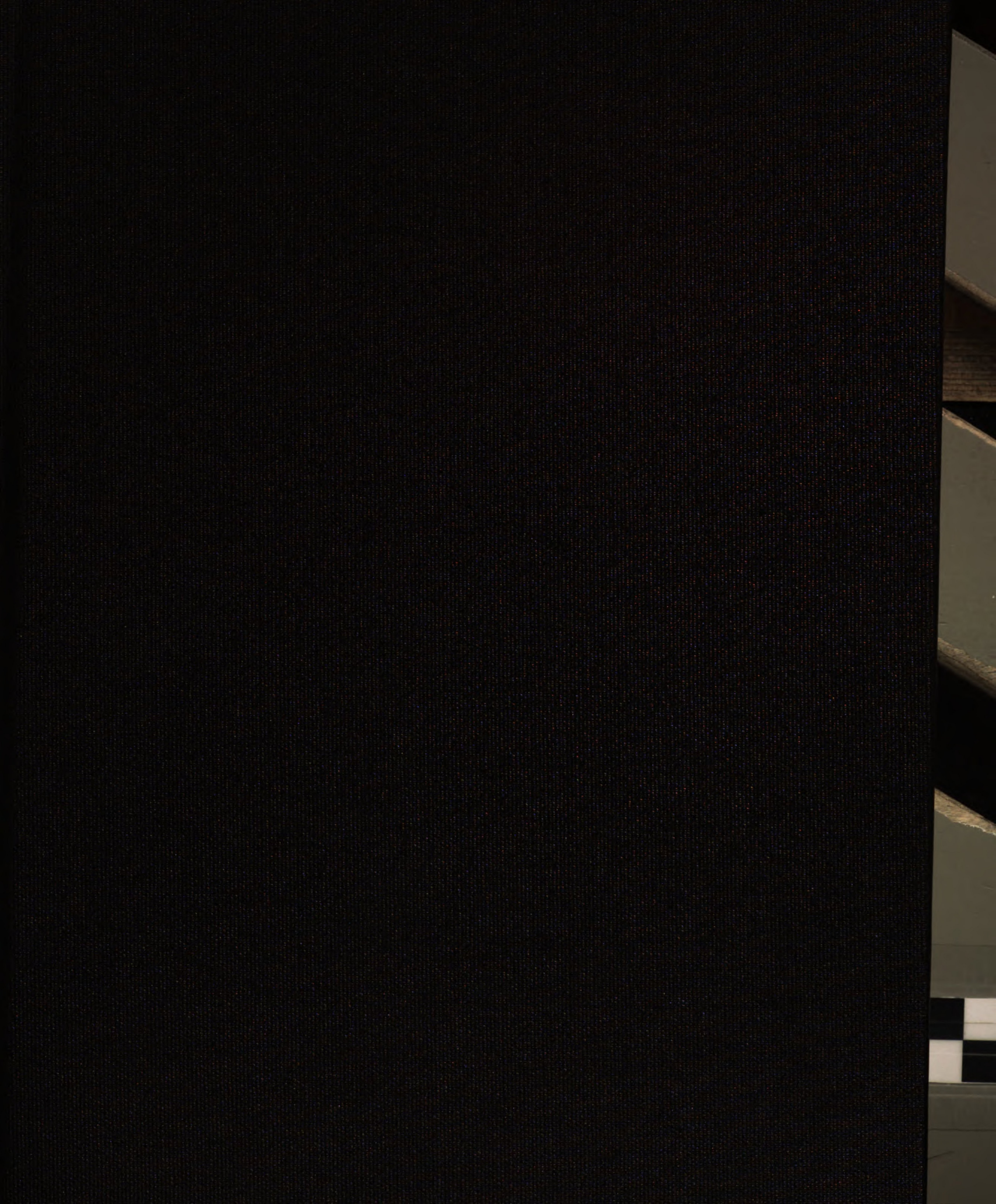

This is to certify that the
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PROFESSIONAL SOCIALIZATION IN ATHLETIC TRAINING EDUCATION AND ITS IMPACT ON THE DEVELOPMENT OF EXCELLENT CLINICAL INSTRUCTORS

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Joseph Dante Susi II

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PROFESSIONAL SOCIALIZATION IN ATHLETIC TRAINING EDUCATION AND ITS IMPACT ON THE DEVELOPMENT OF EXCELLENT CLINICAL INSTRUCTORS

By

Joseph Dante Susi II

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ABSTRACT

PROFESSIONAL SOCIALIZATION IN ATHLETIC TRAINING EDUCATION AND ITS IMPACT ON THE DEVELOPMENT OF EXCELLENT CLINICAL INSTRUCTORS

By

Joseph Dante Susi II

Athletic training education program directors were asked to rank their on-campus approved clinical instructors on their ability to teach athletic training students (ATS). Those ACIs with the highest rankings were invited to participate in face-to-face interviews to determine the socialization processes they underwent to be identified as "excellent". Seven individuals participated in this study and their socialization processes entailed:

1) attending and internship undergraduate program where there were small ATC staff sizes, the students immediately received hands-on experiences which led to a large accumulation of clinical hours; 2) the respondents received an advanced degree and had to function on their own, gained teaching experience, became familiar with accreditation standards and recognized a distinction between athletic training and sports medicine; 3) the respondents had prior job experience; 4) the respondents believed that they were good clinicians and 5) their primary responsibility is to athletics first and academics second.

When asked about the goals that the ACIs had for ATS, four ideas emerged: 1) to prepare ATS to pass the BOC examination; 2) to help ATS acquire relevant experiences; 3) to prepare ATS to enter the workforce and 4) to encourage ATS to value learning. The ACIs thoughts regarding athletic training education were: 1) the ACIs role was to bridge the gap between the academic and real world; 2) that pro-active ATS get a better

education than those who are passive; 3) ATS need more clinical experiences and 4) ATS must see different aspects of athletic training.

The formal coursework for these individuals was very limited resulting in the following desired experiences of the participants: 1) a desire for more formal academic training as most only had two or three athletic training courses; 2) a desire to have training in educational methodologies as athletic trainers have much content knowledge, but limited exposure to pedagogical content knowledge and 3) to understand and gain exposure to the new educational competencies as they are implemented in today's athletic training education.

DEDICATION

This dissertation is dedicated to my parents and my wife for their never ending support and belief in me completing this endeavor. To my parents for instilling in me the need to attend college and the sacrifices they made to make that happen. For supporting me in my decisions and activities related to my education, the changing of schools, the changing of majors, attending each of my games and plays and for the never ending support that continues to this day.

To my wife for her support throughout this process, her understanding in the travels I undertook to complete the coursework needed to obtain my Ph.D. and the financial commitment it entailed, also for her help with computer issues that always seemed to stump me.

