DETERMINING THE
APPROPRIATE SELECTION AND DEVELOPMENT OF
ATHLETIC TRAINING PRECEPTORS

A DISSERTATION
SUBMITTED TO THE GRADUATE SCHOOL
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE
DOCTOR OF EDUCATION IN ADULT, HIGHER, AND COMMUNITY EDUCATION

BY
JESSICA L. RAGER

DISSERTATION ADVISOR: DR. ROGER D. WESSEL

BALL STATE UNIVERSITY
MUNCIE, INDIANA
MAY 2019
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BALL STATE UNIVERSITY
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MAY 2019
ABSTRACT

**DISSERTATION:** Determining the Appropriate Selection and Development of Athletic Training Preceptors

**STUDENT:** Jessica L. Rager

**DEGREE:** Doctor of Education in Adult, Higher, and Community Education

**COLLEGE:** Teacher’s College

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The purpose of this study was to explore how stakeholders determine what is most appropriate for the selection and development of athletic training preceptors. This study was founded on the qualitative paradigm using a phenomenological approach to inquiry. Nineteen stakeholders (preceptors or program administrators) for graduate, professional athletic training programs (12 program administrators, seven preceptors) participated in individual, semi-structured interviews. As a result of the guiding research questions, three themes emerged directly from participants’ statements including their beliefs of ideal preceptors, views of preceptor development, and influences on their beliefs of preceptor selection and development. Preceptors should possess the qualities of an educator, a professional, and a leader. When designing preceptor development, administrators should use flexible delivery techniques, and these opportunities should be highly accessible given the many demands on preceptors’ time. Furthermore, an emphasis on recognizing preceptors for the work they do to help students grow should be made. Finally, four factors appear to influence stakeholders’ beliefs of the appropriate selection and development of preceptors, which include moments of adversity, support systems they have access to, professional development opportunities they have engaged in, and the
advancement of the athletic training profession they desire. The process of selecting and
developing preceptors for athletic training professional programs is complicated. This study
provides a deeper understanding of the beliefs of preceptors and program administrators and the
influences which shape their views. This information will help professional organizations build
best practices for the selection and development of athletic training preceptors.
DEDICATION

This dissertation is dedicated to my forever companion, Rob Huett. Graduate school is not a solitary undertaking. Thank you for so willingly and enthusiastically accompanying me on this journey. Your sacrificial care for me made it possible for me to complete this work. Olive juice.
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The path towards the completion of this dissertation has been a life-changing process, which has helped me transform from a clinician and educator who was intimidated by research to someone who is competent in and appreciative of literature. Its completion is thanks in large part to the special people who challenged, supported, and stuck with me along the way. I am tremendously fortunate to have had each of you pushing and guiding me along the way.

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athletic trainer, educator, and researcher. I will continue to model my practice after your examples. I am forever grateful for your involvement in my professional and personal growth.

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CHAPTER ONE: INTRODUCTION

Athletic training clinical experiences, defined as “direct client/patient care guided by a preceptor” (Commission on Accreditation of Athletic Training Education [CAATE], 2018a, p. 18), is a critical aspect in the preparation of athletic trainers. During clinical experiences, students apply athletic training knowledge, skills, and abilities when providing patient care under the guidance of a preceptor (Edler, Eberman, & Walker, 2017; Levy et al., 2009).

Preceptors are skilled practitioners within healthcare professional programs who supervise healthcare students during clinical experiences (Myrick & Yonge, 2005). In athletic training education, the Commission on Accreditation of Athletic Training Education defined a preceptor as a credentialed athletic trainer or physician who supervise and guide students during clinical experiences (CAATE, 2018a). Most often current preceptors have backgrounds in athletic training, family medicine, orthopedics, and rehabilitation. The responsibilities of a preceptor include instructing and assessing students’ clinical skills, supervising students during clinical experiences, and facilitating the integration of students’ knowledge and clinical skills.

Authors from various healthcare professions including nursing (Altmann, 2006; Singer, 2006), pharmacy (Dalton et al., 2007), and respiratory therapy (Rye & Boone, 2009) cited preceptorships as the model for clinical education in healthcare professional programs. Preceptors provide supervision and instruction, which helps students bridge the gap between educational theory and clinical practice (Altmann, 2006). Furthermore, preceptors bolster student socialization into the athletic training profession where they learn the attitudes and behaviors of the healthcare culture (Altmann, 2006; Lauber, Toth, Leary, & Martin, 2003; Weidner & Henning, 2005) further cultivating students’ excitement and commitment to the profession (Dodge & Mazerolle, 2015; Rye & Boone, 2009). Additionally, preceptors have a role in
protecting students during stressful situations and assisting students in good decision making (McClure & Black, 2013). The mentorship, that preceptors provide students, results in a relationship that has a large impact on students’ acceptance of the responsibilities of an athletic trainer, which subsequently influences their career decisions after graduation (Dodge & Mazerolle, 2015; Mazerolle & Dodge, 2015; Mazerolle, Gavin, Pitney, Casa, & Burton, 2012; Pitney & Ehlers, 2004).

Clinical experiences allow students to gain practical experience with patients and considerably influence students’ professional preparation (Dodge & Mazerolle, 2015). These experiences afford students a first-hand opportunity for providing athletic training services to patients. Furthermore, students develop a commitment to their intended career through clinical experiences (Mazerolle & Dodge, 2015). Dodge and Mazerolle (2015) found that positive clinical experiences included skill integration with patients along with mentorship from preceptors.

With proper mentorship, clinical education provides students with experiential learning activities that give students the opportunities to connect academic knowledge and clinical practice (Dodge & Mazerolle, 2015). Athletic training students admire the culture of working in clinical education environments where preceptors demonstrate appropriate professional roles and promote their learning. As athletic training students transition to practicing clinicians, the amount of stress which tests them may depend on the number of encounters and amount of time they spend with patients during clinical education (Walker, Thrasher, & Mazerolle, 2016). These interactions within clinical education help students develop critical thinking skills, professional commitment, and gain confidence as they progress through a professional program.
Preceptor Selection and Development in Healthcare Education

Published literature suggests there are characteristics, behaviors, and skills that influence a preceptor’s effectiveness, including those in communication, interpersonal practices, management, and problem solving (Lauber et al., 2003; Laurent & Weidner, 2001; Platt Meyer, 2002; Weidner & Henning, 2004, 2005). A preceptor’s success in meeting the goals and objectives of clinical education may also depend on more innate characteristics such as patience, enthusiasm for the profession, self-confidence, and adaptability (Platt Meyer, 2002; Weidner & Henning, 2004). The characteristics, behaviors, and professional attributes of a capable preceptor are thought to be very like those of a developed leader (Platt Meyer, 2002). Preceptors’ understanding of the education program’s goals and objectives influence their effectiveness (Singer, 2006). Moreover, to properly adhere to the policies and procedures of clinical education within the athletic training program, preceptors must first thoroughly understand these protocols as well as the goals and objectives of clinical education. To effectively teach and evaluate students, preceptors must then model the previously mentioned characteristics, skills, and behaviors as well as thoroughly understand the policies and procedures of clinical experiences. Therefore, when not adequately developed, preceptors are often set up to fail at these critical expectations (Rye & Boone, 2009).

The need for the creation of preceptor development programs is profuse in the literature. One study reported that 49 percent of preceptors did not feel they were adequately prepared for the role of preceptor (Yonge, Hagler, Cox, & Drefs, 2008). Additionally, Windey et al. (2015) wrote that developing preceptors for their role leads to increased satisfaction and improved retention of both preceptors and students within the program. Clinical education is a required and fundamental component of a student’s education (CAATE, 2018a), so it is imperative the
preceptors guiding students during clinical experiences have the highest level of training. Preceptors’ successful orientation to the clinical education environment is dependent on the proper preparation of the preceptor as supported by a formalized plan for ongoing preceptor education.

While some literature has focused on the challenges and barriers to precepting and preceptor development, there has been some discussion about innovations within preceptor development that have emerged over the last several years. Many healthcare programs use in-person workshops as a primary mechanism to deliver preceptor development content, while some others such as nursing have used creative modalities such as online, learner-centered modules (Windey et al., 2015). Online programming has been one area where many professions have turned to address the time constraints and scheduling difficulty associated with preceptor development (e.g., Ackman & Romanick, 2011). For example, a few athletic training programs have turned to online asynchronous learning to deliver programmatic and clinical teaching-specific content (Volberding & Richardson, 2015). Both formal and informal processes are utilized to address preceptor developing digitally using methods such as online modules and e-mail as a form of delivery. These online interactions allow for the delivery of preceptor development without the administrative challenge of scheduling large meetings as well as allowing preceptors to engage in the material as their schedule permits.

In addition to innovative delivery mechanisms, program administrators are helping preceptors by developing mentorships between experienced and novice preceptors. Both formal and informal mentorships have been identified as a contributor to the socialization of athletic training preceptors and have allowed novice preceptors the ability to model the behaviors of their more experienced colleagues (Mazerolle, Bowman, & Dodge, 2014; Nottingham, Barrett,
Mazerolle, & Eason, 2016). Mentorships allow the new preceptor an additional way to orient to the role of being a preceptor. By connecting new preceptors with those who have more experience, program administrators are encouraging interaction with role models that will help novice preceptors to observe exemplary behaviors and self-reflect to improve their skills. Beyond mentorship, the content included within preceptor development has focused on developing specific skills associated with clinical instruction. The systematic review conducted by Windey et al. (2015) focused on reviewing interventions that support nursing preceptor development. They found the content most frequently included in preceptor development was giving and receiving feedback, effective communication, facilitating adult learning, reviewing roles and responsibilities of the preceptor role, and development and evaluation of clinical judgment.

**Regulation of Selection and Development of Athletic Training Preceptors**

The Commission on Accreditation of Athletic Training Education is a professional organization whose mission is to define, measure, and continually improve athletic training education (CAATE, 2017a). The CAATE is recognized as an accrediting agency by the Council of Higher Education (CHEA) and reviews the quality of athletic training programs across the country and internationally. This peer reviewing body recognizes whether a program has met pre-determined standards. The process of accrediting athletic training programs, assures students, families, and employers the educational content and methods of delivery within athletic training programs have been assessed and validated to ensure athletic training professionals have been trained at or above the peer-reviewed standard (CAATE, 2017b). While this quality assurance process of accreditation is voluntary, only those students graduating from accredited programs are eligible for professional athletic training certification.
Before 2012, the CAATE mandated the amount of experience an athletic training preceptor must have before working with students. Furthermore, previous specifications directed the specific frequency of and content within the training and professional development of preceptors (Weidner & Henning, 2002). In 2012, the CAATE loosened the regulations surrounding preceptor selection and development affording programs autonomy to make their own decisions (Hankemeier, Kirby, Walker, & Thrasher, 2017). By doing so, the standards aligned more closely with those of other healthcare professional programs. The 2012 standards established minimum requirements professional athletic training programs must meet regarding the selection and development of preceptors. These criteria manifested in Standards 38 and 41. They read: “A preceptor must demonstrate an understanding of and compliance with the program’s policies and procedures. … A preceptor must receive planned and ongoing education from the program designed to promote a constructive learning environment” (CAATE, 2012, p. 5).

On May 20, 2015, however, the Athletic Training Strategic Alliance announced the professional degree for athletic training would change from an undergraduate to a graduate degree. This degree change has stimulated significant discussion and planning among athletic training educators as they work to determine the most appropriate way to implement the degree transition (e.g., Cavallario & Van Lunen, 2015; Mazerolle, Bowman, & Pitney, 2015; Ostrowski & Marshall, 2015). Much of this preparation has focused on the best way to approach clinical education at the graduate level. Along with the transition of the professional degree, CAATE recently released the 2020 Standards for Accreditation of Professional Athletic Training Programs on March 2, 2018. These new standards however will not be implemented until July 1,
The early release of these requirements allows program and institution administrators ample time to make the necessary plans as their program transitions to a graduate degree.

Adjustments were made within the 2020 Standards, which altered the language used to describe the requirements for preceptor selection and development (CAATE, 2018a). While the language utilized to describe the development of athletic training preceptors was modified in the 2020 CAATE standards, the overall philosophy to require programs to provide ongoing training to improve preceptors clinical teaching skills did not. However, the change to the athletic training professional degree combined with the changes to the professional standards has created a renewed need to examine athletic training preceptor selection and development.

**Statement of the Problem**

Clinical education helps students develop critical thinking skills, professional commitment, and gain confidence as they progress through a professional program (Edler et al., 2017; Levy et al., 2009; Dodge & Mazerolle, 2015; Mazzerolle & Dodge, 2015). Preceptors play a vital role during this time of development as they serve as the primary facilitators of student learning during clinical experiences and ensure optimal learning outcomes for students (Altmann, 2006; Lauber et al., 2003; McClure & Black, 2013; Pitney & Ehlers, 2004; Weidner & Henning 2005). Recent and ongoing reform in athletic training education has created a renewed need to examine preceptor selection and development. Unfortunately, professional organizations have not explicitly answered what best practice is for athletic training preceptor selection and development. The gap here creates a problem for program administrators as they are unable to use empirical evidence to support the autonomous decisions they make regarding preceptor selection and development.
**Purpose of the Study and Research Questions**

The purpose of this study was to explore how stakeholders (preceptors and program directors or clinical education coordinators) determine what is most appropriate for the selection and development of athletic training preceptors. The following research questions guided this study: (a) what are stakeholders’ beliefs regarding preceptor selection, (b) what are stakeholders’ views regarding preceptor development, (c) how do stakeholders determine what they believe is most appropriate for preceptor selection and development? This study was founded on a qualitative paradigm. Therefore, to be consistent with qualitative research, hypotheses were not warranted, as the nature of this type of inquiry is to allow findings of the study to emerge organically and inductively.

**Significance of the Study**

Selecting and developing capable preceptors is a challenge for many athletic training programs. As previously mentioned, the literature suggests characteristics, behaviors, and attributes of effective preceptors (Lauber et al., 2003; Laurent & Weidner, 2001; Platt Meyer, 2002; Weidner & Henning, 2004, 2005). However, this literature may be outdated as it has examined preceptorships at the undergraduate level as well as programs using old accreditation standards. Preceptors have an essential role within an athletic training program as their primary responsibility is to supervise students in clinical education. During these experiences, students combine cognitive knowledge with the development of psychomotor and affective skills (McClure & Black, 2013). Preceptors play a vital role during this time of student growth as they ensure optimal learning outcomes for students. Additionally, preceptors facilitate the advancement of students’ professional socialization, prioritization, communication, and task management skills (Dodge & Mazerolle, 2015).
Preceptors understand and accept their role as facilitators of student learning (McClure & Black, 2013). They also know that they have a role in protecting students during stressful situations and assisting students in ethical decision making. Although preceptors understand and accept their role as facilitators of students learning, they often report feeling anxious about balancing the needs of both the student they are teaching and the patients that they care for (Dodge, Mazerolle, & Bowman, 2014; Pollard, Ellis, Stringer, & Cockayne, 2007). The clinical learning environment can often be complicated and unpredictable fueling anxiety for preceptors as they must simultaneously tackle the demands of both the student and patients. Preceptors also, report insufficient time to teach students, lack of training for their role as clinical instructor, and increased workloads as primary barriers to be a capable clinical educator (Dodge et al., 2014; Pollard et al., 2007). Stress caused by preceptorships often leads to suboptimal patient care and burnout among those who take on this role (Angus et al., 2014). These barriers may decrease the effectiveness of students’ clinical experiences.

Several other healthcare professions, including physical therapy, respiratory therapy, nursing, and pharmacy have developed preceptor training models to help prepare and develop preceptors for the role of clinical educator (Dalton et al., 2007; Rye & Boone, 2009; Singer, 2006). However, no standardized model of developing athletic training preceptors exists. According to the CAATE (2018a), athletic training programs are to provide preceptors with planned and ongoing education for their role as a preceptor, which is designed to promote a constructive learning environment for students. While the lack of standardization gives programs the freedom to develop their preceptors based on the goals and objectives of the program, there is a lack of empirical evidence that identifies best practices for preceptor selection and development. Therefore, athletic training program administrators are also responsible for
appraising this among themselves. Gaining information on what stakeholders believe is most appropriate may be helpful in making these critical decisions.

**Definition of Terms**

**Athletic trainers:** Healthcare providers who render service or treatment, under the direction of or in collaboration with a physician, in accordance with their education and training and the state’s statutes, rules, and regulations (CAATE, 2018a). As part of the healthcare team, services provided by athletic trainers include primary care, injury and illness prevention, wellness promotion and education, emergent care, examination and clinical diagnosis, therapeutic intervention, and rehabilitation of injuries and medical conditions.

**Clinical education:** a broad umbrella term that includes three types of learning opportunities to prepare students for independent clinical practice: clinical experiences, simulation, and observation experiences (CAATE, 2018a).

**Clinical experiences:** Direct patient care guided by a preceptor who is an athletic trainer or physician (CAATE, 2018).

**Clinical site:** A facility where a student is engaged in clinical education.

**Immersive clinical experience:** a practice-intensive clinical experience that allows the student to experience the totality of care provided by athletic trainers (CAATE, 2018a).

**Observation experiences:** Learning opportunities supervised by healthcare providers where students do not engage in direct patient care.

**Patient-centered care:** Care that is respectful of, and responsive to, the preferences, needs, and values of an individual patient, ensuring that patient values guide all clinical decisions (Institute of Medicine, 2003). Patient-centered care is characterized by efforts to clearly inform, educate, and communicate with patients in a compassionate manner. Shared decision making,
and management are emphasized, as well as continuous advocacy of injury and disease prevention measures and the promotion of a healthy lifestyle.

**Physician:** Healthcare provider licensed to practice allopathic or osteopathic medicine.

**Preceptor:** Preceptors supervise and engage students in clinical education (CAATE, 2018a). All preceptors must be licensed healthcare professionals and be credentialed by the state in which they practice.

**Professional program:** The coursework that instructs students on the knowledge, skills, and abilities necessary to become a healthcare provider.

**Professional socialization:** Process by which an individual acquires the attitudes, values and ethics, norms, skills, and knowledge of a subculture of a healthcare profession (Breitbach & Richardson, 2015).

**Rural population:** Rural and suburban communities with a population of less than 50,000 residents.

**Simulation:** An education technique to replace or amplify real experiences with guided experiences that evoke or replicate substantial aspects of the real world in an entirely interactive manner (Gaba, 2004).

**Urban population:** Communities with a population of greater than or equal to 50,000 residents.

**Positionality and Assumptions**

With every attempt to minimize the limitations of this study, there are factors which were beyond the researcher’s control. First, my past experiences as an athletic training faculty member, preceptor, and clinician informed my perspective. To bracket off these perceptions of the topic would have been difficult, therefore instead of bracketing, I acknowledged these
perceptions and ensured they were identified throughout the research study (Davidsen, 2013; Heidegger, 1962/1927).

My background and experiences as an athletic training student, faculty member, and preceptor are the lenses in which I view the world and this study. Throughout this study, I attempted to increase my awareness of these experiences and my understandings of the phenomenon of interest; how program administrators and preceptors determine what is most appropriate for preceptor selection and development. To remain reflexive, I used a journaling strategy to help increase my awareness of how these experiences influenced my decisions as a researcher and my interpretations of each interview. As an athletic training student, a preceptor of mine did not provide much autonomy for me to interact with patients. Furthermore, my experiences with this preceptor while I was a student were negative as the preceptor did not engage me in learning opportunities often. I attribute her approach to clinical teaching to my experiences as a student. I worked hard to not replicate the behaviors of my preceptor to ensure the students I supervised had more positive experiences than I did as a student. As a preceptor, I assumed taking on the role of clinical educator meant accepting the many responsibilities of the position and I would be adequately prepared for the challenges I would face. While my first experience supervising students during clinical experiences left much room for growth, I was genuinely interested in teaching and improving my skills in this role. The idea of mentoring students as they gained experience as healthcare providers excited me and I was eager to receive feedback, which would help me improve my abilities. I assumed the program administrator responsible for selecting and training me to be a preceptor had adequate time for their position. So, I took the relationship I built with this program administrator very seriously, and carefully considered their input. Over time, as I have gained more experience working within an athletic
training program, I have come to appreciate just how complicated the process of selecting and developing preceptors may be. I have learned the motivations and experiences of each stakeholder determine how a preceptor is selected and furthermore, just how multifaceted training and developing preceptors to be better clinical teachers can be. Because of these experiences, I brought certain assumptions to this study that should be mentioned.

1. The process of selecting and developing the clinical teaching skills of preceptors is a time intensive and challenging process for the program administrator charged with this task.

2. Those clinicians who are selected to be preceptors for a professional program have a genuine interest in helping instruct and mentor athletic training students.

3. Preceptors who have an open mind and accept feedback from program administrators will have more significant development as preceptors.

4. Preceptors who have thorough orientation and training for the role of clinical teacher will have more positive experiences as preceptors.

**Summary**

This chapter set the stage for a phenomenological study of how stakeholders determine the appropriate selection and development of athletic training preceptors. The introduction included information related to clinical education, preceptors, and the selection and development of athletic training preceptors. Additionally, this chapter summarized the gap in literature on the selection and development of athletic training preceptors. Moreover, the chapter presented three researches questions which guide the study. Prominent operational definitions were offered to generate a consistent understanding of key terminology. Finally, the chapter explored the
researcher’s opinion combined with a transparent reflection of her background and professional experiences.

This dissertation is organized into five chapters. Chapter two consists of an in-depth review of the salient literature, including theoretical frameworks guiding the study. Chapter three outlines the proposed study, including data collection and analysis techniques. Chapter four presents the findings of the study. Finally, Chapter five provides a discussion of these findings, including interpretation and application of the results as well as limitations of this study and suggestions for future research.
CHAPTER TWO: REVIEW OF THE LITERATURE

Developing capable preceptors is a challenge for many athletic training programs. The literature suggested specific characteristics, behaviors, and attributes of valuable preceptors (Lauber et al., 2003; Laurent & Weidner, 2001; Platt Meyer, 2002; Weidner & Henning, 2004, 2005). However, this literature may be outdated. Per accreditation standards, program administrators are tasked with preparing and developing preceptors for the role that they will assume as a clinical educator (CAATE, 2018a). Unfortunately, athletic training professional organizations have not identified best practices for preceptor development; therefore, administrators must appraise this themselves. Gaining information on how stakeholders (i.e., preceptors and program directors or clinical education coordinators) determine what they believe is most appropriate may be helpful in making these critical decisions.

The following review incorporated literature salient to this study, specifically athletic training preceptor selection and development. Chapter Two is organized into seven sections: (1) theoretical frameworks guiding the study, (2) differentiating clinical and didactic education in healthcare, (3) what is a preceptor, (4) the evolution of athletic training preceptor selection and development, (5) dominant issues in preceptor selection and development, (6) the benefits of effective preceptors, and (7) summary of the literature review.

Theoretical Frameworks Guiding the Study

The theoretical foundation for this study is grounded in Experiential Learning (Kolb, 2015) and Andragogy (Knowles, 1984). First, experiential learning (Kolb, 2015) consists of a four-part cycle that involves the introduction of new experiences followed by the reflection, integration, and repetition of these experiences. This type of learning involves the integration of didactic coursework into real-world settings, which further develops students’ knowledge and
skills. The experiential learning environment allows students to apply the theory learned in the
theory of experiential learning has however come under critique due to its inefficient attention on
a multitude of areas (e.g., Bergsteiner & Avery, 2014). A twin-cycle model for experiential
learning has thus been proposed in the literature, which more holistically encompasses the
complexities of learning. The experiential learning model proposed by Bergsteiner & Avery
works to integrate extant models of learning previously critiqued with various learning activity
types. In contract to Kolb’s (2015) model, this model integrates previously siloed categories of
learning style and activity types creating a more cohesive model, which provides greater
diversity in approaches to learning. This model allows educators to use both passive learning
methods such as reading literature or attending lectures with more active techniques such as
simulations all while incorporating reflection into each stage of learning, which more learners
may be comfortable with. The profession of Athletic Training has a long history of experiential
education as a requirement for professional preparation (Perrin, 2007). While those requirements
have drastically changed over the years, an emphasis has remained on experiential learning.

