rate the clinical instructor.[13] And finally, CIs motivation for taking the APTA CIECP were not addressed, nor was their training in other areas related to mentoring, outside the APTA CCIP.

Believing there was a need to understand a CI's motivation for pursuing credentialing, Coleman-Ferreira et al[104] surveyed APTA credentialed clinical instructors in a descriptive exploratory study. The purpose of the study was to investigate the motivational factors that lead CIs to pursue APTA credentialing using a three-part (demographic, Likert, and forced-answer) questionnaire the authors designed and validated. This instrument explores the intrinsic and extrinsic factors motiving CIs to participate in the CCIP. Surveys were sent to 3,827 APTE-credentialed CIs with a return rate of 670 surveys (30.3%), 83 partially completed and 587 completed in full (26.6%). Results indicated the driving force behind pursuing credentialing is intrinsic motivation, with all paired *t* tests for intrinsic being higher than extrinsic ($P<.001$). Professional development and personal satisfaction with helping educate students were the primary intrinsic motivators.[104] A limitation of this study was the idiosyncratic tool used to survey the participants.

The personal satisfaction gained with helping students also resonated with a group of credentialed CIs interviewed by Greenfield et al.[105] In an effort to further

understand the behaviors of experienced PT APTA credentialed clinical instructors the authors explored and described the behaviors of these CIs as they conducted clinical education. This phenomenological study included six CIs who had supervised five or more students and were APTA credentialed. CIs viewed their primary role as helping students transition from academia to clinical care; they often used the terms “guide”, “bridge” and “facilitate” to describe their role. Three themes in educational strategies emerged (1) incremental learning – easy to complex, (2) reflection in practice – asked questions and created scenario to force reflection, (3) creating a caring environment – commitment to the ethics of caring, student centered, mutually interactive and cooperative.[105] Non-credentialed experienced CIs may possess the same behaviors however; they were not included in the study.

The non-credentialed clinical instructor experience is important as well and in the previously mentioned study that identified the “Expert Clinical Instructor”[20], the authors included non-credentialed clinical instructors. Only four of the nine subjects were APTA credentialed CIs, five had no specialty area, and four were APTA members. Their years of experience as a PT ranged from 4-33 years and as a CI from 4-32 years. Peer CIs, CCCEs and DCEs nominated these subjects because they met the study’s description of an expert CI. These inconsistencies between the credentialed versus non-credentialed outcomes likely add to the lack of clarity, for clinical instructors, in the journey to competence.

Assessment

Perhaps the flaw is the method of assessment of the clinical instructor. Once credentialed there is no proof of application of behaviors learned or maintenance

required to keep the credentialed status. Recognizing this insufficiency Bridges et al[106] recently developed an assessment tool to measure the use of behaviors taught in the CCIP. This 58-item survey was pilot tested for content validity and reliability. The APTA Clinical Instructor Education Board reviewed and compared the items with the objectives and content of the CCIP and determined they matched and the content was valid. Cronbach's alpha was used to measure internal consistency and proved all six sections of the survey to be reliable, coefficients ranged from 0.79-0.90. This tool proves promising for specifically measuring the application of behaviors taught in the CCIP. Thus may provide more accurate measurements relating to the necessity of credentialing versus non-credentialing.

Surveying DCEs in PT about the importance of the behaviors taught in the CCIP may be something to consider in the development of an assessment tool. A valid and reliable assessment tool may lead to some standardization in clinical education. With a similar mindset and research question Lauber & Killian[80,107] developed and tested an instrument to measure the effectiveness of athletic trainer clinical instructor behaviors. After factor analysis, expert panel review and statistical testing the resulting Clinical Instructor Behaviors Instrument (CIBI) was found to be psychometrically sound in two categories: interpersonal and professional behaviors. Authors then surveyed 75 program directors and 242 of their clinical instructors. Program directors and clinical instructors agreed on the importance of all categories – instructional, interpersonal, professional, and personal. There was however, a statistically significant difference between program directors and CIs in three specific evaluative CI behaviors: (1) provides useful and constructive feedback, (2) demonstrates objectivity and fairness in

the evaluation of students, (3) defines clearly the expectations of the students.[80] An important feature of this study is the participation of nearly 250 CIs; in fact, they had a greater representation than the programs. This discrepancy between CIs and program directors suggests exploration of CIs perspective is important as they may have a unique view of the necessary skills for CIs.

Summary of Effectiveness

Undoubtedly, there are discrepancies in the published findings as well as insufficient research on the behaviors of non-credentialed CIs. Furthermore, there is a dearth of research available on the effectiveness of some of the resources. Because of the inconsistencies and lack of evidence, at this time, we cannot conclude that APTA CI credentialing, or any particular resource, is the only route to acquisition of competence for CIs. McCallum et al[108] also concluded, in a recent systematic review, that the effect of credentialing on clinical faculty is inconclusive.

METHODS FOR DEVELOPING THE SKILLS OF A CLINICAL INSTRUCTOR

Clinical expertise does not guarantee expertise as a clinical instructor and the assumption that expert clinicians can easily transition to the role of clinical educators is unrealistic without both formal and informal education.[41,109,110] When expert clinicians transition to the role of clinical educator, they go from being an expert to a novice again. Since novice learners are more successful in structured learning environments[111] a standardized framework for CI development may be beneficial. Some recommendations exist in the literature for the development process of the clinical instructor. The methods include CIs seeking training themselves, academic programs

providing training and the identification and implementation of standards and qualities in clinical instructors.

Clinical Instructors Seek Training

One method of developing the skills of a clinical instructor is by the CIs themselves pursuing training, resources and mentorship. Though the effect of credentialing on clinical faculty is inconclusive,[108] education programs geared toward clinical instructors continue to be a recommended option for development as a CI. For example, both the American Physical Therapy Association and the American Occupational Therapy Association recommend their respective clinical instructor/fieldwork educator programs.[4,44] The development of a Field Work Educator (FWE) is addressed comparable to PT, in that the AOTA has a variety of resources available, including a self-assessment tool, online preceptor education modules and a voluntary FWE workshop for the development of FWEs.[44,112,113] The self-assessment tool differs from the PT tool as it provides much more detail, with specific competencies to meet and a Likert scale to rate oneself. The tools' purpose is to assist in a professional development plan including specific strategies and measurable outcomes. Just like physical therapy, this is a voluntary tool.[112]

Others advocate for customized, structured learning experiences specific to the clinical setting and clinician that take into account the unique nature of each setting and instructor.[111,114,115] With this in mind, Cooper[115] developed a Milestone Pathway Tool to be used in general professional development. The author designed the tool based on the theoretical framework and assumptions of practice levels described by Benner[111], Knowle's Adult Learning Theory[116] and Fink's[117] significant learning experiences. The

tool consists of three components: (1) Concept map, (2) Milestone Pathway Template, and (3) Personal Professional Development Plan. The concept map and pathway template contain three important concepts: (1) orientation experiences, (2) unit experiences and progress, (3) leadership opportunities. A nurse facilitator or project coordinator modifies each of these concepts to fit the specific nursing unit. In the development plan, reflective dialogue is encouraged with a facilitator and peers as part of developing professional development goals and a plan to meet those goals. Although the author designed the tool for general professional development, it could be used as a model for clinical educator development. It appears the author designed this model alone, without input from clinicians.

One new graduates' viewpoint is shared in a commentary article about her process of preparing for her future role of FWE.[118] Her journey included an informal literature review, interviews of seasoned colleagues, and Web searches. She found resources within her clinic and through the profession to be helpful in identifying areas of strength and further development. She also sought out mentorship both on-site using informal training and through the profession by means of formal training. The insight she gained from experienced colleagues included three themes: (1) practice positive communication skills, (2) Remember students are unique and not meant to be exactly like you, and (3) organization and time management are essential.[118] Further exploration of clinical instructors' perspective on preparing for becoming a clinical instructor and the journey of becoming competent is warranted.

Academic Program Provides Training

The second method a CI can use to acquire training is through the academic programs with which their clinical site affiliates. In fact, some believe this is not optional, rather the responsibility of the academic program. In a recent position paper, Recker-Hughes et al[41] declare the burden of educating clinical instructors falls on the PT education programs. These programs should collaborate with the Center Coordinators of Clinical Education to provide direct oversight of the CIs to ensure adherence to recommended qualifications. Additionally, the PT programs should provide professional development programs for clinical instructors to enhance their skills as educators.[41]

Similarly, in the field of athletic training, the Commission on Accreditation of Athletic Training Education (CAATE) 2012 accreditation standards require the training and ongoing development of preceptors to be the obligation of the academic institution.[31] Some physical therapy academic programs meet this suggested obligation by providing sponsorship funding for CIs to attend the APTA CCIP and ACCIP courses. Other programs provide individualized training and or training in collaboration with consortiums.[41] However, these methods are not prescriptive in the CAPTE evaluative criteria for PT education programs.[2]

The development of the ability to educate others is a required part of the curriculum content in all accredited physical therapist programs on the authority of the CAPTE Evaluative Criteria. According to these criteria, the curriculum must include content and learning experiences in the behavioral sciences such as teaching and learning, and facilitate students' ability to “effectively educate others using culturally appropriate teaching methods that are commensurate with the needs of the learner (CC

5.26)."[2] CAPTE does not dictate the amount of time or credits necessary to reach these established criteria. Each individual program determines the depth and breadth of the content; they must exhibit evidence of achieving the standards upon program evaluation. And, according to CAPTE evaluative criteria, it is incumbent upon the Director of Clinical Education (DCE) to determine if the clinical education faculty meet the needs of the program by evaluating, at a minimum, the clinical education provided by clinical instructors.[2]

Some education programs are not leaving the development of CIs to post-graduation and have explored models of integration of clinical teaching into the entry-level curriculum. In one PT program, this model consisted of third year students serving as clinical instructors for second year students during integrated clinical education experiences in a pro bono clinic on the campus. Second year students performed peer evaluations on their third year student CIs and third year CIs performed self-evaluations on themselves. The results of this case report revealed second year students becoming more aware of the role of the clinical instructor and more familiar with the process of evaluating clinical teaching. As well as third year students increased awareness of their potential role of CI and desire to be a CI someday, it also contributed to their appreciation of CIs.[100]

The integration of clinical education into the DPT curriculum allows clinicians to work directly with faculty and appears to be a desirable method of developing competence as clinical instructors. Weddle[119] studied integrated clinical education (ICE) in a DPT program and found clinical faculty were most satisfied with professional growth as an instructor. They were also very satisfied that ICE brought the stimulation

to learn more themselves, the opportunity to be a positive role model and mentor for students, the occasion to share their passion for their work with students, the chance to see the energy, excitement, growth and progress of students, and finally the interaction with the academic world this allowed them.[119]

PT academic programs have the opportunity to influence the development of future and current clinical instructor skills. The lack of standardization, detailed requirements and enforcement of those requirements may contribute to the perceived inconsistency in the quality of PT clinical education.[41]

Identification of Standards and Qualifications

A third method of developing skills as a clinical instructor appears to be consideration of standards and qualities for CIs. As noted previously there is a lack of standardization in PT clinical education, including CI qualifications. The *Physical Therapist Clinical Education Principles* captures the spirit of the quest for standardization in clinical education. These standards for clinical education were further explored in a qualitative phenomenology study by Wetherbee[76] et al. Forty-three clinical and academic PT educators, new graduates and students participated in focus group interviews using a semi-structured approach. Themes related to standards for clinical education, including standards for CIs, were identified; of specific interest to this study was the theme, S*tandards for Clinical Instructors*, which focused specifically on credentialing of clinical instructors. CIs did not agree on the necessity, but they did agree there should be standard requirements such as years of practice, and at least one year of experience at the facility in which they practice. Students and new grads also debated the necessity of credentialing. Facility managers agreed standards are

needed but did not identify credentialing as necessary, and Directors of Clinical Education acknowledged the importance of the CI role but did not identify credentialing as a requirement. The authors summarized S*tandards for Clinical Instructors* as qualities, rather than credentials in their model.[76]

Qualities rather than credentials are also the emphasis of the recent position paper by Recker-Hughes et al.[41] After a comprehensive review of literature, reflection and dialogue of shared experiences the authors recommend the following baseline qualifications of CIs. The physical therapist must:

- Be a licensed PT in the state in which the CEE occurs,
- Demonstrate competence as a clinician,
- Practice in a legal and ethical manner consistent with the *American Physical Therapy Association Code of Ethics*[120] and governing laws and regulations,
- Demonstrate a desire to educate students, and
- Display evidence of teaching skills.

They assert PT education programs and Center Coordinators of Clinical Education should collaborate in direct oversight of the CIs to ensure adherence to the qualifications. Additionally, the PT programs should provide professional development programs for clinical instructors to enhance their skills as educators. They did not indicate CI credentialing as a baseline requirement. They do advocate for the creation of a Clinical Education Specialist analogous to the American Board of Physical Therapy

Specialties to provide recognition for CIs and potentially enhance the learning environment.[41]

A model to consider for standards and assessment is the S*tandards to Support Learning and Assessment in Practice*[121] by the Nursing & Midwifery Council (NMC) in Wales. These standards outline specific steps for mentor preparation, including standards, competencies and outcomes for the mentor, practice teacher and the teacher.[121,122] The NMC measures competencies and outcomes for each party by evaluating the following categories: establishing effective working relationships, facilitation of learning, assessment and accountability, evaluation of learning, creating a learning environment, context of practice, and evidence based practice and leadership. Once expected outcomes are achieved the NMC approves the mentor, practice teacher or teacher.[121] It appears the NMC developed these standards, however it is unclear if mentors themselves gave input on these standards.

CALL FOR INNOVATION AND COLLABORATION

Today, the *APTA Vision Statements' Guiding Principles* for the PT profession call for innovation and collaboration in education.[123] The *APTA Strategic Plan*[124] has also placed a priority on promoting excellence in entry-level education and the *APTA Education Strategic Plan* contains goals and objectives that identify how to promote this excellence. The objective that pertains directly to clinical instructors is to "establish and implement mandatory minimum standards for clinical instructors, center coordinators of clinical education, and clinical sites, including the option of completing a credentialing process."[125] The *Physical Therapist Clinical Education Principles*[6] attempt to identify

minimum standards and essential components for clinical education as it provides a resource for academic and clinical educators, and extensively outlines performance principles for clinical instructors.

More recently the American Academy of Academic Physical Therapy (ACAPT), The APTA Education Section, the Clinical Education Special Interest Group (CESIG) of the Education Section, Federation of State Boards of Physical Therapy (FSBPT), and the APTA have developed a ten member steering committee to guide the process for developing a shared vision that "recognizes and strengthens partnerships across the entire spectrum of physical therapist education.[126]

This process has included a recently published special issue of the *Journal of Physical Therapy Education*, which contains seven position papers focused on the key steps in the process of achieving the vision. The papers will be discussed through webinars over the fall and summer of 2014. Additionally, a Clinical Education Summit will be held in October 2014 where the steering committee anticipates "reaching agreement on best practices for clinical education in entry-level physical therapist education with specific recommendations to ACAPT for implementation."[126] The committee acknowledges that evidence based practice in clinical education may not be strong but "as professionals we have to make decisions based on best *available* evidence."[126] While all seven of the position papers have a clinical faculty member as a co-author, in his guest editorial Scott Euype[127], makes a call to all clinical instructors and center coordinators of clinical education to participate by reading the special edition, joining the webinars and attending the Clinical Education Summit. Euype[127] urges clinical faculty to participate and not "remain idle on the sidelines."

The Absence of a Stakeholders' Voice

A potential oversight in this process was the broader community of PT clinical educators may not subscribe to the *JPTE* and therefore may be unaware or unable to gain access to the journal, attend the webinars, or attend the Summit. Additionally, ACAPT only permitted two representatives from PT education programs, who were ACAPT members to attend the Summit. A call for input from these critical stakeholders was made, but the oversight may have kept the instructors' collective voice from being heard, preventing valuable contributions from the broader community of clinical instructors.

CONCLUSION

Clinical education experiences are essential to health profession programs and clinical educators are key stakeholders in CEE. Across most health professions, including PT, there are minimal requirements for clinical educators, with the determination of competence left up to the education programs' director or coordinator of the CEE. In PT, there is also a lack of standardization of training and requirements. Despite the lack of standardization, researchers have identified characteristics and skills that contribute to effectiveness as a CI across the health professions and recently defined the expert PT clinical instructor.

Three questions still remain: (1) what is the meaning of clinical instructor competence? (2) what is the lived experience of achieving competence as a clinical instructor? and, (3) what meaning do these experiences have for clinical instructors? As experienced clinicians choose to become clinical instructors, they travel a journey

from expert back to novice again. Resources are available within the profession and academic institutions, yet, there is a scarceness of clarity in the development and journey to competence of clinical instructors from the CI's perspective. Some recommendations for development are identified in the literature, however, the input from a primary stakeholder, the clinical instructor, seems to be minimal. As the PT professional community makes the call for innovation and collaboration in clinical education the time is right for the clinical instructor's voice to be heard and represented. Clinical instructors are primary stakeholders in the clinical education experience and we need evidence that supports their perspective of the meaning of competence and the experience of becoming a competent clinical instructor. By exploring the perspective of clinical instructors this study will give voice to these primary stakeholders in clinical education.

CHAPTER 3 METHODOLOGY

INTRODUCTION

The aim of this study was to describe and interpret the lived experience of achieving competence as a clinical instructor, from the perspectives of the clinical instructors themselves. To achieve this goal, this study sought to answer the following guiding questions:

1. What is the meaning of "competence" for clinical instructors?
2. What is the lived experience of achieving competence as a clinical instructor?
3. What meaning do these experiences have for CIs?

Phenomenological inquiry, a qualitative approach to research, was the selected methodology for this proposed study. This chapter provides support for the chosen methodology, including a broad overview of phenomenology as a method of inquiry. The design of the proposed study, including participant selection and recruitment methods, the researchers' background and positionality, data collection, analysis and interpretation are outlined. Finally, methodological rigor and resource requirements are discussed.

METHODOLOGY

The Qualitative Research Approach

Qualitative research asks broad questions on topics about which little is known, and seeks to understand and describe the participants' perspective and human experience.[128,129] According to Denzin and Lincoln,[130] qualitative research is performed in the natural setting and endeavors to understand the phenomenon in terms of the meanings people bring to them. It is not to test a theory, or create technical intellectual

tools or prescriptive models.[131,132] Unlike quantitative research, which focuses on generalization by isolating cause and effect, measuring and quantifying findings, qualitative inquiry develops a rich description of the lived experience of the participants, revealing personal perceptions, beliefs and values that cannot be 'measured' through quantitative methods.[130,133]

The researcher uses a wide-range of interconnected interpretive processes when analyzing the data gathered from empirical materials. These empirical methods, including detailed interviewing, allow the researcher to get closer to the participants' perspective and to focus on concepts, rather than the measurements and indicators used in quantitative research.[130,134] Qualitative research has an intentionally narrow scope of study and uses purposeful selection of participants based on the topic of study. The outliers quantitative researchers reject are often the ideal subjects for qualitative research, as qualitative researchers believe even "one" can have an important impact.[134]

Clinical instructors (CIs) are one of the primary stakeholders in clinical education and their collective voice is important. Exploring their perceptions, beliefs, values and personal experiences related to clinical teaching and the achievement of competence can inform clinical education standards and define competence. The perspectives of CIs, however, are subjective, inner constructs that cannot be measured through quantitative methods alone. Previous studies provide evidence that expertise in teaching is not just objective, it is subjective as well, and this subjectivity would be lost using quantitative methods.[9,51,135] Minimal research exists in this area, and few studies have examined the characteristics of expert CIs, as well as how to acquire the skills of

an expert CI.[9,51] However, there is presently no published research specifically concerning competence and the process of achieving competence as a CI, from the CIs point of view. Qualitative research methods are appropriate when there is little known or understood about a particular topic: it allows the researcher to explore and learn from the data.[129,136]

Given the purpose, need, and current gap in research on this topic, qualitative research methodology is the best choice for this study.

Types of Qualitative Inquiry

The field of qualitative health research is maturing, a variety of qualitative inquiry methodologies are more widely accepted with variations on existing methods and new methods growing daily.[136-139] Each methodology has its own distinguishing features yet still shares key epistemological underpinnings.[140] Three of the most established methodologies are ethnography, grounded theory and phenomenology. Ethnography explores cultural groups. Grounded theory originates in symbolic interactionism, seeks to explain processes, and generates theory grounded in the data. Phenomenological inquiry, which seeks to understand and interpret human experience, is most appropriate methodology for this proposed study, and is explored in depth in the following sections.

Overview of Phenomenology as a Method of Inquiry

Phenomenology began as a philosophy, and some scholars believe it is one of the most important philosophical movements in the twentieth century.[141-143] The aim of phenomenology, simply stated, is to understand and describe the human lived experience, to know the world we live in and question the way we experience the world.[131,144] Phenomenology is based on two main assumptions: (1) human

perceptions, as they are lived, can reveal a deep understanding of the world, (2) humans are always conscious of the acts they perform, they are intentional, and this intention brings meaning to experiences.[142,143] Phenomenology relies on the individuals who have lived the experience under investigation to inform the research; it does not seek to develop theory, but rather to describe in-depth the experience and the meaning of the experience to the individual.[145] Because this study seeks to understand and describe the participants' experience of achieving competence as a CI, phenomenological inquiry is best suited to achieve this goal.