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CHAPTER 1

INTRODUCTION

The discrepancy between the practitioner and the academician is an old one and one that hasn't been adequately addressed within the athletic training literature. An increase in the professionalization of disciplines requires bachelor degrees for professions that previously required no degree, master's degrees for professions that had required bachelor degrees, and doctorate degrees for those professions that had required master's degrees. The field of physical therapy exemplifies this trend. Until the late 1980s, one could easily enter the field of physical therapy with a bachelor's degree. In the 1990s, entering the physical therapy profession involved having a four-year degree and earning an entry-level master's degree in physical therapy. Beginning in the 21st century, the entry-level master's degree requirement evolved into a doctorate in physical therapy. This example illustrates the recent history of "professionalization" and the collateral effect that more and more professionals within their respective disciplines are needed as educators to teach the skills needed within the profession. However, the background these individuals possess in educational theory and/or student development, on which they base their presentation of the material, may be questionable as they have been trained as clinicians and not educators.

This research project explored the current state of pedagogical knowledge of clinical instructors in the field of athletic training. It identified those individuals who have been described as excellent clinical instructors to serve as a sample for in-depth analysis. Excellent clinical instructors identified by their respective program directors were interviewed to determine the extent to which they have blended educational theory with

practical application, and how they came to know what they know and act the way they act. The question is explored initially by describing the background of athletic training education and its evolution from infancy roots in physical education to being recognized by the American Medical Association (AMA) as an allied health profession.

In this chapter, I present the research questions and the need for answering those questions. The current state of the literature regarding athletic training education is also explored. Important terms are also defined. The theoretical perspective of socialization was chosen as the framework for this study, with emphasis on professional socialization. Research pertaining to clinical education in athletic training and related fields such as nursing, occupational therapy, and physical therapy are also explored. Finally the research design that was utilized to answer the research questions is described.

Problem Statement

Athletic Training has its roots in education, specifically health and physical education (Delforge and Behnke, 1999). Delforge and Behnke (1999) described two important characteristics that athletic training students should possess when the National Athletic Trainers Association (NATA) was founded in 1950. The first was the requirement to attain a secondary level teaching credential. But aside from a class in advanced athletic training and hands-on practice in skill development, the athletic training course of study during that era was not substantially different from the typical major in physical education. The second feature included courses that would fulfill the prerequisite requirements for acceptance to physical therapy school.

The field of athletic training reached a milestone on June 22, 1990, when the AMA officially recognized athletic training as an allied health profession. Robert Behnke stated,

> It is extremely gratifying that the nation's largest medical organization has recognized athletic trainers. We really haven't had anyone formally acknowledge us as an allied health profession before. Athletic trainers now have a professional status in the health care field (Delforge and Behnke, 1999, p. 59).

This recognition by the AMA supported professionalization of the athletic training field and acknowledged athletic training as an allied health profession, similar to nursing, physical therapy, occupational therapy and other allied health professions.

The 1999 Athletic Training Educational Competencies identified 12 content areas that comprised the role of the Certified Athletic Trainer (ATC) in the health care of physically active individuals. These content areas included: Risk Management and Injury Prevention, Pathology of Injuries and Illnesses, Assessment and Evaluation, Acute Care of Injury and Illness, Pharmacology, Therapeutic Modalities, Therapeutic Exercise, General Medical Conditions and Disabilities, Nutritional Aspects of Injury and Illness, Psychosocial Intervention and Referral, Health Care Administration, and Professional Development.

The competencies within each content area were divided into four behavioral objectives: 1) Cognitive Domain- which encompassed knowledge and intellectual skills; 2) Psychomotor Domain- which encompassed manipulative and motor skills; 3) Affective Domain- which encompassed attitudes and values; 4) Clinical Proficiencies- which

involved decision making and skill application (NATA Athletic Training Educational Competencies, 1999).

The fourth edition competencies, implemented in 2006, still described 12 content areas that were fundamental to an athletic trainer's knowledge base. While the bulk of the content areas remained the same, Assessment and Evaluation was changed to Orthopedic Clinical Examination and Diagnosis; General Medical Conditions was changed to Medical Conditions and Disabilities; and Therapeutic Exercise was changed to Conditioning and Rehabilitative Exercise.

Another change was dropping the Affective Domain in the behavioral objectives. The justification for dropping the Affective Domain was that the behaviors that comprised this domain were embedded in the preparation of athletic training students as professionals. This is supported in the following statement:

> Because the entry-level credential signifies that the holder is a practitioner prepared for entry into the practice of athletic training, behaviors should be infused into every aspect of students' education in order to prepare them for this public trust (Athletic Training Educational Competencies, 4th edition. p. 3).

Nowhere in the third or fourth edition of the athletic training competencies are educational theories, educational methods or student learning theories addressed. The domains addressed what knowledge and skills are required for individuals to function as ATCs, but not as athletic training educators. The emphasis of these domains is the development of the athletic trainer as a clinician, not as an educator. The domains identify the skills and knowledge necessary to provide healthcare services, but do not address the skills and knowledge needed by educators. This movement away from

incorporating pedagogy into athletic training education is a major change from athletic training's roots in physical education (Delforge & Behnke, 1999). The only domain where the development of athletic training students as educators was slightly alluded to was in the third edition competencies; Affective Domain item 12, under the competency of Professional Development Responsibilities, stated, "Accepts the responsibility to enhance the professional growth of athletic training students, colleagues and peers through a continual sharing of knowledge skills, values and professional recognition" (National Athletic Trainers' Association: Athletic Training Educational Competencies, 1999, p. 81). The Professional Development Responsibilities under the fourth edition competencies addressed research and public service with no direct mention of athletic training education. With more athletic trainers acting as educators in classrooms and at clinical sites, a need in educational theory and student learning theories has emerged.

Until recently, the NATA employed two formats for professional education. The Clinical Instructor Educator (CIE) Workshop is still in use today. The other format was the NATA Board of Certification (BOC) Examiner Training Program, which has been terminated as the BOC examination is now a computer-based examination.

The CIE workshop allows individuals to become qualified to hold an Approved Clinical Instructor (ACI) workshop at their home institutions and credential Approved Clinical Instructors (ACIs). The CIE workshop introduces the following topics: Learning Styles and Clinical Education, Teaching Styles: Where Theory Meets Practice, and Methods for Teaching Clinical Proficiencies (Clinical Instructor Educator Seminar, 2001). The CIEs then return to their individual institutions and devise a workshop for their respective ACIs. This local workshop must contain the following information

according to section B3.24 of the CAATE Standards for the Accreditation of Entry-Level Athletic Training Education Programs:

B3.241 learning styles and instructional skills,

B3.242 review of the *Athletic Training Educational Competencies,*

B3.243 evaluation of student performance and feedback,

B3.244 instructional skills of supervision, mentoring and administration,

B3.245 program/institution-specific policies, procedures, and clinical education requirements,

B3.2246 legal and ethical behaviors,

B3.247 communication skills,

B3.248 appropriate interpersonal relationships, and

B3.249 appropriate clinical skills and knowledge (p. 4)

Upon completion, the ACI is permitted to evaluate the clinical proficiencies of athletic training students. This training is only required of those who wish to become an ACI and is not required of a Clinical Instructor who provides supervision and instruction to athletic training students during their clinical experiences.