Andragogy (Knowles, 1984) outlines the many ways in which adult learning differs from
that of children. This learning theory identified five assumptions about adult learning that are
important: (1) adults are at a more mature developmental state and therefore have a more secure
self-concept, which allows them to direct their own learning, (2) adults have diverse past
learning experiences, which influence how they learn, (3) adults have an increased readiness for
learning, (4) adults return to learning for practical reasons, and (5) adults are more internally
motivated to learn than children. Knowles’ theory of andragogy used these assumptions to
develop four guiding principles. First, because of their self-directedness, adults should be
involved in the development of the content and process of their learning. Secondly, adult learning should focus on drawing from the learners past experiences and build upon them. Third, the material included for adult learners should focus on issues related their work or personal life. Finally, the final principle of andragogy suggests learning should center on problem-solving rather than memorization. Overall the concept of andragogy shifts learning from teacher-directed to learner-directed.

Preceptors are healthcare professionals who have graduated from a professional program and earned the appropriate credential to practice in their respective profession. Therefore, it is safe to assume preceptors are adult learners who have past experiences in their field, are self-driven, value learning that integrates with their everyday life, and are internally motivated. While presented as two distinct educational theories, experiential learning promotes active learning within the psychomotor and affective domains that are meaningful to adult learners. The environment fostered within experiential learning places learners, in this case preceptors, into professional contexts where they can experience the realities of the role they hope to fill. This hands-on learning suggested by Kolb’s (2015) Experiential Learning theory and Bergsteiner and Avery’s (2015) twin-cycle experiential learning model promote meaningful educational experiences, which Knowles (1984) suggested in his theory of andragogy.

**Differentiating Clinical and Didactic Education in Healthcare**

Healthcare professional programs include both traditional didactic courses as well as clinical or experiential courses, which allow the student to apply what is learned in the classroom. To better clarify the various components of the professional preparation of healthcare providers it is necessary to differentiate didactic and clinical education. During didactic classes, the overall goal is students increased cognitive learning, and specific course objectives are not
necessarily correlated to clinical experiences (Karuhije, 1997). During clinical experiences, however, students apply knowledge, skills, and abilities when providing patient care under the guidance of a preceptor (Edler et al., 2017; Levy et al., 2009). Athletic training clinical experiences was defined as “direct client/patient care guided by a preceptor” (CAATE, 2018a, p. 18). Clinical experiences in healthcare provide one-on-one learning opportunities, which allow students to gain practical encounters with patients, which considerably influence students’ professional preparation (Dodge & Mazerolle, 2015). During these experiences, students interact with patients in real time to learn how to provide care to their patients. These experiences afford students a first-hand opportunity for providing athletic training services to patients. With proper mentorship, clinical education provides students with experiential learning activities that give students the opportunities to bridge the gap between academic knowledge and clinical practice.

A crucial additional distinction between didactic and clinical education lies in the demands of the learning atmosphere. During clinical experiences, there is limited control over extrinsic factors such as interpersonal interactions and evolving patient needs. The learning opportunities afforded during clinical experiences are often unique to the circumstances and cannot be repeated nor anticipated or planned (Papp, Markkanen, & von Bonsdorff, 2003; Schultz, 2002). In contrast, the environment of didactic teaching utilizes preplanned lecture and lab activities to reinforce previous knowledge as well as create new awareness within the cognitive domain (Schultz, 2002). This atmosphere involves a planned syllabus, which outlines the full semester (Karuhije, 1997). Conversely, what may have been scheduled during clinical experiences can quickly change due to an evolving caseload and patient conditions (Schultz, 2002).
Overall, where didactic teaching emphasizes learning theoretical concepts, clinical teaching emphasizes psychomotor skill development. It is in clinical experiences where students apply the theory that is taught in the didactic setting (Schultz, 2002). While both forms of education have been supported in the literature, no consensus exists to endorse one method over another (DeWolfe et al., 2010).

**What is a Preceptor?**

Preceptors are skilled practitioners within a healthcare profession who supervise and teach students during clinical experiences (Myrich & Yonge, 2005). Authors from various healthcare professions including nursing (Altmann, 2006; Singer, 2006), pharmacy (Dalton et al., 2007), and respiratory therapy (Rye & Boone, 2009) cited preceptorships as the model for clinical education. In athletic training education, the CAATE defined preceptors as licensed healthcare professionals who “supervise and engage students in clinical education” (CAATE, 2018a, p. 20). The CAATE established the responsibilities of a preceptor most recently in the 2020 Standards for Accreditation of Professional Athletic Training Programs. These include instructing, supervising, mentoring, and assessing athletic training students during clinical experiences (CAATE, 2018a).

Preceptors provide supervision and clinical instruction to help bridge the gap between educational theory and clinical practice (Altman, 2006). Additionally, preceptors greatly influence athletic training students’ professional preparation (Dodge & Mazerolle, 2015) and help socialize students into the athletic training profession (Altmann, 2006; Lauber et al., 2003; Weidner & Henning, 2005). During this socialization, students learn the attitudes and behaviors within the healthcare culture, which cultivates excitement and commitment to the profession (Dodge & Mazerolle, 2015; Rye & Boone, 2009). Preceptors also mentor athletic training
students, which results in a relationship that has a large impact on students’ socialization to the athletic training profession (Pitney & Ehlers, 2004) and subsequently influences their career decisions after graduation (Mazerolle et al., 2012).

Published literature suggested there are characteristics, behaviors, and skills that influence a preceptor’s effectiveness, including those in communication, interpersonal behaviors, management, and problem solving (Lauber et al., 2003; Laurent & Weidner, 2001; Platt Meyer, 2002; Weidner & Henning, 2004, 2005). Additionally, a preceptor’s success in meeting the goals and objectives of clinical education may also depend on more innate characteristics such as patience, enthusiasm for the profession, self-confidence, and adaptability (Platt Meyer, 2002; Weidner & Henning, 2004). Furthermore, a preceptor’s effectiveness is influenced by their understanding of the policies and procedures associated with clinical education (Singer, 2006). Therefore, it is crucial for preceptors to understand the policies and procedures of the program with which they work as well as refine their skills in the aforementioned areas to effectively foster student learning

Preceptors themselves, though, may not have had a pedagogic or leadership focus in their professional preparation. Generally, preceptors have not been formally trained in educational theory and techniques but instead have been selected for their role based on their professional abilities as a healthcare provider (Jarski, Kulig, & Olson, 1990; Weidner & Henning, 2004). Being a skillful clinician though is only one-half of the skills necessary to promote student learning. Therefore, when not adequately developed, preceptors may be set up to fail at meeting the expectations of clinical education (Rye & Boone, 2009).
Evolution of Athletic Training Preceptor Selection and Development

Historically, the profession of athletic training has understood the need to provide training and development for those who supervise and teach students in clinical experiences. The terminology and regulation associated with athletic training preceptors, however, has evolved over the past several decades. Previously, athletic training education guidelines were established by the National Athletic Trainers’ Association (NATA) Education Council and regulated by the Joint Review Committee on Education Programs in Athletic Training (JRC-AT) and the Commission on Accreditation of Allied Health Education Programs (CAAHEP; Weidner & Henning, 2002). These groups established guidelines, which mandated athletic trainers complete professional training for their roles as clinical instructors (what are now labeled preceptors). To that end, in 2000 the CAAHEP (as cited in Weidner & Henning, 2004) began Clinical Instructor Educator (CIE) seminars, which aimed to provide program administrators with the tools to train clinical instructors. At the time, accreditation standards required CIEs to train clinical instructors to teach and evaluate students within clinical experiences effectively. By completing this training, clinical instructors earned the designation Approved Clinical Instructor (ACI). However, the numerous levels of training required to establish ACIs may have been too restrictive. On June 30, 2006, the JRC-AT separated from the CAAHEP and reorganized to create the Commission on Accreditation of Athletic Training Education (CAATE, 2018b). While the organizational structure may have changed, nothing at the time altered the requirements to train ACIs. However, in 2012, the CAATE released the new Standards for the Accreditation of Professional Athletic Training Programs. These revised standards redefined
ACIs as preceptors and altered the ongoing education required to train preceptors, which still stand today.

Previous educational standards dictated specific information related to preceptor education such as the frequency at which it must occur and the content that must be included (Weidner & Henning, 2004). For example, the previous requirements included seven standards with 50 criteria prescribing the skills ACIs must demonstrate. Benchmarks in legal and ethical behaviors, communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation skills, and clinical skills were established, which meant program administrators had to train ACIs in these areas to ensure they met or exceeded each of the 50 criteria within the seven standards. The requirements released in 2012, eliminated these criteria and left much more room for the selection and development of preceptors, affording each program more autonomy to select and develop preceptors based on their own goals and objectives (Hankemeier et al., 2017). The revised standards for preceptor development for professional athletic training programs manifested in Standards 38 and 41. They read, “A preceptor must demonstrate an understanding of and compliance with the program’s policies and procedures. . . . A preceptor must receive planned and ongoing education from the program designed to promote a constructive learning environment” (CAATE, 2012, p. 5).

In 2018, the CAATE updated the standards for accreditation of professional athletic training programs, which will be implemented on July 1, 2020. Within these new requirements, the CAATE adjusted the language used to describe the specifications associated with preceptor selection and development. First, Standard 45 established only physicians and athletic trainers may serve as preceptors for athletic training programs. Once implemented, students may only engage in direct patient care while being guided by a preceptor who is an athletic trainer or
physician. Programs may choose to continue to utilize other healthcare providers for observational opportunities, but only athletic trainers and physicians will be permitted to serve formally as preceptors. Additionally, Standard 40 clarified that program administrators must regularly communicate with preceptors to keep them abreast of the program framework and provide professional development opportunities specific to their role as preceptors. The CAATE (2018b) specified that preceptor education must be “designed to promote an effective learning environment and may vary based on the educational expectations of the [clinical] experiences” (p. 9). Finally, Standard 49 established that preceptors must receive regular performance evaluations and feedback related to their skills as clinical teachers.

By removing standardized training for preceptors in 2012, and maintaining a similar philosophy in the 2020 standards, athletic training programs are now afforded institutional autonomy regarding preceptor development. Furthermore, on May 20, 2015, the Athletic Training Strategic Alliance announced that the professional degree for athletic training would change from an undergraduate to a master’s degree. This degree change has stimulated significant discussion and planning among athletic training educators as they determine the most appropriate way to implement the degree transition (e.g., Cavallario & Van Lunen, 2015; Mazerolle et al., 2015; Ostrowski & Marshall, 2015). Much of this planning has focused on the best way to approach clinical education at the graduate level. While athletic training educators can use other graduate, healthcare professional programs at their institution as a guide, no literature has examined current graduate-level professional athletic training program’s approach to clinical education nor preceptor selection and development.

Weidner and Henning (2004) suggested selection criteria for preceptors in athletic training. These accepted characteristics and skills included: “legal and ethical behavior,
communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge” (p. 335). Authors from this study mentioned these criteria could be used not only during the selection process for preceptors, but also useful tools for training and evaluating preceptors. While Weidner and Henning proposed helpful ways of selecting, training, and assessing athletic training preceptors, this literature may be outdated as it not only used previous standards regarding clinical education, but it examined athletic training preceptors for undergraduate programs.

**Current Trends in Preceptor Development**

Today, preceptor development programming has aimed to prepare clinicians from various healthcare professions for the role of clinical teacher. In athletic training, there is anecdotal information of inconsistent methods for developing preceptors and little empirical evidence examining preceptor development. There has, however, been some discussion within the literature regarding delivery mechanisms (e.g., Ackman & Romanick, 2011), mentorships (e.g., Mazerolle et al., 2014), and content (e.g., Windey et al., 2015), which are believed to promote the development of preceptors.

**Delivery mechanisms.** Many healthcare professions, such as nursing, have continued to use workshops as a primary mechanism to deliver preceptor development (Windey et al., 2015). Others, like pharmacy, are beginning to utilize other modalities such as online modules to present preceptor development while accommodating the needs of the preceptor (Ackman & Romanick, 2011). Ricchetti and Jun (2011), for example, listed several online seminars and self-study modules aimed to improve the clinical teaching skills of pharmacy preceptors. Moreover, a few athletic training program administrators have also turned to online, asynchronous learning
to deliver preceptor development (Volberding & Richardson, 2015). These online interactions allow for the delivery of preceptor development without the challenge of scheduling large meetings, allowing preceptors to engage as their schedules permit.

Some professional organizations have also begun to form online continuing education opportunities for preceptors to supplement program administrators’ efforts to develop preceptors. One example of this is occurring within pharmacy professional organizations. Certificate training programs such as the “Education Scholar” certificate offered by the American Association of Colleges of Pharmacy allow preceptors to choose self-directed modules aimed at improving their teaching and leadership skills (Ricchetti & Jun, 2011). Additionally, within athletic training, the NATA’s Professional Education Committee recently launched “Master Preceptor” interactive online modules, which aim to provide clinicians with the opportunity to develop advanced techniques as preceptors (National Athletic Trainers’ Association [NATA], 2017). Both examples show an organizational interest in improving the clinical teaching skills of preceptors to enhance the quality of the clinical education experience for students. Furthermore, these modules may help alleviate some of the challenges program administrators charged with developing preceptors report (Hartzler, Ballentine, & Kauflin, 2015)

**Mentorships.** In addition to innovative delivery mechanisms, program administrators are helping preceptors by developing mentorships between experienced and novice preceptors. Both formal and informal mentorships have been identified as a contributor to the socialization of athletic training preceptors and have allowed novice preceptors to model the behaviors of experienced preceptors (Mazerolle et al., 2014; Nottingham et al., 2016). Additionally, research in nursing (Haggerty, Holloway, & Wilson, 2012; Hallin & Danielson, 2008) and medicine (Sambunjak, Straus, & Marusic, 2006) suggested mentorship between preceptors has a positive
influence on their development as these relationships contribute to preceptors’ career satisfaction, confidence, and productivity. By facilitating mentorship relationships, program administrators are connecting new preceptors with those who have more experience. Furthermore, these interactions may encourage collaboration with role models that help novice preceptors to observe exemplary behaviors and self-reflect to improve their skills.

**Content.** The content included within preceptor development has focused on improving specific skills associated with clinical teaching. The systematic review conducted by Windey et al. (2015) focused on reviewing interventions that support nursing preceptor development. They reported the content most frequently included in preceptor development was giving and receiving feedback, effective communication, facilitating adult learning, reviewing roles and responsibilities of the preceptor, as well as development and evaluation of clinical judgment. Additionally, Assemi, Corelli, and Ambrose (2011) found that pharmacy preceptors prefer topics including strategies to engage and motive students, updates on teaching techniques, and effectively questioning students. Similarly, athletic training preceptors appear to prefer guidance on developing students’ critical thinking skills and teaching clinical decision making within preceptor development (Hankemeier et al., 2017). Regardless of the delivery mechanisms, the content included within preceptor development influences preceptors’ confidence and comfort teaching students within the clinical setting. Examining the learning needs of preceptors may lead to more engaged preceptors who are better prepared to meet their responsibilities as facilitators of student learning during clinical experiences.

**Dominant Issues in Preceptor Development**

The 2012 revisions to preceptor development standards gave program administrators the freedom to form preceptor development programming that meets each preceptor’s learning needs
best (Hankemeier et al., 2017). While the CAATE (2018a) requirements for preceptor development have evolved, the expectations of preceptors to teach, supervise, evaluate, and foster development of athletic training students have not. The recent reform in athletic training professional education has created a renewed need to examine appropriate selection and development of athletic training. As professional programs transition from an undergraduate to a graduate level, program and institution administrators will face a new demographic of student and athletic training clinical education may look much different (i.e., clinical immersion) than it does at the undergraduate level. Therefore, alongside their newfound freedom, program administrators must stay abreast of the learning needs of preceptors while maintaining clinical experiences, which meet the goals and objectives of an evolving program. Existing literature discusses two central issues which program administrators must consider when selecting and developing preceptors: (1) preceptors lack adequate time to engage in preceptor development, and (2) the role strain preceptors experience.

**Preceptors Lack of Time to Engage in Development**

Program administrators have developed programming to enhance preceptors’ skills but may have assumed preceptors have adequate time to engage in the programming. While preceptors appear to understand the benefits of participating in preceptor development, they often report the dominant barrier to their engagement is lack of time (e.g., Hartzler et al., 2015). However, participation and completion of preceptor development is a requirement to serve in this capacity. Hartzler et al. found that only 51 percent of pharmacy preceptors surveyed felt they had adequate time for engaging in preceptor development. Additionally, Nasser, Morley, Cook, Coleman, and Berenbaum (2014) found 95 percent of dietitians surveyed agreed preceptors should know about promoting learning, learner assessment, and evaluation. Furthermore, 90
percent of these participants agreed preceptors should have skills in planning, teaching, coaching, research, and facilitation. Overwhelmingly though, insufficient time was reported as a primary barrier to engaging in preceptor development. Athletic training preceptors report similar obstacles to participating in preceptor development (Dodge et al., 2014). While it appears preceptors want information to improve their skills as clinical teachers, it seems they often feel they do not have enough time in their schedule to engage in development.

**Role Strain of Preceptors**

Preceptors often accept the role of clinical educator without fully understanding and appreciating the challenges they will potentially face (McClure & Black, 2013). Role strain is experienced when a preceptor’s attempt to balance the load between clinical practice and precepting becomes overwhelming (Dodge et al., 2014). Henning and Weidner (2008) posited the dual role complexity of healthcare provider and clinical educator causes preceptor role strain. This tension is argued to lead to weak interactions between preceptors and students, crippling student learning within clinical experiences (Dodge et al., 2014; Levy et al., 2009). Furthermore, Dodge et al. (2014) examined the challenges associated with athletic training preceptorships and found preceptors reported long hours and high patient volumes as barriers to their overall success in precepting. They concluded preceptors’ ability to foster a positive learning environment for students was hindered by the role strain they experienced. Additionally, the literature review conducted by Pollard et al. (2007) noted that nursing preceptors face similar strain between the role of educator and clinician. Many initial preceptor development programs focus on accreditation standards, pedagogy, supervision, and methods of evaluation; which preceptors tend to prefer (Assemi et al., 2011; Hankemeier et al., 2017; Windey et al., 2015). But these workshops often fail to outline the complexities of balancing clinical practice with the
responsibilities of being a preceptor. As a result, the role strain experienced by preceptors is perpetuated, hindering a preceptor’s ability to foster a positive learning environment for the student.

**The Benefits of Effective Preceptor Selection and Development**

The clinical education environment athletic training preceptors provide is well documented to be a vital component to overall student development (Benes, Mazerolle, & Bowman, 2014; Dodge & Mazerolle, 2015; Edler et al., 2017). Clinical experiences afford students opportunities to assimilate into the role of a healthcare provider by offering real-life encounters with patients. During this time, students establish their professional identities and become socialized to their chosen profession (Dodge & Mazerolle, 2015).

The need for the creation of effective preceptor selection and development programs is profuse in the literature. One study reported that 49 percent of preceptors did not feel they were adequately prepared for the role of preceptor (Yonge et al., 2008). Additionally, in their review of the refereed literature, Windey et al. (2015) wrote that developing preceptors for their role leads to increased satisfaction and improved retention of both preceptors and students within the program. Furthermore, providing preceptors with adequate preparation and development enhances student learning and enhances patient care (Thrasher, Walker, Hankemeier, & Pitney, 2015). These improvements may have positive implications for the athletic training profession.

Previous research has long established the experiences and difficulties of newly credentialed healthcare providers (Casey, Fink, Krugman, & Propst, 2004; Clark & Springer, 2012; Duchscher, 2001; Halfer & Graf, 2006; Henning & Weidner, 2008; Mazerolle, Monsma, Dixon, & Mensch, 2012; Mazerolle, et al., 2015; Walker et al., 2016). Clark and Springer (2012) identified the first year of practice as a critical juncture for clinicians. Many new clinicians
choose to leave their profession because of job stress, unreasonable workloads, and difficulty transitioning to practice.

The difficulties experienced during this transition may be eased by better qualified, more prepared preceptors. Upon the transition to practice, newly credentialed athletic trainers’ have yet to provide completely independent care to patients. Because these novice healthcare providers are still adjusting to making decisions autonomously, they lack the wisdom needed for confident decision making. Clinically, prior experiences with patients inform a clinician’s decision making (Wainwright, Shepard, Harman, & Stephens, 2011). Preceptors facilitate realistic and positive environments, which lead student growth during diverse clinical experiences (Benes et al., 2014). Furthermore, the interactions with patients and preceptors during clinical education help students develop critical thinking skills and confidence as they progress through a professional program. Additionally, Bowman and Dodge (2013) stressed athletic training students often grow frustrated with monotonous clinical experiences. Therefore, placing students in a learning environment where the preceptor may be ill-equipped to provide an engaging and variable clinical experience may impede the overall development of the students’ skills providing patient care subsequently impacting their transition to clinical practice.

The current value-driven payment system within healthcare forces administrators to find unique ways to decrease costs while increasing high-quality patient outcomes. Failure to do this may result in reduced reimbursement of third-party payers (U.S. Department of Health and Human Services [HHS], 2013). Effective preceptors impact the next generation of healthcare providers and should be recognized as a cost-effective asset within professional education. Hensinger, Minerath, Parry, and Robertson (2004) found that an investment in preceptor
education saves the healthcare system thousands of dollars when costs related to employee turnover, recruitment, and patient safety were considered.

Finally, when athletic training preceptors do not promote a healthy learning atmosphere, they risk students not integrating into the professional environment, which may increase student dissatisfaction (Dodge, Mitchell, & Mensch, 2009). Because of the role preceptors play in creating excitement and commitment to the field (Dodge & Mazerolle, 2015), students who are supervised by preceptors who struggle in this role are less likely to appreciate the positive aspects of a career in athletic training (Dodge et al., 2014). As a result, utilizing unprepared and inadequately developed preceptors may lead to student discontent with the profession and increased attrition.

Summary of the Literature Review

This chapter summarized the literature of four themes germane to the topic of appropriate selection and development of athletic training preceptors: an overview of athletic training education, identifying the role of a preceptor, preceptor selection and development in healthcare education, and the benefits of effective preceptor selection and development. The literature indicated since early 2000’s there has been a sharp evolution in the accreditation guidelines and standards surrounding preceptor selection and development. The chapter differentiated between didactic and clinical education as identified in the literature (Edler et al., 2017; Karuhije, 1997; Levy et al., 2009; Papp et al., 2003; Schultz, 2002), yet found that no consensus exists to endorse one method over another (DeWolfe et al., 2010). Literature does suggest though clinical experiences and effective preceptors are paramount in creating empowered students and clinicians (Shultz, 2002).
The literature indicated that preceptors provide vital services to healthcare education. Authors from several healthcare professions have suggested that preceptorships are the model for delivering quality clinical education (Altmann, 2006; Dalton et al., 2007; Myrick & Yonge, 2005; Rye & Boone, 2009; Singer, 2006). Preceptors bolster professional socialization for athletic training students (Dodge & Mazerolle, 2015) as well as protect students during stressful situations (McClure & Black, 2013). Furthermore, preceptors have a strong influence over students’ career decisions upon graduation (Mazerolle & Dodge, 2015; Mazerolle et al., 2012).