History of Phenomenology

The phenomenological movement has an extensive, well-documented history, with six major orientations of phenomenology (Table 6). The preparatory groundwork for the phenomenological movement was laid by Franz Brentano and his student Carl Stumpf; Brentano is credited as the first to discuss the value of inner perception and intentionality.[145]

In North America the phenomenological movement began in the early twentieth century with the works of various philosopher-scholars including Hocking, Cairns, Farber, VanKaam, VanManen, Giorgi, Colaizzi and Spiegelberg.[146] The real surge of the movement in the United States was in the 1950s-60s when it was broadly accepted as a major school of philosophy and method of inquiry.[143] With each philosopher came advancement, refinement and diversity of the movement.[146]

The following discussion focuses on the transcendental, hermeneutical, and phenomenology of practice orientations.

Table 6. Overview of Phenomenology		
Orientations	**Philosophers**	**Key Components**
Transcendental	Husserl, Fink, Tymieniecka, Van Breda, Giorgi, VanKaam, Colaizzi, Spiegelberg	• Descriptive • Intentionality • Essence • Bracketing
Existential	Heidegger, Sartre, de Beauvoir, Merleau-Ponty, Marcel	• Science of human beings • "being in the world" • Pre-understanding • Lifeworld • Situated Freedom • Co-constitutionality • Literary approach
Hermeneutical	Heidegger, Gadamer, Ricoeur, van Manen	• Interpretive • Meaning is embedded in lived experience • Hermeneutic circle
Linguistical	Blanchot, Derrida, Foucault	• Language reveals relation • Meaning resides in language and text rather than in the subject of lived experience
Ethical	Scheler, Levinas, Derrida	• "For a truly profound understanding of the human reality one must not ask for the meaning of being, self, or presence but for the meaning of what is otherwise than being, alterity, or the infinite."[147]
Phenomenology of Practice	Binswanger, Van den Berg, Buytendijk, Linschoten, Langeveld, Bollnow, Giorgi, Benner, van Manen	• Focused on the practice of living in personal and professional lives, from a practical perspective • Blends hermeneutic and qualitative empirical methods

Transcendental Phenomenology

Edmund Husserl, a German philosopher, is often referred to as the father of phenomenology despite the preparatory work of Brentano and Stumpf. He believed methods of natural science could not be applied to human issues and saw

phenomenology as a new science of 'being.' According to Husserl's science of 'being,' all living subjects respond to external stimuli, based on their perception of the meaning of the stimulus; they do not simply react. Husserl's approach to phenomenology is founded in the *pre-reflective lifeworld* and the possibility of the researcher "penetrating deeper and deeper into reality."[148] The pre-reflective lifeworld is the notion that an individual has an awareness of the immediate experience before reflecting on the experience, these experiences can be both bodily and perception; for example the experience of physical pain or the experience of loneliness.[149] The tradition on which he built phenomenology, often called transcendental phenomenology, was a descriptive approach to inquiry with three essential concepts: intentionality, essences and bracketing.[150,151]

The principle of *intentionality* identifies the inseparable connection a human being's conscious has to the world, the connection between *knowing* the world and *being* in the world. Intentionality requires conscious awareness and can result in a description of particular realities through retrospection.[144] Another core Husserlian concept is *'essence'*: what makes the phenomenon what it is without accident, or what makes a thing what it is (i.e., the 'whatness' of things).[152,153] For example, what makes a book what is? To answer this, the individual must reflect on varying specific dimensions of the book such as size, shape, color, and function, to determine what is essential for it to be a book. Essence does not just apply to literal objects. VanManen[144] describes essence as the lived experience or phenomenon which is linguistically constructed by the person who lives it. Phenomenology attempts to systematically reveal and describe in-depth, the 'objects' and meaning of the essence.

The third core concept of transcendental phenomenology is *bracketing*, also known as phenomenological reduction or transcendental reduction. Bracketing is a research activity/strategy in which the researcher sets aside their prior knowledge and experience with the topic under study, and reveals his or her biases to prevent these from affecting their interpretation of the data.[152] Bracketing, Husserl believed, suspended one's biases and did not influence understanding of the phenomena.[148]

Hermeneutic Phenomenology

The second orientation of phenomenology, the interpretive tradition or hermeneutic phenomenology, originated with Martin Heidegger, an apprentice of Husserl. He too believed the *lifeworld*, as it is lived, is the foundation of phenomenology. Heidegger, however, disagreed with Husserl in the process of exploring that lifeworld. Heidegger focused on the "mode of being human" or the "situated meaning of a human in the world."[148] He believed consciousness is not separate from the world and pre-understanding is a structure for 'being in the world'. This pre-understanding is based upon one's background, including culture. The relation of the individual to his or her lifeworld is a key focus of Heideggerian phenomenology.[154] *Situated freedom* is another essential concept in interpretive phenomenology. Situated freedom is the freedom to make choices in everyday situations that are inseparably linked to social, cultural and political context, thus making them situated by specific conditions. This type of freedom directly opposes Husserl's radical autonomy belief that humans are free agents and influence their environment, not the reverse.[154]

Heidegger also rejected the Husserlian belief that it is possible to perform the transcendental act of completely setting aside one's subjective experience and

worldview through bracketing. Heidegger believed the researchers' presumptions, knowledge and experience could make a valuable contribution to the process of inquiry and interpretation. This contribution enables blending of meaning by "fusing the horizons" of the subject(s) and the interpreter.[148,154-156] He also assumed *co-constitutionality*, which is unity of the person and the world.[151,154] In other words, the world in which we exist impacts our experiences and influences the meaning of those experiences.

Interpretive, or hermeneutic, phenomenology is different from descriptive phenomenology in the research questions asked, the process of analysis, and the belief that interpretation is part of being human and critical for understanding.[148,154] Descriptive phenomenology focuses on describing the essence of human experience. Interpretive phenomenology also seeks to describe the essence of the experience, but then searches deeper into all aspects of the essence (e.g. time) to gain context and discover how the lifeworld of any one participant impacts the similarities and differences of the group's subjective lived experiences.[154] Heidegger's process of interpretation originated with his concept of the hermeneutic circle resulting in a deeper interface and understanding of the texts. This circle gives the researcher the freedom to move back and forth from the parts of the experience to the whole experience again and again until the intended or expressed meanings are revealed.[148,157]

Phenomenology of Practice

Early forms of the third orientation, phenomenology of practice, come from the University of Utrecht, where phenomenologically oriented educators and professionals were interested in phenomenology as a practical and reflective method in an applied or

professional context, not a professional philosophy.[131] In the early 1940's – 1950's proponents of phenomenology of practice included medical practitioners Binswanger and Van den Berg, clinical psychologists Buytendijk and Linschoten, and educators Langeveld and Bollnow. Current day practitioners include Giorgi, Benner and Van Manen.[147]

Phenomenology of practice also takes an interpretive hermeneutical approach but focuses on the practice of living, in personal and professional lives, from a practical perspective rather than the philosophical focus of Heidegger's phenomenology. It is context sensitive and is a blending of hermeneutic phenomenology and qualitative empirical methods.[144,158] The aim is description and interpretation of the lived experience, gathering descriptive data, analyzing and interpreting through reflective questioning.[158] It also aims to "open up possibilities for creating formative relations between being and acting, between who we are and how we act, between thoughtfulness and tact."[131] These relations impact professional and practical lives. The strength of phenomenology of practice is the resulting communication of the non-cognitive dimensions of our professional practice and the chance that this communication will bring internalization and reflection on behalf of the reader. Through analysis and interpretation of phenomenological texts meaning and images of the phenomenon are conveyed.[131]

Van Manen[131] summarizes the contribution of phenomenological reflection to phenomenology of practice:

> Phenomenological reflection — reading and writing of phenomenological texts — can contribute to the formative dimensions of a phenomenology of practice. By varying the prefixes of the derivatives of "the formative," the various formative

> relations may become manifest. Phenomenology formatively informs, reforms, transforms, performs, and preforms the relation between being and practice. In-formatively, phenomenological studies make possible thoughtful advice and consultation. Re-formatively, phenomenological texts make a demand on us, changing us in what we may become. Transformatively, phenomenology has practical value in that it reaches into the depth of our being, prompting a new becoming. Per-formatively, phenomenological reflection contributes to the practice of tact. Finally, pre-formatively, phenomenological experience gives significance to the meanings that influence us before we are even aware of their formative value.[131]

Metaphors

The use of metaphors can assist with the interpretive process of inquiry. According to van Manen,[159] many of the words we speak originate from an image and metaphoric expressions can suggest phenomenological insights. The human experience acting as the "text" in hermeneutic phenomenology requires interpretative analysis and the use of metaphors can make visible, to the researcher and the reader, aspects of the human experience.[159] It is important, however, not to belabor a metaphor as it can distract from the understanding of the phenomenon.[159]

Miles et al.[160] advocates for the use of metaphors when examining data, as we use them constantly in life to make sense of our world. They actually believe intellectual poverty and misery are the result of research focusing only on matter-of-fact literal descriptions. Metaphors are partial abstractions, which compare similarities of things while ignoring differences, they bring complexity and richness to the findings and allow data condensing and pattern-making.[160] Stated more simply, metaphors help us make sense of situations and create new meaning by taking the unknown and transposing it into terms of the known.[161,162] Metaphors can be written descriptions or conceptual visual aids.[163]

Findings from one phenomenological study on the lived experience of diabetes used a metaphor to interpret the data and represent the findings.[164] The metaphor is of a boat charting a course of health and well-being through a choppy sea.[164] This metaphor was represented by a boat on choppy seas, and was depicted on a felted piece of artwork. The author used the artwork to help her reflect on the narrative data and the metaphor, creating a complete picture to represent the findings. Participants received a photograph of the felted artwork and an explanation of findings as part of a member check (ie, a method of establishing trustworthiness of findings). Participants who responded believed the results, including the use of the metaphor, accurately reflected their experience.[164]

Aita et al[165] also advocates for the use of metaphors as analytical tools. In their previous study[166] of eighteen family practice organizations, findings resulted in three metaphors: franchise family practice, practice as mission, and nurturing family, family practice. The eighteen practices fell into one of the three metaphors. The researchers also identified assumptions and values for practices within the three metaphors. While the researchers did not share the metaphors with the participants, they shared the assumptions and values identified for their particular practice. Participants agreed with the assumptions and values, which confirmed the researchers'' faith in the power of metaphors to accurately describe assumptions and behaviors in family practices.[166]

Application of Phenomenology of Practice to the Proposed Study

The chosen methodological approach for the proposed study was phenomenology of practice. In everyday practice as a clinical instructor, there may be a lack of awareness of the intricacy and depth of their own lived experience of becoming a

competent CI. The practical and reflective nature of phenomenology of practice in this professional context provides the ideal platform for describing and interpreting the lived experience of clinical instructors. Phenomenological reflection asks the participant to reflect deeply on a lived experience. This reflection may bring meaning and significance to the experience, and a new awareness that demands change in the way one practices. It can also provide meaningful advice to those who read the reflective results, in this case, other physical therapist clinical instructors and the physical therapy profession as a whole. These reasons support the selection of phenomenology of practice as the methodology for this study.

Phenomenology of practice, as described by VanManen, guided the design of this study. Accordingly, specific research methods were used to gather, analyze and interpret CIs' reflections on the meaning of competence as a CI and their journey to achieving competence. To assist in the interpretive process a metaphor was used as advocated by Miles et al.[160] The aim of this study was to gain a deeper understanding of the lived experience of achieving competence as a CI with the hope that findings could provide clarity and direction to CIs, PT education programs, the APTA and CAPTE for future efforts and programs designed to prepare clinicians to effectively educate students in the clinical setting.

PARTICIPANTS

The aim of this study was to describe and interpret the lived experience of achieving competence as a physical therapist clinical instructor, from the perspectives of the clinical instructors themselves, thus the participants for this study were physical therapist clinical instructors. Participants included twenty-nine physical therapist clinical

instructors, practicing in the Midwest, who had independently supervised at least one physical therapist student in the last two years.

Inclusion and Exclusion Criteria

Inclusion Criteria

Physical Therapist Clinical Instructors who:

1. Are APTA Credentialed or non-credentialed
2. Practice in the United States
3. Independently supervised at least one PT student in the last two years

Exclusion Criteria

1. Clinical Instructors with less than one year of clinical experience
2. Credentialed Clinical Instructors who have never supervised a PT student
3. CIs who are not Physical Therapists

Participant Recruitment Method

Purposive sampling, according to Richards and Morse,[167] is a method used to seek out participants specifically for their characteristics and abilities to speak about the phenomenon under investigation. Participants were recruited through purposive sampling based on their position as a clinical instructor and CI credentialed status. This allowed in-depth study of the phenomenon and enabled the researcher to answer the guiding questions.[130,139]

Upon receiving IRB approval, the researcher invited potential participants, both credentialed and non-credentialed Physical Therapist Clinical Instructors, through the local clinical sites affiliated with Andrews University (AU) Physical Therapy Department. The researcher emailed directly the Center Coordinators of Clinical Education and

Clinical Instructors in the AU clinical database. The email to the CCCEs (Appendix 4) and CIs (Appendix 3) included a recruitment flyer (Appendix 5) requesting participation in the study with the researcher's contact information. The researcher contacted the potential participants by telephone and email to confirm interest in participating, and answered any questions they had about the study. The researcher worked with the CCCE or one CI at each site to coordinate a meeting date and time that worked for the CIs at the facility. Participants requested interviews be conducted at a location that was convenient for them rather than at Andrews University; each location was neutral to the researcher. Participants joined the focus group that was closest to their work location. The researcher interviewed the focus group participants, in a private conference room in each location.

Informed Consent

Approval was obtained from the Institutional Review Boards at Nova Southeastern University (November 05, 2014) and Andrews University (September 10, 2014) The researcher obtained informed consent from each participant prior to data collection by contacting the potential participant via email, prior to the focus group interviews, with an attachment of the IRB approved consent form (Appendix 2). The consent form included the purpose of the study, what to expect before, during and after the interview process. Participants were given at least a week to consider participation after reading through the details. The researcher then followed up with the potential participants via email to offer answers to any questions the potential participant may have had regarding the study or consent form. Once the potential participant agreed via email to participate in the study, the researcher requested the participant complete the

written consent and return it via fax, email or post mail. Not all participants returned consent forms prior to the interview; therefore, the researcher reviewed the consent form with each participant prior to the interview, answered any questions and obtained signatures. The participant was given time to review and understand the process, as well as consider their decision to participate prior to participating in the study.

RESEARCHER BACKGROUND/POSITIONALITY

Self-reflection by the researcher acknowledging his/her background, experiences, biases and the potential impact these may have on the study, is an essential component of hermeneutic phenomenology.[148,154-157,168] For this study, the researcher's previous experience as a Clinical Instructor, Center Coordinator of Clinical Education and Director of Clinical Education led to her passion for this topic area. The researcher engaged in two reflective activities to minimize researcher bias and enhance the rigor of the study. The first activity was to identify the researcher's potential biases prior to initiating the study. The second activity occurred during the research process and included documentation and reflection on the biases and emotions of the researcher throughout the process. The following is a summary of the researcher's personal and professional background, experiences, and beliefs as they relate to the research topic:

> *When I became a clinical instructor, I felt the need to become a better teacher but was unsure of how to get there. Mentorship from other CIs and reflecting on my own student experiences were part of my process of becoming a CI. I didn't really know at the time what was required of me to be a "competent" CI; I felt like I must be competent enough because the PT program trusted me*

with their students, my students did well, and I was a good clinician. The credentialing process was also beneficial to me, even though I did not go through it until I was a Center Coordinator of Clinical Education (CCCE). I felt there were tools and practical skills taught in the course I could apply with future students and share with the CIs who worked under my guidance. Additionally, I used those skills and tools in my position as DCE and I became an official trainer for the APTA Credentialed Clinical Instructor Program (CCIP).

I do not believe the APTA credentialing is the only route to achieve competence. As a DCE I interacted with many CIs who are not credentialed but are excellent CIs who provide great student experiences. I often heard CIs say that their continuing education funds have been cut, impacting their ability to participate in continuing education, including the credentialing process. I believe these barriers may affect a CIs ability to reach competence. I also believe unclear standards and lack of measures for competence by the profession and Commission on Accreditation of Physical Therapy Education (CAPTE) are barriers to CI competence.

I am very interested in understanding CIs' lived experiences of pursing competence and their beliefs about credentialing. I acknowledge that I am biased by my opinion that the CCIP can be a part of the path to CI competence and is a valuable course because of the content covered and the relatively low cost. I also acknowledge I am biased by my previous research and publication of the motivational factors for CIs pursuing credentialing. Benner[169] reminds me I

need to be open and reflective with my beliefs and biases and prepared to have the texts reveal blind spots and other biases not yet known to me.

I believe the results of this study will reveal a wide variety of journeys to competence, some will include mentoring, and others will include self-teaching. I also suspect that most CIs have not thought very deeply about their own competence as a CI and what it actually means to be a competent CI. Furthermore, I anticipate many CIs with less experience will believe they have not yet reached competence. I believe the focus group interviews will increase awareness and understanding of the meaning of CI competence for all participants.

DATA COLLECTION METHOD

The researcher collected the data through five focus group interviews with both credentialed and non-credentialed PT clinical instructors. Additionally, the researcher asked participants to provide a written statement explaining their beliefs about the meaning of competence and achieving competence as a CI. See Appendix 7.

The interview format was consistent with phenomenological tradition; semi-structured interviews, using an interview guide consisting of broad, open-ended questions. During the interviews, the researcher acted as a moderator ensuring all participants had the opportunity to speak and limiting interruptions as much as possible. At the beginning of each focus group, the interviewer welcomed participants, described the purpose of the study, set the ground rules for the interview and began with open-ended questions. The interviewer prompted the participant to talk about his or her experience with the phenomenon under study.[170,171] There was freedom for the

participant to express his or her thoughts and feelings, yet it was not a casual every-day conversation or a closed ended questionnaire.[170,172] According to Kvale and Brinkmann[170], qualitative interviews include twelve essential components (see Table 7). Each of these components impact the structure, flow, direction and outcome of the qualitative interviewing process. Refer to Appendix 6 for the interview guide used in this study.

Table 7. Essential Components of a qualitative interview	
Life world	Interviewees every day lived experience is the topic of the interview
Meaning	Seeking to understand the meaning and interpretation of the themes
Qualitative	Seeking everyday language in the form of words, not numbers
Descriptive	Interviewee describes exactly how they feel, experience and act in relation to the topic
Specificity	Specific description is sought in the interview versus general statements or opinions
Deliberate naiveté	Interviewer is open to new themes as they present themselves in the interview rather than having a rigid set of presuppositions and formulated questions
Focused	The interview has direction with questions focused on a particular theme but is not prescriptive
Ambiguity	Interviewees' statements may be contradictory reflecting contradiction within their world. The interviewer needs to clarify the source of the contradiction – is it related to interview communication or actual contradiction within their world.
Change	The natural reflection that takes place as part of the interview may bring the interviewee to change their description and meaning about the theme
Sensitivity	The amount of experience and knowledge an interviewer has with the topic can affect the type of questioning
Interpersonal situation	Interaction within the interview can produce different results based on the interpersonal dynamics of the interviewer and interviewee; the interviewer must be aware of the ethical boundaries
Positive experience	The ideal result of an interview – the interviewee feels enriched and gains new insights
[a]*Adapted from Kvale and Brinkmann*[170]	

Pilot Interview

By conducting a trial run on a small number of participants, a pilot interview allows the researcher the opportunity to "test" the proposed methods, the researcher's ability to collect the data, the quality of the interview guide and the researcher's bias.[170,172] More specifically, the researcher is given the opportunity to:

1. Administer the questions in the same way as in the main study
2. Ask the subjects for feedback to identify ambiguities and difficult questions
3. Record the time taken to complete the interview, decide whether it is reasonable, and better record participants' time commitments in the IRB protocol
4. Discard all unnecessary, difficult or ambiguous questions.
5. Assess whether each question gives an adequate range of responses
6. Establish that replies can be interpreted in terms of the information that is required
7. Check that all questions are answered
8. Re-word or re-scale any questions that are not answered as expected
9. Shorten, revise and, if possible, pilot again.[172,173]

In this study, the researcher conducted a pilot interview with three participants who were physical therapy department faculty at Andrews University and physical therapists who have acted as clinical instructors in the recent past. The pilot interview allowed the researcher to evaluate the relevance of the interview guide, clarity of questions, determine the approximate length of the interview and to receive feedback on her interviewing skills. After completion of the interview, the researcher listened to the recording several times with the first intention of just listening for nothing in particular, and then listened again noting new knowledge gained, how the interaction between participants and researcher went, and how the interviewing could be

improved.[170] The researcher also asked participants to give feedback on the experience and an expert in qualitative research listened to the interview and gave feedback to the researcher to facilitate improvement in the interviewing process. The participants gave feedback that they were comfortable with the questions, the environment and the interviewer's techniques. They appreciated the way the researcher worded the questions and the follow-up questions asked. The qualitative expert provided feedback after listening to the pilot interview: silence is ok, don't jump in to quickly to rephrase the question, use more probing questions, ask less leading questions (i.e., instead of "what resources" say "are there any resources"). The researcher made changes to the interview question guide and the interviewing techniques according to the self-evaluation and feedback received from the expert. The individuals who participated in the pilot interview were not a part of the study; neither was the data included in the analysis. The time of the pilot interview was forty minutes, which was close to the duration of the actual focus groups. Length of focus group interviews was as follows: focus group one- thirty three minutes, focus group two- forty-eight minutes ten seconds, focus group three- fifty-four minutes thirteen seconds, focus group four- forty-eight minutes fifty-nine seconds and focus group five- forty-five minutes thirty-eight seconds.