The NATABOC examiner training program was a two-part process. The first part required the ATC interested in becoming an examiner for the NATABOC certification test to take a home study test. The interested ATC read information about the BOC examination and took a written test. Upon successful completion of the written test, the interested ATC then attended a workshop where information was presented in more detail. The NATABOC examiner training program was discontinued when computer-

based testing was implemented, thereby eliminating the need for onsite examiners of the BOC certification examination.

Research Questions

"Expertise in clinical practice does not imply expertise in clinical education." (Strohschein, Hagler & May, 2002, p.3).

This statement reflects this researcher's view not only regarding athletic training clinical education, but clinical education in general. Just as the best athletes do not always make the best coaches, a person who can perform a skill cannot necessarily teach that skill. The converse of this statement can be applied to the classroom; expertise in the classroom does not imply expertise in clinical education or clinical practice. Educators in the classroom may have to develop clinical skills and clinicians may have to develop skills in educational methodology and theory.

Many clinical educators in the field of physical therapy lack education in the area of becoming a clinical instructor and often learn the role primarily through trial and error. Strohschein, Hagler & May (2002) expressed a concern in their research that students and new practitioners often perceive an inconsistency between theory and practice in regard to what is being taught in the classroom and what is being taught in clinical settings. There needs to be an appropriate balance between educational theory and the incorporating and reinforcing of the classroom material within the clinical experience.

Strohschein, Hagler & May (2002) cited an example of an additional dilemma: "As education programs in the United States and Canada move toward graduate degree entry-level, there may be some apprehension on the part of clinical educators with an undergraduate degree who are expected to provide supervision for graduate students"

(p.4). Personal anecdotal observations support this concern in the field of athletic training as well. Many times a practitioner with an undergraduate degree will decide to go back to school to work on a master's degree in athletic training. These programs are usually taught by doctoral-educated individuals who possess the needed academic credentials, but have not practiced outside the realm of academia. The teacher in this case is teaching theory/book knowledge, but cannot relate to the real world of practical knowledge that the student brings to the class. This situation illustrates the disconnect between theory and practice.

Due to the dichotomy between theory and practice, it is imperative to examine questions regarding clinical instructors' knowledge of educational theory and the socialization processes they experienced that led to their current beliefs and assumptions regarding athletic training clinical education. Also information about how some clinical instructors have successfully bridged the gap between theory and practice would be helpful to the field. Thus, the following research questions guide this study:

1. What are the characteristics of ATCs acting as clinical instructors in Commission on Accreditation of Athletic Training Education Programs (CAATE) accredited institutions?
2. How is excellence achieved by clinical instructors in CAATE Accredited Athletic Training Education Programs? What are the educational backgrounds, educational beliefs and assumptions associated with excellent clinical instructors?
3. What were the characteristics of the socialization processes they experienced to become excellent clinical instructors?

Theoretical Perspective

The accumulation of experiences, attitudes, reflective practices and interpersonal skills is a lifelong and ever-changing process. Individuals who are excellent clinicians may not be excellent clinical instructors, just as individuals who are excellent researchers, may not be excellent teachers. How do individuals become excellent teachers, and how do individuals acquire their knowledge and professional characteristics especially if they were not prepared in an academic program? Thus, the theoretical framework of "Professional Socialization" was chosen to frame this proposal.

Professional socialization is a process that involves learning particular skills, values, attitudes and norms of behavior and is considered to be a key component of professional preparation and continued development in health and allied medical disciplines (Pitney, Iisley & Rintala, 2002, p. 63). Professional socialization can be divided into two aspects: anticipatory and organizational. "Anticipatory socialization includes aspects of socialization before entering a work setting or organization, whereas organizational socialization entails processes that occur after entering the work setting or organization" (Pitney, Iisley & Rintala, 2002, p. 63).

"Although a person's experiences coupled with his or her occupational interests are socializing agents, the more formal anticipatory socialization process begins during an undergraduate professional education" (Pitney, Iisley & Rintala, 2002, p. 65). Many of the participants in the study by Pitney, Iisley & Rintala (2002) stated that once they secured employment, they "learned on the run". The authors of this study explained:

> Much of their survival in the organizational entry period was the by product of a great deal of trial and error as they faced situations for which they felt ill

prepared, indicating that their formal education was inadequate. . . The participants consistently identified a lack of formal induction processes. More specifically, job responsibilities were described in writing, but no formal training, orientation or learning processes apart from administrative tasks (eg, vehicle requests, referral procedures, or travel requests), were implemented. When asked about learning their role during the induction process, participants explained that they learned by doing and relied informally on colleagues (Pitney, Iisley & Rintala 2002, p. 66).

The processes that formed excellent clinical instructors, that is the anticipatory and organizational socialization they experienced, need to be identified so that they can be modeled and implemented within the field of athletic training education and other related professions.

Definition of Terms

- *Certified Athletic Trainer* (ATC): An individual who has successfully passed all sections of the National Athletic Trainers' Association Board of Certification Examination. This individual must accrue 75 Continuing Education Units every three years and must submit them to the Board of Certification for verification.
- *Clinical Instructor Educator* (CIE): "The BOC Certified Athletic Trainer recognized by the institution as the individual responsible for ACI training. If more than one individual is recognized as a CIE for an ATEP, then at least one of those individuals must be a BOC Certified Athletic Trainer" (CAATE Standards for the Accreditation of Entry-Level Athletic Training Education Programs, p. 16).

- *Approved Clinical Instructor* (ACI): "An appropriately credentialed professional identified and trained by the program CIE to provide instruction and evaluation of the Athletic Training Educational Competencies and/or Clinical Proficiencies. The ACI may not be a current student within the ATEP" (CAATE Standards for the Accreditation of Entry-Level Athletic Training Education Programs, p. 15).
- *Clinical Instructor* (CI): "An individual identified to provide supervision of athletic training students during their clinical experience. An ACI may be a CI. The ACI may not be a current student within the ATEP" (CAATE Standards for the Accreditation of Entry-Level Athletic Training Education Programs, p. 16).
- *Excellent Clinical Instructor*: For the purposes of this research study, the "excellent clinical instructor" will be defined as the individual who, through the eyes of their respective program director, has the highest rating on the "Selection, Training, and Evaluation of Athletic Training Approved Clinical Instructors (ACI) Clinical Instructor Educator Assessment Form". (Retrieved online at: www.nataec.org/html/clinical_evaluation_tools.html).
- *Athletic Training Student* (ATS): "A student enrolled in the athletic training major or graduate major equivalent" (CAATE Standards for the Accreditation of Entry-Level Athletic Training Education Programs, p. 15).
- *Clinical Education*: "The application of knowledge and skills, learned in classroom and laboratory settings, to actual practice on patients under the supervision of an ACI/CI" (CAATE Standards for the Accreditation of Entry-Level Athletic Training Education Programs, p. 16).