While the literature suggested there are standards and criteria that can be used in the selection and development of athletic training preceptors (Lauber et al., 2003; Laurent & Weidner, 2001; Platt Meyer, 2002; Weidner & Henning, 2002, 2005), this literature may be outdated due to the recent reform in athletic training education. Developing preceptors for their role however still leads to increase satisfaction of clinical experiences by both preceptors and students (Windey et al., 2015). Several techniques have been utilized to develop preceptors including workshops, online modules, and establishing mentorship relationships between novice and experienced preceptors (Mazerolle et al., 2014; Nottingham et al., 2016; Volberding & Richardson, 2015; Windey et al., 2015).

Barriers to effective precepting within the literature included lack of training, insufficient resources and personnel, lack of confidence, workload and time stressors, knowing how to manage challenging students, and balancing clinician and teaching roles (Johanson, 2013). Overwhelmingly though, insufficient time was reported as a primary barrier to engaging in preceptor development (Hartzler et al., 2015; Nasser et al., 2014).

The value preceptors add to healthcare organizations must also be recognized. The increasing emphasis on improving patient outcomes and reduce costs has placed a high amount
of stress on practicing athletic trainers. Preceptors who are highly prepared for the role as a clinical educator have a positive impact on student transition to clinical practice (Thrasher et al., 2014). Preceptors help students develop critical thinking skills and confidence as they progress through a professional program (Walker et al., 2016), which can save the healthcare system thousands of dollars when considering costs related to employee turnover, recruitment, and patient safety (Hensinger et al., 2004). Therefore, the purpose of this study was to explore how stakeholders (preceptors and program directors or clinical education coordinators) determine what is most appropriate for the selection and development of athletic training preceptors.
CHAPTER THREE: METHODOLOGY

Despite having a historical understanding of the need to provide professional development and training for preceptors, developing capable preceptors remains a challenge for many athletic training programs. Per accreditation standards, program administrators (i.e., program directors or clinical education coordinators) are tasked with preparing and developing preceptors for the roles they will assume as clinical educators (CAATE, 2018a). Specifically, preceptor development must be “designed to promote an effective learning environment and may vary based on the educational expectations of the [clinical] experiences” (p. 9). Alongside preparing effective preceptors, athletic training program administrators are also planning for their programs to transition to the graduate level by the year 2022. This degree change has stimulated significant discussion regarding the best way to approach clinical education at the graduate level (e.g., Cavallario & Van Lunen, 2015; Mazerolle et al., 2015; Ostrowski & Marshall, 2015). As a result, many administrators may turn to other graduate-level healthcare programs for information due to the lack of up-to-date evidence within the athletic training literature.

As previously mentioned, the literature has suggested effective preceptors demonstrate certain characteristics, behaviors, and attributes (Lauber et al., 2003; Laurent & Weidner, 2001; Platt Meyer, 2002; Weidner & Henning, 2004, 2005). However, this literature may be antiquated as it examined preceptors serving in undergraduate programs using outdated accreditation standards. Furthermore, literature has suggested the barriers to effective clinical experiences may include challenges such as the lack of time to engage in preceptor development (e.g., Hartzler et al., 2015) and role strain experienced when trying to balance the load between clinical practice and precepting (Dodge et al., 2014; Pollard et al., 2007). Athletic training program administrators should consider these central issues when selecting and developing
preceptors. Additionally, these administrators must evaluate the learning needs of preceptors while maintaining clinical experiences which meet the objectives of an evolving professional program.

Selecting qualified preceptors and providing them with professional development opportunities to help them to become effective clinical teachers may be a vital component to enhancing the overall development of athletic training students. Unfortunately, athletic training professional organizations have not identified best practices for preceptor selection or development, so administrators are responsible for appraising these themselves. Gaining information on what stakeholders (i.e., program administrators and preceptors) believe is most appropriate may be helpful in making these important decisions.

**Purpose and Research Questions**

The purpose of this study was to explore how stakeholders (preceptors and program directors or clinical education coordinators) determine what is most appropriate for the selection and development of athletic training preceptors. The purpose was realized through answering the following research questions:

- Research Question 1: What are stakeholders’ beliefs regarding preceptor selection?
- Research Question 2: What are stakeholders’ views regarding preceptor development?
- Research Question 3: How do stakeholders determine what they believe is most appropriate for preceptor selection and development?

**Design of the Study**

**Methodology**

This study was founded on a qualitative paradigm using a hermeneutic phenomenological approach to inquiry (Heidegger, 1927/1962). The goal of phenomenological studies is to explore
the reactions of participants to a specific phenomenon (Creswell, 2013). For this study, the phenomenon being investigated was how preceptors and program administrators determine what is most appropriate for the selection and development of athletic training preceptors. Utilizing the qualitative paradigm helped develop an understanding of the experiences of those involved in athletic training clinical education to better understand how stakeholders interpret preceptor selection and development.

Phenomenology is situated in the context of constructivism where multiple realities may exist and the researcher and participant co-construct understanding (Hatch, 2002). It is the human experience which phenomenology relies upon to create meaning and a deeper understanding (Wilson & Hutchinson, 1991). Hermeneutic phenomenology, however, differs slightly from other forms of phenomenology. This subset of phenomenology was first introduced by Martin Heidegger in 1927 (Laverty, 2003). Unlike other phenomenologists (e.g., Husserl, 1952/1980), Heidegger (1927/1962) believed one’s background (or historical experiences) could not be separated from their understanding of the phenomena being investigated. Furthermore, Heidegger emphasized the idea that each person draws from their experiences and cultural background to form new understanding (Laverty, 2003). Central to hermeneutic phenomenology is the idea of interpretation. To understand a phenomenon, in the case of this study, how preceptors and program administrators determine what is most appropriate for the selection and development of athletic training preceptors, both the interviewer (i.e., primary investigator) and participants (i.e., program administrator or preceptor) use interpretations of their lived experiences and cultural backgrounds to draw these conclusions. Therefore, hermeneutic phenomenology was selected as the most suitable approach to this study.
Population

The research questions were addressed by interviews with preceptors for graduate, professional athletic training programs as well as program administrators (i.e., program directors or clinical education coordinators) who are primarily responsible for selecting and developing preceptors for these programs. Additionally, to engage in this study, participants must have been at least 18 years old. Individuals who did not identify in one of these roles, served within undergraduate, professional athletic training programs, or were younger than 18 years old were excluded from participation.

Sample

Participants were selected using reverse snowball and quota sampling (Creswell, 2013; Given et al., 2008). Portney and Watkins (2009) noted the importance of selecting the appropriate candidates for interviews so they have experience and interest in the topic being investigated. Snowball sampling is a technique which uses an initial participant pool and asks each informant to nominate other participants they think meet the inclusion criteria for the study (Creswell, 2013). This sampling technique was used to gain access to athletic training preceptors; a population central to this study, which may be difficult accessing. Initially, program administrators were identified using the CAATE website (www.caate.net). Recruitment emails (Appendix A) were sent to all program administrators (i.e., program directors and clinical education coordinators) for graduate, professional athletic training programs. Using reverse snowball sampling, the administrator mostly responsible for selecting and developing preceptors were asked to participate as well as forward the recruitment email onto preceptors for their program. The email sent to each potential participant asked them to complete a brief questionnaire (Appendix B) if they were interested in participating in this study. This
questionnaire reviewed informed consent (Appendix C) and inclusion criteria as well as asked
the participant to complete demographic information and asked for their contact information so
that an interview could be scheduled.

Quota sampling is a technique that determines categories within the population and
specifies the number of participants that should be included from each category (Given et al.,
2008). Using quota sampling helped ensure both athletic training program administrators and
preceptors were interviewed as well as help ensure inclusion of participants from diverse
geographic areas and different experience levels. The recruitment and sampling procedures are
outlined in Figure 1.

![Program Identification](chart1)

**Initial Recruitment**

- Email sent by PI to program director and clinical education coordinator for each program identified during step 1
- Program administrator completes questionnaire if they would like to participate

**Reverse Snowball Sampling**

- Program administrator forwards recruitment email to all preceptors
- Preceptors complete online questionnaire if they would like to participate

**Quota Sampling**

- Participant Role categories created:
  - Program Administrator
  - Preceptor
- Demographic categories created:
  - Geographic Region
  - Amount of experience in role
  - PI interviews participants from each Participant Role category
- PI interviews participants with diverse backgrounds in each Demographic category

*Figure 1. Recruitment and sampling procedures*

**Data Collection**

The purpose and research questions were addressed through individual, semi-structured
interviews (Creswell, 2013; McIntosh & Morse, 2015; Savin-Baden & Major, 2012) with
preceptors for graduate, professional athletic training programs as well as program administrators
(i.e., program directors or clinical education coordinators) who are primarily responsible for
selecting and developing preceptors for these programs. Individual, semi-structured interviews provided an effective way to examine preceptor selection, development, and delivery options as they offered rich contextual data in the participants’ own words. While group interviews or focus groups may offer insights into group interactions on the subject, individual interviews were chosen for the sense of security they offer, which may have led to more honest and reflective responses. Additionally, individual interviews allowed an investigation into each participant’s experiences with preceptor selection and development. A combination of in-person and phone interviews were used for this study. While in-person interviews were preferred, the flexibility offered by phone interviews created opportunities to expand the participant pool beyond the location of the primary investigator (PI). No universal approach to athletic training preceptor selection and development exists due to the freedom given by program accreditation standards (CAATE, 2018a). Therefore, there may have been variations of the experiences of preceptors and program administrators across the country. Therefore, phone interviews were used to interview members of the population who are geographically dispersed. Gaining information from a more diverse sample helped develop a more transferrable understanding of the beliefs of preceptor selection and development.

During each interview, the primary investigator used one of two semi-structured interview guides (Appendix D and E) based on the participant role assigned (i.e., preceptor or program administrator). These interview guides acted as a roadmap for where the discussion needed to go (Creswell, 2013; Hatch, 2002). Existing literature regarding preceptor selection and development helped guide the development of these interview guides. While other forms of interview guides exist, the semi-structured guide was selected for this study because it provides structure to the interview while providing flexibility for the researcher to ask probing questions
when needed (Pitney & Parker, 2009). Separate interview guides were used for preceptors and program administrators to allow for more tailored questions to each participant role. However, to help foster consistency across interviews only minor differences between interview guides existed. Both interview guides included questions related to the following: participants beliefs of effective preceptor criteria, their views of the most appropriate approach to preceptor development, and how they determined what they believe is most appropriate for both preceptor selection and development. The use of a semi-structured interview guide allowed some freedom to probe participants when needed. Therefore, during each interview the primary investigator asked for elaboration and examples when further information was needed to better understand what the participants were reporting (Rabionet, 2011). These data gave insights into how program administrators and preceptors interpret what is most appropriate for athletic training preceptor selection and development.

To improve the trustworthiness of the interview process, the interview protocol was reviewed for understanding, content, and clarity by a panel of experts that have experience with athletic training clinical education and/or qualitative methods (Davis, 1992). These individuals were independent from the research study, thus reducing researcher bias during the development of the interview framework. Review of the feedback provided during this process led to the development of separate interview guides for preceptors and program administrators to facilitate clear questions that all participants would be able to answer. For example, peer reviewers suggested preceptors may not be equipped to answer questions about why they believe utilizing a preceptor should be discontinued. Reviewers did not feel preceptors would have the administrative perspective to inform a response to this question therefore that item was removed from the preceptor interview guide. Additionally, Small (i.e., wording, grammatical)
modifications were made upon review of the feedback provided during this process. The interview guides were then piloted to help determine any flaws or limitations. These pilot interviews were conducted with two individuals (one preceptor and one program administrator) who served within an undergraduate athletic training program. The primary investigator asked the pilot interviewees to review the interview directions and questions and give feedback on understanding, content, and clarity. Based on their feedback during these pilot interviews, the primary investigator made small wording modifications to the questions to improve clarity. The researcher secured approval for the project from Ball State University’s Institutional Review Board (IRB) prior to recruitment (Appendix F).

Prior to recruitment (June 2018), all graduate-level, professional athletic training programs \( n=83 \) were identified using the public database on the CAATE website (www.caate.net). The CAATE website offers an up-to-date directory for all athletic training programs throughout the country and abroad. As of June 2018, this database listed 83 graduate, professional athletic training programs that were active and in good standing. The primary investigator used the directory on the CAATE website to identify all graduate, professional athletic training programs and then searched each institution’s website to identify the athletic training program director and clinical education coordinator. Once IRB approval was obtained, the primary investigator then sent a recruitment email (Appendix A) to the program director and clinical education coordinator for each institution. This recruitment email provided details related to the study and asked the person primarily responsible for the selection and development of preceptors to participate as well as forward the email to all preceptors of their athletic training program. If they were interested in participating in the study, individuals completed the demographic questionnaire (Appendix B). Participant confidentiality and informed consent
(Appendix C) were outlined and obtained from each participant before beginning all interviews. Furthermore, to protect the identity of the participants, pseudonyms were assigned and used for the remainder of the study. All other identifiable information (i.e., institution name, colleagues name) that may have come up during the interview was deidentified during the transcription process to maintain the participant’s confidentiality.

Each semi-structured interview lasted approximately 60-90 minutes and was conducted by the primary investigator. Interviews were conducted with participants who have different backgrounds and professional roles including preceptors and program administrators who oversee preceptor selection and development. These individuals all brought unique viewpoints regarding the best qualifications of preceptors for graduate, professional athletic training programs and how preceptors should be developed to meet student learning needs. Because participants’ experiences informed their beliefs of preceptor selection and development, it was important to interview participants with varied experience levels to gain insights into the beliefs and motivations of both novice and veteran preceptors and program administrators. Therefore, the interviews were conducted with participants of varied experience levels and geographic backgrounds, so the researcher could gain diverse perspectives of what is most appropriate for preceptor selection and development. These categories were used to guide the data analysis process.

Creswell (2013) recommended including data from five to 25 participants for phenomenological studies. However, data saturation guided the total number of interviews (Brinkmann, 2014; Hatch, 2002). Pitney and Parker (2009) described data saturation as a point within data collection when the researcher encounters redundant information from participants. The researcher individually determined when data saturation has been reached, however as a
guide, Pitney and Parker suggested when the researcher has heard a concept presented on three
different occurrences it becomes redundant and the saturation point has been reached. Finally,
each interview was audio recorded and transcribed verbatim by the primary investigator to
increase the credibility of the data (Creswell, 2013; Hatch, 2002).

Data Analysis

Each interview was audio recorded, transcribed verbatim by the primary investigator, and
coded using the Interpretative Phenomenological Analysis (IPA) approach (Smith, Flowers, &
Larkin, 2009; Smith, Jarman, & Osborn, 1999; Smith & Osborn, 2003). IPA is rooted in
phenomenology and the analysis technique aims to explore the participants’ experiences and
perceptions (Davidsen, 2013). Hermeneutic phenomenological research demands an analysis
process of constructing interpretations of experiences while continually questioning the
development of those interpretations (Hertz, 1997). This process, known as the hermeneutic
circle (Heidegger, 1927/1962) required the researcher of this study to continually revisit the data
while constructing interpretation and meaning. IPA involves a double hermeneutic circle as it
attempts to develop a description of the participants’ experiences and perceptions while
interpreting and understanding the context each participant is part of (Smith & Osborn, 2003).

As with most qualitative research methodologies, no recipe for data analysis exists.
Rather the researcher must adapt the analysis technique to the topic being investigated
(Davidsen, 2013). With that in mind, the first step in the data analysis process for this study was
for the primary investigator to construct a description of her experiences with preceptor selection
and development as both an athletic training faculty member and preceptor (Creswell, 2013).
This reflexive journal was used throughout data collection and analysis to help the primary
investigator maintain an awareness of her perceptions of the phenomenon being investigated and
her interpretation of the participants’ interviews. Following the IPA procedures described by Smith et al. (1999), the primary investigator familiarized herself with the data by reading and rereading the transcripts several times. Then, one transcript was randomly selected to begin data analysis. While reading this transcript, the primary investigator made annotations in the left-hand margin related to her understanding of the participant’s account. Additionally, this margin was used to note preliminary associations and interpretations. The right-hand margin was used to document emerging themes and categories throughout the transcript. Once the primary investigator read and annotated this initial transcript, she listed the categories noted in the right-hand margin and looked for connections between them. A directory of quotes to support each emergent category within this initial transcript was then compiled. This process was repeated for each remaining transcript, which resulted in a table of categories for each participant. A master list of categories was then created, and the primary investigator looked for connections between these categories to search for common themes and a codebook was created containing the categories and themes (Creswell, 2013; Hatch, 2002). The themes were then collated and combined with supporting quotes from the transcripts. Both Davidsen (2013) and Arvinen-Barrow, Massey, and Hemmings (2014) described an approach to IPA, which guided data analysis for this study.

Peer debriefing and narrative-accuracy member checks established trustworthiness of the findings. Peer review was used to establish credibility (Creswell, 2013; Lincoln & Guba, 1985). Three individuals with experience in athletic training clinical education or qualitative inquiry provided peer debriefing of the research process. The process of peer review helped to ensure the study was conducted in an appropriate fashion (Pitney & Parker, 2009). For this study, the peer reviewers were given three coded transcripts with the codebook and a description of the
emergent themes. Additionally, peer reviewers were given the purpose, research questions, and methods to give context to the study. The process of peer review or debriefing served as an external check to ensure the data were properly supported within the findings. Furthermore, narrative-accuracy member checks verified the accuracy of the transcription process (Savin-Baden & Major, 2012). The primary investigator sent each participant a copy of their interview transcript and asked each participant to read through and verify what was transcribed accurately represented their responses to the questions asked. Of the 19 member checks, three participants provided additional information to the transcript. This information was included during data analysis, but it did not alter the meaning of the original responses.

Summary

This chapter outlined the purpose, research questions, and design of this study. Specifically, the research method, participants, instrumentation, data collection, and analysis techniques were addressed. Chapter four will present the findings of this study describing the essence of what participants believe is most appropriate for preceptor selection and development.
CHAPTER FOUR: FINDINGS

Per accreditation standards, program administrators are tasked with preparing and developing preceptors for the role they will assume as clinical teachers (CAATE, 2018a). Previous literature has suggested there are certain attributes valuable preceptors possess; however, due to the evolution of athletic training education (i.e., changes to accreditation standards and the professional degree), this may be outdated. Furthermore, the literature does not clearly identify best practices for developing preceptors, which forces program administrators to make critical decisions regarding the selection and development of effective preceptors without the support of empirical evidence. This study sought to explore how stakeholders (preceptors and program directors or clinical education coordinators) determine what is most appropriate for the selection and development of athletic training preceptors.

Participant Characteristics

This study included interviews from 19 stakeholders (i.e., preceptors and program directors or clinical education coordinators) of athletic training preceptor development. Individual participant demographics are presented in Table 1. A large percentage of participants in this study reported they serve as clinical education coordinator (53%, n=10). Thirty-seven percent (n=7) served as a preceptor, 5% (n=1) as a program director, and 5% (n=1) indicated they serve as both program director and clinical education coordinator.

Participants reported a mean of 7.74 years of experience in their current role with a standard deviation of 6.30 years. Participants also provided some geographical characteristics of the area in which their program lies. To begin, participants listed the district of the National Athletic Trainers’ Association (NATA) in which they work. The NATA is the professional membership association for athletic trainers, and it is geographically segmented into ten districts.
### Table 1

**Participant Demographic Information**

<table>
<thead>
<tr>
<th>Participant Pseudonym</th>
<th>Role in AT Clinical Education</th>
<th>Years of Experience in Current Role</th>
<th>NATA District</th>
<th>Population</th>
<th>Miles to Next City</th>
</tr>
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<tr>
<td>Aiden</td>
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<td>Urban</td>
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<tr>
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<td>12.5</td>
<td>10</td>
<td>Urban</td>
<td>n/a</td>
</tr>
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<td>3</td>
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<td>50</td>
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<td>9</td>
<td>Urban</td>
<td>n/a</td>
</tr>
<tr>
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<td>PD</td>
<td>15.5</td>
<td>5</td>
<td>Rural</td>
<td>62</td>
</tr>
<tr>
<td>Jack</td>
<td>P</td>
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<td>2</td>
<td>Rural</td>
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<td>Urban</td>
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<td>8</td>
<td>Urban</td>
<td>n/a</td>
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<tr>
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</tr>
</tbody>
</table>

*Note.* CCE = Coordinator/Director of Clinical Education, PD = Program Director, P = Preceptor; Urban = population ≥50,000, Rural = population <50,000; n/a = not applicable.
based on states near each other. A map of the NATA districts is presented in Figure 2. Seven NATA districts were represented by the participants of this study, with participants coming from 13 states. Thirty-two percent ($n=6$) of participants reported they work in District 3, 21% ($n=4$) in District 5, 21% ($n=4$) in District 9, 11% ($n=2$) in District 10, and 5% ($n=1$) in Districts 2, 6, and 8 respectively. Furthermore, 78% ($n=15$) of participants indicated the program they work within is in an urban area with a population greater than or equal to 50,000. Those who indicated the program is in a rural area (population < 50,000; 22%, $n=4$) reported a mean distance of 40.5 miles to the nearest city with a standard deviation of 19.25 miles.

Three themes emerged from the findings that described participants’ beliefs of preceptor selection and development: beliefs of ideal preceptors, views of preceptor development, and influences on beliefs of preceptor selection and development. These themes were further divided into nine subthemes (Figure 3) and are presented in this chapter along with an examination of the characteristics of the sample.

**Beliefs About Ideal Preceptors**

During their interviews, participants discussed what qualities they reported were important for preceptors to have. These descriptions included the qualities of an educator, a professional, and a leader.

**Educator**

In their descriptions of ideal preceptors, participants discussed their desire for a preceptor to be someone who gives themselves not only as a clinician but as an educator; that they see one of their primary responsibilities as teaching students. Participants described a commitment to teaching and creating purposeful experiences as important characteristics of athletic training preceptors.
Figure 3: Districts of the National Athletic Trainers' Association
**Figure 2: Emergent Themes and Subthemes**

- **Beliefs of Ideal Preceptors**
  - **Educator**
    - Committed to teaching
    - Creates purposeful experiences
  - **Professional**
    - Sets a good example
    - Meets administrative expectations
    - Experienced clinician
  - **Leader**
    - Growth mindset
    - Best practices
    - Embrace educational advancement

- **Views of Preceptor Development**
  - **Logistics**
    - Flexible delivery
    - Accessible
    - Recognition
  - **Content**
    - Program information
    - Teaching strategies

- **Influences**
  - Adversity
  - Support Systems
  - Professional Development
  - Athletic Training Advancement
Committed to teaching. A consistent descriptor of the qualities a preceptor should possess given by participants included being committed to teaching students. Preceptor and administrator participants both frequently described an ideal preceptor being one who is truly committed to educating students. They expressed this commitment in several ways, one of which being the preceptor’s passion for teaching. Furthermore, they discussed a preceptor’s effectiveness as a clinical teacher is negatively affected if the preceptor is not enthusiastic about educating students. Participants such as Aiden, Carrie, Jack, Maria, Miranda, Richard, and Steve all described a preceptor’s willingness and passion to teach students as an ideal quality. When discussing his beliefs of ideal preceptors, Steve, a program administrator, prioritized preceptors’ commitment to teaching. He expressed that due to the numerous responsibilities a preceptor has related to patient care, if they are not dedicated to teaching students, they often lose sight of the students’ learning needs. Steve said:

They need to be passionate about education and teaching first. I do not want preceptors to view students as, “Oh, I just gained an extra set of hands, eyes, etc.” I want a preceptor to view students as “I gained a student I can teach, mentor, develop.”

This difference in a preceptor’s motivation to working with students was a primary concern for participants. When discussing his desire for preceptors to be committed to teaching, Richard, an administrator, described what this meant to him. He stated:

They truly want to work with students, to mentor and educate. They are vested in the educational process of the profession, the program, and the student. They want what is best for the education of the student and the athletic training profession.