Focus Group Interviews

Focus groups typically include six to eight participants. The aim is to gain many perspectives, not necessarily consensus, on the topic. Focus groups allow the researcher to collect data from a homogenous group of people, in a group setting. The group setting allows participants to share a variety of perspectives and opinions, this

interaction may bring about spontaneous responses that would not have appeared in individual interviews.[170] The style is non-directive and the researcher's role is to create a 'safe' environment for expression and conflict, to facilitate participation and discussion, to redirect discussion as needed to keep it focused on the topic, and to ensure all participants have an opportunity to speak so all perspectives are heard.[170] The researcher conducts interviews with several different focus groups to gather sufficient data to identify trends and themes from the participants' perceptions.[174]

The researcher performed five focus group interviews with twenty-nine Physical Therapist Clinical Instructors recruited through Andrews University physical therapy clinical database. Focus group interviews took place in private conference rooms located in the facilities in which the participants worked, which was comfortable and convenient to the participants as well as neutral to the researcher. The researcher received written permission from the facility manager to conduct the focus group prior to each interview. The researcher audiotaped all focus group interviews using two audio recording devices placed in the center of the table; two recording devices were used as a back-up in the event of equipment malfunction. Immediately following the interview the audio file was saved to the researcher's password protected computer. The researcher followed-up with participants after the focus group interviews, by telephone and email, as needed for clarification of data and demographic information. Prior to all interviews, the researcher asked the participants to provide a written statement explaining their beliefs about the meaning of competence and achieving competence as a CI. Upon completion of the focus group interview, the researcher gave each participant a twenty-five dollar visa gift card as a small compensation for their time.

The researcher recorded field notes of her observations, thoughts, and additional questions to ask during the interviews. Following each focus group the researcher further reflected on the discussions, ideas and themes that were emerging from the data. According to Lincoln and Guba[175] field notes allow the research to reconstruct the interview later during data analysis and keep the interview fresh in their mind, especially if there is a significant length of time between interviews.

DATA ANALYSIS

The researcher audiotaped the focus groups interviews and a paid transcriptionist transcribed the audio recordings verbatim; the researcher then saved the transcriptions to the researcher's password-protected computer and then later saved the transcripts on a password protected network drive as a backup. The researcher listened to the recordings while checking for accuracy of the transcriptions and made corrections as appropriate. The researcher then emailed the appropriate transcription to each participant for review and requested participants note any corrections in an email reply to the researcher. The researcher only received corrections from two participants. The researcher made the requested corrections to the transcripts. Once the researcher made the corrections, she uploaded the transcriptions into the qualitative software program, NVivo 10 on her password-protected computer. Once the researcher uploaded the transcriptions, she printed each transcript then read through and listened to each transcript multiple times to submerse herself in the data. During this time the research made notes of ideas and themes that seemed to be emerging from the data, she also noted differences and similarities between each focus group. The researcher

then processed and analyzed the data utilizing methods consistent with phenomenology of practice as espoused by VanManen,[131,144] including thematic analysis.

Thematic analysis is the process of discovering the patterns or themes in the texts,[144,176,177] or in the case of this study, the interview transcripts. A theme is the focus, meaning or point of the experience. VanManen[144] outlines three approaches to uncovering themes, which the researcher will utilize in this study: wholistic, selective and detailed. By utilizing these approaches, the researcher uncovered the themes and overarching theme in the text.

The wholistic approach views the text as a whole and cultivates an expressive phrase that captures the fundamental meaning of the text as a whole. The researcher created nodes in NVivo, which reflected these phrases; these nodes represented the emerging themes. In NVivo, a node can is "a collection of references about a specific theme, place, person, or other area of interest."[178] The selective or highlighting approach refers to reading and listening to the text while asking questions like *"what statement(s) or phrase(s) seem particularly essential or revealing about the phenomenon or experience being described?"* The researcher then highlighted and assigned these references in each transcript related to the nodes.

And finally, the detailed approach requires the researcher to examine every sentence and sentence cluster asking *"what does this sentence or sentence cluster reveal about the phenomenon or experience being described?"*[144] As the researcher examined every line, it seemed to her that subthemes were needed as they supported the themes. The researcher assigned each sentence or sentence cluster in every transcript to a theme or subtheme. The researcher continued this process throughout

the data collection phase and beyond which resulted in evolving themes and an overarching theme as well as elimination of subthemes. Ultimately, eight themes, and an overarching theme emerged from the data. These results provided the framework necessary to interpret the findings.

Data saturation is a fundamental component of qualitative analysis and is reached when only redundant or no new information contributing to the description of the phenomenon is identified in the interviewing and analyzing process.[139,174] In this study, the researcher confirmed data saturation was reached when the focus group interviews no longer revealed new information and was redundant to previous focus groups. The researcher recognized and documented data saturation after prolonged engagement with participants in the field, as well as careful review of interview transcriptions and peer debriefing. Data saturation was achieved with five focus groups and no additional focus group interviews took place.

Establishing Rigor and Trustworthiness

Establishing methodological rigor is another area in which qualitative and quantitative inquiry differ. Quantitative research methods strive to meet validity, reliability, objectivity, generalizability and reproducibility standards to ensure methodological rigor.[134] Qualitative methodological procedures seek to establish trustworthiness of findings. Trustworthiness is defined by Lincoln and Guba[175] as the ability of the researcher to convince the reader that the findings are worthy of attention and that the interpretation of the text is true, applicable, consistent and neutral. To achieve trustworthiness of findings, the researcher performed activities described by Lincoln and Guba to meet criteria for four components of trustworthiness: *credibility*,

transferability, *dependability* and *confirmability* and researcher reflection. See Table 8 for a summary of activities that were used in this study to establish trustworthiness.

Credibility

Credibility's quantitative counterpart is internal validity. The goal of credibility is to establish "truth value", meaning the results are believable. Truth value can be established by conducting the inquiry in a sound "credible" way, and by involving the stakeholders in the reviewing process.[175] In this study, credibility was strengthened in the following four ways, by prolonged engagement, peer debriefing, use of raw data to support finding and member checking.

Prolonged engagement is achieved by investing enough time to understand the culture, build trust and identify potential distortions of practice.[175] The researcher has over twelve years of experience in the culture of clinical education, ranging from clinical instructor, Center Coordinator of Clinical Education to Director of Clinical Education, and has practiced as a non-credentialed CI and become a certified trainer for the APTA CCIP. In her current position as Program Director, she continues to mentor the junior faculty DCE in the DPT program. The time the researcher has spent in the clinical education arena has allowed her to become familiar with the experience of being a clinical instructor, the journey to becoming competent as a CI as well as to develop a relationship with clinical instructors. The researcher knew all the participants and all but one of the participants were familiar to her as either past student or clinical instructor from her role as DCE. This existing relationship allowed the researcher to establish a trusting relationship with the participants thereby facilitating open comfortable conversation during the focus groups.

Peer debriefing is the process of the researcher debriefing with a peer knowledgeable in the topic of study and the chosen methodology.[175] In this study, the researcher debriefed, on multiple occasions, with a peer knowledgeable in the topic of clinical instruction and qualitative methodology. The researcher's role in the sessions was self-reflection and exploration of ideas, while the peer's role was to ask questions encouraging broader thinking and accountability, as recommended by Erlandson[179] et al.

The emerging themes are supported by the use of raw data in the form of participant quotations, the researcher's field notes and reflective writing during data analysis. Several participant statements that best represented the themes are included for each theme to promote trustworthiness of the findings. Descriptions of the settings, group dynamics and other researcher observations were recorded in the researcher's field notes and written in the results chapter.

Member checks allow the participants to verify their statements and intentions. In this study, member checks took place at two times, once after data transcription to ensure accuracy of transcription and a second time after the researcher completed a draft of themes and direct quotes to ensure the intention of their statements. Once transcribed, the researcher emailed the appropriate transcription to each participant to give him or her opportunity to review the raw data to ensure accuracy of transcription. The researcher only received corrections from two participants and made the requested corrections accordingly. A final member check was done at the completion of the write-up of findings, eight of the twenty nine participants responded and affirmed the findings and metaphor of the journey.

Transferability

Transferability refers to external validity or generalizability. However, generalizability is not a goal of qualitative research because in qualitative research all observations are specific to the context of the experience. Transferability is the ability to apply the findings of the study to the readers own situation based upon the degree of similarity of circumstances in the study and the reader's world. Or, stated another way by Firestone[180] "case-to-case translation" or transfer. To strengthen the potential of transferability, it is the researcher's duty to provide the intricate details of the research situation as well as a thick description of the findings.[175] In the findings of this study, the researcher has provided participant demographics, descriptions of the setting in which the interviews were conducted and the interview events themselves as well as a thick description and interpretation of the findings to enable the reader to make transferability judgment in this inquiry.

Dependability

Dependability refers to reliability and can be achieved by the researcher observing change, not only in uncontrolled factors but also in controlled factors like design change.[175,181] Lincoln and Guba[175] emphasize credibility is dependent upon dependability just as validity is dependent upon reliability. Dependability was addressed separately in this study using the two-step process recommended by Lincoln and Guba.[175] In the first step, the researcher provided the details of theoretical, methodological and analytic choices in the research design and data collection methods. The second step required the researcher to perform a reflective examination of the study, which included the data, findings, interpretation, limitations, and

recommendations for future research. This examination occurred periodically during the data collection and analysis phases of the project with the goal of examining the process utilized for the study and the consistency of the data and interpretation by reviewing the raw data or texts.[175]

The researcher also used an inquiry audit to enrich dependability. An auditor performs the inquiry audit by examining the inquiry process, the consistency of data, findings, interpretation, and recommendations. If the auditor finds the inquiry to be acceptable, dependability is confirmed.[175] In this study the chair of the researcher's dissertation committee, who has expertise in qualitative methodology, performed the inquiry audit. An inquiry audit was performed on multiple occasions by the dissertation chair, an expert in qualitative methodology, throughout the research process. Prior to data collection, the auditor reviewed the research design and methods to confirm alignment with the methodology and to ensure rigor. The auditor also examined the data to assure the findings were grounded in the data as well as the dependability of the interpretation and recommendations.

Van Manen[144] also supports the inquiry audit in his use of collaborative analysis which is a formal or informal opportunity where the researcher actively seeks feedback on the identified themes and thematic descriptions. In this study, the researcher performed informal collaborative analysis, employed by sharing the identified themes and descriptions with a methodology expert, the researcher's dissertation chair. Collaborative analysis took place throughout the write-up of the findings and interpretation which allowed the researcher to broaden her view of the findings and ensure she was seeing beyond her biases. This process is meant to be a

conversational relation to strengthen what is weak in the human science text, not to debate or argue what is present.[144]

Confirmability

Finally, confirmability corresponds to objectivity and is accomplished by the confirmability audit using an audit trail.[175] The purpose of the audit trail is to document the development of the data analysis and provide the reader with information in order to determine the dependability, confirmability, credibility and transferability of the study to their experience. In this study the trail consisted of raw data, field notes, data reconstruction and synthesis products used to develop the final report, process notes, reflexive notes and instrument development information.[136,175] The researcher completed the reflexive journal after the debriefing sessions for the audit trail summarizing issues, concerns and developing hypotheses and theory.[179] The chair of the researcher's dissertation committee, who has expertise in qualitative methodology, performed the inquiry audit for this study. The researcher also completed the reflexive journaling throughout the duration of the dissertation process to lend to the credibility, transferability, dependability and confirmability of the study.[179]

Researcher reflection

To further establish rigor and trustworthiness, Lincoln and Guba[175] advocate for the use of the researchers' reflection to capture the extent of the researchers' biases and the impact on the outcomes. This reflection applies to all four areas of credibility, transferability, dependability, and confirmability.[175] Earlier in this chapter, the researcher shared her reflections on her background in relationship to this study as well as biases and the potential impact these may have on the study. Throughout the data

collection and analysis, the researcher kept a reflexive journal of her thoughts, impressions and reasoning behind decisions made in the development and merging of themes, subthemes and overarching themes. In chapter 4, the researcher shares her observations and reflections about each focus group and then a final summary reflection of the groups and the overarching themes.

Table 8. Establishing Trustworthiness

Components of Trustworthiness	**Activities to Meet the Criteria for the Components**
Credibility (Truth Value)	1. Prolonged engagement 2. Peer debriefing 3. Participant review 4. Member checks
Transferability (Applicability)	1. Provide participants demographics 2. Describe the interview setting 3. Describe interview events 4. Provide thick description of findings 5. Provide interpretation of findings
Dependability (Consistency)	1. Inquiry audit performed by an expert in qualitative methodology 2. Researcher provides the following for the audit a. Description of methodology b. Details of research design and data collection methods c. Data, findings, interpretation and recommendation throughout the data collection and analysis phases 3. Researcher performs reflective appraisal of the study
Confirmability (Neutrality)	1. Audit trail a. Raw data b. Field notes c. Data reconstruction and synthesis products d. Process notes e. Reflexive journaling

RESOURCES

The researcher applied for and received a small grant through the Office of Scholarly Research at, Andrews University. The largest expense included gift cards for participants and transcription costs, aside from this, the major expenditures for this study was a recording device for the interviews, and data management software. The researcher's time needed to travel to conduct the interviews, and the time to process and analyze the data cover the bulk of the human resources required.

SUMMARY

This chapter presented the methodology and design of the study. Rationale for selecting qualitative inquiry for this study and a history and definition of phenomenology was presented. Support for the selection of phenomenology of practice was outlined, as well as a detailed description of participants, recruitment methods and data collection. The choice to use focus group interviews as a means of data collection were presented and justified. The particulars of data analysis were offered and a discussion of methods employed to uphold methodological rigor and enrich trustworthiness were presented.

CHAPTER 4: RESULTS

INTRODUCTION

This chapter will present the findings of this qualitative study including the researcher's descriptions and interpretations. Discussion on the findings in relationship to the existing literature will be presented in chapter 5.

The aim of this study was to describe and interpret the lived experience of achieving competence as a clinical instructor, from the perspectives of the clinical instructors' themselves. To achieve this goal, this study sought to answer the following guiding questions: What is the meaning of "competence" for clinical instructors? What is the lived experience of achieving competence as a clinical instructor? And, what meaning do these experiences have for CIs? Qualitative methodology, specifically phenomenology, was used to answer these questions. Semi-structured interviews were conducted with five focus groups. Participants were physical therapist clinical instructors. Audio recordings of the interviews were transcribed verbatim. Analysis of this raw data was performed using thematic analysis to describe and interpret the findings.

FINDINGS

Basic Information and Field Notes

Five focus group interviews were conducted at various locations convenient for the participants. Participants were all physical therapist (PT) clinical instructors (CIs) who had independently supervised at least one PT student in the past two years. Each of the rooms was a conference style room with chairs surrounding the table(s) with

enough space to sit comfortably. Participants selected their own seating as they arrived for the interview. Each interview began with introductions, and closed with the researcher asking if there was anything else they would like to add that had not been discussed. The interviews ranged from 33 minutes to 54 minutes in length. Though there was variation in the interview times, the researcher asked questions in each focus group until she felt the description of the phenomenon was complete. The interviews were conducted from December 1, 2014 through January 30, 2015. The researcher recorded observations in her field notes on the setting before each interview, then on the group dynamics and overall tone following the interview.

Focus Group One was conducted in an outpatient facility that was housed within a hospital and medical center campus. The participants consisted of five females and were a mixture of outpatient, pediatrics and inpatient clinical instructors.. Three of the CIs were APTA credentialed and two were non-credentialed; all of the CIs had at least ten years of experience as physical therapist CIs (Appendix 8). The Center Coordinator of Clinical Education (CCCE) for that site was not present for the interview. Participants slowly arrived and two of the expected participants had not arrived, requiring the organizer to leave the room and follow-up with them. This resulted in a late start for the interview, ultimately limiting the length, as several of the participants only had a one-hour break. Additionally, the interview was delayed by the amount of time it took the participants to complete the written statements (Appendix 7). The group started out with six participants but one decided not to participate after discussion with the researcher. The individual gave no reason; she asked the researcher if the interview

was optional or required, the researcher responded it is optional, she then said “then I don’t want to participate” and left the room.

The participants engaged in small talk with each other and the researcher when they entered the room. Some of them brought their lunch to eat during the interview, as this was the only time they would have a break. The room in which this interview was held doubled as a conference room and kitchenette for the staff. Although the department manager had posted a sign on the door indicating the conference room was in use, the researcher had to pause the interview twice while a staff member (non-participant) retrieved their lunch.

Despite the distractions and late start, the participants were very engaged in the interview and focused with answers. Participants seemed to be reflecting on the questions before answering. The participants were respectful of each other, allowing one another to equally contribute without interrupting. Their responses were often in agreement with each other and expanded on the previous comments. There seemed to be no real conflict or differing of opinions. While both of the non-credentialed CIs expressed interest in continued learning, neither of them communicated that they planned to take the CI credentialing course. The interview lasted thirty-three minutes.

Focus Group Two was conducted in a hospital and consisted of five female and one male inpatient clinical instructors; five were APTA credentialed and one non-credentialed, and the CCCE was a participant. The years of experience as a PT ranged from 2.5 to 34, and years of experience as a CI ranged from 1 to 20 (Appendix 8). The interview took place at the end of the workday, in a conference room that was private. Six clinical instructors were scheduled to participate however; two appeared to be no-

shows so the researcher began the interview without them. Thirteen minutes into the interview, while the participants were still answering the first question, the two participants appeared and apologized for being late. The researcher paused the interview, reviewed the consent forms with the two participants, obtained signatures, and informed them of the question that was being answered. The interruption did not seem to bother the other participants and they smiled at them when they arrived.

There was one additional interruption of two maintenance men entering the room. The researcher again paused the interview and then resumed after they exited; this distraction did not seem to bother the participants either as they resumed the discussion immediately. The interaction of the participants was overall collegial; they often built on each other's responses and openly shared stories from their own experiences. There was a brief debate over the necessity of credentialing between two of the participants. I felt this conversation caused a bit of tension between the two but that seemed to disappear when the discussion, shortly after, turned in a different direction. I was uncertain how the one non-credentialed CI felt during this debate as they were talking about her not being credentialed prior to working with students.

Overall, the very seasoned therapists seemed to have more input in the interview, but the researcher's impression was the two less experienced CIs were listening and reflecting deeply before sharing their thoughts. After the interview ended the CIs asked the researcher, whom they knew in her previous position as DCE, for feedback on their performance as CIs. This showed the researcher a genuine desire to learn and grow as CIs on their part.

The duration of the interview was forty-eight minutes ten seconds. After the notable delay in starting the first two interview groups, the researcher decided to email the written statements (Appendix 7) to all remaining participants for completion prior to the interviews in an effort to be efficient and allow more time for the actual interview.

Focus Group Three was conducted in a hospital owned outpatient facility and consisted of seven females who practiced in pediatrics, lymphedema, women's health, outpatient neurology and orthopedics. Of the participants, six were APTA credentialed CIs and one non-credentialed CI. The CCCE was one of the participants. The years of experience as a PT ranged from 3 to 24 and years of experience as a CI ranged from 6 months to 19 years (Appendix 8). This interview took place in a private conference room without any interruptions. Participants seated themselves comfortably around the table as they entered the room. They seemed like an energetic talkative group as they engaged in small talk with each other before the start of the interview.

As the interview commenced, there were several participants frequently interrupting other, building on what they were saying but interrupting none-the-less. This dynamic did not appear to affect the more outspoken participants, but may have impeded the quieter participants from adding to the conversation. One of the quieter participants was also a newer CI, and while she did not share as much in the interview, her written statement was comprehensive and insightful, more so than those who shared more verbally. Another one of the newer CIs posed many questions during the interview as she was processing the researcher's questions and the other participants' responses. It seemed that her method of reflecting was external rather than internal. At times, some of the participants' interruptions caused the researcher to redirect the

conversation back to participants who had not had a chance to answer the questions. Nevertheless, the more quiet participants joined the discussion, often with a nod of agreement, or brief words of affirmation (eg, “uh huh,” “yeah”). The group became very passionate when discussing productivity expectations and their perceived negative impact it has on their ability to practice well as a CI. The duration of this interview was fifty-four minutes thirteen seconds.