- *Clinical Experiences:* "Those clinical education experiences for the Athletic Training Student that involve patient care and the application of athletic training skills under the supervision of a qualified instructor" (CAATE Standards for the Accreditation of Entry-Level Athletic Training Education Programs, p. 16).

Summary

This study examines the background experiences that clinical instructors have had, that have made them exemplary. It attempts to identify the socialization processes they have encountered as well as identify any training that they have received in the area of educational methodologies and strategies. Since athletic training clinical instructors not only supervise athletic training students' clinical experiences, but also provide skill instruction and evaluation, it is important to determine how they came to know what they know.

CHAPTER 2

LITERATURE REVIEW

The areas of review for this study include four topics: 1) The history of athletic training education; 2) socialization theory; 3) clinical instruction; and 4) the theory application gap believed to be present between didactic instruction and clinical instruction. The history of athletic training education provides background information as to the roots and evolution of athletic training education and its current state of affairs. Socialization theory is defined and discussed, and will set the stage for the third section on clinical instruction and how clinical instruction is performed in athletic training and other professions. This section also presents research on clinical instructor selection, preparation, and placement. The theory application gap paradigm explores the discrepancy between didactic instruction and clinical instruction, and the struggles that both students and educators have with bridging this gap.

Restructuring Athletic Training Education

The field of athletic training education recently underwent a drastic restructuring process. January 1, 2004 marked the elimination of a dual route to National Athletic Trainers Association Board of Certification (NATABOC) when it was mandated that any individual who wishes to sit for the NATABOC examination must graduate from a Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredited institution. This change eliminated the internship route which had previously been allowed. The move to one route to certification caused much commotion within the field of athletic training education and forced universities to decide if they wanted to offer an athletic training education program at all. This scrambling forced athletic

training education programs to find qualified faculty to teach within their athletic training education programs. Many programs selected ATCs who have functioned as clinicians to become faculty members in the classroom, often selecting individuals who may have had no background in educational theory or methodology. In addition to this mandate, the BOC examination changed its format to a computer-based examination, and CAAHEP was dropped as the accrediting agency. It was replaced by the Commission on Accreditation of Athletic Training Education (CAATE) effective July 1, 2006. With these changes it is important to understand the evolution of the National Athletic Trainers Association (NATA). The next section will focus on the evolution of the NATA from its inception to its development and recognition as an allied health profession.

History of Athletic Training Education

The NATA was founded in 1950 to "build and strengthen the profession of athletic training through the exchange of ideas, knowledge, and methods of athletic training" (Delforge & Behnke, 1999, p. 53). As athletic training became a course of study in the 1950s, two important features were emphasized to the athletic training student. The first was to attain a secondary-level teaching credential. This was usually attained in either health or physical education (Delforge & Behnke 1999). But, as Delforge & Behnke (1999) pointed out, aside from a class in advanced athletic training and hands-on practice in skill development, the athletic training course of study was not much different from the typical major in physical education. The second feature was to include courses that fulfilled the prerequisite requirements for acceptance to physical therapy school.

It wasn't until 1969 that the first undergraduate athletic training education programs were officially recognized by the NATA (Delforge & Behnke, 1999). Graduate athletic

training education programs did not emerge until 1972. The current clinical experience requirements utilized by the NATABOC evolved from the first standards, which were developed in 1969 (Turocy et al., 2000). These standards recognized four routes by which athletic training students could gather clinical experiences to become eligible to sit for the national certification examination.

The first route to BOC certification allowed athletic trainers already engaged in the profession to be grandfathered in by providing proof of a minimum of five years experience beyond that of a student athletic trainer at the high school level. The second route to BOC certification allowed physical therapy degree graduates to become eligible by completing two years of athletic training experience under direct supervision of a certified athletic trainer.

The last two methods of BOC certification were in place until December of 2003. The internship method, which was discontinued, allowed students to become eligible as apprentice candidates. Very little has been written about the internship route to NATABOC certification. Delforge & Behnke (1999) made small mention of it, as did Peer & Rakich (2000) and Turocy et al. (1997). Internship candidates were to receive on-the-job training for a minimum of 1,800 hours (reduced to 1,500 hours in the late 1980s or early 1990s) under the direct supervision of a certified athletic trainer with prerequisite courses and a four-year college degree (Turocy et al., 2000) (Delforge & Behnke, 1999). These hours had to be supervised by an NATABOC certified athletic trainer and had to be accrued in no less than two years and no more than five. It was required that 25 percent of all athletic training clinical experiences of curriculum and internship candidates be acquired on location during practice or competition of a high-risk sport.

High-risk sports included football, soccer, hockey, wrestling, basketball, gymnastics, lacrosse, volleyball and rugby (Turocy et al., 2000).

The final avenue which eventually evolved into the one currently in place allowed students who were enrolled in NATA-approved graduate or undergraduate programs to acquire a minimum of 800 clinical experience hours in no less than two years and no more than five under the direct supervision of certified athletic trainers.

In the 1970s and 1980s, curriculum programs changed and moved away from their roots in physical education. Athletic training students were advised to seek high school teaching opportunities outside the field of health and physical education. Athletic training was becoming its own discipline and was recognized as such by establishing its own major, which soon became a requirement for schools that were seeking to offer an NATA-approved curriculum program (Delforge & Behnke, 1999).

In early 1990, the American Medical Association (AMA) Council on Medical Education (CME) determined that athletic training met all criteria established by the AMA for recognition as an allied health profession. Athletic Training was officially recognized as an allied health profession on June 22, 1990 (Delforge & Behnke, 1999).

The recognition of the AMA acknowledged athletic training as an allied health profession, similar to nursing, physical therapy and occupational therapy. This acknowledgement led to a decision by the NATA Board of Directors to seek accreditation for its entry-level programs through the AMAs Committee on Allied Health Education and Accreditation (CAHEA). Delforge & Behnke (1999) explained that the NATA's primary purpose in seeking AMA recognition was, in essence, to become accredited through the CAHEA process. The first step in achieving CAHEA recognition

was to be recognized as an allied health profession by the AMA per its policy. As a result of this work, February, 1994, saw the first two entry-level athletic training education programs to be accredited by CAHEA.

CAHEA accreditation was short-lived. The AMA decreed that it wanted an independent agency to perform the accreditation. The CAHEA was disbanded, and the Commission on Accreditation of Allied Health Education Programs (CAAHEP) was recognized as the accrediting body for athletic training education. With this change, the NATA Board of Directors recommended a requirement to take effect in 2004 "that in order to be eligible for NATABOC certification, all candidates must possess a baccalaureate degree and have successfully completed a CAAHEP accredited entry level athletic training education program" (Delforge & Behnke, 1999, p. 60).