Jack, a preceptor, also agreed, stating, “I think there has to be some passion behind becoming a preceptor. If you just go through the motions, you are doing a disservice to yourself and to the students.” When describing a commitment to teaching, Aiden, an administrator pointed out he had some ownership in preceptors viewing themselves as educators. He stated:
It is more about developing a faculty of preceptors, and we do not tend to view athletic training preceptors as faculty. They are somehow different. They are clinicians who are willing to teach students out of the kindness of their heart, with little to no compensation. If we empower them and say “no, you are part of our faculty.” I want to do whatever I can to make preceptors feel more like members of our faculty.

Carrie and Maria, both administrators, also described the importance of having preceptors who are committed to teaching students. Carrie mentioned, “not all athletic trainers go into the profession to be teachers, but I think it is an important quality to have for successful clinical experiences.” Maria further described why it is so important to have preceptors who are enthusiastic about educating students. For her, clinical education is designed for students to apply what they have learned in the classroom, and without effective preceptors, students’ learning may be inhibited. Maria reported:

They [preceptors] absolutely must be willing and excited to teach our students. That is absolutely crucial because this [students’ clinical experiences] is where they learn many skills, this [clinical experiences] is what reinforces what we teach them in the classroom. So, preceptors have to be willing to teach students.

Additionally, when describing the importance of preceptors’ commitment to teaching, participants noted the value of a preceptor taking time out of each day to educate students. An often busy and hectic workday can test a preceptor’s dedication to teaching, but participants highlighted that ideally preceptors can devote time each day to teach and mentor students. When discussing preceptor qualities, Anthony, a preceptor, mentioned how it is easy to forget students’ learning needs when trying to balance a patient load. He said, “many times athletic trainers get locked into helping patients. They can sometimes lose sight of teaching students, so they can focus solely on being a clinician, but this does not give students the opportunities to learn they need.” Anthony explained that preceptors who are truly committed and motivated to teaching students take time out of their day to help students learn and grow. Carrie, an administrator, agreed. She shared how preceptors must be able to give time to helping students grow, especially
during the first year of the program. She said:

I think they [preceptors] are used to students in the undergraduate level who have had one or two observational experiences, or they were further along in skills and content knowledge before working with them [the preceptor]. When you think about their [students’] first experiences as a master’s student, they have only had one or two courses, and their skill level is minimal. Preceptors have to be willing to take the time to mentor those students and give them learning opportunities.

Charlotte, a preceptor, spoke from personal experience when describing the necessity of dedicating time for working with students. She mentioned:

They [preceptors] must be generous in terms of willingness to use their time. Sometimes the only quiet I get all day (because I am a mother to young children and work in a busy environment) is during a baseball game or a soccer game I am covering. As a preceptor, you give up what could have been quiet time to talk over things with them [students]. You have to use that time to break down a situation with a student and discuss things with them.

Participants, especially those who reported the program they serve is located in the southeastern region of the country (i.e., NATA districts nine and three), also discussed that preceptors show they are committed to teaching by being warm and open with students. Charlotte, Maria, Natasha, Ray, and Samantha all discussed the importance of this quality. Described warmth and openness as being not only understanding with students but also openly giving feedback and sharing their own missteps as a clinician. Charlotte, a preceptor, discussed how preceptors must be patient with students while they work through their process of decision making. She said:

Students are coming in, and they are going to be nervous and unsure of themselves. They [preceptors] need to have the patience to let students engage in patient care and talk them through procedures because they cannot learn if they do not practice their skills.

Maria, another preceptor, described ideal preceptors as those who are warm towards students. When describing what warmth meant, Maria shared, “they are welcoming, not standoffish. They go out of their way to talk to students. They have a personality that is comforting, and students
feel like they could talk to them about anything.”

Natasha and Samantha described the importance of preceptors being open with students. For Natasha, an administrator, this openness meant that preceptors were willing to give students frequent feedback. She revealed this open and frequent feedback helps students learn how to improve as a clinician. Natasha added that without feedback, students often do not understand how they could improve as a healthcare provider. Natasha shared:

I want a preceptor who is willing to be open and honest with positive and constructive feedback. That is extremely important for students’ learning. Not only do they need to have positive reinforcement when they do something correct, but they also need to be corrected with constructive feedback. They need to understand where they can improve. When you have a preceptor that does not give this feedback early, I then get evaluations about the students where the problems were never addressed. That is an issue because it is too late at that point.

Samantha, a preceptor, discussed how openness with students means preceptors are willing to engage in conversations with students about challenging situations. She said, “they [preceptors] should be open about sharing mistakes with students so they can understand we are not perfect and we make mistakes and how you can turn those missteps into positives.” When describing this openness, Samantha also mentioned that sometimes those conversations need to be about difficult professional issues. She said:

We need to be open to discussing with students some difficult issues such as the relationship between athletic trainers and other healthcare professions and how it could be more positive. Just having an open discussion about it and allowing them [students] to see that it is something that is going on and talk about how it may affect their practice in the future. Being open to me means not hiding warts but to put them out there and say, “this is a challenge we are facing, and I can understand both sides, but we need to be on the same team. So, how do we make this happen?”

Creates purposeful experiences. Participants also discussed the need for preceptors to create purposeful experiences for students by engaging students in patient care in meaningful ways and not overutilizing students as a labor force. This quality was especially important for
those participants who were serving as program administrators. When describing his beliefs of ideal preceptors, Trey, an administrator, mentioned he values a preceptor who can guide students through patient care using verbal prompts without stifling the student’s experiences. He explained:

My favorite preceptors are those who are willing to be confident in their skills and to bury their hands in their pockets and let students apply their skills. To let the students be challenged, but at the same time, be there so you can intervene on behalf of the patient if need be. Preceptors should not be the ones doing the evaluation, the treatment on patients. But, rather they guide the student through the evaluation and treatment using verbal cues. I think our students deserve the opportunity to try. They deserve the autonomy and respect to practice their skills on real life patients.

Ray, a preceptor, added, “they [preceptors] need to allow students to experience and do things. We need to let them [students] get their hands dirty.”

Participants like Aiden, an administrator, mentioned that students value preceptors who plan learning opportunities for them and create a more effective clinical experience. He said, “students’ value someone [a preceptor] who is organized and consistently has things [learning activities] for them. They have a plan for each day.” Additionally, Aiden shared that without highly engaging clinical experiences, athletic training would not align with how peer professions prepare their students. He added:

The more effective preceptors understand students need to be actively engaged during clinical experiences. They understand you cannot have students come in for 12 hours and only engage in 30 minutes of meaningful experiences and the rest of the time sitting around and cleaning. That is an inefficient use of time, and, frankly, it is a disservice to the profession. Our skills are more valuable than that. That is not how any other healthcare profession trains their next generation.

Carrie, Steve, and Trey described negative experiences with preceptors who were not creating purposeful experiences. By not engaging students in meaningful experiences, participants discussed students did not have opportunities to learn and develop their skills as clinicians. For example, Steve, an administrator, told a story about a discussion with a preceptor. He shared:
One preceptor was having our student work these insane hours, for whatever reason. I asked them [the preceptor], “why is this student here so much? We want quality hours, not quantity.” I do not want the student to report to me they are completing 70 hours per week. There is no reason. They [the preceptor] told me, “well, that is how I did it. They need to learn, and when I was learning how to be an athletic trainer that is how we did it. It made us tougher.” And to me that is not a valid reason. That, to me, is a dated practice that has no weight. It is not effective at helping students learn.

Several participants, namely those who are administrators, noted how adding immersive clinical experiences into the program has shed light on preceptors who were not creating purposeful experiences for students. Aiden commented:

Immersion has separated the haves from the have nots. It has made us more aware of who our stronger preceptors are because our students will tell us, “I had a great experience with my preceptor. If we were not working with a patient, I was working on lesson prep, or reviewing the emergency action plans, or doing a documentation analysis. We were always doing something.” And those preceptors packed as many learning opportunities into a week as they could get.

In general, participants believed preceptors should view themselves and be viewed as educators who are vital contributors to student growth, and they should be committed to teaching and creating purposeful clinical experiences for students. Participants preferred a preceptor who takes time to engage with students and help them learn as well as those who have a warm and inviting approach to mentoring students. Intentionally engaging students in patient care was an important quality for participants because it gave students opportunities to practice their clinical skills and learn the behaviors of an athletic training professional.

Professional

In addition to having the qualities of an educator, participants described an ideal preceptor as someone who practices with professionalism, someone who sets a good example, meets administrative expectations, and has experience beyond their professional degree.

**Sets a good example.** Participants, especially those who were administrators, believed to qualify as a preceptor, one should set a good example for students. For example, Harry, an
administrator, described the importance preceptors modeling strong communication skills with stakeholders such as coaches and the parents of patients who are minors. He said:

I want them [preceptors] to talk appropriately with athletes’ [a patient’s] parents and coaches. I want them to be a good role model to students on how they should communicate with people. I think a good preceptor is one who can show them [students] when a patient is injured and there are others asking them about what happened to the patient they are able to show the student how to answer questions from others without violating HIPAA [patient privacy laws].

Setting a good example for students was also important for Steve, an administrator, who believed preceptors should have a positive attitude about athletic training. He said:

I want preceptors to be positive about the profession. We are all aware of the trials and tribulations of being an athletic trainer, but I do not want preceptors who are “Debbie downers” with a negative attitude towards athletic training. I do not like that negative energy. I get that we all have bad days, but if there is a consistent theme of negativity, I will not send a student to work with that preceptor again.

Natasha, also an administrator, offered that preceptors should set a good example by following professional standards for documentation and record keeping. When discussing reasons why she would no longer use a preceptor Natasha mentioned, “I would not use a preceptor who was not practicing to the standard of care. For example, if a preceptor was caring for an entire team of athletes and never documenting anything they did with their patients.” Another way participants highlighted that preceptors should set a good example for students was by being engaged with the athletic training profession and staying tuned into professional matters. Richard, for example, discussed how he wants preceptors to attend meetings of professional organizations and be able to discuss current professional topics with students to reinforce what they are discussing in their classes. He shared:

I want preceptors to know what is going on here [in our state] regarding licensure and state legislative acts. It is hard for preceptors to mentor or have discussions with our students on these things if they are not informed, and we want students to be a part of those discussions.
Setting a good example was important for participants like Miranda, an administrator, because she desired coherence between what students learn in the classroom and what they see modeled by their preceptors. She reported:

There are preceptors who are very willing to teach, but if they are modeling inappropriate or unprofessional behaviors, that becomes a major issue because the students see a disconnect between what we [course instructors] are teaching them in their courses and what is being modeled by their preceptors.

**Meets administrative expectations.** Participants, namely those who were administrators, also discussed desiring preceptors who meet administrative expectations. When discussing their beliefs of ideal preceptors, Maria, Aiden, and John, all administrators who reported the program they serve is in an urban community, said an ideal preceptor promptly responds to messages, submits necessary records, and proactively communicates student difficulties to the administrator. Maria stressed the importance of preceptors who quickly replied to students to demonstrate their commitment to helping them develop. She said, “preceptors should not take three, four days to respond [to messages] if a student is trying to get a hold of them. I think that is important because it shows they care. That they want to help the student.” Aiden desired preceptors who complied with policies regarding the administrative aspects of clinical education, such as submitting forms. He disclosed:

If I have to ask a preceptor six times to send their bloodborne pathogen policy, then I am pretty sure there are other aspects of their practice that are not optimal, and we do not want students in those environments.

Furthermore, John believed preceptors should be proactive in communicating situations with students to the administrator. He shared:

Can they [preceptors] come to me about a student? Can they come to me and discuss any issues? Can they call me and say “hey, this is what is going on. Wanted to let you know; I’ll keep you updated,” before it is too late to do something about the issue.

**Experienced clinician.** While they did not describe a set amount of experience,
participants, namely administrators who reported the program they serve is in an urban community, stated to best embody their beliefs of an ideal preceptor a clinician should have spent some time practicing as an autonomous healthcare provider. Richard, an administrator, reported his beliefs regarding how younger clinicians may not be able to give students the experience caring for patients they need. He shared, “younger preceptors tend to feel they need to be in charge; they need to build their reputation as a clinician. They do not allow the student to be involved in patient care as they should.” Ray, a preceptor, agreed, stating, “I do not think a new graduate should be a preceptor. A new graduate in their first job does not have enough experience to give the student a quality experience.” Trey, an administrator, also discussed the importance of allowing the new clinician time to develop as an autonomous healthcare provider without the demands of working with students. He shared, “part of the reason is it gives them [the new clinician] an opportunity to become more confident professionally without having a student who is always looking for answers, looking for feedback.” John, an administrator, reflected on his experiences being a preceptor while adjusting to being a new clinician. He revealed:

> I remember when I was fresh out of school and I was a preceptor. I wanted to do it all because I was also learning. I had just graduated so I wanted to get the experience, but I had to remember “oh, wait, I have students, they also need experience.” I think preceptors should have a couple of years of experience to give them an opportunity to work autonomously with patients. They [the new clinicians’] need that experience to figure things out for themselves. Then once they do work with students they are more willing to give up the reins and let students have opportunities providing care to their patients.

> Overall, participants believed preceptors should display the qualities of a professional by being good role models, meeting the administrative demands associated with working with students, and having had autonomous experiences as a healthcare provider. Participants acknowledged these qualities were needed to help develop students who embody that idea of
professionalism upon graduation.

**Leader**

Another subtheme to emerge referred to participants describing ideal preceptors as those who possess the qualities of a leader, preceptors who have a growth mindset, utilize best practices, and embrace educational advancement.

**Growth mindset.** Participants reported that preceptors should exhibit a growth mindset to be effective in their role. This characteristic was mentioned by only participants who reported they had less than 10 years of experience in their current role. They believed that ideally preceptors should have the attitude of continuing to not only develop as clinical teachers, but also, their skills related to patient care should adapt alongside the evolution of healthcare. Aiden, an administrator, mentioned his desire for a preceptor who seeks opportunities to grow, which helps them make more meaningful connections with students. He stated:

> Preceptors should understand that being a preceptor is not just a one-and-done deal. They should constantly seek to connect; especially as students’ change over time, as learning styles evolve. They [preceptors] want to be effective and they are not complacent with how things have gone in the past. They are always looking for newer, better ways to connect with students.

As the conversation continued, Aiden elaborated that preceptors who have the mindset of continual advancement tend to be preferred by students. He shared, “the preceptors our students request repeatedly are those who have the mentality of improving each day. They [students] request them because the experiences of the students who have worked with those preceptors are so much better, richer.” Maria, Carrie, Mary, and Robert all agreed a preceptor should possess a growth mindset. In his accounts of ideal preceptors Robert, a preceptor himself, reported the importance of preceptors to want to improve not only their skills as clinical teachers but also to advance their skills related to patient care. He pointed out this attitude of continual advancement
helps preceptors connect with students by mutually identifying as a learner. He stated:

They [preceptors] should not think they know everything. They should not be stuck in their ways. They [preceptors] should want to continue to learn new [teaching] techniques and new approaches to patient care. I think that helps them understand what students are going through. They can relate to students better.

Stanford, an administrator, reflected on difficulties with preceptors not wanting to continue to grow professionally. He spoke of his desire to change their mindset and help them be more open to new techniques. Stanford reported:

We have had some preceptors in the past we have always had issues with. They have the attitude of, “well, I did not learn this specific thing in school, so I do not feel comfortable evaluating a student on that specific technique.” We try to identify preceptors who have that attitude and ask them to be more open minded and want them to continue to enhance their practice.

Best practices. Participants also discussed how preceptors should incorporate the best available evidence into their practice and keep abreast of evolving skills being taught within professional curriculum. Participants who reported the program they serve lies in an urban community and who have no more than 10 years of experience in their role appeared to prefer preceptors who incorporate best practices. Furthermore, this quality appeared to be notably essential for administrators. However, preceptors such as Mary also divulged that it was important. When discussing her beliefs of preceptor qualities, Mary mentioned the importance of preceptors staying up-to-date with their clinical skills, something she revealed she herself might be weak in. Mary stated:

They [preceptors] should be up-to-date on what is going on in healthcare. I work in a clinic setting, so I am not as up-to-date on some of the things that are going on as I should be. I feel this is a weakness of mine.

Other participants like Anne, an administrator, agreed preceptors should keep up on best practices in healthcare, because when they are not well-informed, they may teach students outdated information. Anne said:
Preceptors should keep up with best practices and keep up with position statements and new clinical skills. For example, if a preceptor is not doing everything in their power to incorporate rectal thermometry in how they manage heat illness that is a big problem because they are then showing students it is okay to not use rectal thermometry for recognizing heat illness.

Other administrators such as Maria, Richard, Steve, and Trey discussed how important it was for preceptors to utilize best practices by staying up-to-date with the current clinical skills being taught in the curriculum and incorporating evidence into their practice. Maria, for example, wanted preceptors to be able to help teach students the new skills which are being taught in the curriculum. She said, “how can preceptors teach students if they themselves do not know how to perform the skill? We are being asked to teach more and more skills [in the curriculum], so preceptors need to keep up on these new skills.” Richard, also an administrator, added how crucial it was for preceptors to strive for positive outcomes with their patients by integrating evidence into their practice. He shared:

One of the big qualities I want in a preceptor is someone who takes the time to understand the position statements and is concerned about quality outcomes with their patients. I think these outcomes come by providing care that is based on current evidence and best practices.

Steve, an administrator, discussed a preceptor who students were having negative experiences with and who was not incorporating best practices. He said:

I have had some students in the past come to me and tell me their preceptor was telling them different information from what they were learning in class or the preceptor had no idea what they were referring to and they did not know what to do. For example, they [students] just went through the chapter on [Therapeutic] Ultrasound, and the preceptor is still locked in to the outdated information they learned in the ‘80s and has not embraced or utilized current evidence. So, students were very confused on the content because they were getting mixed information.

Trey, an administrator, also spoke of a challenging experience with a preceptor who was not willing to change the way he practices even though it conflicted with best practices. He stated:

A preceptor once told a student of mine, “well, you know, I have been doing things my
way for a long time and it works for me, so we are going to do it my way.” And, the student presented them with the evidence to suggest maybe he should reconsider, but they still responded with “no, we are going to do it my way.” That is a big issue with me, and I have not used that preceptor again.

**Embrace educational advancement.** Additionally, the educational transition to the graduate level has left participants, especially those who are administrators whose programs are in the southeast region of the country (i.e., NATA Districts three and nine), desiring preceptors who have embraced this change and who buy-in to the programmatic transformations as a result.

Maria discussed her experiences with preceptors during programmatic transition at her institution. She shared:

> They [preceptors] need to be willing to adjust as the program changes. They need to be able to think a little more outside the box, as we are all trying to do, with the transition. . . . As things change in the program like policies and procedures, clinical experiences, expectations of preceptors, the best preceptors we have had have been those who have taken those changes and ran with them. And, I think for the most part the ones [preceptors] who we have retained throughout our transition have been those who were very willing to change alongside us.

Often when they were discussing how crucial this quality of embracing educational advancement is participants shared challenging experiences they have had with preceptors who have not embraced the transition of the professional degree. Carrie, a program administrator, said:

> Even though we have limited resources we have stopped using a couple of preceptors because of a negative attitude toward our program now that we are at the graduate level. I did not feel like they were open-minded enough to teach our students. It was like our students would start off in a hole with them, like they were being stereotyped or they had a bias against them. So, as a result the students had very poor clinical experiences with those preceptors because the preceptors had such a wall up. If students spend half of their rotation trying to get their preceptor to open up to them, that is a terrible experience, and students do not learn in those environments.

Natasha and Steve, both administrators, shared the same opinion about how vital it was for preceptors to embrace the advancement of the professional degree. Natasha stressed this was the most important quality a preceptor should have. She declared:
The number one characteristic a preceptor should have is being open to the new changes with the professional curriculum. Having a preceptor who understands or is at least open to learning about the changes and to move forward with us is important. I have worked with preceptors before who do not agree with or have negative feelings towards the changes, and they do not appreciate the learning process with our students.

Steve added how the addition of immersive clinical experiences has caused some problems with preceptors. He shared:

They [preceptors] have to be willing to buy-in to our program philosophy now, even if it is different than what they are used to. With the new [accreditation] standards, I have to be willing to decide that a preceptor should no longer be used because they do not buy-in. For example, since we have added immersion [immersive clinical experiences] there have been a few preceptors who are not on board with that. They do not want anything to do with those types of experiences. So, I have had to decide not to send my students to them any longer because they no longer align with our philosophy.

Generally speaking, participants stated preceptors should have leadership qualities to best prepare students during their professional education. That is, participants reported there was value behind possessing a growth mindset, utilizing best practices, and embracing educational advancement.

**Views of Preceptor Development**

Participants also discussed their beliefs of how preceptors should be developed. Their descriptions included both the logistics of preceptor development as well as the content they reported should be included within preceptor development opportunities.

**Logistics**

While describing their views of preceptor development, participants discussed logistical aspects, which were important to them. These included three facets of preceptor development logistics: flexible delivery, accessible, and recognition. Participants discussed the value of preceptor development having the logistical flexibility required to meet the many learning needs of preceptors. Additionally, participants discussed that developmental opportunities should be
easy for preceptors to access. Finally, participants acknowledged the need for preceptors to be recognized for their efforts teaching students during clinical experiences.

**Flexible delivery.** Participants discussed one of the most effective ways to deliver preceptor development was through an in-person, group workshop. However, they also revealed the delivery of preceptor development should be malleable and various delivery techniques should be used to ensure engagement of all preceptors despite individual circumstances such as geographic barriers and scheduling conflicts. It was also important to participants for preceptors who are newly credentialed healthcare providers to receive more frequent preceptor development opportunities.

Participants strongly expressed one of the most effective methods of developing preceptors was in-person, group workshops, because these types of workshops provide an opportunity for preceptors to engage with and learn from each other in meaningful ways. Miranda, an administrator, discussed in-person workshops as she described how preceptors should be developed. She stated:

> Ideally, I really like face-to-face meetings. I think there is a lot of value in being able to develop preceptors with a group of individuals together. I want to be able to open the floor for discussion and let preceptors talk about their experiences and learn from each other. . . . Because, it has been a long time since I have practiced clinically, so I do not feel like I can speak to their challenges very authentically. I think there is a level of validity when preceptors hear from each other in that way.

Participants who were preceptors often described in-person, group workshops as their preferred method for delivering preceptor development. Robert, for example, reflected on his experiences attending in-person workshops and why this method was important to him:

> It is good to hear from other preceptors. What works for them [with students] and the bad experiences they have had. There is one preceptor who is really good about including students when he is evaluating a patient. That is something I think I could be better at. I tend to not interact with students when I am evaluating a patient’s injury. I tend to just have them stand and watch me. So, that is something another preceptor here
does really well, so I like to hear about the things they [other preceptors] do. That has been helpful for me.

Charlotte, also a preceptor, agreed that getting together with other preceptors is a great way to stimulate discussion. She said, “when you are in-person, you have all of, or the majority of, the preceptors together. I think that elicits conversations that probably would not have happened otherwise.” Stanford, an administrator, mentioned he preferred in-person, group workshops over other methods of delivering preceptor development because preceptors within his program prefer an in-person format over online methods. He reported:

We have mainly done preceptor development face-to-face. We have explored the idea of doing something online, but we have not gotten that off the ground yet, because many of our preceptors enjoy the face-to-face workshops. They enjoy the personal interaction amongst other preceptors as well as with the administrators.

Samantha, a preceptor, similarly described her beliefs of in-person group workshops and added how they give an opportunity to simulate interactions with students. She shared:

I like it when all the preceptors are together, especially when we can meet each other, network, and talk about our experiences [with students]. That is my favorite. Most preceptors have made a point to come to these meetings because we enjoy each other’s company, and it is valuable time to learn from each other. Plus, you can have other experiences such as role playing. We can do some practice scenarios, like conflict management. You cannot do those things as effectively online.