Focus Group Four was conducted in a hospital owned outpatient facility and consisted of three females and two males, who practiced in outpatient orthopedics, inpatient and home health. Of the participants three were APTA credentialed and two were non-credentialed. The CCCE was not one of the participants. The years of experience as a PT ranged from 2.5 to 24 and years of experience as a CI ranged from 1 to 17 years (Appendix 8). The interview took place in a private room and participants sat comfortably around a table. There were no outside interruptions during this interview. As the participants entered the room, they appeared very relaxed and began small talk with each other, mostly centered around their workday thus far. The tone of the interview was relaxed, in comparison to the previous focus group, and all the participants were engaged throughout the interview. The participants were respectful of each other when speaking and did not interrupt; they shared openly about their experiences. One participant gave several lengthy, redundant responses, which required the researcher to redirect the discussion to ensure others enough time to respond. Just as with the other groups, they appeared passionate about teaching and committed to what they do as CIs. While the two newer CIs did not have as many experiences to draw from, they did share openly about their experience thus far. Both

of these non-credentialed CIs expressed a desire to become credentialed when they find a course that fits their schedule and location. Overall, the group seemed to agree, and their insights often built on one another. This interview lasted forty-eight minutes fifty-nine seconds.

Focus Group Five- was conducted in a hospital owned outpatient facility and consisted of three females and three males, who practiced in outpatient orthopedics. All were APTA credentialed. The CCCE was one of the participants. The years of experience as a PT ranged from 3 to 24, and years of experience as a CI ranged from 2 to 23 (Appendix 8). The interview took place in a private conference room without any interruptions. The tables were arranged in a square and the participants chose their own seats when they entered the room. The lighting and colors in the room provided a very warm relaxed feeling and all participants seemed to take on that relaxed feeling as they sat down. There was not as much small talk with this group prior to commencing the interview; it seemed as if they were silently settling into the environment. The participants appeared engaged throughout the interview. The researcher needed to initially probe through questioning to get the interview "flowing," as they seemed a bit hesitant to share their experiences. Participants minded the ground rules and respected each other's speaking, and their comments often built on each other. It became evident that the CCCE had been a CI for at least one other participant, and had mentored the three newer CIs. The mentees shared the role the CCCE played in mentoring and teaching them as student and CIs and expressed appreciation for his mentorship. As with other groups, even the seasoned CIs seemed somewhat

uncomfortable with the notion that they are competent CIs. The duration of the interview was forty-five minutes thirty-eight seconds.

Results from Data Analysis

An overarching theme of "Empowerment" emerged from the data analysis of the transcriptions and field notes. This overarching theme is supported by eight themes which resonated across the five focus groups. Many of the themes were named using statements from participants. The overarching theme and themes will be discussed in detail in the following pages.

Theme 1: The meaning of competence
Theme 2: "My first student"
Theme 3: Finding the way
Theme 4: Feeling supported
Theme 5: A fork in the road
Theme 6: Barriers to achieving competence
Theme 7: The "ah-ha" moment
Theme 8: "Ongoing road"

Theme 1: The meaning of competence

To describe the journey to competence without describing the meaning of competence would be like asking one to reflect on their trip to nowhere. While a journey can be described without a description of the goal, the goal must at least be identified before one knows which experiences to reflect upon. With this in mind, the researcher asked participants "what is the meaning of competence as a clinical instructor" and probed deeper with questions like "describe an experience where you recognized yourself as a competent CI". When asked what the meaning of clinical instructor

competence is, participants' descriptions revealed many roles of the competent CI. According to the participants in this study, the competent clinical instructor personifies a skilled clinician, teacher, mentor, reflective learner and collaborator who is also adaptable and an effective communicator (Appendix 10). Participants shared descriptions of the skills and characteristics within each of these roles that brought meaning to clinical instructor competence (Appendix 10).

Many participants discussed the importance of being a confident *skilled clinician* first, before one could be considered a competent clinical instructor. The participants expressed agreement that clinical skills should, at a minimum, include competence in examination, evaluation, diagnosis, prognosis, interventions, outcomes, documentation and billing.

- *[The CI would]Have to have understanding of anatomy, physiology, neuro, ortho etc. to teach and help student grow…..to have a good understanding of current position, documentation, billing, to a level that can be taught to others.* (Seth)

- *…starts off with being competent as a clinician and being able to convey that that knowledge to your student in an effective fashion*… (Tim)

- *…I needed to be confident as a clinician first before I felt I could be confident as an instructor*…. (Karyn)

A few participants, however, felt that being a competent clinician does not necessarily mean the person will be a competent CI.

- *I think it's important for the CI to be competent as a clinician although that doesn't always translate into being a good CI but you have to be competent as a clinician to be a good CI.* (Allison)

- *That's true*. (Marsha agreed with Allison)

According to all of the participants, being a skilled *teacher* is also essential to being a competent CI. The competent CI has a desire to teach, even despite challenges they face.

- *…Willingness to work with student and observers. Willingness and interest in sharing knowledge with others*. (Kelly)
- *Additionally, a competent CI will be looking to take on students regularly to expand their ability to learn different learning styles.*(Allison)
- *Interested in instruction of the student to progress clinical skills*. (Faith)
- (Interviewer asked clarification questions after one participants' comment about being a CI before she became credentialed) *You willingly took the student? Or were you talked into it? (*Laura responded) *I did. I did! No I did! (laughter) No, I really wanted to take – I – I wanted to, I was nervous about it …….*
- *It [CPI] would be a barrier; I mean we don't have a choice, and I love having students, so I go for it….* (Marilyn)

They are also knowledgeable about academic programs and their evaluation tools.

- *understanding what their educational background is um cause we do get students that haven't had neuro or ortho and you know so understanding where they are education-wise…* (Nancy)
- *…also keep up with the requirements from the schools and what they want to see students doing the CPI and things like that.* (Kelly)
- *I think it's also important for the CI to have a good understanding of the CPI, understanding of what the CPIs looking for, and uh, kind of steer the student in the direction to where he will be able to uh um kind of demonstrate all these different performance criteria and provide the experience for your student to be able to do that and ultimately I think the competence of the CI is kind of shown by the progress that the student makes from mid-term to final.* (Tim)

- *…self-directed learning using the CPI and appendices as guidelines. Knowing what is expected by the university and knowing the students' class/clinical background are also crucial to being a competent CI* (Victor)

They are proactive in their approach to teaching and planning learning experiences, fostering critical thinking skills and teaching reflection.

- *I really like what* [P8] *does with his first day with a new student. He tells them everything he expects from them. He gives them an overview of the clinical, everything from expecting the in-service and so on and its very good.* (Arlene)

- *Providing someone for them to bounce ideas back off of, but not necessarily just giving them answer* ["uh hum" of affirmations from the group]*, or what we think, but helping them, say well, you know, what would you think this test, if this test is positive, what does that indicate? You know, and having them kind of bounce back the ideas and then so then what would be the next step? Is there something else you would test? You know, and then, just kind of picking it apart a little bit, but not just saying, "I would do this next". That means this. You know, you don't just give them the information, you want them to have to decipher it.* (Marsha)

- *one of the things I like to do is ask the student ahead of time, before we go in, after we've done the observa- observed, we talk some but also ask the student before going in, "now what would you do with this diagnosis? How would you work with this patient? What do you expect to see when we go in there? What if you're seeing somebody weaker or stronger how are you going to build your treatment plan on that? Or what, I ask them, what their plans are before they go in.* (Kelly)

The majority of participants noted that as a teacher, the competent CI is also fostering a safe and structured learning environment. The CI creates a learning environment for the student to practice their clinical skills, ask questions and make mistakes. The CI allows the mistakes to take place for the sake of learning without compromising safety of the patient and student while providing appropriate supervision of the student.

- *I always let them observe first, gather questions if they have and you sit down together and then answer those questions. That way they are prepared in*

knowing what to expect from certain kind of diagnoses. If there's something totally more complex then you're always there to guide them or to help them out with their thought process with providing treatment techniques, what can be altered? But providing a very good observation situation is very very important I feel without which they wouldn't be able to grasp as to how much to proceed or what can be done. (Marilyn)

- *I feel that being competent as a CI it's more like giving the student the um a good learning environment and uh an environment where what they have already learned at the school if I can help them get that out. Cause I believe that they have learned a lot at school, but uh if I don't give them that environment they just kind of block all that out. So I just try to kind of connect those two and I feel like I'm just a facilitator of of having them to reproduce what they know and just kind of adding to you know that by giving them a good experience…* (Helen)

- *And to let them make mistakes. I think that's kind of hard like just trying to jump in all the time but I mean as a clinician when we first started I mean sometimes we made mistakes and just allowing that and I don't know. That it it can be difficult um so um I think a competent clinician would know when it is ok to let them make a mistake and when they should* (Allison)

- *A competent CI is one who allows the student to try new things in a safe and controlled environment* (Seth)

In this safe learning environment, the teacher also challenges the student to grow professionally and improve their skills.

- *…to provide what learning opportunities and experiences that challenge those strengths and weaknesses as well. To recognize them but to also structure a learning environment that allows them to improve their weaknesses but then also challenge their strengths.* (Julie)

- *I think to be competent as a clinical instructor you have to um be able to set an environment for students to um develop their skills and a learning environment out of the academic setting in the –in the clinic and facilitate that process with the student…….providing a safe, structured environment for the student to integrate their academic knowledge base and practice professional behaviors even more so than instructing them in a new way to do things……I think an orientation initially to kind of set the stage where you and your student get to know each other at least a little bit um is very important – try to always have um you know to reserve that time no matter how busy we are to*

have a good orientation kind of get started on the right foot. And to talk about how that feedback is going to be best – best delivered before or after or during if necessary…(Kevin)

According to the participants' statements, they described a skilled teacher as one who identifies their students' learning styles and needs, and then establishes individualized plans and adjusts those plans as the need arises. This flexibility allows the CI to adapt their own learning and teaching style to meet the needs of the student, and adapting the level of questioning and teaching style to meet the students' growing needs. In addition, the teacher recognizes personality differences and adapts their approach accordingly.

- *Learning what they're best way of learning is and being able to guide them if they um are more of a observe and then gradually progress to the hands on versus hands-on both working together at the same time. Those are things being able to set um good goals to plan for like each day or each week , like somebody says help them progress and adequately to meet their goals of that clinical.* (Madalyn)

- *And I think it – you know, that's where maturity and experience comes in as you kind of feel out the personalities of your student and how soft you can be or how firm you need to be. How point blank it is or how you can give a leading thought or a leading question like, well how do you really think that eval went today? And you know let them find their errors. If they're not seeing their errors you know then you need to take the next step and be a little more direct. So I think that's part of it too, is seeing you know meeting the student where they are but finding out how direct you need to be or how leading you can be with some of those teaching moments.* (Jean)

- *Be able to define student readiness and plan and conduct relevant learning experiences…. Be able to conduct and document evaluations of student performance* (Ethan)

- *I mean obviously we all have preferred learning styles, too, but we have to kind of assess and figure out with our student what their best learning styles are and then I mean they need to also be able to interpret that for their*

patients, and how am I going to teach them? How are they going to learn best? So it's you know there is definitely a trifecta there! (Marsha)

- *…to be a competent CI we also need to be able to – for the student who is not following the course as we would expect them to be – to be able to step back and make a plan and find the best path for that individual student because not all students are good students. A lot of smart students struggle in the clinic and being able to get where you need to get in the end to have a confident clinician is going to ground you right so being able to develop a plan with your student I think would be also important to be a competent CI. (Karyn)*

- *I think understanding different personalities as well you know that may be something that – that you see as different or not the way that you would do it doesn't necessarily mean that it's wrong so trying to understand that and adjust accordingly.* (Brittany)

- *And being willing change that* (clinical instructor teaching style) *as time goes on, cause I think yeah they come in here academically feeling like ok when I'm in the academic setting I learn best by this but then when they get here that might not be as applicable or they find you know, I really think I learn better if I like kind of try a little bit. Show me a little bit and then I try it a little bit and then you critique me or you know and that's yeah and then that might change as they go through especially if it's a longer internship it might you know as you're backing off and getting more verbal feedback instead of as much hands on*…(Marsha)

Many participants described the competent CI as *mentor,* leading by example in advocating for the profession, conducting themselves professionally and modeling teamwork. They act as a coach, inspire students, and are dedicated to maintaining the quality of future professionals, despite the investment of time required.

- *As a CI we have the important role of preparing the future professional of our profession to ensure we are building our profession up and assisting in providing competent Physical Therapists for the future.* (Kendal)

- *Help facilitate multi-disciplinary communication like* (Kelly) *said, setting up meetings with all these different disciplines and just kind of guiding them towards a team approach.* (Tim)

- *At the end of the 5 weeks that I had mine,* (laugh) *uh they they made a comment saying that starting out in acute care they'd never thought they could see themselves working in a hospital and they were really apprehensive about it but the experience that we had together and the opportunities that they had in learning that I was able to help them through. They were now open to the idea of becoming an acute-care therapist and I felt like for me I had done my job or become competent and made that was my goal to make them feel comfortable be able to work at the hospital.* (Carolyn)

- *It is very personal, it takes increased work outside of the clinic…….I think I was having um my first third year student so they were here for a longer period of time and we could really establish kind of short and long term goals and she wasn't very confident in um orthopedic physical therapy so we spent time at the end of each week practicing different techniques with her and then by the final she had met those goals that we had established along the way for different very specific orthopedic techniques and skills and so I thought that was good. Um feedback even to me that taking the extra time to make sure it goes along the way and practicing with her made a big difference and she felt a lot better about orthopedic physical therapy after that.* (Peggy)

They also foster autonomy by allowing students to develop their own style and way of practice and not just expect them to "be like me."

- *I just had a thought listening to all three of you kind of heard just kind of the same thing common thread is guiding the student, um, in having them learn on their own but still providing them those those questions or those resources so that they can try and take the initiative then to kind of determine the next step or what they did wrong or how they can progress or implement new things and so I, I really like that. You you're there to guide them but not tell them exactly what to do.* (Carolyn)

- *I think something is you're teaching them how to be a physical therapist, not you* [several "yes" affirmations from the group]*, you're not teaching them how to do everything how you would do it – which is hard to let that go but I think that's what makes somebody a little bit more competent is realizing that you're just – you're teaching them thinking skills, thinking strategies, clinical decision-making in a clinical setting, not well what would my CI do? what would my instructor – how would my instructor do this?* (Laura)

- *I don't think you would be a competent CI if your student was saying, "well you know these are the exercises that my CI would have you do." You know I think its good – I think with every student that we have, we end up learning a*

little bit something like a new activity to do with a kid that I hadn't thought of because you don't want your student just to mimic you [uh hums of affirmations from the group] you want them to – you want to give them the tools to think for themselves. (Donna)

Participants discussed the competent CI as a *reflective learner,* one who seeks to learn from experiences, students, colleagues, and from professional development courses by reflecting on those experiences and using that reflection as a process of improvement. They are teachable themselves and they recognize their limitations.

- *The students were giving me feedback either at the mid-term or sometimes the final, and I kept trying to adjust accordingly. And granted, they're not obviously they're not all the same. But if I started hearing something repeatedly, then I realized ok, this is an area of weakness for me, and I need to alter, I, this is, would be helpful to future students. Some of it you recognize is just an individual style. But a lot of times there is a pattern, so I kept having to adjust as I went along thinking ok, I know I'm not very organized but it's important to students. So that helped.* (Maria)

- *For myself, I need to kind of make sure I'm not staying stagnant in my knowledge as well but continuing to grow and pursue different areas of interest as well…..Competence does not equal and "all knowing" mind, the instructor is still learning themselves…..They should also learn about educational delivery and various learning styles to help foster a productive learning environment for the student. They should seek guidance from their peers on how to become a competent and effective CI.* (Carolyn)

- *I think they*[CI] *need to have inherent curiosity and demonstrate the lifelong learning that keeps them learning and up on recent trends and developments in the profession.* (Kevin)

P10 provided a good example of how she reflected on student actions and recognized her role in guiding students to become safe, competent physical therapists:

- *…a student who has a patient who is non weight-bearing with one leg due to an orthopedic surgery and they hop out to the middle of the room and my student's with them and everything's going great and then the patient says to my student, "can you get me a glass of water?" And my student says, "OK"*

and leaves the patient in the middle of the room with one foot up in the air and goes to get the water. And it took me a while to figure out what was going on. Students are so used to doing what they are told. They haven't yet developed the ability to trust their own judgment, say, wait a minute, this isn't safe. The patient told me to do something but I'm going to use my own judgment over what the patient told. And so part of what you're doing as a clinical instructor is that you are building your student's ability to use their own judgment, and say, yes I was told to do this but it's not right. I'm going to fall back on things I know and that comes really only through experience and as a clinical instructor you're helping them to get that clinical experience in a safe way where nobody gets hurt. You're their backup to help them to become competent. (Arlene)

The participants in this study described the competent CI as *collaborator:* someone who builds relationships with colleagues, students, and academic institutions in an effort to ensure student success. They work together as teams sharing students allowing them to learn from one another, and model collaboration to the student. With academic programs, they work with the programs to meet the students' needs, especially when they face challenges. In addition, they intentionally include the student in developing a plan for the students' success.

- *…neither of us is able to take on a fulltime CI role and so we always share and so that's been a great learning experience just like you were saying just talk things through together about how we're going to do it and learn from each other.* (Faith)

- *I like keeping in touch with the ACCE, especially in style approach to the students learning.* (Maria)

- *I think the ACCEs have good resources too and helpful in in being able to um you know they're um whether it's – whether it's just um you know a phone call or um you know other resources that they can – they can sometimes provide um. I – I think they're a good partner with the clinical education program.* (Kevin)

- *Goal-setting is important. We have to set goals, teach the student how to set goals for their patients, but especially teach or set goals for the student themselves. And that's a collaborative thing.* (Faith)

- *…by kind of sharing a student with another CI I mean there were – I think there's pros and cons to it but it does kind of give you other insights of things that each of us does differently and which ones might be more effective than other and so it kind of gave me kind of another I don't know another perspective and another more options and things that I could do that you know the other CI was doing and I wasn't or vice versa.* (Julie)

The competent clinical instructor, according to the participants, is also an e*ffective communicator* who communicates their expectations to the student, keeps open lines of communication with the student and provides feedback on performance, whether positive or negative.

- *more spontaneous communication you know as the need arises, you know, right after a patient, that kind of thing, you at the end of the day or whatever, just you know, that kind of thing, but then there's also a place for planned communication. I think that's helpful to say we're going to meet you know once a week and this is the time so you make sure that you get to it and maybe you're a little bit more focused on the whole picture of their time with you. Instead of just the spontaneous stuff.* (Faith)

- *As the student follows the instructor's example, the CI must give the student adequate feedback and constructive criticism and maintain a constant and open dialogue with the student to keep them on track.* (Tim)

- *I think competence as a clinical instructor too should include some sort of when you have to you have to be ok with you know, to saying the hard stuff kind of, you know to guide somebody you can't sugarcoat it and you can't you know really be their friend you have to be willing to let them know your clinical decision. You have to be able to – you have to be able to separate yourself from that to say…. Yeah to be objective. Yeah, but then you have to say it like it is – I don't know how else to say that, you know that you can't just sugar-coat it for them to build them up and hold their hand. You're there to – and you're not there to tear them down either, you know? Competence is knowing the difference between the two and then finding the balance.* (Laura)

Key elements for the remaining themes, 2 through 8, can be found in Appendix 11.

Theme 2: "My first student"

When the researcher asked, "tell me about your journey to becoming a competent CI" participants reflected on their past and each of them recounted how their journey started. This start was meaningful to them as they all shared about their first student. Though each story was unique, there were similarities. Many of them described a positive start; one in which they were able to develop competence as a physical therapist clinician or make a gradual entry into clinical teaching before becoming a clinical instructor.

- *I came from India and then I started here at* [facility]- *I agree with [P21]. I had to learn a lot first before a student and so I started I think after three years of working and you know knowing and seeing things from my colleague mostly [P21] having students you know I just kind of um I ought to be a good clinician myself before I would be able to take a student.* (Tammy)

- *Yeah, I mean, there wasn't a ton of clinical instructing that I had done prior to that other than just helping on off-days of other therapists. But I feel like overall two years of experience I'm not saying I was – I had all the preparedness I needed and I obviously was nervous but I think you always will be until you do it but, um, I think I was at a good point and I am learning. I mean obviously I can learn more but two years of experience I was feeling more and more confident as a clinician period. Um so I think I was at a good point to – to help me, too.* (Jacob)

Some CIs began their journey by sharing students with another CI before they independently worked with students.

- *When I was comfortable and I thought I, I'm ok, I can guide, I just wanted to start to have students I started to share students with [one CI or another CI] and then I started – I started to learn, you know, and I learned but again I had shared so I had some experience from them, I learned from them.* (Tammy)

- *No I don't want to be the primary role because one of the things like I don't want to answer all that but I don't know what I'm doing. So that helped when you know when I was with somebody and the sharing part I think it was kind of good…..* (Helen)

For several participants, the journey included a progression from beginner to final clinical experiences, PTA to PT, or filling in for a CI for a few days before taking students. This progression contributed to their competence.