The two routes (internship and CAAHEP accredited programs) for NATABOC certification prior to January 1, 2004, resulted in a lack of credibility for athletic training professionals in the allied health care industry (Peer & Rakich, 2000). Because of the variation between the two models, the athletic training profession fought constant uphill battles due to this lack of standardization. Accreditation solved this dilemma. Peer & Rakich (2000) stated:

> Program accreditation serves as a stimulus for change as internal and external pressures to provide quality education continue to increase. Athletic training is feeling the effects of these pressures. . . Accreditation is a means of standardizing athletic training educational programs that facilitates efforts to promote quality in the athletic training profession as a whole" (p. 189).

Once implemented, the accreditation process brought athletic training education to a standard equal to that of physical therapy education, nursing education and the education of other allied health professions. In conjunction, the single route for athletic training education preparation standardized the preparation of entry-level athletic trainers and facilitated entrance into an already competitive allied health care job market.

Athletic training education continued to evolve with the development of the 4th edition of the Athletic Training Educational Competencies to be used by institutions seeking accreditation and re-accreditation in 2006. Additional changes included the NATA leaving CAAHEP as its accrediting body and switching to the Commission on Accreditation of Athletic Training Education (CAATE), and the transition to providing a computer-based certification examination which eliminated the practical portion of the BOC examination.

Relevance to the Study

It is important to understand the evolution of athletic training education during the past 50 years. The route to accreditation has been challenged, with the most recent test being the elimination of the internship route to accreditation and the establishment of a single route in which students can become eligible to sit for the NATABOC certification examination. An understanding of this history should explain the current state of affairs regarding athletic training education as it evolved from four routes for one to become eligible to sit for the BOC examination to the current single route through the CAATE.

Professional Socialization

Socialization takes place from the womb to tomb. It is a recurrent and lifelong

process taking many forms and occurring across a wide range of settings. Exiting one setting moves one into another, and socialization begins anew (Van Maanen, 1983, p. 213).

Tierney and Rhoads (1993) quoted Mertan's 1957 statement that, "Socialization is the process through which individuals acquire the values, attitudes, norms, knowledge, and skills needed to exist in a given society" (p. 6). They continued by stating: "Socialization involves learning the various roles one must enact in a multitude of complex social settings" (p. 6). These sentiments were echoed by Sabari (1985) when she stated that socialization is "the process by which individuals acquire and internalize the values, norms, roles, and skills that enable them to function as members of their cultural group" (p. 96). Sabari further explained: "Each time we join a new group, we must learn its unique values, norms, and roles; we do so through a socialization process" (p. 96). With each role comes scripts or clues about how to enact these roles.

Athletic training students aspire to enter what Bruffee (1999) described as a "knowledge community", specifically a "knowledge community" of the certified athletic trainer. To do so, athletic training students need to know how to act, speak and think as athletic trainers. The concept of the "knowledge community" is illustrated below:

> From the very beginning of our lives we construct knowledge in conversation with other people. When we learn something new, we leave a community that justifies certain beliefs in certain ways with certain linguistic and paralinguistic systems, to join instead another community that justifies other beliefs in other ways with other systems. We leave one community of knowledgeable peers and join another.

> The community we join may of course be only slightly different from the one we left. This is the case, for example, when we learn a new way to use semicolons or steal second base. Or it may involve reacculturation to entirely new values, habits, symbol systems, and expertise. This is the case when we first cross the street alone, pass the bar exam, or learn Chinese. Kurt Lewin offers the example of a group of watchmakers learning to become carpenters. To do that, Lewin says, they have to do more than just learn to use a hammer and saw. They have to learn to swear like carpenters, drink like carpenters, walk, eat, and tell jokes like carpenters. Learning involves shifting social allegiances because knowledge results from acknowledgement, the mutual agreement among knowledgeable peers that a belief expressed by a member of that community has been socially justified or is socially justifiable (Bruffee, 1999, pgs. 135-136).

The following section reviews the literature of professional socialization and examines the components of anticipatory and organizational socialization. It describes the socialization process as it relates to nursing students, as this process seems to parallel the experiences of athletic training students. Finally anticipatory socialization practices currently utilized in athletic training clinical education are described.

Anticipatory Socialization

Professional preparation is generally divided into two segments, formal academic preparation and a period of clinical training (Sabari, 1985). Professional socialization is a process that involves learning particular skills, values, attitudes, norms of behavior and is considered to be a key component of professional preparation and continued development in health and allied medical disciplines (Pitney, Iisley & Rintala, 2002, p. 63).

Professional socialization can be divided into two catagories, anticipatory and organizational. "Anticipatory socialization includes aspects of socialization before entering a work setting or organization, whereas organizational socialization entails processes that occur after entering the work setting or organization" (Pitney, Iisley & Rintala, 2002, p. 63).

"Anticipatory socialization occurs when people are able to anticipate what it would be like as a member of a particular group or occupation to which they do not yet belong" (Pitney, Iisley & Rintala, 2002, p. 68). This definition was expanded by Tierney and Rhodes (1993) when they referred to anticipatory socialization as "how non-members take on the attitudes, actions, and values of the group to which they aspire" (p. 23). Anticipatory socialization serves four functions. It allows the individual to adopt the values of the group he or she wishes to join; second, it helps the individual advance within the group, and, once a part of the group, helps to ease the adjustment to the group. Finally, it allows new members to contribute to the group to which they will belong (Tierney & Rhodes, 1993, p. 22).

In regard to collegiate athletic trainers, Pitney, Iisley & Rintala (2002) stated: "the anticipatory phase extends into formal role preparation phase during the undergraduate and graduate student experiences that can be viewed as a process of developing a stronger vision about what it means to be a collegiate athletic trainer" (p. 68). The authors also reported that, despite the effort put into undergraduate education, many individuals who take National Collegiate Athletic Association (NCAA) Division I Level positions initially have formidable challenges and adjustments while adapting to their roles. They concluded by stating:

> . . . undergraduate student athletic trainers may be well served if they are educated about the initial entry into a professional role and how to better use informal learning situations during their initial socializing events. As such, facilitating self-directed learning among undergraduate students can potentially better prepare them for the independent learning required in the workplace. If practitioners are learning through trial and error, then facilitating reflective practice with undergraduate and graduate-level students becomes paramount. Furthermore, because practitioners are ultimately expected to function independently in a work environment, perhaps more attention should be given to progressing student athletic trainers from a more dependent clinical education environment to a more independent field experience environment during the anticipatory socialization period. Other disciplines have used or required internships, preceptorships, residencies, and fellowships to allow students to gain an appropriate level of experience to prepare for a given professional role (Pitney, Iisley & Rintala 2002, p. 68).

Pitney, Iisley, & Rintala (2002) continued by stating: "Although a person's experiences coupled with his or her occupational interests are socializing agents, the more formal anticipatory socialization process begins during an undergraduate professional education" (p. 65). If this is the case, then athletic training students must be exposed to educational theories and methodologies during their formal undergraduate education to plant the seed for future educators. This would help prepare athletic training students to become educators, just like athletic training students are prepared to become clinicians and administrators.