Steve and Trey, both administrators, acknowledged that in-person, group workshops were ideal for preceptor development. However, they both have experiences in their role that make this format very difficult to execute for all the preceptors with whom they work. Steve liked the idea of having all preceptors together, but he pointed out there were significant scheduling difficulties associated with bringing a large group of healthcare providers from different work settings together at the same time. He stated:

I would love to get preceptors in a space together. It would be great to have the high school ATs, and college ATs, and ATs who work in clinics together along with the physicians and physical therapists, but, that is so hard. Everyone’s schedules never line
up. Have you ever tried getting 15 clinicians together in a room at the same time? That is so difficult.

The addition of immersive clinical experiences has allowed students to travel away from the local area to complete their clinical experiences. These immersive experiences have added logistical challenges to bringing preceptors together for an in-person workshop. Even though Trey believes preceptor development should be delivered in-person, he does not feel it is a realistic method for developing preceptors who are not in the same geographic region as the program. Trey reported:

> What I have found is that the best way to develop preceptors is to get them together, so they can share with each other, share what has worked [with students], what has not worked, and share those experiences. They develop a bond with each other that way. . . . Unfortunately, our summer field experiences are immersive, and students can go anywhere in the world. We have some students who travel to Madrid, Ireland, Scotland, and Australia for these immersive experiences. To have those preceptors physically sit in the same room together is not an option.

Ray similarly described that in-person workshops would be the best way to deliver preceptor development, but there are logistical barriers to getting preceptors together in the same space. He shared:

> Ours [preceptor development] is delivered via online courses. Being honest, that is probably not the best way to ensure everyone fully engages in the content. Because if you are watching a video, you may let it play and walk out of the room, and you miss things. Ultimately, I think the best way to do it [preceptor development] would be in-person. . . . But you cannot do that with preceptors who are across the state.

Miranda, an administrator, shared similar experiences to Ray regarding in-person preceptor development. As a result, she has implemented online methods of delivering preceptor development, but does not feel preceptors have been as engaged with the content as she would like them to be. She stated:

> It is very difficult to get preceptors in one room at the same time, especially as our program has grown. We have close to 50 preceptors this year and have added clinical experiences all over the state. We even have students who are in different regions of the
country this semester. So, in-person training for those preceptors is not possible, so, we have done more online training with those preceptors. For me, the challenge now is trying to find a way for preceptors to be more engaged during the online training, rather than sit and watch a couple of videos and answer some quiz questions.

In addition to their views on delivering preceptor development via in-person, group workshops, participants, barring those from the west coast (i.e., NATA Districts eight and 10), also indicated there should be a multi-modal approach to delivering preceptor development. All participants who expressed this opinion had 10 or less years of experience in their current role. By using methods other than in-person workshops, participants explained that more preceptors would engage with the content. Some participants, like Carrie, an administrator, offered that preceptor development should use multiple delivery methods due to the differences in preceptors’ experience levels and learning styles. She shared:

*We have to have multiple ways of delivering preceptor development. Just like with our students, there is no one way to teaching something. We need to individualize it based on the preceptor, on their experiences with students, and how long they have been a preceptor.*

Jack, a preceptor, agreed, “it should not be the same for every preceptor because everyone has different circumstances.” Mary, also a preceptor, added preceptor development should be tailored based on the preceptor’s teaching and learning style. She shared:

*I do not believe preceptor development should be standardized, because just like students learn differently, preceptors teach differently. It depends on the setting a preceptor works within. I am in a clinic-based setting rather than a university or high school, so my approach to teaching students is going to be different than a preceptor in one of those settings. So, I think preceptor development should be tailored to the individual.*

Steve, an administrator also discussed that a multi-modal approach to delivering preceptor development was important to ensure all preceptors can pick up the information. He said, “I think everyone learns differently. Some people latch onto content in different ways, and I want to hit as many preceptors as possible and appease as many as possible.” Steve added a few
examples of different modalities he has used to deliver preceptor development:

Some content lends itself better to certain things. For example, if I am teaching preceptors about pedagogical theory, I will use infographics, because I think those work better for the content. If I want to include teaching tips, I may develop a podcast where you can talk through some of those tips.

Aiden, an administrator, reflected on his experiences as a preceptor and why he felt it was important to use multiple methods for delivering preceptor development opportunities. He shared:

I have served as an AT and preceptor in just about every type of setting. When I served in that capacity, there were clinical education coordinators who understood the demands of my job and others who did not. Because of those experiences, I do not like to do things that impose unnecessary demands on the preceptor’s time. I want to be as flexible as possible.

To be flexible, some participants like Carrie, Stanford, and Trey, all administrators, shared their experiences conducting site visits to meet with individual preceptors less formally. Carrie, for example, shared how she prefers to use these visits as a less formal way to meet with preceptors individually at their place of employment. She stated:

I try to do one-on-one [preceptor development] that is less formal. It is more of a conversation with the preceptor. . . . I will share some teaching strategies, or we will debrief on their experiences with students. I like to be able to give them helpful suggestions in this type of way instead of a more formal workshop.

Stanford agreed the site visits offer an opportunity to meet with preceptors individually. He described some of the topics he discusses with preceptors during these opportunities. Stanford said, “we talk about how things are going with the students, any issues they are having. It is an opportunity to sit down with preceptors individually, so I can give them advice on how to manage a specific situation.” Trey added using site visits to deliver preceptor development gives an informal opportunity to help preceptors improve while also helping to build relationships with each preceptor. He stated:
Even though they may only be 45 minutes long, there is always a whole lot of development that happens, and what I think is really cool is that it is really informal. I usually have a short agenda, but it is not formal. It is a good opportunity to build relationships.

Participants, namely administrators with no more than 10 years of experience who reported their program lies within an urban community, also explained the delivery of preceptor development should happen more frequently if a preceptor is new to their role as a clinical teacher. When discussing his views of preceptor development, Aiden, an administrator, reported he should reach out to new preceptors more often and connect with them one-on-one. He shared:

 Particularly for new preceptors, I might visit more frequently to make sure things are going well. I think it is important to meet with them one-on-one and answer questions they have in their environment. There is value in that so administrators absolutely need to get out of their office and into the preceptor’s space.

Miranda also stated it was important to reach out to new preceptors, especially those who were newly credentialed athletic trainers. She discussed how valuable it was to meet with those preceptors more frequently to help them in their role as clinical teachers and to show those preceptors she cares for them. Miranda reported:

 I try to visit with our younger preceptors, particularly our graduate assistants. I want to take time to meet with them informally on a regular basis. I want to see how things are going, what they might be struggling with, what is going well for them, or how we can help them. I do not want them to feel like they have been left to sink or swim on their own.

While participants revealed the most effective way to deliver preceptor development was through an in-person group workshop, they agreed the approach to preceptor development should be multi-modal. Additionally, participants believed accommodations should be made to preceptors who are not located near the program and for those preceptors who are new to their role as clinical teachers.

**Accessible.** To increase the likelihood preceptors would engage in preceptor
development, participants, especially those with less than 10 years of experience, reported these opportunities should be easily accessible. Participants who served as preceptor as well as those who were administrators stressed their desire to promote preceptors’ development as clinical teachers without creating a burden on their time. As Stanford put it, preceptors often are not paid for their time to teach students, so he wanted to make sure what he asked preceptors to complete did not ask too much of their time. He stated:

I think we are very aware they [preceptors] are volunteering and doing this out of either a vested interest in mentoring students or as professional service. I want to be very mindful of their time and not require a ton of investment into the training process but still making sure it is an effective training process.

While describing their views of preceptor development, participants suggested preceptors should be able to engage in these opportunities on their own time. Jack, a preceptor, commented on the time commitment associated with preceptor development and how preceptors’ time should be respected. He mentioned:

I prefer it when we have an initial meeting in-person then everything else is online. I have access to information when I have time to look at it. I prefer it when it [preceptor development] is left up to me and when I have time to get to it, especially during the school year.

Additionally, participants explained the way preceptor development is structured should make the content easy to digest. As Carrie, an administrator, said, “I think we need to make tools preceptors can use easily, and they understand easily. They should not be a time or resource burden on preceptors either.” This view was echoed by another participant, Miranda who is also an administrator. When discussing the importance of preceptor development not being burdensome, she shared, “burnout is such a big problem in our profession, and I think I am very mindful of the fact we do not want to be a reason for preceptors’ burnout.” When reflecting about his experiences creating preceptor development events, Aiden shared his beliefs that
delivering more frequent opportunities in smaller pieces was more meaningful than other methods of developing preceptors. He reported:

I can remember my first year as a program director. The only preceptor training we did was an annual [in-person] meeting with preceptors. We would record it, and if someone did not come to the meeting they would have to watch the video and take a quiz. That is all we did, which is not as important, in my mind, as recurring, quick hitters, small snippets and feedback to preceptors over the course of the [academic] year. We have our annual meeting with preceptors tonight, and I believe a week from now, most preceptors will not even remember what the theme was.

Furthermore, participants suggested that to promote their development preceptors should have access to program administrators and quick responses regarding questions they may have. For example, Stanford shared his desire for preceptors to feel close to the program by being available to preceptors when they have concerns. He reported:

If preceptors are having additional issues with students or have concerns, we have an open-door policy. They [preceptors] can reach out to me by phone or email any time and get a pretty quick response. . . . I think it allows preceptors to feel connected to our program when we maintain those open lines of communication.

When asked about her beliefs on the delivery of preceptor development, Charlotte, a preceptor discussed the value behind being able to reach out to another preceptor for guidance. She stated:

My company has a mentorship program that might be a good idea. I think it would be great if we paired a preceptor who has been doing this for two or three years and another preceptor who is just starting. So, if the newer preceptor has any day-to-day type questions, they can reach out to their preceptor mentor for answers. Like, “I have seen that with my student, that is totally normal” or “no, that is a problem. You need to talk to the clinical coordinator about that.”

**Recognition.** A variety of perspectives were expressed, and differing opinions surfaced regarding the concept of incentivizing preceptor development. A common view among participants from eastern states (i.e., NATA districts two, three, and nine) was that serving as a preceptor was a form of professional service, which should be a reward itself. All participants who discussed this opinion all reported they had 10 or fewer years of experience in their current
role. Jack said:

I think it [being a preceptor] is a way for athletic trainers to expand and give back to their profession. . . . Probably every athletic trainer would love a little extra money, but when it comes down to it, my reward is giving back to the profession.

Natasha and Carrie, both administrators, agreed that they believed being a preceptor was more about giving back to the profession, and there should not be a monetary incentive for serving in that capacity. Carrie discussed her experiences previously serving as a preceptor. She commented:

Our preceptors receive an honorarium for each student they work with. I do not agree with it though. . . . I was never paid when I was a preceptor. You do it because you enjoy working with students and teaching. You are doing a service to the profession, and I think that is enough incentive.

Natasha, also an administrator, shared her views on incentivizing preceptor development and why she felt preceptors should not be paid for their role as clinical teachers. She said, “it is about giving back to the profession and giving back as a mentor. That is service to the profession. There are many things we do as service that we do not get paid for.”

Other participants described their beliefs of recognizing preceptors differently and stated preceptorships should be incentivized. There was a sense among these participants that while serving as preceptor is a way for athletic trainers to give back to their profession, there are other ways of recognizing preceptors for the work they do to help students grow. Richard, for example, believed since preceptors are often volunteering, he should use rewards like continuing education units (CEUs) to recognize them. He stated:

When it [being a preceptor] is voluntary, there is no financial benefit. Giving them [preceptors] one night for their hotel room at a district meeting or going to a CEU workshop and not having to pay the registration fee is a great incentive for people. It is an incentive for people to be involved [with the program] and they will work hard for you. An “attaboy” or “attagirl” are very important, but when you also give someone $100 for being a guest lecturer in your class because they do great work, that is a nice thing to do for them.
Charlotte, an administrator, mentioned again, the significant time commitment to being a preceptor and how nice it is to be able to give something back to them. She said, “it does take more time than I think people realize. So, it is nice to give preceptors CEUs for coming to it [a preceptor development workshop].” Harry, also an administrator, agreed that preceptors should be rewarded for the effort they put into helping students during their clinical experiences. He reported:

I want them [preceptors] to understand I appreciate them, and nothing says appreciation more to me than money. I hear preceptors complain a lot about how they are not being paid despite how much extra work it is to be a preceptor. I think anytime you can give someone appreciation, whether it is a gift card, cash, or a meal; I think you have to do those things.

Participants appeared to be conflicted on their beliefs of paying preceptors a stipend for their work as clinical teachers. For some, this was due to administrative barriers within the university for which they work. When discussing incentivizing preceptor development, Stanford mentioned the difficulties of paying preceptors but discussed other methods he has used to recognize preceptors for their work. He stated:

For many institutions of higher education to pay preceptors is difficult. But certainly, for a large chunk of people, money talks. I think offering a small stipend per semester would be nice, but you could also pay for their [preceptors] maintenance of certification fee. Preceptors can also count up to five category B CEUs for being a preceptor. I think those can be huge incentives for them.

The topic of incentivizing preceptor development prompted an expressive response from Aiden. As he was describing his opinions, Aiden discussed how not paying preceptors may affect how they prioritize their role with students, and he talked about the challenges he has faced when trying to reward preceptors for their time. He reported:

People value and prioritize the things other people value and prioritize. So, if a student is assigned to a Division I football athletic trainer for their clinical experiences and no amount of that preceptor’s salary is paid by us [the academic program], then guess what
is most important to that preceptor? Well it is certainly not precepting. While well-intentioned and as kind-hearted as those folks [preceptors] may be, there comes a point where they have to answer to what pays the bills. I do not think we will ever get to a point where we have people who are paid just to be preceptors, but I think anything would be better. . . . But, our [the institution’s] administration has not been supportive to paying preceptors. And I understand, we are one program in a school with 18 or 19 other professional programs, many of which have clinical education components. If you pay our preceptors, you have to pay them all. So, we are not talking about a few thousand dollars here. We are talking about a significant investment. So, they [institution administrators] do not want to change that. But, I would like to be able to give something that shows preceptors are valuable. Our profession just fought for so long to not volunteer our time [as clinicians] for tournaments and the like. Was it because we are not charitable? No. It was because we want people to value what we do. . . . I think in a situation like ours, where it has been clearly communicated it cannot be and likely will not ever be a check, then we owe it to our preceptors to find other ways [to reward them]. Anything we can do to provide incentives and support for the preceptor is huge.

When discussing the issue of incentives, Samantha, a preceptor, suggested there may be other ways in which a program can support preceptors to show their appreciation for the work they do. She said:

I think you can support preceptors in other ways. I would love to call up the program and say “hey, I need to borrow a portable table for a program I am piloting with [my patients]. Can I do that?” and they said, “yes, absolutely. We appreciate your help for the program. Borrow the table for as long as you need.” Or another example, “hey, are there a couple of students that would be interested in coming out and taking heart rate and blood pressure during our health screens?” That kind of support, that kind of willingness to help us with things in our work lives. That would be great.

Together, these results provide insights into participants views of the logistics around delivering preceptor development opportunities. Participants pointed out it was important for preceptor development to be delivered in a way that was flexible enough to meet the learning needs of all preceptors, for it not to be laborious but rather easy to access and digest.

Furthermore, participants reported mixed views regarding incentivizing preceptor development but explained overall that preceptors should be recognized for the time they commit to teaching students during their clinical experiences.
Content

While on the topic of preceptor development, participants described their views of the content which should be included in preceptor development opportunities. Their ideas of preceptor development content featured two aspects: programmatic information as well as teaching strategies.

Programmatic information. A common view amongst participants was that preceptor development should include the various components of the program, specifically, the policies within the program, the expectations of preceptors, and the curriculum and course sequence. Furthermore, participants offered this should include information related to new clinical skills that have been recently introduced into the curriculum.

Orienting preceptors to the curriculum and course sequence was an important aspect for participants who were both preceptors as well as those who were administrators. Initially that should occur to orient preceptors who are new to the program but should be repeated for those who have previously served as a preceptor to keep them informed of programmatic changes. For example, Jack, a preceptor, appreciated being updated on programmatic information regularly. He said, “we are kept up-to-date with the program information. I think it is helpful to have that refresher, so we do not forget.” Miranda, an administrator, described this content to help ensure preceptors follow the program policies. She stated:

There needs to be an orientation to the program policies and procedures. I think students get frustrated when there is a disconnect between the academic side of the program and the clinical [education] side. When students ask preceptors questions, or when preceptors do things that are not in line with our policies, students get frustrated when they see that disconnect.

When discussing programmatic information, Samantha, a preceptor, stated preceptors should be aware of and comfortable with the program policies and what the administrators expected of her,
especially because she had served as preceptor for multiple institutions. She shared some of the challenges she has faced trying to adapt herself to how different programs choose to orient her to their program:

Preceptor development needs to include expectations for the preceptor. I was a preceptor for one program who used Google Docs™ for everything and had a very strict structure for what they students were doing while they worked with me. But, I had no introduction to that beyond an email. I felt like I was always catching up. Then, another program had absolutely no structure. They just told students “hey go learn something.”

Other participants, like Carrie described their experiences including programmatic information such as the assessment tools preceptors will use to evaluate students. She stated:

We train preceptors how to use the evaluation forms. . . . What I have found is even though we ask them to assess something simple like communication their [preceptors] definitions of that is so varied. So, we need to make sure we are all on the same page.

Natasha, an administrator similarly offered her beliefs of including programmatic information in preceptor development. She expressed why this was so important to her:

Preceptors need to understand what is expected of them and what we [the program] want our outcomes to be so they understand what they are getting into. I feel like it is unfair to send a student out to a preceptor who has had no training, who does not understand what they are supposed to do.

Beyond the program policies and expectations of preceptors, participants reported the programmatic information should include materials about the curriculum and course sequence. It was important for participants like Richard, an administrator, for preceptors to understand what students have learned in class as well as what information students have yet to learn. He said:

Preceptors need to know what a student is capable of, what the student has learned or not learned yet. They need to know when to and when not to put a student into certain environments based on what they have learned in class. For example, students may have an evaluation during their clinical experience that involves a [therapeutic] modality. Well, they may be taking the [therapeutic] modality class at the same time, so being evaluated on that topic is not appropriate at the beginning of the semester. It is important, so those teachable moments can be appropriately determined and scheduled for the
Mary agreed preceptors should understand what students have learned up to the point of engaging in a particular clinical experience. She stated, “making sure we [preceptors] know what the students’ abilities are when they get to us, understand their coursework, and what all they have learned so far.”

The transition to the graduate level has left some participants, like John, wanting preceptors to understand how students may be different than what preceptors were acclimated to with undergraduate students. He discussed that this programmatic information should be included into preceptor development opportunities to help preceptors understand how teaching graduate students might be different than undergraduate students. He reported:

Preceptor development should include what is going on in our program, what types of students do we have, and how are those students changing, the characteristics of students. They need to understand how students are evolving now that we are a graduate program.

Additionally, participants revealed the programmatic information should include content related to new clinical skills that have been added to the curriculum in recent years as well as those that were recently added to accreditation standards. Some participants, like Richard, had been anticipating new curricular content standards and had been incorporating those skills into preceptor development to help prepare preceptors to teach those skills during clinical experiences. Richard shared:

For example, our latest workshop for preceptors involved training preceptors on what we thought was coming down the pipe from CAATE, things like suturing and injections, interpreting EKG’s [electrocardiograms], and IV’s [administering intravenous fluids]. We wanted to ensure preceptors we were there to help with their education, so they could teach students those skills as well.

Anthony, a preceptor, also discussed that preceptors should be up-to-date with the skills that have been added or are in the process of being added to the curriculum. He said:
We need to educate our preceptors on what the current standards are and what is changing. For example, the accreditation standards have changed so much in the past few years that even though I teach a course in the program, even I need to go learn some new skills to teach that course.

It was important for participants to give preceptors opportunities to update their skills not only so they were better equipped to teach students but also to give the resources and equipment to which they may not otherwise have access. For example, Maria, an administrator, discussed how some preceptors do not have the equipment necessary to practice certain clinical skills that are being taught in the curriculum such as rectal thermometry. She shared:

I feel like some high school ATs do not have access to the supplies and simulation equipment that we do. For example, just last night we went over rectal temperature and advanced airways. Because, I asked them if there were skills they wanted additional practice on, and most of them said those skills. They just do not have the resources to practice those skills in their own clinics.

**Teaching strategies.** To help preceptors become strong educators, participants highlighted that preceptor development should also include content aimed at helping them develop their clinical teaching abilities. A variety of specific content areas were introduced by participants including basic teaching and learning theory, debriefing, and helping preceptors create an inclusive learning environment. Participants also discussed using simulated experiences during preceptor development as an approach to incorporating this content.

Participants suggested preceptor development should include basic information regarding teaching and learning theory. Steve discussed the pedagogical content he prefers to include in preceptor development to give preceptors a baseline introduction to being an education professional. He said:

They [preceptors] have to learn how to teach. I would break it down to square one for them, so they can begin to understand. So first, I would include what it means to be an educator. From there, you include Bloom’s taxonomy, some educational theory, really give them [preceptors] a strong theoretical basis in pedagogy, in education. So, now they have a good nucleus and can branch off. I have done this, and because they have a good
base, I can build on this and send preceptors a teaching tip each week they can use.

Charlotte, a preceptor, also pointed out it was important to understand different ways in which students learn because preceptors’ professional education does not include information on teaching students. She stated, “most of us [preceptors] do not have a background in teaching, so, I think the content that would be helpful is information on different types of learners and how to teach students who learn in different ways.” Robert, also a preceptor, agreed that preceptors are not trained to teach during their professional education, so including content on learning styles was important to him. He added, “most of us athletic trainers do not have any background in teaching. We have not had education classes. So, some content so we can learn about how students learn would be beneficial. That would be helpful for me.”

Another common view amongst participants was their desire to help preceptors create positive learning environments, which was described using several ideas that should be included in preceptor development to help preceptors establish an atmosphere which promotes student learning. One of the methods participants mentioned was debriefing. Debriefing is an educational technique that allows learners to process their experiences by reflecting on and appraising a shared event in a structured way (Dennehy, Sims, & Collins, 1998). Miranda, an administrator, explained that students appreciate when this technique is incorporated into their clinical experiences. Therefore, she recommended information on using debriefing be included in preceptor development. Miranda reported:

Something students really like is the concept of debriefing after events or on a regular basis, like once a week. They appreciate debriefing with preceptors, because it makes them feel like they are part of the process [patient care]. So, I think information on debriefing is an important thing to include in preceptor development.

Other content participants acknowledged would help preceptors create learning environments included preventing and managing conflict, appropriately planning time spent with
students, and being more aware of implicit bias. Maria discussed the importance of preceptors being able to mitigate conflict and the ways that can be accomplished by having a better understanding of personality types. She suggested, “I would include the Myers-Briggs personality test [Myers-Briggs Type Indicator®]. It sheds light on how they [preceptors] function and how they deal with people and different situations. They learn how to work with others better.” Samantha, a preceptor, discussed that conflict was inevitable and described the need to teach preceptors how to appropriately manage conflict based on an experience she had while working with a student. She reflected:

Preceptors should know how to discipline students while keeping a positive demeanor. I think this is something they [preceptors] struggle with. Students mess up and do the wrong things all the time. I worked with a student once who let a patient return to a football game after a concussion without consulting me first, despite strict instructions he had been given. When that happens, when a student does not listen and are endangering patients’ lives, that can be hard. I wanted to rip that student apart. So, preceptors need to understand how to manage those situations in a way that will impart the seriousness of the mistake but not be so hard on them they choose another profession.