- *I started taking PT Assistant students first. And then I would take the short two or three-week PT students – their first couple years. And then I progressed up to taking final year PT students. So that was over like three or four or five years.* (Arlene)

- *I started off taking students back in 2007 when I stopped floating and started working strictly in acute care. If I remember correctly my first student was a first-year student. She was here for like maybe three or four weeks. And then my second student was an entry-level student, so I had to make that adjustment it was her final clinical…[He later continued] Um, so with each consecutive student, I think I learned a little bit more from them, as well, you know as to how to guide my next student.* (Tim)

- *I started out with um, physical therapy observers that came in and you know touring them through the hospital and introducing them to what I do as a physical therapist and then I started with the two-weekers I think from [program] – I think I had about a year of actual experience in the clinic in rehab before I actually took a student. And during that year I had quite a few observers but then after that I had like two-weekers and then four-weekers and built up to the six-weekers from [program] or seven – 14 weekers for other students uh universities….*(Kelly)

Some clinicians, who had been CIs for more than 15 years, shared their journeys' start as a "sink or swim" type of experience where they were thrown into being a clinical instructor, often because there was no one else willing to do the job. These participants also recounted the fact that they did not even have one year of experience as a physical therapist or any training on how to be an instructor.

- *I had trial by fire. I was out of school for six months when I had my first student. And there was no orientation; there was nothing. Here's a student, they're here for eight weeks.* (Jessica)

- *I pretty much had the same. I had the same thing 'cause I had that student where visitors, and I hadn't even been out a year and she was from Holland for three months. So I think that they, there was no, I've never really had a lot of formal instruction until we had that* [DCE] *came down you had an in-service for us.* (Maria)

- *I had my first student here as nobody else wanted to take the student* [laughter from group]. *And uh student needed a second affiliation to be completed in order to complete the year, too. And I was relatively new here*…(Marilyn)

- *My initial experience being a CI was not good because I hadn't even been out of school for I think six months when I was given my first student. And I felt that it was the blind leading the dumb to try to get through the day. And um, so that started out poorly.* [Later she continued] *I needed to be confident as a clinician first before I felt I could be confident as an instructor. Cause if you don't really feel like you've got your feet under you* (affirmations) *and my first couple students were probably not the best students that could have possibly presented to me so. I should have failed them, but I didn't know that at the time.* (Karyn)

Theme 3: Finding the way

Just as the start of the journey was unique yet similar, so was the continued pathway to competence. Some CIs blazed their own trail, learning from their own experience, while others had guides leading them along the way. Regardless of the journey, all participants in this study shared that the pathway they traveled was filled with many teaching and learning experiences. These teaching and learning experiences contributed to their competence in multiple ways.

All the participants who experienced a “sink or swim” start to their clinical instructor journey reflected on building their competence upon their own experience as a student and what little clinical experience they had at that time.

- *And I have, like I said, I had my first students when I had just been out of school so I was able to draw on my own clinical experiences right off the bat. What worked. What didn’t. I was able to glean from that and apply it*….(Jessica)

- *Just kind of going off of my experience from when I had CIs and what they were you know asking of me and what were they kind of guiding me and took a lot of that um tried to apply it cause I I felt like I had excellent CIs in my internships so um kind of what I learned from them trying to apply it to the students that I have now so*..(Diane)

- *One of the things that helps to be a good clinical instructor is remembering your own experiences as a student. What felt both good and bad and you’re like, ok this worked well from the CI and this didn’t. And use that for your own students.* (Arlene)

- *I think I took a lot of my student experiences with the CIs I interacted with and for me I kind of built off of those you know things that were successful or that I really appreciated as a student I found myself incorporating more of and kind of tailoring it that way.* (Jean)

Participants across the spectrum, in this study, spoke of opportunities they have had to learn from their experiences with students. They then described how they would apply this new insight to the next experience.

- *I may be confident in a lot of different ways but if it doesn’t translate for the student then I feel I have been lacking in some aspect and those are the things I would certainly like to improve upon for the next student in case that happens to be the case.* (Marilyn)

- *But I do think that just like when you’re starting out with patients and you like every patient is like you’re learning from them it’s the same thing. Like you can’t start out being competent because you you know I don’t know like it’s the same it’s the same thing I don’t know – does that make sense? Like as*

you see more patients and you gain more experience well it's the same the same thing. (Allison)

- *Because if you had like a really more of a challenging experience clinical, with a clinical with one of the students then it didn't end so well and then you're like, ok, you can look back and say what could I have done to maybe make that more of a positive experience for like both of us a better learning experience and then you had taken that as well.* (Madalyn)

The majority of participants also shared that their journey included learning from the students and adapting their approach based on those learning experiences. Most participants expressed a desire and need for good feedback from students so that they, as clinical instructors, could understand where they needed to improve. These participants were open to receiving constructive criticism from their students but recognized students were often afraid to tell them "what they really thought" because of the CI-student relationship.

- *I think I learned from the students. The students were giving me feedback either at the mid-term or sometimes the final, and I kept trying to adjust accordingly. And granted, they're not obviously they're not all the same. But if I started hearing something repeatedly, then I realized ok, this is an area of weakness for me, and I need to alter, I, this is, would be helpful to future students. Some of it you recognize is just an individual style. But a lot of times there is a pattern, so I kept having to adjust as I went along thinking ok, I know I'm not very organized but it's important to students. So that helped.* (Maria)

- *I had a PTA that was transitioning to be a PT and that's before I had – she was my first student so I was like, well that's kind of neat. I'm going to learn more from her probably being a PTA after 15 years on the treatment side, and then I can help her out with the eval stuff and I just got this idea in my head that well like, she probably knows the treatments so I'm not going to teach her much there. And I just approached her and I'm like, all right we're going to do this as a team…I think my journey's been just trying to get as much feedback as I can from the students 'cause it's not I don't think it's an equal you know I give them so much feedback….And I like stepping back and just seeing how*

a student does that and I'm like, wow, I actually like how they did that. I'm – I'm going to steal that for my practice. So I feel we learn from them too. (Seth)

- *I guess I would echo too that uh you learn a lot from your students. The more you have that you just um especially I think earlier when I was a CI I learned a lot like at the final eval where it was like, ok, some of these things are making sense but it's too late now! But then it helps to apply those earlier…*(Kevin)

Theme 4: Feeling supported

The majority of participants conveyed the experience of "feeling supported" as being very influential in their journey to competence. Although some of the participants started out with this "sink or swim" experience, they all transitioned to a supportive environment at some point in their career. Reflections shared by many participants centered on colleagues and Center Coordinators of Clinical Education (CCCE), who all contributed to their growth and success as a clinical instructor. Some described their facilities as allowing them to become a competent clinician prior to becoming a clinical instructor. Colleagues acted as role models, collaborators and resources for the participants.

- *I think it's having better therapists in the building and when you see them and how they are as a CI to their student that's a resource right there that's something that I could possibly imitate when I have my own student. Cause that seems to be effective. Or that's a new technique that for my next student might be applicable. I guess just having those people around as resource itself.* (Kendal)

- *[She is] always giving suggestions about how to you know, do things, so um you I kind of take a lot from that where that's what I want to pass on to my student.* (Diane)

- *I think the other thing is I think we have a benefit of working in a large clinic where we have clinical instructors who've been doing this for a long time so*

we can bounce ideas or get feedback from them um and guidance from them as to what we can do to improve our skills as a clinical instructor um and then helping our students get better. So I think having them around has helped us quite a bit. (Julie)

- *Just like being able to ask and you know and even observe what they do with their students I think that's where I've learned a lot you know like oh, that's what* [P27] *does, that's what I want to do* [laughter from the group] (Brittany)

Support from the CCCE included mentoring, providing resources and opportunities for the clinical instructors.

- *Well, and again, that's the reason why we have the CCCE that, ok, I'm encountering this difficulty, I have somebody to ask or discuss this with and resolve the issue of concern, or how can I deal with so-and-so. That's where we take students and a collaborative approach from the whole department would certainly help.* (Marilyn)

- *And* [CCCE] *does a lot um every time we get a student he reminds us with paperwork about you know don't forget orientation, don't forget even detailed things like you can take them to lunch um that's really helpful.* (Peggy)

Theme 5: A fork in the road

In each of the participants' pathways, a similar "fork in the road" was CI credentialing. This fork occurred in different places along the journey. Some participants chose credentialing prior to taking their first student, others instructed a few students before becoming credentialed, and others who were not yet credentialed, expressed their plan to become credentialed in the near future. Most of the participants with over ten years of experience as a CI became credentialed after being a CI for many students. Neither of the two non-credentialed CIs with over twenty years of CI experience, mentioned plans to become credentialed. Follow-up with both of these CIs revealed that although, they see the value of the course, they felt the cost and the small percentage of time they spend as a CI do not warrant the two day CCIP course.

Instead, they believed their time and money were better spent on a clinical related continuing education course.

- *There are several reasons why I haven't gone to a CI credentialing course. I can totally appreciate the effort by APTA to try to standardize CI requirements. And, of course, I am all for training. That is important for growth……. There have been restrictions in educational allowance. I think we get $500 right now. At times, we haven't been allotted anything. So, I would rather use it for a course that is clinically based. I take one student a year so although I enjoy doing that, it is a relatively small part of my practice.(Maria)*

Participants, in this study, gave mixed reports of when they felt the CCIP was most beneficial. The participants who took the course prior to working with their first student recognized they still had a lot to learn once they worked with their first student. All but one of the participants felt that the CCIP course was helpful in their journey and it gave them tools they could use immediately and reference in the future.

- *I had the chance to go to the APTA CI course before I had my first student which was helpful and yet I don't really think that I understood what I was going, what I, kind of what I was getting into or whatever until I had my student. And then I tried to, I mean it was good because I had a resource to go back to try to figure out about how to set the goals and use those resources, but I, I don't know, I still feel like you don't really know until you do it the first time what it's going to be like. I don't know that I was competent, per se [laughter from group], nobody checks that I was competent, but I did take that course ahead of time which was helpful.* (McKenzie)

- *I had a student and then I was able to attend the CI certification, so I was, I was learning more of what should have been expected of me before I had my first student. When I had my student after that, I had a better resource, like [P5] said, of like I should be focusing more a little be more on this. So I felt like I was a better CI after I attended the certification*. (Kendal)

- *In the very beginning, the CCCE mentored me with guidance so that helped and then she encouraged me to go to the CI course – that was before the [APTA] credentialing course. There was a couple of them I actually went to over a few years there before the credentialing course came out. And then I*

went to that. And all that helped build up to where I feel fairly competent [laugh]. (Kelly)

- *Yeah, it was actually having my experience with the students that helped me make it through the (laughter) the course because it is that interpersonal like how you feel about confrontation how you feel about being a help giving helpful criticism versus just making them feel that you're being overly critical and shutting them down and being not as receptive to learning*…(Madalyn)

- *I think after I did that class um, it helped me think of this whole experience as a more objective and less emotional. before that it would be just like a lot of emotions and you know so that I was able to really like take that process it was just more of clarity of like what should be the you know communication you know what kind of system should I have and you know expectations and both from the student and from my side what they are expecting what I am expecting. So things became a little bit more objective and that helped me kind of you know bring my own emotions bring that down a little bit. So that helped me. And I think honestly that was my biggest gain from that class. That I was able to think the whole process out a little bit better. And I'm not the most organized person you know so for me to get that was kind of big.* (Helen)

Two non-credentialed participants, who had over 15 years of experience, reported participating in other types of training, including in-services and continuing education courses focused on clinical education which they found beneficial.

- *…at one of the SOPAC conference they had a a little seminar on the millennial student. Um and that was helpful because I – I knew I had seen a change in the students that were coming through and I thought I, just because I was getting old, (laughs) but apparently I wasn't the only one that noticed that millennials were different in the way they approached their learning because it was just – it's a different time and that was helpful too. So I think that the more information that we can get from different resources it helps us.* (Maria)

When asked what resources assisted them in becoming competent Participant 1 stated:

- *[CCCE] put together this in-service that many many many people attended about – um the topic was ideas to advance clinical training um and it included things like writing specific goals, and incorporating specific learning activities.* (Faith)

Theme 6: Barriers to achieving competence

All the participants in this study identified obstacles that interfere with or prohibit their ability to perform as a competent clinical instructor or at a level they desire. Some examples they gave include, limited knowledge of the academic program's expectations, curricular changes, availability of resources, the academic preparation of students, limited communication from programs on students' personalities and learning styles and limited to no warning prior to sending "problem" students. Some CIs also stated the length of the clinical internships impeded their ability to perform well as a CI.

- *Yeah, I think, I mean, I always think um sometimes I get a student I'm like, man it would be really nice if the school, I mean they send you out the email that tells you everything that the person has learned but it's been now like ten years since you graduated and trying to remember what all those courses mean, and you know, sometimes I'm like man I wish they would just come and give us a brief overview of what they are presenting in some of the classes or um I guess there's times when you have a difficult student and then you do contact the facility and like they know but they didn't bother to tell you and that's kind of frustrating because they actually might know good ways to and I'm sure part of it is they don't want to bias you. But if they could help you figure out better ways to communicate or what some of those strengths and weaknesses are before they came then you could cater to those instead of figuring out mid-term that – hopefully before that*….(McKenzie)

- *… I know they try to protect probably to a certain degree that the student's, what do you call it, keep that kind of confidential. …. I kept trying to kind of pull information from this student but I just couldn't get anything out of her – good bad or otherwise. …. she was just a very reticent kind of person ….. So when I talked to* [Program] *you know that's when I got "well, yeah, we know that"* (laughs from the group) *… so …. how would you suggest you know in your experience you've had her for a bit now what's the best way to be able to*

pull her out of herself so I can understand what she needs because I just couldn't get anything out of her. (Maria)

- *Its hard too, because each school is so different on the length of clinicals when the clinicals occur within their education and I think that would be most helpful for the student and for the clinicians the CIs if it was a little bit more standardized almost.* (Madalyn)

One less experienced non-credentialed participant seemed to see credentialing as a necessary part of becoming competent as a CI and felt like a "renegade" because she was a CI prior to credentialing. She implied the availability and timing of the course was a barrier to becoming credentialed and therefore a barrier to being a competent CI.

- *I know for me and I don't know if it's just that it's not that well-advertised but I feel like there are very few courses CI credentialing courses and the ones that you know about I mean the ones that I found – when I realized I missed the one at – the local one for – that would have been local for me, just keeping it generic – it was the next couple ones were in Colorado, in Florida, in Maine – I mean, they were very far away and there was no way I was going to fly out to take a CI course and especially when you are not reimbursed for it, so it's for your own personal gain and I feel a little renegade having a student without having that right now because I feel like maybe I'm supposed to have had that*… (Laura)

One of her colleagues reassured her that they were all CIs prior to becoming credentialed. She continued to share that availability of the CCIP was a barrier for her. And, after listening to further discussion from her credentialed colleagues about their perception that the CCIP facilitated their journey to competence she stated:

- *I'm sure there are like resources that are about being a highly-effective educator or something and those might be good but I don't think as far as a clinical educator there's a necessary resource. I think you can utilize other people's experiences as your resource just (affirmations). Asking them how they did it or what they did or you know what do you do when you have a student. But I think as far as like a resource something that's improved here competence clinical instructor, yeah, you said the course.* (Laura)

Some participants indicated that the volume of patients, either low or high, can negatively impact their ability to provide students with good learning experiences. Additionally, if there are not a wide variety of diagnoses for the students to practice on, they as CIs felt they were not as competent.

- *…if you have a really low census at that particular time that could also be a barrier cause you're not being able to provide the variety of experiences that the student needs. But if you have a very high busy census then you kind of feel rushed with your patients a little bit, you feel like you can't really take the time that you need to take with your students to relate to them what you need to.* (Tim)

- *I've definitely apologized to my students because 80% of my caseload is geriatrics so that's something that's out of my control. Um but it can be very – you know it's not a very diverse orthopedic clinical. It's definitely one of my barriers.* (Victor)

The majority of participants also expressed time as an obstacle. They discussed the continuous burden of productivity demands, which remains even when working with students, leaves them feeling like they do not have enough time to teach the student as well as they would like.

- *I had weekly worksheets that I had to complete and we'd meet for at least an hour every week and I feel like I have gone away from that because of productivity and I think that is very sad* [affirmations from group]….. (Donna)

- *Yeah, my biggest barriers are time. You know. Time designated, like [P14] was saying you know with a student because you can just get a better feel of how they are doing sooner rather than later like at mid-term. It's like, oh, I didn't realize they were struggling with this and its like I would have – if I had that time daily or weekly…* (Nancy)

- *Yeah, the demands of your time um, we've given some examples of where it's nice to be able to share some you know some extra time with students if needed. We don't always have extra time. Extra time is becoming scarce. Um cause every your time is accounted for and I think we're fortunate too, and maybe it should have been said before, I do think that we're in an environment where we do have administration that is very supportive of our*

clinical education program cause they do – they do allow us to do some things, to take the time for orientation, to take some time and let us take students to lunch and things like that um so that helps us but it's a dual – they're supportive but you know it's – the same administration also that requires the productivity standards that uh don't counteract the other help but it makes it a challenge, for sure. (Kevin)

- *…along the lines of time I feel like sometimes in order to get everything done and – and explain everything as thoroughly as I would like to you know I – I guess it's under the that heading of productivity cause I feel like I only a certain amount of time and I don't want to be till 8 o'clock at night you know finishing my notes cause I was explaining but I want to be thorough as well so. Having some time maybe in that day like when we have students* (Brittany)

Many also shared frustrations with the time it takes to complete the Clinical Performance Instrument (CPI) and how on shorter rotations there is just not enough time between the start of the clinical, midterm and final to justify them completing the CPI twice.

- *Yeah.* [CPI] *would be a barrier. I mean, we don't have any choice. And I love having students. So I go for it but I would certainly like it to be a lot more concise to be able to focus on specific points rather than so much more in detail and then be able to focus more on treatment aspect that would certainly be very very helpful.* (Marilyn)

- *I guess the barriers to the CPI when taking only a four-week student, a five-week six week, how um it just doing the CPI after two weeks, and having to repeat it, and how much time that eats up. I don't necessarily look forward to having to eat up so much time when the short period of time you feel like they don't necessarily you know get a lot of experience and aren't able to fill out half the CPI cause you haven't had the time or experience or situations to meet the criteria um so I don't know if I would have a different understanding if I took the credentialing course or not? In that. But I just feel a lot of students just don't score very high, and again I'm having to do that at two weeks and another two weeks it's challenging. Takes up a lot of time for only a four-week student.* (Diane)

Theme 7: The ah-ha moment

When asked when they first acknowledged themselves as competent, participants in each focus group responded in the same way: with laughs that sounded insecure or comments like “I never have.”

- *Like your first student you’re like oh I’ve got this, no problem. And then and that was even doing the course first, right, I think you just kind of follow. I don’t know. I did the course and then I tried to do everything that they recommended like setting the goals and meeting and I’m like ok I can do this. And you’re also not that far out of school so you remember the experience of being in that position and I think you can communicate more closely with that person because you are almost the same age anyway um which is kind of funny and then and then you get to and then like maybe two students later you’re like man, I have no idea what I’m doing. This feels so strange or maybe you have a student that’s a little more difficult and maybe they need more help something different than what you’re used to um and then you’ve I guess questioned your competence. I wouldn’t say that you ever maybe feel competent but I think there are moments where you feel like you’re doing well in that role versus moments where you’re like man I don’t know what to do…* (McKenzie)

- *I tend to think everything I know is just common sense and everybody should know it but when a student shows up and they know so little, I’m like “wow I do have things that I can teach them”* [laughter from all]… *We know we’re competent when* [Interviewer] *comes to interview us* [laughter from all] (Arlene)

- *That word is a little scary!* [laughter] (Nancy)

The less experienced clinical instructors were not the only ones who seemed to question their competence. Even participants with over fifteen years of experience made comments that revealed their own struggle with the question of competence.

- *I don’t think I’ve ever felt that way! I’ve been doing it for a long time. I’m not saying how many years.* (Maria)

- *I'm not claiming competence [laughter] so I just want to put that out there since we had to answer the question – you asked that question and I was like "what is the meaning of competence?" I – we're still working on it, I guess*. [laughs from group] (Ethan)

Even though many expressed concerns about competence they still shared their "ah-ha" moments when they realized they were moving the right direction toward competence. As the interviewer probed deeper into the idea of being competent she asked participants to describe an experience were they acknowledged that they were competent as a clinical instructor. Nearly all participants shared experiences in which their competence was confirmed most often by students, peers and DCEs but also upon self-reflection.