Organizational Socialization

Organizational socialization (the socialization processes that occur after entering the work setting or organization and in the context of athletic training education, which involve socialization not just to the organization, but to the field and to the work) consists of two phases, an initial entry phase and a role continuance phase. "The entry phase involves interactions that might occur during the recruitment and selection process as well as the early period of organizational learning that occurs as soon as the individual begins employment" (Tierney & Rhodes, 1993, p. 25). The role continuance phase begins "after the individual is situated in the organization" (Tierney & Rhodes, 1993, p. 25).

Sabari (1985) described three criteria that should be utilized to enable the socialization process to function optimally. These criteria include:

a) the goals of the organization must be clearly defined;

b) these goals must be known to all socializing agents and neophytes; and

c) the various participants must accept these goals as being valid and mutually compatible (p. 99).

Reutter, Field, Campbell & Day (1997) examined the socialization processes that nursing students underwent during their four years of nursing school. From their perspective, socialization entailed developing a personally and professionally-acceptable role through a process that involved acquiring knowledge and skills as well as understanding the norms and values of the professional culture. They divided professional socialization into two approaches, the functionalist and interactionist approach. The functionalist approach was basically exhibited by first-year nursing students and was generally considered to be a more passive institutionalized process of

socialization. The interactionist approach, "assumes that a person acquires meaning through interaction with others and the environment as well as through a reflective process" (p. 149). The interactionist approach views role behavior as a process rather than as conformity to preexisting social norms. The findings from the Ruetter, Field, Campbell & Day (1997) study are important because the socialization process of nursing students parallels the development of athletic training students.

Socialization Processes in Athletic Training Education

Athletic training clinical instructors must be cognizant of the professional socialization process. Athletic training students need time to practice the skills they have been taught and observed, so they can place them within their own context of learning. Athletic training students then can start framing their own individual philosophies and begin developing their personal repertoire as described by Schon (1983). During the socialization process, athletic training students can experiment with different ideas and skills so as to add to and purge from their experiences those practices which work best for them. How best to allow this repertoire to develop has led to extensive debate within the field of athletic training education. Some practitioners believe that athletic training students need to be on their own so they will have opportunities to develop this repertoire and make decisions on their own without continuous and intrusive supervision.

The other side of the argument focuses upon the current setup of athletic training education in which athletic training students are supervised in such a way that the supervising ATC can intervene on behalf of the athlete, should the need arise. Some ATCs may feel this process limits the development of athletic training students, as they know someone is always watching over them. The challenge for athletic training

educators is to provide the required supervision, in a way that will allow athletic training students to feel responsibility for their own decision making. The clinical instructor, therefore, must structure clinical experiences in such a way as to allow athletic training students the freedom to explore and at the same time, protect the interests of the patient.

The socialization process associated with the athletic training profession is not addressed within the current Athletic Training Education Competencies (2006). Clinical instructors incorporate anticipatory socialization into athletic training students' field experiences both formally and informally. Clinical and field experiences may be the appropriate areas in which to develop these skills, as Miller and Berry (2002) found that 59 percent of an athletic training student's time was spent unengaged within a clinical placement. With so much time spent "unengaged," the clinical instructor needs to develop skills and strategies to better utilize athletic training students' clinical time. Traditional athletic training is a "feast or famine" profession, meaning that the ATC is either very busy or not busy at all.

Berry, Miller and Berry (2004) refined Miller and Berry's 2002 study and examined athletic training students' perceived time spent on active learning by sending survey packages to all 131 schools accredited by CAAHEP as of January, 2001. They found that 51 percent of an athletic training students' clinical experience times were engaged in active learning, 9 percent in managerial activities, 17 percent in unengaged activities and 23 percent in waiting activities. The researchers noted that the perceived decrease in unengaged activities may be due to differences in methodology and a "refinement of the behavioral time framework used in each study" (p. 181).

According to leaders in the field, a key challenge must be addressed regarding professional socialization in athletic training education:

> The profession of athletic training has devoted significant effort to reforming undergraduate athletic training education, but the professional socialization process in athletic training education programs has been a neglected research area. Therefore, it is advisable for future researchers to investigate the development of a professional orientation among student athletic trainers to understand the specific professional values and attitudes to which they are socialized (Pitney, Iisley & Rintala, 2002, p. 69).

While the previous quotation refers to investigating the professional socialization of athletic training students, it does suggest the need to research socialization as it pertains to athletic training education. Clinical instruction is a part of athletic training education. Identifying clinical instructors who are "excellent" in the eyes of their program directors is crucial for athletic training education. Once these excellent individuals have been identified, the socialization processes they utilized need to be identified so that they can be repeated in athletic training education. This in turn will provide opportunities to athletic training students as they develop into athletic training professionals.

Athletic Training Student Socialization

What should the clinical educator expect from the athletic training student during the student's four-year college education? No studies specific to athletic training education have been performed, but one study on the socialization of nursing students over a four-year nursing education was identified. This study can be utilized by athletic training educators to better understand the socialization process of students within an allied health

profession. Ruetter, Field, Campbell and Day (1997) found that nursing students during their first year were oriented toward learning theoretical concepts, observing role models (mainly their instructors in the classroom and laboratory settings), and practicing skills. First-year nursing students placed high value on becoming comfortable communicating with patients. The students also felt that, while norms, values, and even skills may be learned in the classroom, the internalization of knowledge takes place when the skills are practiced in the clinical setting.

Second-year nursing students placed a greater emphasis on applying theory to practice. Second-year students had to cope with "real" rather than "ideal" situations. In their interaction with patients, nursing students became aware of their limited knowledge base, but also gained understanding of the responsibility attached to the performance of skills they previously practiced in a structured laboratory setting. The researchers felt that this awareness of limited knowledge and experience may lead to a feeling of inadequacy, which is particularly stressful given the second-year nursing students' perceptions of the potentially serious consequences their lack of knowledge poses for patients. This may cause students to hesitate when performing a skill on a "real" patient for fear of making a mistake.

Ruetter, Field, Campbell and Day (1997) also mentioned that the second-year nursing students' conflict with the "real" versus "ideal" world was reflected in students' observations that staff nurses did not always practice nursing as the students had been taught. Students perceived that the ideals stressed to them in the classroom were not always reflected in nursing practice. The values which students perceived from the

faculty may be discrepant with what they observed on the unit. Students perceived that some nurses did not value the nursing student or the nursing education program.

Second-year nursing students began to process rather than merely imitate behaviors of students, faculty and staff. Students began to critically evaluate their observations and to discriminate between role models. At this point in their nursing education, students were still very dependent on their instructors, because of their limited knowledge and limited experience. The students were beginning to develop clinical judgment. They did not yet trust their judgments however, and needed positive feedback at this point in time.