Some participants, particularly administrators, discussed the worth of helping preceptors determine appropriate ways to structure students’ experiences. For Aiden, this meant helping preceptors organize students’ clinical experiences to push them to new and more complex modes of thinking. He stated, “a great idea would be practically, how can preceptors structure their interactions with students to force them to think deeper and to view clinical experiences as more than just putting in time.” Harry, also an administrator, wanted to be able to help preceptors determine the appropriate timing and skills for students to perform during their clinical experiences. He reported:

We need to give them [preceptors] guidelines on when it is best to incorporate certain skills. For example, I do not want a student to do a knee evaluation on a patient if all they have learned in class is how to tape ankles. Preceptors could ask them to take a patient’s history or to perform an inspection, but after that, I am not sure that student has the knowledge to be able to continue the evaluation beyond that point.
Participants also highlighted to improve their clinical teaching abilities preceptors should promote cultural awareness. Carrie, an administrator, mentioned the importance of incorporating this information into preceptor development so students have strong role models who support an inclusive working environment. She stated:

One of the things I want to do for our preceptors is cultural competence or implicit bias training. That can be tough because it takes several hours to complete. But, being more aware of those things is something students need to be exposed to in appropriate ways.

Participants, namely those with 10 or more years of experience, reported to promote the advancement of preceptors’ skills as clinical teachers, preceptor development should include scenarios and simulated experiences. Samantha specifically discussed how preceptors should be able to practice strategies using simulations. She shared, “I think the content should be practiced during practical scenarios or learning simulations where preceptors have to role play how to interact with students during a common scenario.” Richard, mirrored Samantha’s beliefs and shared examples of different types of simulated experiences that would help preceptors. He reported:

We give them [preceptors] learning scenarios on how to use their time wisely with students. Some of those include how they [preceptors] can involve students in conversations with [athletic] coaches or developing injury reports or other types of documentation. Scenarios that help preceptors’ practice how to create productive learning experiences and that they are not using down time to just shoot the breeze.

Together, these results provide important insights into participants’ beliefs of preceptor development. Participants described their views of important logistical aspects of preceptor development including a flexible approach to delivering preceptor development, highly accessible preceptor development opportunities, and recognizing preceptors for the work they do to teach students. Furthermore, their descriptions included information on the content participants felt should be included in preceptor development opportunities, including
programmatic materials and strategies to promote preceptors’ skills as clinical teachers.

Influences on Beliefs of Preceptor Selection and Development

Finally, participants were asked to describe the things that may influence their beliefs towards preceptor selection and development. During their interviews participants recounted several aspects that have helped shape their views, which included: adversity, support systems, professional development, and athletic training advancement.

Adversity

While discussing the ways in which their views have been shaped, participants described moments of adversity that molded their beliefs of preceptor selection and development. In their explanations, participants reflected on their experiences as students, in previous professional roles, and in their current positions and described moments of adversity as students that shaped their predilections. Ray, a preceptor, explained how a previous professor who he revealed did not teach well influenced his preferences. To Ray, this experience shaped why it was so important to him preceptors be committed to their role as educators as well as why he felt preceptor development should focus on teaching strategies. He said:

I had a trigonometry professor during undergrad who was not a good teacher. When I would ask him questions, he was not able to explain things to me clearly, so I could understand. He was very intelligent, but I had to find someone else who could actually explain things to me, so I understood.

Miranda, an administrator, also had a poor experience as a student, which she acknowledged has shaped her viewpoints. She explained:

When I was a graduate student, there was a situation where my supervisor did not communicate to me about my performance until it came time to turn in my performance review, and it was awful. I felt blindsided, and I told myself I would never let that happen to a student I worked with.

A small number of participants also described hardships during previous professional
roles, which guided their views of preceptor selection and development. For Jack, a preceptor, it was an experience serving as a preceptor just after becoming a credentialed athletic trainer. He stated:

I remember being an athletic training student and then the next year being a preceptor. It was a shock. I was just a student, and I did not know what I was going to teach them [students]. It was intimidating because I did not have any guidance on how to teach them. I had just graduated. I had just started working on my own, freshly certified, and now I have a student that wanted to learn from me. I was still trying to get my bearings as an athletic trainer. I did not have the confidence. I had not figured out my system, my way, and I had to be able to teach students.

Several challenges associated with their current professional positions also influenced participants’ opinions of preceptor selection and development. Carrie, an administrator, described a situation when a preceptor was not interacting with a student due to their own negative feelings towards the advancement of the athletic training professional degree. She reported:

It has been incredibly challenging for me because many of our preceptors are having trouble with the transition to the master’s degree. There was one preceptor who stopped giving a student opportunity to engage with him. I went there to observe the preceptor and student interacting, and the student was on one side of the court and the preceptor at the other because the preceptor did not want to be around the student and engage with them.

Additionally, while discussing her preference for in-person preceptor development opportunities, Charlotte, a preceptor, described her lack of interaction with other clinical teachers due to her being the sole preceptor at the clinical site. Because of this adversity, she appreciated the opportunity to engage with preceptors during in-person group workshops and prefers that method of delivering preceptor development over others. Charlotte shared:

The university I am affiliated with has mostly off-campus preceptors, so, we do not have many opportunities to talk about our experiences with one another, to talk to each other about this student or that student or what is working for me or what is working for you. So, it is nice to be able to come together as a group and meet.
Miranda, an administrator, discussed the difficulties trying to develop online formats to deliver preceptor development. While reflecting, she shared her experiences of preceptors not viewing the materials she had asked them to look through; which was a frustrating realization for her and has influenced her feelings towards using online modes of delivering preceptor development.

Miranda said:

One of the sobering things that happened during one of our faculty meetings recently, our program director had gone onto Moodle™, our online teaching management software where we share all our preceptor development content. She ran a report of that year’s content. Less than half of our preceptors had even viewed our preceptor manual, which is very concerning because this is where we communicate all the policies and procedures for our program. We also looked at how many preceptors had viewed the video we had shared, and again, the numbers were very poor.

The addition of immersive clinical experiences has added a level of complexity, which some participants, like Aiden, find challenging. This type of clinical experience has influenced Aiden’s views of delivering preceptor development, because the preceptors for these experiences are not located in the same geographic area as the program. He reported:

Immersion has added a whole new complexity to preceptor development, because students can go anywhere. We have dozens of preceptors now who I have never met face to face. So, that is a challenge we are going to have to work through. I cannot fly to those places and meet with those preceptors. So, whether we meet on Skype or WebEx we have to do things differently because the way we have done it in-person will not work for them.

Maria agreed the addition of clinical experiences away from campus has influences her views of preceptor development. She also noted that her discomfort using technology has played a role in her preference regarding the use of online platforms to deliver preceptor development. Maria stated:

I am just not as comfortable with online delivery. I think it could absolutely work, and it will probably have to work because if I send students to Timbuktu I have to reach those preceptors somehow. And, I probably will not be able to go to visit the preceptor in-person. So, if students have immersive [clinical] experiences outside of this area, I am going to have to get more comfortable with online platforms.
While ruminating on what has shaped their views, several administrators spoke about how hearing negative reports from students has helped them determine what is appropriate when selecting preceptors. Aiden, for example, shared how students’ evaluations of preceptors influence the qualities of preceptors he prefers. He commented, “if students are consistently scoring a preceptor low and they are difficult to work with, then usually we will not send a student to work with them for a semester or two.” Anne agreed that students’ feedback has influenced her opinions of ideal preceptor characteristics. She shared, “students have come to me with stories about them having a bad learning experience with a preceptor. So, I try to get more information from them on why their experience has been bad and what could be different.”

In her role as program administrator, Carrie has also faced adversity that has guided her beliefs of preceptor development. One of the experiences she shared involved conflict between a student and preceptor, which she had to mediate. She expressed dissatisfaction with her need to intervene and as a result explained that it was important to teach preceptors to be able to resolve conflicts with students themselves. She retorted:

I have had to have so many meetings to diffuse situations between preceptors and students. At the end of the conversation I think, “why am I involved? I do not understand why you two people, two adults, are not communicating and figuring things out.” So, I think it showed me there was a need for conflict resolution strategies within preceptor development.

Participants who reported they serve as preceptor mentioned how their demanding work schedules have influenced their beliefs of preceptor development. Jack, for example, spoke about how he prefers preceptor development that is highly accessible because of the timing of his work day. He noted:

I basically have a second shift position working in the secondary school setting. I am at work until 8:00 or 9:00 at night, sometimes later. I prefer the freedom to get preceptor development done on my own time instead of going to a required meeting then rushing to
work. I like the freedom of being able to do the self-guided learning.

Charlotte, also a preceptor, agreed and added how being a parent has made her schedule even more complex. She said, “I think we all know how busy an athletic trainer’s schedule is, especially those who are working parents. That makes attending a [in-person] meeting difficult.”

While describing their views of preceptor selection and development, participants shared how adversity has shaped what they believe to be most appropriate. Participants recounted experiences they have had as students as well as those in previous and current professional roles.

**Support Systems**

In addition to the adversity which has shaped their views of preceptor selection and development, participants described sources of support that guide their preferences. Participants discussed having role models and mentors, having many choices when selecting preceptors, and receiving feedback, which have steered their beliefs.

Role models and mentors have played a substantial part in shaping participants’ beliefs of preceptor selection and development. This was especially true those who reported they had 10 or fewer years of experience in their current role. Participants said this support came from preceptors with whom they worked as students and programmatic administrators who have all set examples and guided them as they have determined their views of preceptor selection and development. Jack, a preceptor, discussed how a preceptor he worked with as a student set an example of the type of clinical teacher he wants to be for other students. He said:

> I have looked back to my preceptors and how I thought they were effective at helping me. I wanted to pull from them to help me teach students the same way. One of my preceptors, for example, I learned so much from. He had a wealth of knowledge, and he helped me balance work with my home life. He was able to communicate in a way that resonated with me. He was able to show me that you are doing your job, but you are also helping students by showing them both life skills and clinical skills.

Robert, also a preceptor, reflected on a preceptor he worked with as a student when he was
discussing his views of preceptor selection and development. He explained:

The best preceptor I had was someone who connected with their patients very well. You could tell they really cared for their patients and us students. He always treated everyone with the same level of care. . . . I think it is important to have compassion for everyone and try to meet everyone’s needs. That preceptor set a good example of that for me to see.

During her accounts of preceptor qualities, Mary, a preceptor, described a fondness for the preceptors who helped her when she was a student. She recognized how much her preceptors helped her and discussed her aspirations for students to view her with the same reverence. Mary reported:

I think of all the people who helped mold me into the athletic trainer I have become. I look at the preceptors I had and the experiences I had, and I want others to have those kinds of experiences because mine were so good. I felt I had an excellent education that shapes how I think all experiences should be. I look at all the preceptors who helped me when I was a student. I try to take all the good qualities from each of those individuals to guide how I teach students now.

Anne, an administrator, shared her experiences with role models who set a good example of the qualities she reported a preceptor should possess. She stated:

I thought the preceptors I had as a student were great. They had high expectations of me, and I turned out, I think, pretty well. Having preceptors who pushed me to be better but also encouraging me to be resourceful and teaching me how to find answers on my own was valuable to me.

Participants who have served as administrators discussed how other athletic training program administrators have helped guide their preferences of preceptor selection and development. It should be noted that in addition to these participants having similar roles, they also reported 10 or less years of experience in their role and the program they serve lies within an urban community. Maria noted how an administrator who served before her has mentored her and shaped her beliefs of preceptor selection and development. She reported:

I had a very good mentor who used to be a Clinical Coordinator. She has been my mentor ever since I was a student. We have had conversations that have helped me, but
also using the preceptor training she has done as an example. Those have helped guide me.

Natasha, spoke admirably of a program administrator who she has learned from while new to her role. She complimented:

This is my first time working as clinical education coordinator, but I have been very blessed to work with an amazing program director at a previous institution who I have learned so much from. She is a mentor and role model of mine, and we still meet and have quarterly lunches. She helps mentor me in my new role.

Although he has served as program administrator for longer than his colleague, Richard expressed respect for another colleague who he felt had developed an expertise relative to preceptor selection and development. He praised:

Even though she [my colleague] is a former student of mine, has gone on and developed an expertise and become a leader in these areas [preceptor selection and development]. Her knowledge is for beyond what mine is. She is an expert in clinical education. I am not. So, I have utilized her as a mentor, and I have tried to follow her lead. ... I see her approach, how she has trained preceptors, how she gets them involved, how she keeps them informed. Even though our styles may be different I have tried to incorporate a great deal of my approach in the same way she has.

In their depictions of preceptor selection, participants who were administrators serving programs which lie within an urban community mentioned the ability to be selective when choosing preceptors. Having a large pool of potential preceptors allowed them to carefully consider the qualities of each clinician and choose only those they felt would teach students best. Having this large network of preceptors was one type of support participants discussed during their interviews. Richard, for example, brought up how being in an urban area allowed him to be highly selective when making decisions about student placements. He said:

We have a tremendous advantage in that we live in an urban area. We have fantastic settings that are diverse and help our graduates’ transition to practice because of living here [in an urban area]. We have the opportunity to be picky about our preceptors.

Aiden added that the addition of immersive clinical experiences has allowed him to utilize
professionals as preceptors who he had not been able to use previously because they work in another region of the country. The addition of these types of clinical experiences gives him the opportunity to be more selective with preceptors because he has more options than he had in the past. Aiden commented:

> It [immersive clinical experiences] gives us tremendous leverage now. Since we have so many students and the number of potential preceptors in town, I did not have the luxury of being selective five years ago. If a clinician was willing to teach a student, they became a preceptor because we had so many students. Immersion has changed that. We can very easily say, “you are clearly not interested in teaching our students. We have another preceptor who is.” And, that preceptor could be across town or across the country. We can very easily choose the best possible preceptor out there.

In addition to having many options when selecting preceptors, participants, especially those with no more than 10 years of experience, described support they receive from student and preceptor feedback. Jack, a preceptor, discussed feedback he has received from former students and how it helps affirm the techniques he uses to teach them. He reported:

> Having the reward when a student from years ago comes back and tells you, “I remember when you taught me this or that when we were treating this patient.” When students come back a year later and they tell you, “I remember when so-and-so patient had so-and-so injury, and you did this, and I never saw it done that way, and that helped me.” It is rewarding when you receive that feedback. And you see ATs you have taught become better clinicians.

Miranda, an administrator, spoke of how the feedback students give about their preceptors helps inform her decisions about preceptor selection and development. She stated, “the students, thankfully, are very open and willing to talk about their experiences with preceptors. They will share their thoughts in-person, but it also comes out in the evaluations they complete. That has absolutely informed my beliefs.”

Participants who were administrators expressed how feedback they receive from preceptors has helped them determine the best approaches to preceptor development. For instance, while Aiden was discussing how he had recently implemented online preceptor
development opportunities, he mentioned the favorable feedback he received from preceptors regarding this delivery technique. He recounted, “our preceptors who have piloted the online module have told us they really like it because they like the information, and they like the self-paced aspect of it being online. They can engage with the information when they have time.” Maria also received encouraging reports from preceptors; however, she received positive feedback regarding in-person group workshops. She reported:

If the [in-person group] workshops do not work, then I will change the format and try something else. I am willing to do whatever preceptors want me to do. So, if they prefer a different format, I will change it. But, in my experience, it [in-person group workshops] has worked really well. So, I will keep using this format.

Their support systems have helped shape participants’ beliefs of preceptor development. In their accounts of this support, participants described the impact of role models and mentors, their ability to be selective when choosing preceptors, and the feedback they receive from students and preceptors.

**Professional Development**

While they were discussing the many influences on their beliefs of preceptor selection and development, administrators described how engaging in professional development opportunities has shaped their views. Administrators, especially those with 10 or fewer years of experience, discussed the importance of seeking these opportunities as well as how current literature and attending professional conferences have impacted their views. When talking about the influences of her beliefs, Natasha mentioned the importance of keeping up with new information, so she can adapt as the profession evolves. She explained:

Many things have changed since I was a student. I cannot just use my experiences and expect that to carry over. I have to understand what the current CAATE requirements are, and what the AT strategic Alliance groups are saying. You cannot shape something from what was developed 10, 20, 30 years ago, because the profession is evolving.
One of the ways in which participants revealed their professional development has influenced their views was by reading current literature related to clinical education. Maria highlighted the fact that she follows research-based publications from several healthcare fields related to clinical education to keep informed of emerging evidence. She commented:

I have read articles and try to stay informed of the current research regarding clinical education. There are good resources out there. It is just a matter of getting them and learning how to incorporate different things based on them. I look at research related to medical, nursing, and PT students and what those professions have done also.

This perspective was echoed by another participant, Carrie, who also uses literature primarily from other healthcare professions to inform her beliefs of preceptor selection and development. She shared:

I try to find information in the literature. Like, what are the best strategies? What is most effective? We use a lot of the literature from nursing, physical therapy, and other health professions right now.

Those participants also spoke of how attending professional conferences has helped them determine what is most appropriate regarding preceptor selection and development. Miranda, for example, attended a conference when she first became a program administrator that helped orient her to the role. She reported:

I went to the clinical instructor educator training when I first became a program director. I thought it was great for me because I was just stepping into this role and I knew I would be responsible for preceptors. It gave me something to start with, which was a huge help for me.

Aiden also mentioned how attending professional conferences has helped shape his beliefs because he uses them as an opportunity to network with other program administrators and listen to the techniques they use. He stated:

Going to the [Athletic Training] Educator’s Conference and to the NATA Conference, those things influence our perceptions. When we see things that work, and we interact with colleagues who tell us, “oh we tried this, and it worked really well,” “We flipped our classroom and that was great,” or, “that method was horrible for us.” That all feeds in to
whatever we believe about preceptors, about clinical education.

All in all, participants who have served as administrators described the ways in which their engagement with professional development has helped them determine what is appropriate for preceptor selection and development. These participants discussed the importance of keeping up-to-date with the most recent information using current literature and attending professional conferences.

**Athletic Training Advancement**

Finally, the advancement of the professional of athletic training also emerged in participants’ descriptions of what has influenced their beliefs regarding preceptor selection and development. Overwhelmingly, participants discussed that having quality preceptors who were prepared to teach students during their clinical experiences would lead to stronger young professionals who would help drive the profession forward. As one participant, Carrie, an administrator said:

> Our goal here is to have great athletic trainers graduating from our program and entering the work force. I feel every athletic trainer that I have talked to says the biggest influence of their careers is always a clinician, a preceptor they have had. It is important then that preceptors themselves have a background to educate and help students grow and develop so the profession can continue to move forward.

Charlotte, a preceptor, agreed that the future growth of the profession of athletic training lies with the students she teaches. She stated:

> We need to come together and grow the future of our profession, and that is these students. If we are going to grow as a community, if we are going to expand and practice within physician’s offices, into other [emerging] settings, it is going to start with us educating the students to the best of our abilities and create the future.

For Jack, gaining respect from other healthcare professions pushed him to want to be a better, more prepared clinical teacher. He said, “It comes down to advancing the profession. It is like a snowball. As we teach more and more students who become athletic trainers, it will lead to
gaining the respect we are working for.” Natasha was also motivated by her desires for the profession to move forward. She asserted:

> It goes back to moving the profession forward. We cannot remain stagnant. We have to move forward. The recent changes to the professional degree are probably some of the biggest changes we have ever seen. It will take some time. And, we need leaders in the profession, and those are our preceptors. We need all preceptors to be on board. So, it goes back to leading the profession forward and advocating for athletic training and being on board with where we are going.

Ray’s passion for advancing the profession by teaching the next generation of athletic trainers came out during his interview. Being an effective educator was important to him, and he stressed why it mattered so much to him. Ray avowed:

> I care about the quality of the next generation of athletic trainers. . . . I want them to be very prepared. There will always be preceptors who say “Really? I have to do this training?” Maybe they think it is inconvenient. I think it can be a pain sometimes, but I also feel it is important if you are going to be teaching the next generation of athletic trainers.

For Richard, an administrator, preceptors’ contributions to the advancement of the profession of athletic training was a driving force behind his views. He highlighted that preceptors must be a part of this advancement because at the graduate level, students are enrolled over a shorter window of time, and all program educators must be very intentional at incorporating new skills. Richard pleaded:

> We need to go in a direction of evidenced based practice. We need data collection, documentation to move our profession forward so we are on an even playing field with all other healthcare professions. I think our preceptors are the most important aspect of the education team, and especially at the master’s level. It is a two-year program, and you have so many different things that students learn very quickly. There just is not any time for un-productivity during clinical experiences.

Participants described several factors which shaped their views on preceptor selection and development: past adversity participants have faced, the support systems they have access to, professional development opportunities they have engaged in, and the advancement of the
athletic training profession they desire.

**Summary of Findings**

Chapter four served to present the three major themes and nine subthemes, which emerged from participants’ interviews related to what they believe is most appropriate regarding athletic training preceptor selection and development. As a result of the guiding research questions of this study, three themes surfaced directly from participants’ statements including: beliefs of ideal preceptors, views of preceptor development, and influences on beliefs of preceptor selection and development. Participants discussed preceptors should possess the qualities of an educator, a professional, and a leader. Among their views of preceptor development, participants described their preferred logistics of preceptor development opportunities and the content which should be included in preceptor development. Finally, four influences emerged from interviews with participants, which included adversity, support systems, professional development, and athletic training advancement. Chapter five presents the relationship of these findings with current literature and provides implications for the future of athletic training education.
CHAPTER FIVE: DISCUSSION

As previously discussed, athletic training clinical experiences are opportunities for athletic training students to engage in “direct client/patient care guided by a preceptor” (CAATE, 2018a, p. 18). These planned activities are critical components in the preparation of an athletic trainer, which prepare students to take on the roles and responsibilities of a healthcare provider (Benes et al., 2014). During their clinical experiences, athletic training students apply knowledge, skills, and abilities while providing care to patients under the guidance of a preceptor (Edler et al., 2017; Levy et al., 2009). Preceptors’ roles in supervising and guiding students during these experiences is crucial as they are responsible for providing instruction and supervision, which facilitates students to bridge the gap between educational theory and clinical practice (Altman, 2006). Additionally, preceptors have a role in bolstering students’ socialization into the profession of athletic training, protecting them during stressful situations, and assisting them in good decision making (Altmann, 2006; Lauber et al., 2003; McClure & Black, 2013; Weidner & Henning, 2005). When effective, the guidance and mentorship which preceptors provide students results in an impactful relationship that largely affects students’ acceptance of the responsibilities of an athletic trainer and further cultivates their excitement and commitment to the profession (Dodge & Mazerolle, 2015; Mazerolle & Dodge, 2015, Mazerolle et al., 2012; Pitney & Ehlers, 2004; Rye & Boone, 2009).

Athletic training students appreciate the culture of working in clinical education environments where preceptors demonstrate appropriate professional roles and promote their learning (Dodge & Mazerolle, 2015). Furthermore, the number of encounters and amount of time they spend with patients during clinical experiences may facilitate students’ transition to a practicing clinician upon graduation (Walker et al., 2016). Simply put, the interactions within
clinical experiences help students develop critical thinking skills, commitment to their chosen profession, and gain confidence in their abilities as they progress through a professional program.

While preceptors understand and accept their role as facilitators of student learning, they most often are not formally trained as educators but rather their background is in areas of healthcare such as athletic training, medicine, orthopedics, and rehabilitation. As a result of the demands placed upon them, preceptors have reported feeling anxious about balancing the needs of the students they supervise and those of the patients they care for (Dodge et al., 2014; Pollard et al., 2017). The challenges reported by preceptors may decrease their ability to provide effective clinical experiences.

Selecting and developing capable preceptors can be challenging for athletic training programs. Previous authors (e.g., Lauber et al., 2003; Laurent & Weidner, 2001; Platt Meyer, 2002; Weidner & Henning, 2004) have suggested characteristics, behaviors, and attributes of effective athletic training preceptors; however, recent and ongoing educational reform in the profession has created a renewed need to examine preceptor selection and development. Furthermore, several other healthcare professions have developed preceptor training models; however, no standardized model for development athletic training preceptors exists. While this lack of standardization gives programs much autonomy to select and develop preceptors based on their goals and objectives, professional organizations have yet to identify best practices. Therefore, athletic training program administrators must appraise what they feel would be best for students themselves. Gaining insight into stakeholders’ beliefs of appropriate selection and development of athletic training preceptors may be helpful in making these critical decisions.
The purpose of this study was to explore how stakeholders (preceptors and program directors or clinical education coordinators) determine what is most appropriate for the selection and development of athletic training preceptors. The following research questions guided this study: (a) what are stakeholders’ beliefs regarding preceptor selection; (b) what are stakeholders’ views regarding preceptor development and; (c) how do stakeholders determine what they believe is most appropriate for preceptor selection and development?