- *my "ah-ha moment" was, I won't name names uh, that I got a call and someone asked me to take a student that was failing other places and I thought to myself, well number one, they're either really desperate and they're just taking anything they can get ahold or they think I'm ok at this so maybe I'm ok at this* (laughs). *I'm going to stick with that story.* (Karyn)

- *I wouldn't say I've arrived, but, I think as a CI, when you get the note from one of your student's that's states: "I'm hoping to be half the CI that you have been to me" – it's nice to hear.* (Kendal)

- *…. the other thing that is a little bit objective is just feedback on the evaluations. You know. And if it's I don't know if we have totally honest feedback from students because you know they want us to think positively of them too but but that tells you something. Thank-you notes or just evaluations what they say on the evaluations that means something. If it's positive lets you know you did ok.* (Faith)

- *I think I was having um my first third year student so they were here for a longer period of time and we could really establish kind of short and long term goals and she wasn't very confident in um orthopedic physical therapy so we spent time at the end of each week practicing different techniques with her and then by the final she had met those goals that we had established along the way for different very specific orthopedic techniques and skills and so I thought that was good. Um feedback even to me that taking the extra time to*

make sure it goes along the way and practicing with her made a big difference and she felt a lot better about orthopedic physical therapy after that. (Peggy)

- *If I get you know kind of uniform um feedback from all the other co-workers it just kind of helps me like ok, we are on the right path. And I'm not like totally off-track or ignoring something really you know basic.* (Helen)

- *I guess positive feedback from a DCE um with a student I had last year or something and then she's like, oh, I just wanted to really thank you for giving the student a great experience and she's really had an awesome time and you know just saying nothing but good things of how I did. And I was like, oh, I guess I did a good job then you know*…(Seth)

- *I had a pretty tough student. Student before the last student I had and um you know, it was her last clinical, and it just seemed that she was very very green to the clinical setting and and I felt that I was successful in getting her to be entry-level at the end of everything and I felt that I was confident in my ability to teach her how how to function in a in a clinical setting after I was after everything was done with her. So I guess that particular experience made me feel competent.* (Tim)

Theme 8: "Ongoing road"

No matter how their journeys' began, the training they've had, the obstacles they've overcome, or their current level of perceived competence, a common thread across focus groups was the understanding that the road to competence as a CI is ongoing. There is always more to learn.

- *It's an ongoing road.* (Jean)

- *…it's kind of just in that category of the more you learn the more you realize you don't know um because there is always just so much to learn about..(Faith)*

The majority of participants discussed the feeling that, because the knowledge base is always changing and each student is so different, a CI starts over with every student and reestablishes competence.

- *But, you know, students change so much. You know, even in, in groups, you know, you have the kind of millennials that were coming in and it you could kind of sense a change in their learning styles and so I think you know technology has changed but because everything has changed so much I think it's hard to – I don't think I can ever say I've arrived because the student the next student will probably surprise me. You know, how bring in a totally different skill set and or have a different set of preparation and there you go again, you gotta kind of learn as you go how can I make this experience for this student optimal.* (Maria)

- *Yeah, so will we will I ever get to the point that they'll say yeah, I'm a good competent CI – I don't think so cause I agree with* [P3] *it's always a challenge the what the next student will bring to you. And I think that's just part of learning in education cause if you get complacent how you think you are and then that I don't think that's beneficial to your student.* (Kendal)

- *Yeah, I mean part of me wants to answer that by saying you know you start with a clean slate with every new student so it's almost like you're re-establishing your competency with every student that comes*…(Kevin)

Many participants expressed their desire to continue to learn and pursue growth as clinical instructors.

- *I do you wish there were advanced continuing education on being a CI rather than just a one-time course and once you do the course essentially it's just you know – even if they just did updates on um and maybe there's more I haven't seen but on education or communication.* (McKenzie)

- *I haven't taken this [CCIP] course yet but I would like to take that hopefully this year is my goal so that I can better help them with completing the CPI…* (Diane)

- *I'm interested in that advanced uh CI course that they have out after a few more students maybe I'll try to take that 'cause I liked how they brought in the problem-solving of, ok, your student is not progressing. Now what do you do? What action plans do you have to come up with and you know, that goes through any – you know even your own action plans are like, wow, I'm really bad at knee evals. What am I going to do to get better at this knee stuff? Or I cannot stand someone's shoulder. I better take a few classes on my shoulder.* (Seth)

- *Even um snippets. I don't know if that like a newsletter or um just you know an article or recording webinars or just small things that just kind of you how continuing education rejuvenates you anyway and so. You get the knowledge plus you get the passion back.* (Faith)

Overarching Theme: Empowerment

Following detailed review and reflection of the themes that emerged from the data the overarching theme of empowerment became clear. As all five focus groups reflected on and discussed the meaning of clinical instructor competence their ideas, examples and stories pointed to their ability to empower students to be physical therapists as well as empower themselves to be successful clinical instructors.

The term empowerment in business is defined as "a management practice of sharing information, rewards, and power with employees so that they can take initiative and make decisions to solve problems and improve service and performance. Empowerment is based on the idea that giving employees skills, resources, authority, opportunity, motivation, as well holding them responsible and accountable for outcomes of their actions, will contribute to their competence and satisfaction."[182] This overarching theme of empowerment was threaded throughout all eight themes. As participants shared their experiences it was clear the journey to competence was empowering them with the ability to make a difference in the profession and then in turn they endeavored to empower their students to do the same.

The Metaphorical Journey to Clinical Instructor Competence

We use metaphors throughout life to help make sense of our world. Similarly, Miles et al.[160] advocate the use of metaphors when analyzing qualitative data. Metaphors bring complexity and richness to the findings and allow data condensing and

pattern-making.[160] Metaphors can be presented through written descriptions or conceptual visual aids.[163]

In this study, the metaphor of “the journey” became clear to the researcher during data collection and analysis. Participants described their experiences of achieving competence as a journey with a starting point, a pathway, barriers, support and a seemingly endless path. The metaphor is visually represented in Figure 1. The image depicts a forest with a river running through it and different pathways. The starting point represents the theme of “My first student”, every participant began with a first student and that first experience had meaning significant enough that CIs remembered the experience. The rushing river represents the unsupportive turbulent feeling participants felt by participants who had a “sink or swim” first student experience. The bridge represents the support that many participants felt from their employers, colleagues and CCCEs as they began their journey. The pathway beyond the bridge represents the teaching and learning experiences that are essential to becoming a competent CI. The fork in the path illustrates the choice to pursue credentialing or not and the obstacles in the paths depict the barriers to becoming competent that participants shared. The “ah-ha” moment on the path serves as a reminder that competence can be achieved, and is often only realized by CI’s through affirmation from others. The appearance of an endless path portrays competence, according to participants, as a process of continued development and pursuit of learning and growth.

The visual representation of the metaphor has limitations that should be considered by the reader. Participants shared that barriers to competence occurred throughout the journey, not just in a few locations as depicted. The visual

representation of support with the bridge only represents one location of support that in actuality occurred throughout the participants' journey to competence. The fork in the road of credentialing actually occurred for some participants at the very start rather than further into the journey. Finally, the "ah-ha" moment may have occurred in different locations in the journey.

Figure 1. The Journey to Clinical Instructor Competence

RESEARCHER OBSERVATIONS/REFLECTIONS

As previously noted in chapter three, self-reflection by the researcher acknowledging his/her background, experiences, biases and the potential impact these may have on the study, is an essential component of hermeneutic phenomenology.[148,154-157,168] Following are the researcher's reflections and observations as recorded in her field notes, throughout data analysis and write-up of the results in the following paragraphs. Additionally, the researcher's emotions during the interviews and her reflections on the participants' view of empowerment are shared.

As a former DCE, I was very familiar with all but two of the twenty-nine participants. This familiarity allowed me to listen with a sense of trust in their responses and I believe brought them a sense of trust and confidence in me as a moderator. As I listened to each participant's reflection of their journey to competence and the meaning of competence as a clinical instructor, I felt a deeper level of respect for each of them. This deepening of respect came from the expression of commitment and dedication to students success despite the challenges that each of these clinical instructors face. Additionally, their intrinsic motivation was simply inspiring.

Across all the groups, the stories shared revealed a profound level of intrinsic motivation and desire to give back by serving as clinical instructors. It was encouraging to see all of the participants continue to serve as clinical instructors despite the very real pressures of productivity in the clinical setting. All of the participants appeared humble in their approach to instructing by seeking feedback from students, DCEs and colleagues, as well as acknowledging the need for continual growth as a CI. I was very surprised to hear so many of the participants, even those with many years of

experience, express a sense of insecurity in their competence as a clinical instructor. I questioned if this insecurity comes from the absence of a definition of clinical instructor competence. If one does not know what standard they are measuring themselves against then how can they know where they measure? It's no wonder there is insecurity in their minds.

Despite the absence of a definition of competence the clinical instructor participants all expressed similar expectations of the meaning of competence. They clearly hold themselves to a high standard, as many of their expectations are synonymous with the recently defined 'Expert CI'. It is possible that some of the participants are indeed expert CIs, not just competent. I felt a sense of pride in these participants as they had all worked with students from my program, Andrews University, and many of them are AU alum as well.

As I listened to their stories, analyzed the data and reflected on the study the overarching theme of empowerment became clear to me. Clinical instructors empower themselves by having the intrinsic motivation, self-efficacy and capacity to facilitate positive outcomes in themselves and students. As mentors, role models and the providers of experiential learning for their students they empower them to succeed and become excellent physical therapists.

It was interesting to hear the different perspectives on credentialing. One of the seasoned CIs expressed concern that one of the participants in the room was a CI and not yet APTA credentialed. The seasoned CI stated her opinion that all CIs should be APTA credentialed prior to taking any students. This CI felt they had to be intentional about providing extra support for the non-credentialed CI and opportunities for the

student to observe other credentialed CIs during their clinical experience. The CCCE, who was in the same focus group, expressed her opinion that sometimes having a few students prior to becoming credentialed "can open your minds to questions and things to look for support in your education at the course"(Kelly). The non-credentialed participant did express her desire to become credentialed, she just had not found a course that fit her schedule or location. Because the majority of participants were from a system that encourages credentialing it was not surprising to me that this was an opinion.

During the analysis and write-up, I had to work hard to separate my own experience and bias so I could see the data clearly. I naturally saw the data and results through certain lenses because of my experience as a DCE and a certified trainer for the CCIP. The inquiry audits and peer debriefing with an expert in qualitative research enabled me to reflect deeper on the impact my biased lenses' had on my view of the data and findings. For example, because of my experience in teaching the content of the CCIP course, I was seeing and interpreting the descriptions of the teacher as a parallel to how the CI practices as a clinician; even though on further reflection that is not what the CI was saying themselves, it was my interpretation.

SUMMARY

Thematic analysis of the interview data revealed eight themes and an overarching theme that represent the participants' experience of becoming a competent CI. Participants provided in-depth descriptions of the meaning of the competent clinical instructor competence as a skilled clinician, teacher, mentor, reflective learner,

collaborator and effective communicator. Participants also shared the journey to competence as a multifaceted process that is continual. The start of the journey was significant for each instructor as they discussed their “first student” and then shared how support, teaching, learning and barriers filled the pathway to competence. Participants shared varying views of CI credentialing and the role it played in their journey to competence. Most participants were hesitant to call themselves competent, but each shared “ah-ha” moments when they realized they were on the right track. Finally, participants identified the journey as one that is ongoing and constantly changing as the demands and expectations of clinical instructors, and the needs of students change.

CHAPTER 5: DISCUSSION

INTRODUCTION

This chapter includes discussion and interpretation of findings in the context of the existing literature in the health professions. Implications of the findings, recommendations for future research and limitations will also be presented.

DISCUSSION

Clinical instructors (CIs) play a fundamental role in the clinical education component of all physical therapist education programs. The effectiveness of clinical instructors in physical therapy and other health professions is a well-published topic. Many authors agree on traits that lead to success as an instructor, and traits that may result in less than optimal experiences. The Commission on Accreditation in Physical Therapist Education (CAPTE)[2] expects and requires proof of competence for CIs associated with accredited programs, yet there is no definition of clinical instructor competence and there is a dearth of information on the journey of achieving competence through the eyes of the instructors. Therefore, this qualitative, phenomenological inquiry fills the gap by aiming to describe and interpret the lived experience of achieving competence as a clinical instructor, from the perspectives of the clinical instructors themselves. The guiding questions in this study were:

1. What is the meaning of “competence” for clinical instructors?
2. What is the lived experience of achieving competence as a clinical instructor?
3. What meaning do these experiences have for CIs?

Of the twenty-nine participants in this study, 37.9% of the participants possessed a DPT degree as compared to 15.2% in a 2008 study by Recker-Hughes et al.[14]

Additionally, 79.3% were credentialed CIs, 44.8% had a specialty certification, and all CIs had more than 1 year experience as a clinician before becoming a CI, as compared to CAPTE's 2012-2013 annual report of 48.3% credentialed, 22.4% holding a specialty certification, and 4.7% with less than 1 year of experience as a clinician before becoming a CI.[33]

Clinical Instructor Competence

The participants in this study described the competent CI as a skilled clinician, teacher, mentor, reflective learner, collaborator and effective communicator. These attributes, working in harmony, create a competent CI. These findings resonate with characteristics of effective CIs categorized by Recker-Hughes et al[41] as interpersonal skills/communication, professionalism, instruction/teaching, and evaluation/performance assessment relative to clinical education evaluation tools. Additionally, the findings of this study are similar to the "Clinical Instructor" guidelines established by the APTA House of Delegates indicating that the clinical instructor will effectively demonstrate certain skills.[40]

Competence in the area of clinical practice is an expectation CAPTE holds for all clinical instructors.[2] Participants in this study indicated that competence in clinical skills is a prerequisite to competence as a clinical instructor, but that clinical competence alone does not equal competence as a CI. Similarly, Recker-Hughes et al[41] recently advocated for the importance of CIs to demonstrate skilled clinical practice by providing patient focused care that is outcomes–oriented and evidence-based. Additionally, it has been found that as CIs use evidence-based practice they demonstrate a commitment to

lifelong learning and help students develop clinical rationale for treatment while integrating current research.[73]

The combination of pedagogical skills and clinical competence have been found to have a tremendous influence on students.[83] Participants in this study resonated with these findings indicating a primary role of the CI is being a teacher. The participants' reflection of the characteristics of a teacher echoed the findings of many studies on effective teaching behaviors including the need to have a sincere desire to teach, knowledge of the content, the importance of establishing a safe learning environment, fostering critical thinking skills, teaching reflection and self-assessment as well as evaluating and assessing the students' performance.[9,41,45,48,54-59,61-64,69-71]

Participants in this study emphasized the importance of creating a safe learning environment for students. Creating a caring environment was also a teaching strategy used by experienced credentialed CIs, according to Greenfield et al.[105] Participants in this study indicated adaptation according to student needs by recognizing personality differences then modifying the CIs approach as well as adapting the level of questioning to students' needs is an essential component. This echoes the results of Kelly's[9] case study of the exemplary CI in adapting the experience to the student. Other authors support the need for flexibility in teaching style according to student learning style and situational needs.[45,65-67] Additionally, engaging students with varying levels of questioning is also supported by many authors.[9,41,48,64,183]

The majority of participants in this study, described how they examined and evaluated students learning styles and performance, developed a diagnosis for the learning needs including strengths and weaknesses, established a prognosis by setting

goals with the student and evaluating their teaching techniques, applied interventions, re-evaluated and finally reviewed the outcomes of the entire experience. Through her lenses as former CI, DCE and currently CCIP Trainer the researcher saw these methods of teaching, for participants in this study, as components of the Patient Client Management Model.[89] This same reflective technique and approach to problem solving was found by Buccieri et al[20] in the study of the expert CI. The years of experience as a CI for participants in this study ranged from 6 months to 24 years, so it is unlikely all were expert CIs.

Participants in this study did not discuss the *APTA Core Values*[184] as a component of competence per say. It was clear that some of the characteristics they described are directly related to the *APTA Core Values*[184] and the sample indicators. In the mentor role, participants shared examples synonymous to the core values of altruism, integrity and professional duty. The reflective learner assumed responsibility for their learning and change, as well as recognized and understood their personal limitations; these are indicators of the core values of accountability and excellence. The collaborator participated in collaborative practice to promote high quality outcomes, which is also an indicator of the core value of excellence. Finally, as an effective communicator, clinical instructors demonstrated elements of accountability and compassion/caring core values. Social responsibility was the only core value not directly supported by the data in this study. Overall however, competent clinical instructors embody the APTA core values. Modeling *APTA Core Values* as a demonstration of professionalism is promoted in the recent position paper on the essential characteristics of quality clinical education.[41]

Only one participant in this study indicated that CI credentialing should be required prior to becoming a CI. All other participants discussed qualities and skills rather than credentials which is consistent with the findings of Wetherbee et al.[76] who summarized the *Standards for Clinical Instructors* model as qualities rather than credentials. Likewise, Recker-Hughes et al[41] were of the same opinion in their recent position paper in the 2014 Supplement Journal of Physical Therapy Education. After a comprehensive review of literature, reflection and dialogue of shared experiences the authors recommend the following baseline qualifications of CIs: (1) licensed PT in the state in which the clinical education experience occurs, (2) demonstrate competence as a clinician, (3) practice in a legal and ethical manner consistent with the *American Physical Therapy Association Code of Ethics*[120] and governing laws and regulations, (4) demonstrate a desire to educate students, and (5) display evidence of teaching skills. Unfortunately, this author group did not include clinical instructors rather consisted of three PT professors/directors of clinical education, one PT manager, and one director of PT/CCCE. It is likely that these authors served as CIs in the past but that was not made clear in the article.

The Journey to Clinical Instructor Competence

Sharing the start of their journey was important to participants. There was significant meaning to their "first student" as all their reflections of the start of the journey centered on their first student experience. An absence of standardization in requirements for clinical instructors brought variations of their journey's start. Some participants described a gradual start to becoming a CI, some shared their first students with more experienced CIs, while some were just "thrown" into being a clinical

instructor. No studies were found in the physical therapy literature that relate to beginning experiences of CIs. There is literature, however to support the move toward preparing students to be future CIs. The variations in the journeys in this study seem to support initiating the preparation to be CIs in physical therapy programs so there is a foundation and knowledge of resources no matter how their CI journey begins.

Participants in this study described the pathway to competence as one filled with many teaching and learning experiences. This is supported by Plack[185] who found clinical instructors and students alike reported learning in the clinical environment was supported by their past work and clinical experiences. Participants with a "sink or swim" start, reported building on their own experience as a student and from behaviors previous instructors modeled to them. Those who reported this difficult start were among the participants who had over 15 years of experience as a CI. Currently, CAPTE Evaluative Criteria requires all curriculum to include content and learning experiences that teach students how to effectively teach and educate others.[2] It is possible that this beginning foundation of teaching contributes to a CIs journey to competence, especially for those who find themselves "thrown in" to being a CI.

Experiences shared by participants in this study showed intellectual humility which is consistent with the APTA Core Value[184] of excellence. In the stories they shared, their intellectual humility was displayed by being humble when given feedback, recognizing that they did not know everything, listening respectfully to learn, and using their knowledge to assist others. These indicators are consistent with the meaning of intellectual humility.[186] This intellectual humility and the practice of self-assessment and reflection lead to participants in this study learning from experiences and making

change for the future. Participants' reflective nature and willingness to learn and apply appears to significantly impact their journey to competence in clinical instruction. The willingness to seek and receive feedback and the desire for continued self-improvement are essential behaviors supported by other studies as well as the APTA PT Clinical Education Principles.[6,41,73]

Peer coaching has been found to bring a broader range of hypotheses, thoughts, more confidence and less anxiety when students evaluated a simulated patient.[187] For participants in this study, the feeling of support primarily came from colleagues and CCCEs; they also appreciated and desired feedback from colleagues and mentors. Some participants mentioned DCEs and consortia as sources of support. Interestingly, no mention was made of paper resources such as the APTA Guidelines for Clinical Education,[5] Physical Therapist Clinical Education Principles,[6] and Core Documents.[93] Other studies have pointed out the importance of consortia and DCEs as a source of support for the development of clinical instructors.[41,99] These studies however, did not include clinical instructor participants.

Feelings of support were not initially present for participants in this study who started their journey with a "sink or swim" type of experience. These participants had to empower themselves to seek support much like an occupational therapist new graduate who shared her viewpoint a commentary article about her process of preparing for her future role of Field Work Educator.[118] Her journey included an informal literature review, interviews of seasoned colleagues, and Web searches. She found resources within her clinic and through the profession to be helpful in identifying areas of strength and further development. She also sought out mentorship both on-site using informal training and

through the profession by means of formal training. The insight she gained from experienced colleagues included three themes: (1) practice positive communication skills, (2) Remember students are unique and not meant to be exactly like you, and (3) organization and time management are essential.[118] These insights are consistent with the findings of this study. While personal empowerment is important for CIs, the findings of this study indicate CIs have a lack of knowledge of available resources or do not view these resources as a meaningful part of their development of CI competence.

Along their journey to competence, clinical instructors were faced with a choice of pursuing APTA clinical instructor credentialing or continuing their growth, but as a non-credentialed CI. The majority of participants in this study were credentialed or desired to become credentialed in the near future. CI credentialing is not required, it is voluntary. Additionally, there are no restrictions on when the credentialing course can be taken. Participants in this study took the course at varied times in their journey. Some took the course prior to working with students, others had a range of experience as CIs before taking the course. Overall, participants felt the CI credentialing course was beneficial but had varying opinions on the ideal time to become credentialed. Two very experienced CIs chose not to become credentialed as they preferred to spend their time and money on clinical related courses. Both acknowledged the content of the course appeared to be valuable, but when faced with the decision they felt a small percentage of their time was spent as a CI in comparison to time as a clinician.