Third-year nursing students are "fine tuning," which involves developing the art of nursing by incorporating a variety of role models, critically analyzing their own and others' experiences and developing their own formulation and style. It was also during this time that nursing students initiated clinical rotations, which required action as a "liaison" between clinical rotations, and allowing for the sharing of information between units. The rotation of clinical sites proved stressful for third-year nursing students as they must adjust to a "new reality" every six weeks. Some students likened clinical rotations to starting a new job every six weeks. Clinical rotations act as a continuous orientation wherein students need to learn the formal and informal norms of the unit. They first determine those staff nurses who are supportive of students, then seek them out.

Fourth-year nursing students took advantage of the "learner" role as they prepared for their future as nurses. The student nurse status is seen as justification for being able to admit that they do not know all the answers. Learning at this point is focused on the skills needed for the "real" world. Overall fourth-year nursing students were less dependent on instructors and more dependent on nurse preceptors in the field.

Relevance To The Study

Clinical instructors must be credentialed health care professionals as defined by the AMA and the American Osteopathic Association. Additionally, they must be appropriately credentialed for a minimum of one year (CAATE Standards for the Accreditation of Entry-Level Athletic Training Education Programs, revised 2007). These individuals work closely with athletic training students but are not required to have any knowledge of educational theories, methodologies, or student learning theories. Identifying the socialization process that clinical instructors have experienced is crucial to understanding the formation of each clinical instructor's beliefs and assumptions regarding athletic training education. By identifying socialization processes of clinical instructors, especially the good ones, this information can be implemented into athletic training education programs so that athletic training students benefit and ultimately become viable, contributing clinical instructors.

This section has examined professional socialization and its component parts, anticipatory and organizational socialization. Studies of socialization of nursing students and athletic training students were reviewed, setting the stage for the next discussion concerning the clinical educator.

Clinical Educators

"Theory without practice is empty, and practice without theory is blind."

K. Patricia Cross

Strohschein, Hagler and May (2002) stated "Expertise in clinical practice does not imply expertise in clinical education" (p. 3). This statement asserts that both the didactic and clinical education to prepare the athletic training student to be a good educator does

not always equate to being a good clinician and being a good clinician does not imply that one is a good educator. Weidner & Henning (2004) supported this idea by stating:

> Although the revised clinical education format is part of the evolution of education reform, it has placed more clinical teaching and evaluation responsibilities on certified athletic trainers who may not have had a pedagogic focus in their professional preparation. Similar to the field of athletic training, it is not uncommon to find that other allied health clinical instructors, in general, have not had formal preparation in education and have been selected because of their professional aptitudes rather than their teaching and student evaluation skills. Clinical expertise as an athletic trainer is important, but it does not guarantee expertise as a clinical instructor (p. 335).

It is the clinical educator who structures the transitional experiences between the classroom and the clinical environment. Therefore, it is important to examine the input of clinical instructors in the educational development of athletic training students. The following section explores the history and competencies of "doctoral-educated" athletic trainers and addresses the issue of training clinical instructors. Educational standards that clinical instructors should strive to maintain are presented, followed by research on the domains of clinical teaching knowledge. A brief review of the literature and how it relates to the selection of clinical sites is presented.

Doctoral-Educated Athletic Trainers

Hertal, West, Buckley, & Dengar (2001) looked at the educational history and competencies of "doctoral-educated" athletic trainers and stated that, with the educational reform process taking place in the field of athletic training, more "doctoral-educated"

Certified Athletic Trainers were needed to fill tenure-track faculty positions than were being prepared. The authors cited three reasons for increasing the number of "doctoral-educated" ATCs. First, if the athletic training profession is to affect higher education policy, there must be "doctoral-educated" ATCs in senior faculty and administrative positions. The CAATE Standards for the Accreditation of Entry-Level Athletic Training Education Programs (revised 2007) stipulated that the program director must, "be a full-time position of the sponsoring institution" (p. 3) and "have full faculty status, rights, responsibilities and privileges as defined by institution policy and be consistent with other similar positions at the institution"(p. 3). Second, doctoral programs are needed because of the leadership required for providing research relevant to the advancement of the athletic training profession. Lastly, the "doctoral-educated" will provide the next generation of athletic training educators.

While it is important to identify the purpose of the "doctoral-educated" athletic trainers and the role they play in athletic training education, the role of the clinical instructor and the training that they have received is important to identify as well. The following section describes the processes involved in becoming an Approved Clinical Instructor (ACI).

Clinical Instructor Educator (CIE) Training

Many clinicians who function as clinical instructors have expressed the need for formal preparation and training in educational theory to more adequately fill clinical educator roles. The NATA has addressed this deficiency by developing a Clinical Instructor Examiner (CIE) Workshop which provides information on how to instruct clinical instructors in educational matters. Once individuals have completed the CIE

workshop, they can return to their respective institutions and direct Approved Clinical Instructor (ACI) workshops. Once participants complete this ACI workshop, they are then eligible to determine if athletic training students have mastered the psychomotor proficiencies necessary to become an ATC. While the implementation of the CIE and ACI programs is a step in the right direction, researchers need to identify the long-term impact of ACI training on the perceived importance of clinical instructor behaviors (Lauber, Toth, Leary, Martin & Killian, 2003).

This was recently done by Weidner and Henning (2004), who established research-based standards with associated criteria for clinical instructors in the field of athletic training. They identified seven standards appropriate and necessary for clinical educators. The standards include: 1) legal and ethical behavior, 2) communication skills, 3) interpersonal relationships, 4) instructional skills, 5) supervisory and administrative skills, 6) evaluation of performance, and 7) clinical skills and knowledge.

Of particular importance to this proposed study is standard number four, instructional skills, as this standard seeks to identify the traits of an ACI/CI who is aware of and utilizes various educational methodologies. Weidner and Henning (2004) supported the idea that clinical educators must not only have expertise with clinical skills, but also be knowledgeable about basic educational principles. The clinical teacher is the vital link in the teaching-learning process, for it is the clinical teacher who "facilitates the learning process, motivates students with the desire to learn and encourages quality learning" (Nahas, 1998, p. 663). Athletic training students involved in clinical experiences have already "acquired a level of knowledge and experience" (Weidner & Henning, 2004, p. 341), and should be treated as adult learners. Clinical instructors should, therefore,

"encourage a spirit of collaboration and friendly competition among student peers" (Weidner & Henning, 2004, p. 341). To establish this atmosphere, "ACIs should purposely plan opportunities for students to practice technical and problem-solving skills" (Weidner & Henning, 2004, p. 341). Treating athletic training students as adult learners may be a difficult concept for athletic training educators to fully accept, as most athletic training students are right out of high school and sometimes lack the maturity of an adult.

Clinical Teaching Knowledge

Weidner and Henning (2004) identified four domains of clinical teaching knowledge:

> First, ACIs must be knowledgeable of the subject matter within their field
>
> Second, ACIs need to be aware of their students' current knowledge
>
> Third, in addition to knowledge specific to clinical teaching, ACIs need to know general teaching principles
>
> Fourth, ACIs must synthesize their knowledge to develop content-specific pedagogy. When general content knowledge and general teaching methods are transformed into content-specific instruction, new knowledge results for the ACI. This knowledge, developed through teaching experience, is the essence of content-specific pedagogy: content knowledge organized for teaching purposes and comprehensible to particular learners. This is what separates clinical instructors from mere content experts. (p. 341).