These questions were addressed using a hermeneutic phenomenological approach to inquiry (Heidegger, 1927/1962). The research questions were addressed by individual, semi-structured phone interviews (Creswell, 2013; McIntosh & Morse, 2015; Savin-Baden & Major, 2012) with preceptors for graduate, professional athletic training programs as well as program administrators (i.e., program directors or clinical education coordinators) who were primarily responsible for selecting and developing preceptors for these programs. The interview guides (Appendix D and E) included questions related to participants beliefs of ideal preceptor qualities, their views of the most appropriate approach to developing preceptors for their role as clinical teachers, and how they determined what they believe is best in these areas. Each interview was audio recorded, transcribed verbatim by the primary investigator, and coded using the Interpretative Phenomenological Analysis (IPA) approach (Smith, Flowers, & Larkin, 2009; Smith, Jarman, & Osborn, 1999; Smith & Osborn, 2003). This study provides a deeper understanding of what preceptors and program administrators believe makes an ideal preceptor and what they view is important regarding developing preceptors for their role. Additionally, this study gives insight into the influences on preceptors and administrators beliefs of preceptor selection and development.
The following discussion includes the analysis of the themes which emerged and how these themes connect with the current literature. Following data analysis, many areas needed to be investigated based on emergent themes, which led to the exploration of new literature. Before collecting data, the development of a framework for and significance of the study steered the formation of the literature review. However, following data analysis, emergent themes guided a new literature search. Therefore, based on the themes identified within this study, new literature is introduced, which will connect the findings to existing theories to show how the results of this study add to the current body of knowledge. Following a discussion of each theme, the implications of the findings, limitations and delimitations of the study, and suggestions for future research are presented.

**Stakeholders’ Beliefs Regarding Preceptor Selection**

Preceptors and administrators believe preceptors should have the qualities of an educator, professional, and leader to execute their role adequately. Specifically, stakeholders with 10 or fewer years of experience, appear to place emphasis on a preceptor having a growth mindset. Furthermore, those whose programs are in urban communities appear to believe it is especially important for preceptors to utilize best practices, meet administrative expectations, and have experience beyond their professional education to be equipped to teach students during their clinical experiences. Preceptors are undoubtedly vital educators who must be committed to their role as clinical teachers if they are to succeed in helping students grow. Several authors from various healthcare professions agreed that preceptors must take their position of educator seriously. Authors from dietetics (Walker & Grosjean, 2010), medicine (Riesenber, Biddle, & Erney, 2001; Sutkin, Wagner, Harris, & Schiffer, 2008), pharmacy (Young, Vos, Cantrell, & Shaw, 2014), and athletic training (Weidner & Henning, 2004) discussed the importance for
preceptors to be enthusiastic about teaching students during their clinical experiences. It has also been previously suggested preceptors should take time to engage with students in learning opportunities such as discussing a complicated patient case or their career options (Huggett, Warrier, & Maio, 2008; Lie et al., 2009; O’Sullivan et al., 2015; Weidner & Henning, 2004; Young et al., 2014).

Preceptors and administrators within this study noted the importance for preceptors to deliberately engage students in patient care to help facilitate their learning. Similarly, other authors have emphasized a preceptor’s effectiveness is influenced by their ability to engage students in patient care and give students independence during their clinical experiences (Huggett et al., 2008; Knisely, Fulton, & Friesth, 2015; Lauber et al., 2003; Lie et al., 2009; Nottingham & Kasamatsu, 2018; O’Sullivan et al., 2015; Riesenberg et al., 2001; Weidner & Henning, 2004; Young et al., 2014). Preceptors should also have a warm and inviting disposition with students and should not be afraid to discuss their missteps and challenges. Lie et al. (2009), and more recently Knisely et al. (2015), used different approaches, but both found those preceptors who are welcoming and open with students are thought to be more effective in their role as clinical educators in both medicine and nursing respectively. Approachability and openness towards students are also suggested to be a characteristic of effective athletic training preceptors (Nottingham & Kasamatsu, 2018). Additionally, the literature review conducted by Walker and Grosjean (2010) found honesty and kindness to be an attribute of preceptors, which dietetics students prefer. Furthermore, sharing one’s mistakes and learning experiences was a common thread among students’ comments about pharmacy preceptors who have gone on to win professional accolades for their role as clinical teacher (O’Sullivan et al., 2015). These crucial
conversations with students may help students to become better equipped when they face adversity.

It is especially crucial for athletic training administrators to critically examine a preceptor’s motivations for working with students. While rare within the literature, Weidner and Henning (2004) have previously suggested athletic training program administrators should carefully investigate the driving force behind a preceptor wanting to work with students to ensure they are not using students as a means for supplementing athletic training services. The findings of this study suggest both athletic training administrators and preceptors continue to prefer a preceptor who does not overutilize students as a labor force in the athletic training clinic as this may stifle students’ opportunities to engage in patient care during their clinical experiences.

Preceptors should also possess the qualities of a professional and leader. There is strong socialization into the profession of athletic training through students work with preceptors (Dodge & Mazerolle, 2015; Mazerolle & Dodge, 2015; Mazerolle et al., 2012). Therefore, preceptors should be strong role models for students. Overwhelmingly within the literature, authors from a multitude of healthcare professions discuss the necessity for preceptors to set a positive example for students (Knisely et al., 2015; Lauber et al., 2003; Lauber & Killian, 2009; Lie et al., 2009; Riesenberg et al., 2001; Walker & Grosjean, 2010; Weidner & Henning, 2004; Young et al., 2014). To best portray the qualities of a professional, administrators and preceptors from this study believed preceptors should have experience as a healthcare provider beyond their professional education. This quality, however, is rarely discussed within the literature. Huggett et al. (2008) examined the learning journals of medical students and found students valued most a preceptor who demonstrated professional expertise. This professional experience was anchored in prior encounters with patients as student participants discussed preceptors who
lacked experience were viewed and described as less credible and less capable to teach. Additionally, the literature review conducted by Walker and Grosjean (2010) noted dietetics students desire a preceptor who had previous experience working in their profession. Authors here noted while less experienced clinicians may possess the knowledge and skills of a competent healthcare provider, they may lack the confidence to portray themselves as authorities in their area of practice effectively. Moreover, the characteristics of an effective athletic training preceptor have been tied to the core traits of an effective leader; including self-confidence (Platt-Meyer, 2002). Although not directly linked to their previous experience as a healthcare provider, students and preceptors within nursing programs have ranked a preceptor’s self-assurance as a characteristic which promotes their effectiveness (Knisely et al., 2015).

While there may be some evidence to suggest students desire a preceptor with prior experience as a healthcare provider, the accrediting agencies for a multitude of healthcare educational programs including medicine, pharmacy, nursing, physician assistant, occupational therapy, respiratory therapy, and athletic training do not standardize a minimum amount of experience a clinician must have to serve as a preceptor. These professions only require that preceptors are credentialed in their respective professions, and they can effectively teach and evaluate students. However, the accrediting bodies for counseling psychology (Council for Accreditation of Counseling and Related Educational Programs [CACREP], 2015) and physical therapy education (Commission on Accreditation in Physical Therapy Education [CAPTE], 2015), require clinicians to have two years and one year of experience respectively to be qualified as a preceptor. The evidence in this study establishes the need for athletic training programs to consider going beyond the minimum requirements set by their accrediting agency
and carefully examine the professional experiences of their preceptors and whether a newly credentialed athletic trainer is best suited to teach students during their clinical experiences.

Additionally, preceptors should be able to meet the administrative demands of working with students. The ability to complete these tasks in a timely fashion without continual reminders and oversight is an essential quality reported by program administrators. Weidner and Henning (2004) previously used a Delphi technique to build a consensus among athletic training education experts systematically and found completing administrative tasks promptly to be a desirable trait of preceptors. Additionally, Platt-Meyer (2002) identified good organizational skills as essential for athletic training preceptors to possess. Interestingly though, this characteristic was not mentioned by authors from other healthcare professions, which may raise questions comparing workload demands for preceptors and program administrators within athletic training programs and those of other healthcare professional programs.

Moreover, to best prepare students during their professional education, preceptors need to value their continual professional growth. Walker and Grosjean (2010), as well as Weidner and Henning (2004), discussed the importance of preceptors engaging in regular self-appraisal of their skills and having the enthusiasm to continue to grow professionally. While the body of literature which explains the importance of continual growth is limited, much of the studies which have examined preceptor characteristics have focused on student perceptions. Therefore, the findings of this study may help to broaden the understanding of ideal preceptor characteristics by gaining the perspective of program administrators and preceptors alike. Finally, to be prepared to teach the next generation of ATs, preceptors themselves must be willing to expand their knowledge and clinical skills. Authors from athletic training (Lauber & Killian, 2009; Platt-Meyer, 2002), pharmacy (O’Sullivan et al., 2015), nursing (Knisely et al.,
2015) and medicine (Sutkin et al., 2008) all discussed the importance for preceptors to be knowledgeable and competent in their profession as well as demonstrate sound clinical reasoning while making patient care decisions.

Absent from the literature was the belief that preceptors should embrace the advancement of professional education. This quality may be unique to this study given the nature of current educational reform in athletic training. In 2015, the Athletic Training Strategic Alliance announced the decision for the athletic training professional degree to transition from an undergraduate to a graduate level. This educational reform has left program administrators acutely aware of how athletic training professional education is transforming. Some administrators indicated challenging moments they have experienced when preceptors have not embraced the transition to a graduate degree, which has not only affected their relationships with those preceptors but also had a negative impact on the students experience with clinical education. Furthermore, when preceptors buy-in to educational transition, it promotes a more cohesive philosophy between the didactic and clinical educators within an athletic training professional program. While the decision for the professional degree in athletic training was announced in 2015, programs have until 2022 to complete this transition. While not explicitly examined, participants of this study may have been in the midst of a recent change, which may have impacted the viewpoints they expressed, especially considering this desired quality was primarily reported by program administrators.

Overall, to promote the best learning environment for students, it is vital for preceptors to possess the qualities of an educator, professional, and leader. More specifically, preceptors should view themselves and administrators should equally view them as vital contributors to student growth who are committed to their role as a clinical teacher and provide abundant and
purposeful clinical experiences for students. Furthermore, to develop students who embody professionalism upon graduation, it is crucial for preceptors themselves to have the characteristics of professionalism. Preceptors can display the qualities of professionalism by being good role models, meeting the administrative expectations of their role, and having autonomous experiences as a healthcare provider before working with students. Finally, strong leadership characteristics are essential for preceptors to hold. To best exemplify leadership qualities, preceptors should have a growth mindset, utilize best practices as they relate to recent literature and evolving clinical skills, and embrace the evolution of athletic training professional education.

Stakeholders’ Views of Preceptor Development

When considering the logistical aspects surrounding preceptor development, administrators should consider the delivery techniques used, accessibility of these opportunities, and recognizing preceptors for the role they play within a professional program. Stakeholders whose programs lie in urban communities appear to place particular importance on the need for more frequent preceptor development opportunities for those who are new to the role of clinical teachers. This was also true for those stakeholders with 10 or fewer years of experience. Additionally, this same group of stakeholders with 10 or fewer years of experience prefer preceptor development opportunities be easy to access and digest. Within this study as well as in the literature, in-person workshops are perceived to be a highly useful format to deliver preceptor development. Other healthcare professions, such as nursing, have continued to use in-person workshops as a primary mechanism to deliver preceptor development (Windey et al., 2015). Furthermore, simulation-based learning during in-person workshops has been discussed to be an effective strategy to help nursing preceptors develop their clinical teaching skills (Krautscheid,
Kaakinen, & Warner, 2008; Wilson, Acuna, Ast, & Bodos, 2013). Learning opportunities such as this offer learners, in this case, preceptors, concrete experiences, which are followed by structured debriefing that help preceptors reflect on their experiences. This strategy to developing preceptors embodies Kolb’s (2015) experiential learning cycle, which adult learners are well positioned.

However, while delivering preceptor development in-person has been reported as a favorable method for developing preceptors, this study reaffirms that administrators should be flexible in their approach to ensure engagement of all preceptors. Authors have previously discussed how other modalities such as online modules are being used to present preceptor development to accommodate the varying needs of preceptors (e.g., Ackman & Romanick, 2011). Ricchetti and Jun (2011) for example, listed several online seminars and self-study courses aimed to improve the clinical teaching abilities of pharmacy preceptors. Moreover, a few athletic training program administrators have also turned to online, asynchronous learning to deliver preceptor development (Volberding & Richardson, 2015).

The model of learning proposed by Bergsteiner and Avery (2014) suggested learning activities should not silo themselves in individual categories of learning style or activity type, but instead administrators should develop several events, which integrate any number of learning styles to help provide more comprehensive programming for learners. This study reemphasized this concept as both preceptors and program administrators shared their beliefs of the importance of athletic training programs to consider a multi-modal approach to developing preceptors. Stakeholders within this study recognized individual circumstances such as geographic barriers and scheduling conflicts might prevent preceptors from attending in-person workshops consistently. Therefore, programs should not rely solely on one delivery mechanism to develop
preceptors but instead offer more comprehensive and wide-ranging opportunities for preceptors to engage. Vos and Trewet (2011) similarly suggested a comprehensive development program to foster the continual growth of preceptors. The program which these authors developed used a wide range of formats including live and recorded seminars, in-person workshops for group interaction, one-on-one visits with preceptors, and regular newsletters. As a result, preceptors were highly responsive to these opportunities and students reported better quality interactions with these clinical teachers.

Should administrators choose to utilize newly credentialed healthcare providers as preceptors, they may need to offer more frequent preceptor development opportunities and mentorship. Other authors in various healthcare professions have noted the positive influence mentorship has played on a preceptor’s socialization as well as their career satisfaction, confidence, and productivity (Haggerty et al., 2012; Mazerolle et al., 2014; Nottingham et al., 2016; Sambunjak et al., 2006). Specifically, Gueorguieva et al. (2016) discussed the importance of developing a structured approach to mentorship, which allows novice preceptors to receive timely mentorship from their more experienced colleagues who work with them in their immediate clinical environment. Collectively, this information suggests those who are new to clinical practice should receive additional training and mentorship to fulfill the expectations of a preceptor. However, when combined with the recommendation for preceptors to have autonomous experiences as a healthcare provider, program administrators should carefully examine how appropriate it is to utilize newly credentialed healthcare providers as preceptors at all.

Preceptor development opportunities should be easily accessible to increase preceptors’ likelihood of engaging in these opportunities and not create a burden on preceptors’ time.
Preceptors have previously indicated they understand the importance of participating in professional development which enhances their abilities as a clinical teacher (Hartzler et al., 2015; Nasser et al., 2014). However, they often report the dominant barrier to their engagement is lack of time (Dodge et al., 2014; Hartzler et al., 2015, Nasser et al., 2014). Furthermore, McClure and Black (2013) discussed preceptors often accept the role of clinical educator without fully understanding and appreciating the challenges they will face. If preceptors do not fully understand the intricacies of serving in this role, this may perpetuate the strain they report while serving dually as healthcare provider and educator (Dodge et al., 2014; Levy et al., 2009; Lienert-Brown, Taylor, Withington, & Lefebvre, 2018; Pollard et al., 2007). To help combat the time demands placed upon preceptors, programming such as The One-Minute Preceptor discussed by Kertis (2007) has been used to give preceptors from other healthcare professions an accessible and quick method to engage in professional development that aims to improve their clinical teaching skills. Other authors have discussed components to preceptor development programming which are readily accessible and easy to engage with such as home-study courses, monthly journal clubs, regular newsletters, and on-the-fly discussions with experienced faculty and program administrators (e.g., Vos & Trewet, 2012). Therefore, programs should offer preceptors highly accessible opportunities to help them assimilate to their role as a clinical teacher and overcome the time demands placed upon them by serving in multiple positions.

The logistical aspects of preceptor development should also ensure preceptors are recognized for their efforts teaching students during their clinical experiences. While there may be mixed beliefs regarding providing financial compensation to preceptors, it is widely believed the energy preceptors spend to help students should be acknowledged in some capacity. A recent report produced by the American Association of Colleges of Pharmacy (AACP) was published to
promote the professional development of preceptors (Worrall et al., 2016). Using a synthesis of focus group data, membership surveys, as well as policy and literature review, authors of this organizational report outlined proposed policy statements, recommendations to the AACP, and suggestions to schools/colleges of pharmacy to promote the development of high-quality preceptors. Among these suggestions was a call for better and more frequent recognition of preceptors. While the authors noted compensation might be a welcome benefit to preceptors, there are many barriers to remuneration and suggest other, more prestigious ways to recognize preceptors. Methods such as advanced credentialing, awards, affiliate faculty appointments, discounts, and public acknowledgment were proposed. The commitment preceptors make to serve a professional program is well documented yet recognizing preceptors for this work appears to be done inconsistently as a strong call for better, more meaningful recognition has been discussed.

In addition to the logistical components to developing preceptors, the content offered during these opportunities should focus on programmatic information as well as strategies to promote preceptors’ skills as clinical teachers. A few authors have discussed the content included within preceptor development, which has focused on improving specific skills associated with clinical teaching. For example, the systematic review conducted by Windey et al. (2015) focused on reviewing interventions that support nursing preceptors’ professional development. The content most frequently identified within this study included giving and receiving feedback, effective communication, facilitating adult learning, reviewing the roles and responsibilities of preceptors, and development and evaluation of students’ clinical judgment. This study found similar areas of importance identified by participants such as outlining the expectations of preceptors and clinical teaching strategies.
Preceptors, however, appear to prefer topics related solely to clinical teaching. Pharmacy preceptors have reported preferring subjects including strategies to engage and motivate students, updates on teaching techniques, and effectively questioning students (Assemi et al., 2011). Similarly, athletic training preceptors have reported they prefer guidance on developing students’ critical thinking skills and teaching clinical decision making within preceptor development opportunities (Hankemeier et al., 2017). Furthermore, this study revealed the importance of including information related to new clinical skills which have been recently introduced into the curriculum. As educational requirements of athletic training professional education have evolved, the clinical skills being taught within programs have also changed. The literature is limited within this content area. However, there may be an additional need to continue this practice as the clinical skills which must be taught within a professional program have been recently expanded (CAATE, 2018a). Regardless of the logistical components of developing preceptors, the content included within these opportunities influences preceptors’ confidence and comfort teaching students within clinical education. Further examining the learning needs of preceptors may lead to more engaged preceptors who are better prepared to meet their responsibilities as facilitators of student learning.

When designing preceptor development programming, it is crucial for programs to consider both the logistical factors as well as the content included within these opportunities. Specifically, these professional development offerings should be flexible offering multiple methods to delivering the content, which helps accommodate the various learning styles of preceptors. Furthermore, to increase the likelihood of preceptors’ ability to engage in preceptor development, these opportunities should be easy to access and digest, and not create a burden on preceptors’ time. Additionally, recognizing preceptors for their efforts teaching students is a
crucial component to preceptorships. When possible, financial compensation for their role is welcome; however, other forms of recognition may be better suited given the financial implications of remuneration. Things such as free continuing education credits, reimbursement of professional fees, access to healthcare equipment or library databases, awards, and public recognition could be other ways for preceptors to be recognized for the work they do to teach students during their clinical experiences. Regardless of the logistical factors, the content of preceptor development should include programmatic information such as program policies, preceptor expectations, the curriculum, and information related to new clinical skills which have been recently added to the curriculum. Furthermore, to help preceptors become strong educators, content should also center on helping preceptors develop their clinical teaching abilities.

**Influences on Stakeholders’ Beliefs of Preceptor Selection and Development**

Preceptors and program administrators described four main aspects which have informed their reported beliefs about preceptor selection and development. These included past adversity, support systems they have access to, professional development opportunities they have engaged in, and their desire for the advancement of the athletic training profession. Interestingly, stakeholders who have 10 or fewer years of experience were particularly influenced by role models and mentors, support from feedback they receive, and professional development opportunities they have engaged in. Additionally, those whose programs lie within an urban community were influenced by role models and mentors, and their ability to be more selective when identifying preceptors to serve their program. Previous literature has identified how past experience and mentors have helped shape the views of healthcare professionals. For example, Wardrop, Coyne, and Neeham (2019) recently discussed how their previous experiences working with students highly influenced nursing preceptors' expectations of the role of clinical teachers.
Furthermore, in their investigation into how primary care medicine preceptors respond to the learners they are working with, Mazor et al. (2005) found preceptors’ recollections of their own past mistakes influenced how they responded to mishaps with students with whom they were working.

In addition to past experiences and adversity which shapes the beliefs of preceptor selection and development, role models and mentors have also been identified as a strong influence on these views. The role of mentors is well documented to have a substantial impact on the professional socialization of athletic training students. The relationships these students develop with their preceptors and mentors help them learn the attitudes of the healthcare culture (Altmann, 2006; Lauber et al., 2003; Weidner & Henning, 2005). Furthermore, career decisions athletic training students make, appear to be influenced by their mentors (Mazerolle et al., 2012). The influence of mentorship and previous experiences seems to continue though beyond the professional education of athletic trainers. Nottingham (2015) revealed how mentorship from their preceptors and past experiences as students were contributors to preceptors’ views of the role they play as educators. Furthermore, athletic training preceptors have indicated how their previous experiences, interactions with role models, and the professional development opportunities they have engaged in have helped in their socialization to the role of a preceptor (Mazerolle et al., 2014). The findings of this study help support those from previous authors, and further suggest just how strongly past experience and adversity, role models, and professional development opportunities shape the beliefs surrounding preceptor selection and development.

However, the theory of adult learning may help in gaining a better appreciation of the many influences which have shaped stakeholders’ beliefs of preceptor selection and
development. The participants of this study are healthcare professionals who have graduated from a professional program and earned the appropriate credential to practice in their respective profession. Therefore, it is relatively safe to assume that these stakeholders of clinical education are adult learners who are self-driven and value learning which integrates with their everyday life. The aspects which shape how adults learn is a complex, multidimensional process, which no single theory or model has wholly encompassed. Much of the adult learning theories discussed today are grounded in the principles established by Knowles (1984). Due to the frequency of use and wide acceptance within healthcare literature (e.g., Bomar & Mulvihill, 2016; Henderson, Dalton, & Cartmel, 2016; Gatti-Petito et al., 2013; Mazerolle, 2014), Knowles’ (1984) theory of adult learning was used to conceptualize what shapes stakeholders’ views regarding preceptor selection and development. This theory of what affects adult learners outlines how these professionals have a greater self-concept, which helps direct their learning. This previous understanding helps to rationalize why program administrators and preceptors interviewed for this study drew from their own professional development experiences to form their views of preceptor selection and development.

Furthermore, the concept that past experiences inform how adults learn is a key tenant to Knowles’ (1984) theory of adult learning. This concept may help to explain why their experiences with past adversity and sources of support such as feedback they have received and being able to choose from many preceptors have had such a significant impact on shaping their beliefs of preceptor selection and development. Finally, Knowles’ theory suggested that adult learners are more internally motivated, and their professional interests drive their learning. Participants of this study identified how their passion for the advancement of the athletic training profession influences their opinions of preceptor selection and development. This level of
enthusiasm and internal motivation indeed lies within the principles of adult learning, which could help explain why the idea of professional advancement would have such an active role in affecting the beliefs of these participants.