Four out of the five focus groups in this study were employees from a health system that places CI credentialing as an essential component of their clinical ladder. For these participants, CI credentialing is expected and part of the culture. During one

of the focus groups, group dynamics indicated one participant was under peer pressure to become credentialed. In a different group, one participant viewed herself as a "renegade" because she had not become credentialed prior to being a CI. For many of these participants the culture and expectations of their employer may influence their view of the necessity of credentialing. Recent studies however, support the notion that CIs can be effective, actually expert CIs, without being credentialed clinical instructors.[20,41,51,76] Additionally, a recent systematic review concluded the effect of credentialing on clinical faculty is inconclusive.[108] In fact, the APTA House of Delegates Guideline for Clinical Instructors document does not list CI credentialing as an expectation.[40] This is consistent with the current study as participants did not indicate credentialing as a requirement for competence.

Participants in this study identified several barriers to achieving and maintaining clinical instructor competence. Those barriers centered around academic expectations, curriculum, availability of resources, communication from academic institutions about problem students, length of clinical education experiences, volume of patient load, variety of diagnoses, student performance and time. Participants' description of time related to productivity expectations and time to complete the Clinical Performance Instrument. Similarly, Plack[185] identified barriers to student learning in the clinical environment. Clinical instructors reported fast-paced or slow-paced environments were barriers to learning in addition to students' negative past experiences[185]

The majority of participants in this study felt that productivity demands placed on them by their employer have significantly impacted how they function as a clinical instructor. Several participants stated they felt they were not able to practice as

competently as a CI because their teaching time with students is limited to moments during or briefly between patient care rather than scheduled one-on-one meetings times. Several participants explained their employers' productivity expectations of them are still the same with or without a student. A study conducted in 1995 indicated overall productivity and direct patient care increase when CIs had students versus without students.[188] However, no recent United States based studies were found on this topic and these results are no longer contemporary due to changes in reimbursement and student supervision. Many also indicated the write-up of the CPI is time consuming and often done "off the clock" which they felt was a barrier.

One final barrier related to time was the limited time they have available for continuing education in general, not specifically to clinical instruction. This limited time caused them to choose between continuing education related to clinical skills versus clinical instructor skills. Other studies have also identified time off work as a barrier to continuing education.[189-193] This barrier was also alluded to in the ACPAT clinical education summit report as participants recommended more user friendly training for clinical instructors that did not require travel.[194]

A surprising result of this study was the discomfort CIs across the spectrum of experience had with the idea that they are indeed competent clinical instructors. Many of them laughed at the thought of being competent and made statements indicating they did not see themselves as competent. This finding is consistent with that of Recker-Hughes et al.[14] who found most CIs felt their knowledge was less than adequate for clinical instruction. They also found CIs with at DPT were more likely to perceive their knowledge as being more than adequate; this however, was not examined in this study.

Perhaps the lack of a definition for clinical instructor competence brings a sense of uncertainty; without a clear expectation, the instructor is left to his or her own assessment of competence.

In this study, the average amount of years as a clinician was 15.23 years and the average amount of years as a clinical instructor was 11.66 years. It appears time alone does not make a clinical instructor feel competent. This is contrary to the findings of Buccieri et al[36] who sought to identify self-reported characteristics which correlated with self-assessment criteria of a CI. A positive relationship was found between self-report of effectiveness and the CIs age, years in PT practice, years as a CI, total number of students supervised, credentialing as a CI and use of the *Guide to Physical Therapist Practice*.[89]

Despite the insecurity participants had admitting competence, with probing from the interviewer, each participant shared their "ah-ha" moment or recognition of competence. This finding exposed the participants need to define competence in order to determine their own competence as a CI. Affirmations in various forms, from students, peers, and DCEs was an important confidence booster for participants.

The theme of the "ongoing road" speaks to the dedication and pursuit of excellence found in the participants in this study. Their recognition of the need for continuous improvement is consistent with the *APTA Core Values*[184] of accountability, altruism, excellence, and professional duty and is tantamount to the APTA Clinical Instructor Guidelines[40] which declares pursuit of learning experiences to develop knowledge and skills in clinical teaching as an indication of a desire to work with students.

In their recent recommendations of standards for CIs, Recker-Hughes et al,[41] suggest continual self-improvement, including pursuit of professional development, is an essential characteristic of a clinical instructor however, did not list it as a baseline qualification. They also note the development of a skilled clinical instructor is an ongoing process that takes motivation and action on the part of the CI but also assessment and support from the academic programs and clinical settings.[41]

Empowerment

As the participants discussed and reflected on the meaning of clinical instructor competence their ideas, examples and stories pointed to their ability to empower students to be physical therapists as well as empower themselves to be successful clinical instructors. This overarching theme of empowerment was threaded throughout all the themes. The term empowerment in business is defined as "a management practice of sharing information, rewards, and power with employees so that they can take initiative and make decisions to solve problems and improve service and performance. Empowerment is based on the idea that giving employees skills, resources, authority, opportunity, motivation, as well holding them responsible and accountable for outcomes of their actions, will contribute to their competence and satisfaction."[182]

Further defined elements of empowerment are *structural empowerment* and *psychological empowerment*.[195-197] Structural empowerment relates to an employee's work environment including access to opportunity, resources, information and support. Kanter's[195] structural empowerment theory maintains an employee's level of structural

empowerment is impacted by the level of access to these variables and in turn, their job performance can be either optimized or constrained.[195,198,199]

Some studies have found a relationship between structural empowerment and the variables of job satisfaction and organizational commitment, which in turn results in better work outcomes.[200,201] Other studies have found empowerment-based leadership training has a positive impact on both leader and staff outcomes resulting in more engaged staff, a healthier workplace and greater organizational commitment.[202,203]

In this study, clinical instructors reported the impact of structural empowerment in the themes of ”*my first student*”*, feeling supported, a fork in the road, barriers to achieving competence* and *ongoing road.* Participants described employment settings that either had positive structural empowerment by allowing them to develop competence as a clinician prior to becoming a clinical instructor or a lack of structural empowerment by “throwing them in” without support. They also described colleagues and CCCEs acting as resources and providing structural empowerment that contributed to their competence. Continuing professional development and the APTA CCIP were viewed by participants as important resources and support network for clinical instructors. Conversely, barriers to achieving competence, such as lack of support from academic programs and employers, negatively impacted structural empowerment.

Psychological empowerment relates to the individual’s self-efficacy, or intrinsic belief in one’s ability to complete a task, as well as the capacity and intrinsic motivation to take action.[204,205] Spreitzer[196] asserts the four intrinsic beliefs that contribute to psychological empowerment are as follows: (1)meaning- similarities between one’s personal values and workplace values; (2) impact- one’s belief that they can make a

difference; (3)self-determination- autonomy and control over one's work; and (4)competence- self-efficacy beliefs that one has the ability and skill to perform their work.[196,202]

In this study, psychological empowerment is threaded throughout the themes of *the meaning of competence, "my first student", finding the way, the "ah-ha" moment* and *ongoing road.* The participants believed that a competent CI has the capacity to take action, as both the skilled clinician and teacher. The participants' description of the competent CI as a mentor, reflective learner, collaborator and effective communicator, illustrates their belief that the CI has an intrinsic motivation to take action. In these roles, they also empowered students by providing opportunities for them to learn, grow and build confidence in their own skills. Similarly, Shellman[204] claims experiential education settings, provide many opportunities for exercising empowerment. Participants' stories about their first student and how they found their way as CIs demonstrated intrinsic motivation to persist despite the difficult start some experienced and the challenges they all faced along the way. They talked about the road to competence as ongoing, revealing an intrinsic motivation toward continual growth. This intrinsic motivation for professional development was also found by Coleman-Ferreira et al[104] in their study of motivational factors for clinical instructors' pursuit of credentialing.

Furthermore, findings suggest that the competent CI embodies empowerment, which can be identified through behaviors such as sharing information, creating a safe learning environment, and fostering autonomy and critical thinking through teaching strategies. These behaviors parallel the professional behaviors expected of all physical therapists described in the APTA Core Value of Compassion/Caring. Although specific

to ”empowering patients/clients to achieve the highest level of function possible and to exercise self-determination in their care,”[184] empowering others is highly valued in the profession.

Therefore, the CIs in this study, empower themselves by being self-motivated, taking responsibility, holding themselves accountable, seeking assistance and accessing resources when needed and they empower students by providing opportunities for them to learn, grow and build confidence.

IMPLICATIONS FOR THE CLINICAL EDUCATORS

The findings of this study can assist Clinical Instructors in understanding their personal journey to clinical instructor competence and provide experiences to compare and contrast to their own. Clinical instructors may resonate with the journeys shared and find empowerment in knowing that they are not alone in the journey to clinical instructor competence. Clinical instructors may also benefit from understanding the meaning of clinical instructor competence as seen through the eyes of fellow CIs. They may be empowered by the description of competence to either recognize themselves as competent or see the skills they need to develop to be competent. In everyday practice as a clinical instructor, there may be a lack of awareness of the intricacy and depth of his or her own lived experience of becoming a competent CI. Participants in this study reflected deeply on the lived experience of achieving competence as a clinical instructor, which may have brought meaning and significance to the experience, and a new awareness that demands change in the way one practices.

Findings of this study also indicate clinical instructors may not be aware of all the resources available to them for development as clinical instructors and therefore

readers of this study may be made more aware of the resources. This study reveals there are different pathways to clinical instructor competence and non-credentialed clinical instructors may be refreshed to know credentialing is not the only pathway to competence. These findings can inform their decisions about professional development opportunities related to clinical education. Novice clinical instructors may be encouraged to know that achieving competence is, in fact, a journey and even experienced clinical instructors see it as a continual pursuit. Experienced clinical instructors may find comfort in knowing other experienced CIs do not necessarily see themselves as having "arrived" as the knowledge base and uniqueness of each student influences their level of competence.

Center Coordinators of Clinical Education (CCCE) may use this description and interpretation of the meaning of competence to assist in selection of competent CIs. Additionally, they could use these results to help CIs or new clinicians create a professional development plan focused on achieving competence. Since participants identified support from CCCEs and colleagues as a key aspect in their journey to competence, CCCEs should also feel empowered to provide support for CIs and encourage networking with colleagues.

IMPLICATIONS FOR PROFESSIONAL EDUCATION

The competence of a CI directly affects the quality of clinical education. The findings of this study can inform the PT education program regarding preparation of students to become clinical instructors, choosing competent clinical instructors, and providing support for clinical instructors.

Participants in this study had a variety of experiences at the start of their journey. The results of this study should inform physical therapist education programs understanding of the variability of CIs journey to competence. Programs should especially think of the "sink or swim" starts as they prepare their students to become clinical instructors themselves. Additionally, the fact that most participants in this study did not mention some key resources in the profession as tools for their journey should inform programs of the need to educate students on the available resources within the profession.

The findings of this study can assist PT education programs in evaluating clinical instructor competence for their clinical education program by reflecting on the meaning of competence shared by participants. Programs may consider developing a checklist, evaluation tool, or utilizing existing APTA self-assessments as a means of evaluating competence.

Finally, PT education programs may be informed by the findings in this study regarding support for clinical instructors' journey to competence. While many participants discussed the supportive role of their colleagues and CCCEs few discussed the support of the DCE or clinical education consortium. Several participants in this study indicated they would like better communication from academic programs and more support with professional development. If programs are indeed to assist in improving and monitoring the quality of clinical instructors their direct involvement with clinical instructors is necessary.

IMPLICATIONS FOR THE PROFESSION

CIs dedicate a significant amount of time to students and hearing their voice of experience from the "front-lines" on this topic was imperative. The findings from this study can inform the current debate in the profession on the essential characteristics of quality clinical education. These findings also assist in understanding the meaning of competence, and the process of achieving competence from the CIs perspective.

The American Academy of Academic Physical Therapy (ACAPT), The APTA Education Section, the Clinical Education Special Interest Group (CESIG) of the Education Section, Federation of State Boards of Physical Therapy (FSBPT), and the APTA recently developed a ten member steering committee to guide the process for developing a shared vision that "recognizes and strengthens partnerships across the entire spectrum of physical therapist education."[126]

This process included a recently published special issue of the *Journal of Physical Therapy Education*, which contained seven position papers focused on the key steps in the process of achieving the vision. Clinical instructors, CCCEs, DCEs, academic faculty and clinic managers were invited to discuss the papers through webinars over the summer and fall of 2014. Additionally, a Clinical Education Summit was held in October 2014 where the steering committee worked to "reach agreement on best practices for clinical education in entry-level physical therapist education with specific recommendations to ACAPT for implementation."[126]

The webinar "standardize qualifications and support clinical instructors" resulted in a general agreement of the standardized baseline qualifications for CIs. Participants in the webinar indicated a key component is the development of a standard set of CI

teaching skills through the CCIP and new processes. Productivity expectations negative impact on the quality of clinical education was an expressed concern by participants. Finally, participants voiced apprehension of standards or qualifications that may discourage capable physical therapists from becoming clinical instructors.[194]

The clinical education summits' harmonization recommendation categories of a common language for communication and clinical faculty preparation/development apply directly to this study. The recommendation of academic and clinical faculty to develop, disseminate and use standard terminology may result in a future definition of clinical instructor competence.[194] The results of this study could inform this definition.

The recommendation for academic and clinical sites to partner in the development and support of clinical instructors included proposed implementation steps like revamping CI training to make it web-based, cost effective and more accessible. Workshops for CPI training as well as more informal learning and mentoring opportunities via the use of technology was also recommended.[194] This resonates with the results of this study in that some participants reported accessibility and convenience of the CCIP as well as the need for more learning and mentoring experiences were barriers to developing competence. Time was a barrier mentioned by participants in this study, so the development of resources that do not require significant travel or time away from work would likely be beneficial as well. A final proposed implementation directly related to this study is determining evaluative criteria for clinical instructors.[194] The findings in this study can be used to inform the development of this evaluative criteria.

LIMITATIONS AND DELIMITATIONS

Limitations in this qualitative study include the following: data collection method, small purposive sample size of PT CIs in the Midwest, specific selection criteria, participant homogeneity, researcher inexperience and potential researcher bias. The researcher attempted to ensure methodological rigor and reduce biases.

Limitations with focus group interviews do exist, and include the potential for poor quality audio recording due to multiple voices, as well as the moderator having less control over the direction of the conversation.[170] To minimize these limitations the researcher used two recording devices, a semi-structured interview guide to assist in directing the conversation and conducted a pilot interview. Additionally, focus group interviews, as compared to one-on-one interviews, may limit responses from some participants. In an attempt to minimize this limitation the researcher worked to ensure all participants had the opportunity to speak, and that no one person dominated the conversations. One of the focus groups challenged the researchers' ability to do so. This group had a few "quieter" participants and although the researcher attempted to engage all participants in conversation they may not have contributed all their thoughts. In an attempt to reduce this limitation, the researcher also had all participants complete a written statement (Appendix 7).

This study used a small purposive sample of PT CIs in the Midwest. The Andrews University clinical database was used to contact potential participants. The researcher chose facilities within reasonable driving distance of the university and sent recruitment emails to CCCEs and CIs. It became clear early in the recruitment process that potential participants did not have the time nor were they willing to drive to Andrews

University for the focus groups. Many requested the interviews be conducted at their facility. Once the researcher received responses from CCCEs or CIs indicating an interest in participating, the researcher worked with those individuals to coordinate a time and date that worked for the potential participants at their respective facility. The goal of sampling in qualitative methodology is not to achieve generalizability rather to maximize information. This sampling method allows for the generation of in-depth information that gives context to the phenomenon under study and supports the findings.[175] In this study, the researcher provided demographic information, descriptions of the settings in which the interviews were conducted, researchers' observations and reflections on the interviews and raw data which allows transferability judgments by the readers.

There was no predetermined N rather a continuation of data collection until no new ideas emerged and the information provided by participants became redundant, which indicated data saturation was reached. In this study, the researcher confirmed data saturation was reached when the focus group interviews no longer revealed new information and was redundant to previous focus groups. The researcher recognized and documented data saturation after prolonged engagement with participants in the field, as well as careful review of interview transcriptions and peer debriefing. During the fifth focus group it became apparent to the researcher that data saturation was achieved as the information shared was redundant to the other groups and no new insights were shared. The researcher concluded the participants shared similar feelings and stories as their peers and therefore, no additional focus group interviews were conducted.

The researcher was familiar with all the participants from her previous role as a DCE. This familiarity may have caused participants to refrain from full disclosure due to potential judgment on the researchers' part. Attempts were made to minimize this potential with opening remarks that stated "I am here to learn from you – you are the experts - so please don't tell me what you think I want to hear. I want to hear your views of the meaning of competence and what your experiences have been in achieving competence, whatever they are. There are no right or wrong answers, each persons' experience is their own." Each participant also understood his or her right to withdrawal from the study at any time without prejudice.

The majority of participants in this study were employed by the same health system which includes credentialing as a component of the clinical ladder. This homogeneity may have shaped the perspectives of the participants and thus influenced the thoughts that were expressed. Additionally, participants were primarily from an outpatient orthopedic or inpatient setting, there were no participants from a private practice setting.

Researcher inexperience was another limitation in this study. This was the first qualitative study the researcher performed including the first time she performed focus group interviews in which she was the moderator. She attempted to minimize this limitation by conducting a pilot study, which allowed her to practice interviewing in the phenomenological tradition. She later listened to the interview, reflected on her interviewing techniques, and made note of changes she needed to make for the focus group interviews. This pilot interview was then reviewed by her dissertation Chair, an expert in qualitative research. The Chair gave feedback on how to improve in

interviewing including rephrasing questions so they were not leading participants in a certain direction and to be comfortable with silence allowing the participants time to think and reflect before jumping in an rephrasing the question.

Potential researcher bias may have been a limitation in this study. To minimize this limitation the researcher was transparent in chapter 3 with her background and positionality in relationship to this study. Throughout the data collection and analysis, the researcher kept a reflexive journal of her thoughts, impressions and reasoning behind decisions made in the development and merging of themes, subthemes and overarching themes. In chapter 4, the researcher shares her observations and reflections about each focus group and then a final summary reflection of the groups and her efforts to separate her own experience and bias to enable her to see the data clearly. An inquiry audit was performed on multiple occasions by the dissertation chair, an expert in qualitative methodology, throughout the research process. Prior to data collection, the auditor reviewed the research design and methods to confirm alignment with the methodology and to ensure rigor. The auditor also examined the data to assure the findings were grounded in the data as well as the dependability of the interpretation and recommendations.

Inherent limitations in interpretive phenomenology include the extensive amount of time invested by the researcher in gathering and analyzing the data, recognition of preconceptions and biases, and interpretation that remains true to the original context of the data.[169] The researcher is a former CI, DCE and currently CCIP Trainer and has a tendency to view the data through this lens. To minimize these limitations, the researcher used triangulation of data collection methods, including data gathered

through interviews and review of a written statement by the CI explaining their beliefs about achieving competence as a CI. As advocated by Lincoln and Guba,[175] the researcher also performed activities to establish methodological rigor and trustworthiness of findings; these included member checks, peer review and debriefing of the interpretation of the findings, inquiry audit, reflexive journaling by the researcher, as well as an examination and clarification of the researchers' biases.[175]

A metaphor of "the journey" was used to make sense of the findings and bring new meaning to the lived experience of achieving clinical instructor competence. Manhas and Oberle[163] caution that "there is a thin line between artistic license for better expression and distorting the participants' actual experience and meanings." They assert the ethics of using metaphors must be considered, as there is a potentially damaging effect on participants' dignity, respect and integrity. This may result from oversimplification or distortion of the actual experience, values conflict between the metaphor and the participants' values, and disagreement between participants and researcher with member checks.[163] Though the researcher used member checking and peer debriefing in this study, there is a possibility that the metaphor of the journey oversimplifies or distorts the lived experience.

RECOMMENDATIONS FOR FUTURE RESEARCH

For future research, identification of themes that emerge from the data may be tested against a larger population of CIs. Validation of themes, possibly through a survey instrument, may contribute to the development of a standardized method of defining and assessing competence. A deeper understanding of competence will also provide a foundation for future research leading to the development of a theoretical

model of CI competence, and ultimately, strategies to improve CI competence and the quality of clinical education in physical therapy.

Since private practice owners were not among the participants in this study, it would be beneficial to conduct a similar study including private practice owners. Additionally, more representation from non-credentialed CIs would be appropriate to pursue. Furthermore, comparing the results of this study with what is taught and tested in the CCIP and then implemented by credentialed CIs may reveal insight as to why the effects of credentialing is inconclusive. The development of outcome measures, based on the meaning of competence, which is completed by the DCE, CCCE, CI and student periodically may also prove valuable in improving clinical instruction.

SUMMARY

The purpose of this chapter was to discuss the findings of this study in relationship to the existing literature. The findings of this study revealed the competent clinical instructor has many attributes which contribute to competence. The competent clinical instructor personifies a skilled clinician, teacher, mentor, reflective learner, collaborator and effective communicator. The existing literature supports these findings as well as the finding that competence is viewed as the possession of certain qualities rather than credentials. While the journey to clinical instructor competence did not exist in the literature, there is support for the themes of *finding the way, feeling supported, barriers to achieving competence, the 'ah-ha' moment,* and the *ongoing road.* Empowerment was the overarching theme that emerged from the data. Both structural and psychological empowerment were present in the meaning of clinical instructor competence and the journey to competence. The existing literature supports the

findings that environment and intrinsic beliefs either positively or negatively impact performance.

Despite the limitations of this study, findings can bring reflection, understanding, empowerment and awareness to the clinical instructor and participants. Physical therapy education programs may be more informed on the meaning of competence and the journey clinical instructors' face and may in turn re-evaluate their selection criteria for clinical instructors and their support of clinical instructors. In the physical therapy profession, the results of this study may inform a definition of clinical instructor competence and standardized qualifications. A deeper understanding of the meaning of competence and the journey to competence from the clinical instructors' perspectives may also assist in future planning of professional development opportunities for clinical instructors.

NOVA SOUTHEASTERN UNIVERSITY

MEMORANDUM

To: Kimberly Coleman-Ferreira, PT, MSPT
HPD – College of Health Care Sciences

From: Matthew Seamon, Pharm.D., JD
Vice Chair, Institutional Review Board
WHS for Dr. Seamon

Date: November 5, 2014

Re: *Achieving Competence: Clinical Instructors Perspectives* – NSU IRB No. 09101409Exp.

I have reviewed the revisions to the above-referenced research protocol by an expedited procedure. On behalf of the Institutional Review Board of Nova Southeastern University, *Achieving Competence: Clinical Instructors Perspectives* is approved in keeping with expedited review category #7. Your study is approved on **November 5, 2014** and is approved until **November 4, 2015**. You are required to submit for continuing review by **October 4, 2015**. As principal investigator, you must adhere to the following requirements:

1) CONSENT: You must use the stamped (dated consent forms) attached when consenting subjects. The consent forms must indicate the approval and its date. The forms must be administered in such a manner that they are clearly understood by the subjects. The subjects must be given a copy of the signed consent document, and a copy must be placed with the subjects' confidential chart/file.

2) ADVERSE EVENTS/UNANTICIPATED PROBLEMS: The principal investigator is required to notify the IRB chair of any adverse reactions that may develop as a result of this study. Approval may be withdrawn if the problem is serious.

3) AMENDMENTS: Any changes in the study (e.g., procedures, consent forms, investigators, etc.) must be approved by the IRB prior to implementation.

4) CONTINUING REVIEWS: A continuing review (progress report) must be submitted by the continuing review date noted above. Please see the IRB web site for continuing review information.

5) FINAL REPORT: You are required to notify the IRB Office within 30 days of the conclusion of the research that the study has ended via the IRB Closing Report form.

The NSU IRB is in compliance with the requirements for the protection of human subjects prescribed in Part 46 of Title 45 of the Code of Federal Regulations (45 CFR 46) revised June 18, 1991.

Cc: Dr. Melissa Tovin
Dr. M. Samuel Cheng
Mr. William Smith

Andrews University
Office of Research & Creative Scholarship

September 10, 2014

Kimberly Coleman-Ferreira (PI)
Tel: (269) 471-6222
Email: kimferreira@andrews.edu

Co-investigator:
Melissa Tovin, Tel: (954) 262-1697; Email: mtovin@nova.edu

RE: APPLICATION FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS
IRB Protocol #: 14-093 **Application Type:** Original **Dept.:** Physical Therapy
Review Category: Expedited **Action Taken**: Approved **Advisor:** N/A
Title: Achieving Competence: Clinical Insructors Perspectives

This letter is to advise you that the Institutional Review Board (IRB) has reviewed and approved your IRB application of research involving human subjects entitled: *"Achieving Competence: Clinical Instructors perspectives"* IRB protocol number 14-093 under Expedited category. This approval is valid until September 10, 2015. If your research is not completed by the end of this period you must apply for an extension at least four weeks prior to the expiration date. We ask that you inform IRB whenever you complete your research. Please reference the protocol number in future correspondence regarding this study.

Any future changes made to the study design and/or consent form require prior approval from the IRB before such changes can be implemented. Please use the attached report form to request for modifications, extension and completion of your study.

While there appears to be no more than minimum risk with your study, should an incidence occur that results in a research-related adverse reaction and/or physical injury, this must be reported immediately in writing to the IRB. Any project-related physical injury must also be reported immediately to the University physician, Dr. Reichert, by calling (269) 473-2222. Please feel free to contact our office if you have questions.

Best wishes in your research.

Sincerely

Mordekai Ongo
Research Integrity & Compliance Officer

Appendix 2 - Consent Form

Consent Form for Participation in the Research Study Entitled
Achieving Competence: Clinical Instructors Perspective

Funding Source: Andrews University Berrien Springs MI

IRB protocol #:

Principal investigator(s)
Kim Coleman-Ferreira PT, MSPT
Department of Physical Therapy
8515 East Campus Circle Drive
Berrien Springs, MI 49104-0420
(269)471-6222

Co-investigator(s)
Melissa Tovin, PT, MA, PhD
Department of Physical Therapy
Nova Southeastern University
Ft. Lauderdale, FL
(954)262-1697

For questions/concerns about your research rights, contact:
Human Research Oversight Board (Institutional Review Board or IRB)
Nova Southeastern University
(954) 262-5369/Toll Free: 866-499-0790
IRB@nsu.nova.edu

Site Information (if applicable)
Andrews University, Nova Southeastern University, or a private meeting room at the Westin – Crown Center Kansas City, MO.

What is the study about?
You are invited to participate in a research study. The goal is to understand and interpret the meaning of competence and the experience of achieving competence from the clinical instructor's point of view. This study is designed to help investigators collect information that will assist in the development of clinical instructors.

Why are you asking me?
We are inviting you to participate because you are a physical therapist clinical instructor, and can provide insight into your experiences on becoming a clinical instructor.

What will I be doing if I agree to be in the study?
You will be asked to participate in a focus group interview with the principle investigator, Kim Coleman-Ferreira, who will ask about your experiences as a clinical instructor, specifically your path to achieving competence as a CI. Other CIs will participate in the focus group interview, and the focus group will last approximately 1 hour. The researcher may also contact you by telephone for follow-up questions after the focus group interview if clarification is needed.

Is there any audio or video recording?
The focus group interview and any follow-up interview, will be recorded with an audio-recording device. The purpose of the recording is to ensure complete and accurate data collection. The audio recording will be heard by the transcriptionist and the investigators. It may also be heard by the university's Institutional Review Board members. A transcriptionist, who has signed a confidentiality agreement, will transcribe the recording. The audio recording will be kept securely using a password protected secure file on Kim Coleman-Ferreira's password protected computer. The recording will be kept for 36 months from the end of the study and destroyed after that time by erasing the electronic files. Because your voice will be potentially identifiable by anyone who hears the recording, your confidentiality for things you say on the recording cannot be guaranteed, although the investigator will try to limit access to the tape as described in this paragraph.

What are the dangers to me?
Risks to you are minimal. Being recorded means that confidentiality cannot be promised, but every precaution will be made to ensure the confidentiality of the research data throughout the collection, storage, analysis, and reporting stages. Risk will be reduced by using false names in the data analysis and reporting. Loss of time is another potential risk that will be minimized by informing you in advance of the length of the interviews, choosing a location that is accommodating to your location and respecting your time and schedule. If you have any questions about your research rights please contact Kim Coleman-Ferreira or Melissa Tovin at the numbers listed above. You may also contact the IRB at the numbers indicated above with questions about your research rights.

Are there any benefits for taking part in this research study?
Although there are no direct benefits to you for participating, it is hoped that the study will ultimately benefit the development of physical therapist clinical instructors and the students that they serve.

Will I get paid for being in the study? Will it cost me anything?
There are no costs to you for participating in this study. After completion of the interview, you will receive a $25 pre-paid visa gift card as a small compensation for your travel expenses.

How will you keep my information private?
All information obtained in this study is strictly confidential unless disclosure is required by law. The transcripts of the interviews will not have any information that could be linked to you. All transcribed data from the interview will be available to be read by the investigators, and may be read by the university's Institutional Review Board and regulatory agencies. The investigator's computer requires a password known only by her, and any hard copies of data will be stored in a locked file cabinet and destroyed 36 months after the study ends.

The investigator will use false names in the data collection and in any publications or presentations about the study findings.

What if I do not want to participate or I want to leave the study?
You have the right to leave this study at any time or refuse to participate. If you do decide to leave or you decide not to participate, you will not experience any penalty or loss of services you have a right to receive. If you choose to withdraw, any information collected about you **before** the date you leave the study will be kept in the research records for 36 months from the conclusion of the study and may be used as a part of the research.

Other Considerations:
If significant new information relating to the study becomes available, which may relate to your willingness to continue to participate, this information will be provided to you by the investigator, Kim Coleman-Ferreira.

Voluntary Consent by Participant:
By signing below, you indicate that

- this study has been explained to you
- you have read this document or it has been read to you
- your questions about this research study have been answered
- you have been told that you may ask the researchers any study related questions in the future or contact them in the event of a research-related injury
- you have been told that you may ask Institutional Review Board (IRB) personnel questions about your study rights
- you are entitled to a copy of this form after you have read and signed it
- you voluntarily agree to participate in the study entitled *Achieving Competence as a Clinical Instructor: The Lived Experience of Clinical Instructors*

Participant's Signature: _____ Date: _____

Participant's Name: _____ Date: _____

Signature of Person Obtaining Consent: _____ Date: _____

Appendix 3- Email to the PT Clinical Instructor Participants

To: PT Clinical Instructor Participants
From: Kim Coleman-Ferreira, PhD student at Nova Southeastern University, PT, MSPT, Andrews University Physical Therapy Department Chair and Entry-level Program Director
Date:
Re: Invitation to participate in clinical education research study: *Achieving Competence: Clinical Instructors Perspectives*

Greetings,

My name is Kim Coleman-Ferreira. I am currently a PhD student at Nova Southeastern University in the dissertation phase of my PhD education. As part of the fulfillment of my PhD, I am conducting a research study entitled: *Achieving Competence: Clinical Instructors Perspectives*.

This study will investigate the CI's understanding of the meaning of competence as a clinical instructor and their journey toward achieving competence. There appears to be limited training and mentoring available as well as a lack of guidelines for achieving competence as a clinical educator and a lack of standards for measuring that competence. Evidence shows there are effective and ineffective characteristics of Clinical Instructors however; the effectiveness of training is debated in the literature. Additionally, no study was found that reveals the CIs perception of and the journey to achieving competence in clinical education. Therefore, investigating these factors is important and may contribute to the effectiveness of clinical education, provide direction to the APTA and PT education programs for training and mentoring, as well as give clinical instructors the voice they deserve in this area of clinical education.

Participation in this study includes participation in a focus group interview with other PT Clinical Instructors and potentially a follow-up individual interview. You will also be requested to provide a written statement of your understanding and perception of competence.

If you agree to participate, please complete the attached consent form and return it to me along with your preferred contact information. I will be in contact with you for further information about the interview.

Thank you so much for considering participation in this study. I look forward to hearing from you. Please contact me with any questions of concerns regarding the study.

Thank you,
Kim Coleman-Ferreira, PT, MSPT
PhD student Nova Southeastern University
(269) 471-6222
kimferreira@andrews.edu

Appendix 4 - Email to the Andrews University Center Coordinators of Clinical Education and Clinical Instructors

To: CCCEs and CIs of Andrews University
From: Kim Coleman-Ferreira, PhD student at Nova Southeastern University, PT, MSPT, Andrews University Physical Therapy Department Chair and Entry-level Program Director
Date:
Re: Invitation to participate in clinical education research study: *Achieving Competence: Clinical Instructors Perspectives*

Attention Clinical Instructors

Let your voice be heard! As a Clinical Instructor, you are a primary stakeholder in the education of PT students. Your insight and perspective on the meaning of competence and the experience of achieving competence as a clinical educator needs to be heard and understood. Please consider participation in this study *Achieving Competence: Clinical Instructors Perspectives.*

While I am the Andrews University Physical Therapy Department Chair I am also currently a PhD student at Nova Southeastern University in the dissertation phase of my PhD education and I need your help. If you are interested in participating in this study, or know a Clinical Instructor who may be, please contact me today.

Please see attached flyer for more information.

Thank you,
Kim Coleman-Ferreira, PT, MSPT
PhD student Nova Southeastern University
(269) 471-6222
kimferreira@andrews.edu

Appendix 5 – Recruitment Flyer

Clinical Instructors

Let <u>your voice</u> be heard, loud and clear

<u>You</u> can make a difference in the future of clinical education.
Do not let recently proposed changes in clinical education be made without input from such a crucial stakeholder.

The profession needs to understand <u>your</u> perspective on the meaning of competence & the experience of achieving competence as a Clinical Instructor

The expert clinical instructor was recently defined but the meaning of "competent clinical instructor" has not been defined. Please consider participation in this study *Achieving Competence: Clinical Instructors Perspectives.*

If you are interested in participating in this study, or know a Clinical Instructor who may be, please contact me today. I will be conducting focus group interviews with Clinical Instructors in a variety of locations to accommodate your travel needs.

Thank you, Kim Coleman-Ferreira, PT, MSPT
PhD student Nova Southeastern University
kimferreira@andrews.edu
(269) 471-6222

Appendix 6 - Interview Guide

Introduction

Good day, I am Kim Coleman-Ferreira and I am a PhD candidate in the physical therapy program at Nova Southeastern University. For my dissertation, I am researching clinical instructors' experiences with achieving competence as a clinical instructor and the meaning of competence as a CI. I have asked you to take part in this study because you are a clinical instructor for physical therapist students.

You have all consented for the interview to be recorded and this information will remain confidential. My role in the interview is to guide the discussion and make sure everyone has a chance to speak. I am here to learn from you – you are the experts - so please don't tell me what you think I want to hear. I want to hear your views of the meaning of competence and what your experiences have been in achieving competence, whatever they are.

You may or may not be familiar with each other so, we will start with introductions. First, however, I ask you follow three simple ground rules during the interview. Please do not interrupt your fellow peers while they are sharing their thoughts, please try to give everyone a chance to speak, and please keep the information shared during the interview confidential. Do you have any questions before we get started?

Semi-structured interview questions

1. What is the meaning of competence as a clinical instructor?
    a. If I said you are a competent clinical instructor, what would that look like?
2. Tell me about your journey to becoming a competent CI?
3. When did you acknowledge to yourself that you were competent?
    a. Describe a situation in which you recognized your competence.
4. Are there any resources that assisted you in becoming competent?
5. Are there any barriers existed on your journey to competence?
6. What is the difference between a competent clinical instructor and an expert CI?
7. Is there anything else you would like to add that we didn't address here today?

Probing questions/statements to interject as needed:

- Tell me more about "X" *or* can you say a bit more about "*X"*?
- Can you give me an example of that?
- Can you elaborate more on that experience?

Appendix 7 – Written Statement

Achieving Competence: Clinical Instructors Perspective

Thank you for providing your answers, from your perspective, to the following questions. Your written statements will remain confidential and the researcher will not reveal your individual written responses during the focus group interviews.

1. Please explain your understanding of the meaning of competence as a clinical instructor (not competence as a clinician).

2. Please explain your beliefs of the role of the clinical instructor in achieving competence as a clinical instructor in the clinical setting.

Appendix 8 – Participant Demographics

Participant	Gender	Degree	Years as PT	Current Practice Setting	Certifications	APTA member	Years as CI	CCIP	# of students in career	# of students per year	Other courses
Faith	F	BSPT	29	Pediatrics	None	No	22	No	18	1	Inservices
Jessica	F	BSPT	35	Outpatient Ortho	None	No	33	Yes	20	1	Inservices
Maria	F	DPT	25	Pediatrics	PCS	No	24	No	40	1	Inservices
Kendal	F	BSPT	22	Neuro Rehab	None	No	10	Yes	5	1	No
McKenzie	F	MPT	10	Acute Hospital	None	Yes	10	Yes	5	0-1	Yes (CSM)
Carolyn	F	DPT	2.5	Acute Hospital	None	Yes	1	Yes	1	1	No
Kelly	F	MSPT	21	Acute Hospital	None	No	20	Yes	24	1-2	Yes
Tim	M	MSPT	15	Acute Hospital	None	No	8	Yes	12	1-2	No
Marilyn	F	BSPT	34	Acute Hospital	NDT, CLT	No	18	Yes	25	1-2	No
Arlene	F	MSPT	19	Acute Hospital	None	No	18	Yes	40+	1-3	No
Diane	F	DPT	7	Acute Hospital	None	No	5	No	4	1	No
Laura	F	DPT	3	Pediatrics/Lymphedema	CLT	No	6 mo	No	1	2	No
Marsha	F	BSPT	24	Outpatient Neuro	NDT	No	19	Yes	16	2	No
Donna	F	DPT	13	Pediatrics	None	Yes	12	Yes	20+	1-2	No
Jean	F	MSPT	17	Lymphedema	CLT/LANA	No	16	Yes	8	0-1	No
Madalyn	F	MSPT	18	Lymphedema	CLT	Yes	16	Yes	20-30	1-2	No
Nancy	F	MSPT	15	Women's Health	FCE	No	11	Yes	6	1-2	No
Allison	F	DPT	4.5	Outpatient ortho/vestibular	None	No	1+	Yes	1	1	No
Jacob	M	DPT	2.5	LSVT Parkinson's	None	No	1	No	1	1	No
Seth	M	DPT	7	Inpt Rehab/Home Care	None	Yes	4	Yes	10	3	No
Karyn	F	MSPT	18	Inpatient Rehab/Acute	RPFS	No	17	Yes	25-40	1-2	No
Tammy	F	MSPT	7	Outpatient Ortho	None	No	4	No	3	1	
Helen	F	BSPT	24	Outpatient Ortho	None	No	7	Yes	13-14	2	No
Peggy	F	DPT	4.5	Outpatient Ortho	OCS	Yes	3.5	Yes	4	1-2	No
Victor	M	MSPT	9	Outpatient Ortho	None	No	4	Yes	5	2	No
Julie	F	DPT	3.5	Outpatient Ortho	OCS	No	2.5	Yes	3	1-2	No
Kevin	M	BSPT, MHS	24	Outpatient Ortho	OCS, ATC	Yes	23	Yes	50+	2-3	ACCIP
Brittany	F	DPT	3	Outpatient Ortho	OCS	Yes	2	Yes	2	1-2	No
Ethan	M	MSPT	19	Outpatient Ortho	OCS, COMT	No	18	Yes	36-54	2-3	No

Appendix 9 – Participant Demographics continued

Highest Degree Earned	n=29
Bachelor's	20.7%
Master's	41.4%
Doctorate	37.90%
Years of Clinical Practice	
0-5 years	24.10%
6-10 years	17.20%
11-20 years	27.60%
>20 years	31.00%
Years as Clinical Instructor	
0-2 years	17.20%
3-5 years	20.70%
6-10 years	13.80%
>10 years	48.3%
# of students in career	
0-2	17.2%
3-5	24.1%
6-10	10.3%
11-20	17.2%
>20	31.0%
# of students per year	
0-1	6.9%
1	31.0%
1-2	34.5%
2	13.8%
2-3	13.8%
APTA Credentialed CI	
Yes	79.3%
No	20.7%
APTA Member	
Yes	27.6%
No	72.4%

Appendix 10 - The Competent CI

Various roles of the competent CI as perceived and described by participants

Role	Elements
Skilled Clinician	Competence in: examination, evaluation, diagnosis, prognosis, interventions, outcomes, documentation and billing
Teacher	Desire to teach, despite challenges related to teaching
	Knowledgeable about academic programs and their evaluation tools
	Proactive in approach to teaching and planning learning experiences
	Fosters critical thinking
	Teaches reflection
	Fosters a safe and structured learning environment which allows students to practice their skills, ask questions and make safe mistakes
	Challenge students to grow professionally and in their skills
	Identifies students learning styles and needs
	Establishes and adjusts individualized student plans as needed
Mentor	Advocate for the profession
	Conduct self professionally
	Model teamwork
	Act as coach
	Inspire students
	Foster autonomy
Reflective Learner	Seeks to learn from experiences, students, colleagues and professional development course through reflection and application
	Teachable themselves
	Recognize limitations
Collaborator	Work as a team with colleagues sharing students, at times, to broaden their experience
	Work with academic program to meet students' needs, especially when there are challenges
	Intentionally include student in planning processes to ensure student's success
Effective Communicator	Communicates expectations to students
	Keeps open lines of communication with student
	Provides student with constructive feedback on performance

Appendix 11 - The Journey to Competence

Theme	Elements
"My first student"	Start of the journey was meaningful
	Positive start allowed attainment of clinical competence first the gradual entry into teaching
	Negative start was a 'sink or swim' experience where CIs were thrown into being a CI
Finding the way	Teaching and learning experiences were built on experience as a student and experience with students
	Adaptation and application of new insights to future situations
	Desire for feedback from students
Feeling supported	Colleagues provided support by acting as role models, collaborators and resources
	Support from CCCE included mentoring, providing resources and opportunities
A fork in the road	Credentialing vs. non-credentialing
	If chosen, what is the best timing for credentialing
Barriers to achieving competence	Limited knowledge of academic programs' expectations
	Limited communication from programs regarding students
	Perception of credentialing
	Volume of patients
	Time: Productivity demands and lengthy evaluation tools
The "ah-ha" moment	Insecurity with declaring themselves competent CIs
	Competence confirmed through colleagues, students, DCEs and self-reflection
"Ongoing road"	Changing knowledge base of students
	Uniqueness of students
	Desire for continued professional development

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