**Implications for the Future**

Selecting and developing high-quality preceptors can be a challenging task, which all athletic training professional programs face. While this study cannot completely inform the practice of selecting and developing athletic training preceptors, noteworthy implications exist for athletic training program administrators, preceptors, and students, as well as athletic trainers their patients, and the costs associated with the healthcare system. Key implications of this study:

- Highlight the importance of athletic training preceptors to possess the characteristics and qualities of educator, professional, and leader, which stakeholders believe promote ideal preceptorships.
- Bring to the surface the logistical components and content stakeholders believe are essential to foster the professional development of athletic training preceptors.
- Shed light on how past adversity, sources of support, professional development, and the desire for the advancement of their profession has influenced stakeholders’ beliefs of athletic training preceptorships.

Previous literature has recognized behaviors and characteristics believed to promote effective preceptorships. The similarities between the findings of this study and those of previous authors suggest the recent reform in athletic training education may not have substantially altered the preferred qualities of preceptors. Having a better appreciation for the ideal qualities of preceptors will help program administrators make more informed decisions when selecting individuals who will facilitate students’ learning during their clinical experiences.
The logistics and content identified within this study help to further explain the components of preceptor development that not only preceptors but also program administrators prefer. This information may help administrators determine the types of opportunities they utilize to promote the development of preceptors for their program. For example, this study revealed the importance of offering professional development opportunities which are delivered using in-person, group workshops to facilitate active learning techniques such as simulated teaching experiences which preceptors may be highly responsive to. Additionally, these findings contribute to an understanding of the content which both preceptors and program administrators believe support the professional growth and instructional abilities of preceptors. Overall, this information will help better inform program administrator’s critical decisions regarding developing athletic training preceptors for the role of clinical teachers. In utilizing the evidence which emerged here, program administrators will have more empirical support to the autonomous decisions they must make regarding the selection and development of preceptors within their program. This knowledge may alleviate some of the challenges they face when fulfilling their responsibilities to oversee a professional program. Ultimately, their ability to make more informed decisions regarding preceptorships may lead to program administrators designing clinical experiences which are more effective in improving students’ abilities as healthcare providers and developing their readiness for clinical practice.

Furthermore, by using this information from their colleagues in education, preceptors as well as those clinicians considering the role will better understand the qualities which are crucial in helping fulfill the expectations of a preceptor and may help these individuals be more prepared to accept the responsibilities of a clinical educator. As preceptors evaluate their engagement in professional development, they may rely on the information revealed within this study, which
highlights the content suggested to promote their abilities as a clinical teacher. This preparation may lead to decreased role strain experienced by preceptors and more meaningful, higher quality clinical experiences for students.

Additionally, this research helps develop a deeper understanding of the influences over preceptors and program administrators’ opinions regarding preceptorships. In the future, stakeholders such as administrators within institutions of higher education, but also decision makers within athletic training professional organizations, can use this information when designing professional development opportunities for athletic trainers and the knowledge may guide future research in clinical education for healthcare professions.

Overall, the goal of preceptorships is to offer healthcare students high-quality clinical experiences, which help them prepare for and integrate into a demanding professional environment. The findings of this study help inform better decisions regarding the professionals who may be best suited to serve as a preceptor as well as how to best prepare them for their role as a clinical teacher. By utilizing more qualified and better-prepared preceptors, students will gain a deeper appreciation for the positive aspects of a career in athletic training, which may result in decreased attrition. This may be especially important during a program’s transition to a professional master’s degree as enrollment is expected to temporarily decrease. The time and financial investment in selecting and developing high-quality preceptors should be recognized as a cost-effective asset within institutions of higher education. Institutional administrators should consider the findings presented in this study regarding the importance of recognizing preceptors for the time they spend with students. In doing so, administrators should evaluate the ability to expand the resources available to remunerate preceptors or minimally other ways (e.g., affiliate faculty titles, access to library databases, reimbursing professional dues) in which the institution
can aid in the recognition of these vital educators. Furthermore, institutional administrators should reassess the load and evaluation of program administrators who are tasked with the responsibility of selecting and developing preceptors. This study highlights the highly complex and at times cumbersome process of identifying preceptors who are best suited to teach students during their clinical experiences as well as ensuring adequate professional development for these individuals. While not specifically examined in this study, the program administrators who are often charged with these responsibilities are given minimal load reductions to allow time for this process which may be insufficient. Reevaluating the time commitment involved with selecting and developing high quality preceptors and increasing how this is reflected in their annual evaluation may ease the significant strain reported by these program administrators. Ultimately allowing increased time to ensure more meaningful, higher quality clinical experiences for students.

Finally, when considering the influence they have in a student’s transition to clinical practice, preceptors are an integral part of helping newly credentialed athletic trainers prepare for their careers as healthcare providers. An investment in strong preceptors is a safe and effective way to save the healthcare system thousands of dollars when expenses related to employee turnover, recruitment, and patient safety are considered. These findings combined with existing literature help to promote well-prepared ATs who are ready and equipped to play an integral role in improving patient outcomes and decrease healthcare costs.

Limitations, Delimitations, and Suggestions for Future Research

There are several inherent limitations to this study, which should be recognized. First, the CAATE website was used to identify and recruit participants. However, the study relied on program administrators for each athletic training program to pass along the recruitment email to
the preceptors of these programs. As a result, the full population of participants may not have received the recruitment materials and been given an opportunity to participate. Secondly, the participants of this study were limited to preceptors and program administrators for graduate, professional athletic training programs. Having not included stakeholders for undergraduate programs, comparisons cannot be drawn between the beliefs of stakeholders for graduate and undergraduate, professional programs. Additionally, the nature of qualitative research design limits the ability to analyze findings across demographic characteristics of participants. Therefore, while demographic information from participants helped ensure a diverse sample, comparisons were not made between these various participant characteristics.

To contrast those external limitations of this study, three delimitations were set to exclude certain factors, which may have impacted the findings intentionally. First, the population of interest in the study was limited to program administrators (i.e., program directors or clinical education coordinators) and preceptors for graduate, professional athletic training programs. This study intended to explore how stakeholders (preceptors and program directors or clinical education coordinators) determine what is most appropriate for the selection and development of athletic training preceptors. This stakeholder group was selected because each professional plays a vital role in athletic training clinical education and brings unique perspectives to the discussion. Secondly, in-person individual interviews were conducted when possible, however, the flexibility offered by phone interviews created opportunities to expand the participant pool beyond the location of the primary investigator (PI). No universal approach to athletic training preceptor selection and development exists due to the freedom given by program accreditation standards (CAATE, 2018a). Therefore, there may be variations of the experiences of preceptors and program administrators across the country. For this reason, phone interviews were used
when needed to interview members of the population who were geographically dispersed. Finally, only those individuals who were associated with a graduate, professional athletic training program were included in this study. This level of athletic training program was selected to best align participants with the recent decision for professional athletic training education to occur at the graduate level (Athletic Training Strategic Alliance, 2015).

The body of literature which discusses current practices in athletic training preceptor selection and development is quite limited. Therefore, future studies should be conducted which examine these practices to help determine how they align with the beliefs discussed here. Future research should also explore the challenges associated with selecting and developing athletic training preceptors, and which aspects of preceptor development are effective at facilitating student learning and readiness for clinical practice. Furthermore, studies should be conducted which examine how preceptors are evaluated to assess their clinical teaching abilities. Additionally, to better understand the resources available to programs based on their geographic location, researchers should examine the various aspects of clinical education for programs in both rural and urban communities. The amount of experience an individual has may also have an impact on their beliefs of preceptor selection and development. Research should investigate whether the amount of experience an individual has influences their views of preceptorships. Additionally, research should also be drawn which compares preceptor selection, development, and evaluation practices across various types of healthcare programs (e.g., athletic training, pharmacy, medicine, nursing, counseling psychology). Finally, future work should be conducted to disseminate principles of teaching for athletic training preceptors.
Conclusions

Preceptors are healthcare providers who serve professional programs by teaching students during their clinical experiences. During these experiences, preceptors help students develop critical thinking skills and confidence as they progress through a professional program (Walker et al., 2016). Per accreditation standards, program administrators (i.e., program directors or clinical education coordinators) are tasked with preparing and developing preceptors for the roles they will assume as clinical educators (CAATE, 2018a). The literature had suggested effective preceptors demonstrate certain characteristics, behaviors, and attributes (Lauber et al., 2003; Laurent & Weidner, 2001; Platt Meyer, 2002; Weidner & Henning, 2004, 2005). However, speculation existed as to whether this information was outdated considering recent athletic training educational reform. Selecting qualified preceptors and providing them with meaningful professional development opportunities to help them become effective clinical teachers is a vital component in enhancing the overall development of athletic training students. Unfortunately, athletic training professional organizations have yet to identify best practices for preceptor selection and development, so administrators must make these crucial decisions without this information. This study employed a phenomenological approach to explore how stakeholders determine the appropriate selection and development of athletic training preceptors.

As a result of the guiding research questions, three themes emerged directly from participants statements including their beliefs of ideal preceptors, views of preceptor development, and influences on their beliefs of preceptor selection and development. Preceptors should possess the qualities of an educator, a professional, and a leader. When designing preceptor development, administrators should use flexible delivery techniques, and these opportunities should be highly accessible given the many demands on preceptors’ time.
Furthermore, an emphasis on recognizing preceptors for the work they do to help students grow should be made. Finally, four factors appear to influence stakeholders’ beliefs of the appropriate selection and development of preceptors, which include moments of adversity, support systems they have access to, professional development opportunities they have engaged in, and the advancement of the athletic training profession they desire. The process of selecting and developing preceptors for athletic training professional programs is complicated. This study provides a deeper understanding of the beliefs of preceptors and program administrators and the influences which shape their views. This information will help professional organizations build best practices for the selection and development of athletic training preceptors.
REFERENCES


Dear Program Administrator,

My name is Jessica Rager and I am a Doctoral Student at Ball State University. I am asking for your participation in a research project entitled “Determining the Appropriate Selection and Development of Athletic Training Preceptors.” For this study, I need to interview the individual mostly responsible for preceptor selection and development. If you are that person and would like to participate in a 60-90-minute interview, could you please complete this brief demographic questionnaire. If you are not that person, would you please forward this email to the individual who is mostly responsible for preceptor selection and development for your program? Additionally, I am asking this individual to forward the information below to the preceptors of your program. I have included information related to the study in the email text below.

Thank you for considering participating in this research study and sending the information to preceptors for your program. I look forward to hearing from you. Have a great day!

Jessica Rager

Hello,

My name is Jessica Rager and I am a Doctoral Student at Ball State University. I am asking for your participation in a research project entitled “Determining the Appropriate Selection and Development of Athletic Training Preceptors.”

The purpose of this study is to explore how stakeholders (preceptors and program directors or clinical education coordinators) determine what is most appropriate for the selection and development of athletic training preceptors. This study has been approved by the Institutional Review Board from Ball State University.

For this study, I need to conduct individual phone interviews with preceptors and program administrators who are responsible for selecting and developing preceptors for graduate, professional athletic training programs. If you are one of these individuals and would like to participate in a 60-90-minute phone interview, could you please complete this questionnaire. This initial brief questionnaire is intended to confirm inclusion criteria, collect demographic information, and determine your availability for an interview.

The informed consent is also included in this questionnaire for you to read prior to our discussion. If you have any questions about the informed consent, please do not hesitate to contact me or we can discuss your questions prior to the interview. Additionally, if you have any questions about your rights as a research participant, please feel free to contact Ball State’s Office of Research Integrity at (765) 285-5070 or at irb@bsu.edu.

Thank you for considering participating in this research study. I look forward to hearing from you. Have a great day!
Jessica Rager

Jessica L. Rager, MS, LAT, ATC
Doctoral Student, Ball State University
Primary Investigator

Roger D. Wessel, PhD
Professor of Higher Education, Ball State University
Faculty Advisor
Appendix B: Demographic Questionnaire

Name: ____________________________________________

1. Are you at least 18 years of age?
   a. Yes
   b. No (if no survey ended)

2. Participant Name: ______________________________

3. What is an email address or phone number we can contact you to schedule an interview?
   ______________________________________________

4. Is the athletic training program you are affiliated with at the graduate level?
   a. Yes
   b. No (if no survey ended)

5. Please select the role(s) which best describes your position within the athletic training program? (check all that apply)
   _____Program Director (PD)
   _____Clinical Educator Coordinator/Director (CEC)
   _____Preceptor

6. (If Preceptor was selected) Please list your healthcare credentials. ______________

7. (If PD or CEC was selected) Are you the individual mostly responsible for selecting and developing preceptors?
   a. Yes
   b. No (if no survey ended)

8. How many years have you served in this role? ______________

9. Please select which state your institution is in.

10. Which best represents your geographical location?
    a. Rural (populations <50,000)
    b. Urban (populations ≥50,000)

11. (If Rural selected) Approximately, how long would it take (miles) to the next largest city?
Appendix C: Informed Consent

**Study Title** Determining the Appropriate Selection and Development of Athletic Training Preceptors.

**Study Purpose and Rationale**
The purpose of this study is to explore how stakeholders (preceptors and program directors or clinical education coordinators) determine what is most appropriate for the selection and development of athletic training preceptors.

**Inclusion/Exclusion Criteria**
Preceptors for graduate, professional athletic training programs as well as program administrators (i.e., program directors or clinical education coordinators) who are primarily responsible for selecting and developing preceptors for these programs are invited to participate in this study. Additionally, to engage in this study, participants must be at least 18 years old. Individuals who do not identify in one of these roles, serve within undergraduate, professional athletic training programs, or are younger than 18 years old will be excluded from participation.

**Participation Procedures and Duration**
For this project, you will be asked to complete a brief demographic questionnaire and participate in an individual phone interview that will last approximately 60-90 minutes.

**Audio Tapes**
With your permission, the interviews will be audiotaped for accuracy. To protect your identity, pseudonyms will be used throughout the interview and when the recordings are transcribed. The audio files and transcripts will be stored on a password protected computer for five years and then digital data will be erased.

**Data Confidentiality or Anonymity**
We will ask for your name for the demographic questionnaire to connect your information with the interview. Once this connection is made your name will be deleted and a pseudonym assigned. Data will be kept confidential with the use of assigned pseudonyms. The data will all be stored under that pseudonym. The PI and her faculty advisor will be the only individuals who know the connection between your name and the pseudonym. If you choose to withdraw from the study, all your data will be destroyed.

**Storage of Data**
Electronic data and transcriptions will be kept on a password protected computer. After five years, the recordings and transcriptions will be destroyed.

**Risks or Discomforts**
There are no potential risks for participating in this research.

**Benefits**
None
Voluntary Participation
Your participation in this study is completely voluntary. You may refuse to answer any question or choose to stop participation in the study at any time for any reason. You will not suffer any prejudice or penalty by your decision to stop your participation. If you choose to withdraw from the study, you may also choose to withdraw your data.

IRB Contact Information
If you have any questions about your rights as a research participant, feel free to contact the Director, Office of Research Integrity, Ball State University, Muncie, IN 47306, (765) 285-5070 or at irb@bsu.edu.

Consent
I provide my consent to participate in the research project entitled “Determining the Appropriate Selection and Development of Athletic Training Preceptors.” I have read the description of the study and all my questions have been answered. I believe that I meet the inclusion criteria established for this study. I give my consent to have my interview audio recorded. I understand my rights as a research subject and that I will receive a copy of this consent form to keep.

Researcher Contact Information
Primary Investigator:
Jessica L. Rager, MS, LAT, ATC
Doctoral Student
Adult, Higher, and Community Education
Ball State University
Muncie, IN 47306
jlrager@bsu.edu

Faculty Advisor:
Roger D. Wessel, PhD
Professor of Higher Education
Ball State University
Muncie, IN 47306
rwessel@bsu.edu
Appendix D: Program Administrator Interview Guide

Hello.

How are you doing? Thank you for taking the time to speak with me today. The purpose of this study is to explore how stakeholders (preceptors and program directors or clinical education coordinators) determine what is most appropriate for the selection and development of athletic training preceptors. This interview will last approximately 60-90 minutes and will consist of several questions.

You viewed the informed consent information when you completed the demographic questionnaire. Have you reviewed that form? If you have not reviewed that form, or would like to go over it again, I will read the consent form to you. (After reading the form), Do you have any questions at this point? This study has been approved by Ball State University’s Institutional Review Board and all information you provide will be kept confidential. As we discussed previously, this conversation will be audio recorded. Do you still provide your consent to be recorded?

To protect your identity, pseudonyms will be used throughout the interview and when the recordings are transcribed. The digital recordings will be stored on a password-protected computer. The recordings will be stored for five years and then erased.

Your participation in this study is completely voluntary. You may choose to stop participation in the study at any time for any reason. You will not suffer any prejudice or penalty by your decision to stop your participation. If you choose to withdraw from the study, you may also choose to withdraw your data.

Do you still provide your consent to participate in this study?

Thank you again for your participation in this study.

Do you have any questions at this point?

Are you ready to begin?

**Turn on Tape Recorder**

Preceptor Criteria – *So I’d like to begin by asking questions related to the selection of preceptors for athletic training professional programs. When responding to each question I’d like you to consider what preceptor characteristics promote student learning the best.*

1. Describe the characteristics/qualities that make an ideal preceptor.
2. Why do you feel these are important qualifications?
3. What are some reasons a preceptor should no longer be used?
4. Based on your previous responses, what influences your beliefs of preceptor qualifications?
Preceptor Development—*Now that we have discussed preceptor criteria, let’s discuss what you believe is most appropriate for training and developing preceptors. Remember to keep in mind what you believe is best for student learning.*

5. Please describe what you believe is the ideal content for preceptor development.
   a. Probe if needed: Is the content you are suggesting the same across all preceptors? Why/Why not?

6. What influences your beliefs on preceptor development content?

7. Why is this content important to you?
   a. If so, how?

8. How should preceptor development be delivered?
   a. Probes/examples if needed:
      i. How often should it be delivered?
      ii. What delivery mechanisms are most appropriate?

9. Should it be incentivized, if so, how?

10. What influences your views on the delivery of preceptor development?

11. Why are these aspects of delivering preceptor development important to you?

Conclusion – *We are nearing the end of the interview. Thank you very much for all you have shared with me this afternoon.*

12. Is there anything else related to preceptor criteria or development that I haven’t touched on that you’d like to discuss?

13. Is there anything additional that you would like to discuss that we have not? *That concludes our interview. Thank you so much for coming and sharing your thoughts and opinions with me.*
Appendix E: Preceptor Interview Guide

Hello.

How are you doing? Thank you for taking the time to speak with me today. The purpose of this study is to explore how stakeholders (preceptors and program directors or clinical education coordinators) determine what is most appropriate for the selection and development of athletic training preceptors. This interview will last approximately 60-90 minutes and will consist of several questions.

You viewed the informed consent information when you completed the demographic questionnaire. Have you reviewed that form? If you have not reviewed that form, or would like to go over it again, I will read the consent form to you. (After reading the form), Do you have any questions at this point? This study has been approved by Ball State University’s Institutional Review Board and all information you provide will be kept confidential. As we discussed previously, this conversation will be audio recorded. Do you still provide your consent to be recorded?

To protect your identity, pseudonyms will be used throughout the interview and when the recordings are transcribed. The digital recordings will be stored on a password-protected computer. The recordings will be stored for five years and then erased.

Your participation in this study is completely voluntary. You may choose to stop participation in the study at any time for any reason. You will not suffer any prejudice or penalty by your decision to stop your participation. If you choose to withdraw from the study, you may also choose to withdraw your data.

Do you still provide your consent to participate in this study?

Thank you again for your participation in this study.

Do you have any questions at this point?

Are you ready to begin?

**Turn on Tape Recorder**

Preceptor Criteria – *So I’d like to begin by asking questions related to the selection of preceptors for athletic training professional programs. When responding to each question I’d like you to consider what preceptor characteristics promote student learning the best.*

1. Describe the characteristics/qualities that make an ideal preceptor.
2. Why do you feel these are important qualifications?
3. Based on your previous responses, what influences your beliefs of preceptor qualifications?
Preceptor Development—Now that we have discussed preceptor criteria, let’s discuss what you believe is most appropriate for training and developing preceptors. Remember to keep in mind what you believe is best for student learning.

4. Please describe what you believe is the ideal content for preceptor development.
5. What influences your beliefs on preceptor development content?
6. Why is this content important to you?
7. Do you feel content should be the same or different between preceptors? (e.g., novice clinician vs. experienced AT & new preceptor vs. experienced preceptor, preceptors in different settings)?
   a. If so, how?
   b. Why do you believe the content should be different/not different between preceptors?
8. How should preceptor development be delivered?
   b. Probes/examples if needed:
      i. How often should it be delivered?
      ii. What delivery mechanisms are most appropriate?
9. Should preceptor development be incentivized?
   a. If so, how?
10. Why are these aspects to delivering preceptor development important to you?
11. What influences your views on the delivery of preceptor development?

Conclusion – We are nearing the end of the interview. Thank you very much for all you have shared with me this afternoon.

12. Is there anything else related to preceptor qualifications or development that I haven’t touched on that you’d like to discuss?
13. Is there anything additional that you would like to discuss that we have not? That concludes our interview. Thank you so much for coming and sharing your thoughts and opinions with me.
Appendix F: IRB Approval

Office of Research Integrity  
Institutional Review Board (IRB)  
2000 University Avenue  
Muncie, IN 47306-0165  
Phone: 765-285-5070

<table>
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<tr>
<td>TO:</td>
<td>Jessica Rager, MS</td>
</tr>
<tr>
<td>FROM:</td>
<td>Ball State University IRB</td>
</tr>
<tr>
<td>RE:</td>
<td>IRB protocol # 1245723-1</td>
</tr>
<tr>
<td>TITLE:</td>
<td>Determining the Appropriate Selection and Development of Athletic Training Preceptors</td>
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<tr>
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The Institutional Review Board reviewed your protocol on June 14, 2018 and has determined the procedures you have proposed are appropriate for exemption under the federal regulations. As such, there will be no further review of your protocol, and you are cleared to proceed with the procedures outlined in your protocol. As an exempt study, there is no requirement for continuing review. Your protocol will remain on file with the IRB as a matter of record.

**Exempt Categories:**

<table>
<thead>
<tr>
<th>Category 1: Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.</th>
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<tr>
<td>X Category 2: Research involving the use of educational test (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior</td>
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<tr>
<td>Category 3: Research involving the use of educational test (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under category 2, if: (i) the human subjects are elected or appointed officials or candidates for public office; or (ii) Federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.</td>
</tr>
<tr>
<td>Category 4: Research involving the collection of study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or...</td>
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If the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

**Category 5:** Research and demonstration projects which are conducted by or subject to the approval of Department or agency heads, and which are designed to study, evaluate or otherwise examine: (i) public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in methods or levels of payment for benefits or services under these programs.

**Category 6:** Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed or (i) if a food is consumed which contains a food ingredient at or below the level and for a use found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

While your project does not require continuing review, it is the responsibility of the P.I. (and, if applicable, faculty supervisor) to inform the IRB if the procedures presented in this protocol are to be modified or if problems related to human research participants arise in connection with this project. Any procedural modifications must be evaluated by the IRB before being implemented, as some modifications may change the review status of this project. Please contact (ORI Staff) if you are unsure whether your proposed modification requires review or have any questions. Proposed modifications should be addressed in writing and submitted electronically to the IRB (http://www.bsu.edu/irb) for review. Please reference the above IRB protocol number in any communication to the IRB regarding this project.

**Reminder:** Even though your study is exempt from the relevant federal regulations of the Common Rule (45 CFR 46, subpart A), you and your research team are not exempt from ethical research practices and should therefore employ all protections for your participants and their data which are appropriate to your project.

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D. Clark, PhD/Chair
Institutional Review Board

Christopher Mangell, JD, MS, MEd, CIP/
Director
Office of Research Integrity