These domains correlate very well with the three most frequently-mentioned dimensions of effective behaviors of teachers identified by Nahas (1998), "competence and knowledge, interpersonal relationship and personal attributes" (p. 664) and by

Shulman (1986), "subject matter content knowledge, subject matter pedagogical knowledge and curricular knowledge" (p. 13).

Clinical instructors must be able to develop athletic training students' critical thinking and problem-solving skills. The clinical instructor should use clear educational objectives to establish purposeful clinical instruction. Clinical instructors must be willing to share their knowledge with athletic training students and also acknowledge their own personal and professional weaknesses (Weidner & Henning, 2004).

Turocy et al. (2000) declared that clinical sites should provide experiences in a variety of environments with different types of populations that would be consistent with the mission of the NATA. They further stated that efforts should be made to ensure that education occurs formally and informally at all clinical sites.

Weidner and Laurent (2001) concluded by stating,

> Although students may learn their responsibilities by observing athletic training role models who are experienced professionals, formal and consistent clinical education would help to ensure that all students are exposed to a comprehensive, uniform clinical experience in their profession. A lack of formal emphasis on clinical education settings promotes haphazard and coincidental learning during students' clinical experiences. . . The focus in clinical education settings must include educational standards and experiences designed to augment students' knowledge and to promote their professional maturity. . . .Ideal clinical experiences are closely relevant and timely to what is being taught in concurrent courses and allow continued reinforcement and practice of what has been learned.

> Such experiences are vital to a students' development of competence, self-confidence, and flexibility in unfamiliar situations (p. 67).

Athletic trainers need these critical skills as they deliver health care in uncontrolled environments. Athletic trainers typically have to provide health care under time constraints and competitive pressures, not to mention unpredictable environmental conditions such as rain, heat, and snow. The delivery of quality health care under these conditions are not conducive to "cookbook" approaches and many times the athletic trainer will indeed have to, as Oermann, Truesdell & Ziolkowski (2000) stated, "think-on-your-feet" to arrive at a workable solution to a health care issue.

Summary

Being an effective clinical instructor involves more than just showing an athletic training student how things are done. This section focused on five areas pivotal in clinical instruction. First, the educational history and competencies of "doctoral-educated" athletic trainers were discussed, followed by a discussion of the training that is currently in place for clinical instructors. Standards that clinical educators should strive to reach were introduced next, followed by domains of clinical teaching knowledge, followed by items to consider for the selection of clinical sites.

Theory Application Gap

The educator (and the student) needs to understand the connection that exists between the theoretical knowledge presented in the classroom and how that knowledge is actually applied in the athletic training profession. When a student is not able to draw a connection between the "theoretical" component and the "applied" component, a "Theory Application Gap" develops (Carr & Drummond, 2002). The athletic training educator

must bridge this gap to clarify how the "theoretical" becomes the "applied." By bridging the gap between "theory" and "application," the athletic training educator can help to develop the athletic training students' professional knowledge as described by Schon (1983). Schon (1983) quoted Edgar Schein's three components to professional knowledge as:

> 1. An underlying discipline or basic science component upon which the practice rests or from which it is developed.
>
> 2. An applied science or "engineering" component from which many of the day-to-day diagnostic procedures and problem solutions are derived.
>
> 3. A skills and attitudinal component that concerns the actual performance of services to the client, using the underlying basic and applied knowledge (p. 24).

Each of the above points is crucial to the education of young athletic training professionals, but it is through Schein's third point where the basic theoretical and applied knowledge areas are combined to provide a better service to the client, be it a patient or student of the profession. Mastery of the content becomes evident.

This section explores the division between didactic instruction versus clinical instruction, followed by a discussion of role conflict and role ambiguity and concludes by bringing to the forefront stresses and challenges faced by certified athletic trainers as they transform from clinicians into clinical educators.

Didactic Versus Clinical Instruction

Schon (1983) described the physical structuring of the curriculum as being dichotomous by stating:

> The separation of the medical school curriculum into two disjunctive stages, the pre-clinical and the clinical, reflects the division between theory and practice. The division also appears in the location of the training and in medical school facilities. The sciences of biochemistry, physiology, pathology and pharmacology are learned from classrooms and laboratories, that is, in formal academic settings. More practical training, in clinical arts such as internal medicine, obstetrics and pediatrics, takes place in hospital clinics within actual institutions of delivery (p. 28).

Teaching roles tend to reflect the same division: "Medical school faculties tend to be divided between the Ph.D.s and M.D.s, between teachers of basic science and those in clinical programs" (Schon, 1983, p.28). This division between the Ph.D.s and the M.D.s further expands the separation of the clinician and the educator.

Carr & Drummond (2002) believed that, when athletic training education programs have instructors employed by different departments (academic and athletic) the responsibility of athletic training education becomes a shared role. When there is wide separation between the two departments in theory and practice, athletic training students are exposed to a potential "theory-application" gap. This notion was reinforced by Ruetter, Field, Campbell & Day (1997), who studied the socialization process of nursing students. This study relates to athletic training education because both disciplines are allied health professions with many of the same issues. Ruetter, Field, Campbell & Day (1997) found that the "ideal" versus "real" was reflected in nursing students' observations of staff nurses at work, in that the staff nurses often did not perform what the nursing students had been taught as standard practice. The nursing students perceived that the

ideals taught to them in their nursing education classes were not always reflected in nursing practice. Moreover, the nursing students perceived that some staff nurses did not value them or their nursing program. The researchers then suggested that the "theory-application" gap was not perceived by the nursing students as problematic, but more of a stumbling block for the teachers rather than the students. They concluded: "The ambiguity of the student role, brought about by differences in education and practice, is essential and provides important learning opportunities for reflection and the development of experiential knowledge" (Ruetter, Field, Campbell & Day, 1997, p. 10).

These sentiments are reflected in the research by Sabari (1985) where she explained that faculty members, who strive to produce nurses who can function effectively as innovators, often encounter conflicting messages from the clinical role models of nursing. This coordination between faculty and clinicians supports the principle that, when the socialization of the educational program's members and the clinical setting's members are coordinated, students demonstrate the ability to shift in both attitude and activity as their professional role change. But when the educational program's socialization is not reinforced by the clinical setting, the educational program's socialization input is diminished (Sabari, 1985).

These examples support the need to coordinate educational program goals and clinical site goals to reinforce their respective benefits. This means that faculty educators must have clinical expertise and clinical educators must have knowledge of educational methods and theories to best convey these skills to athletic training students.

Role Conflict

Role conflict may become a reality for clinicians who become educators. Sabari (1985) stated "Role stress will occur if the educationally defined role is incongruent with the role defined by one's employing organization" (p. 99). She divided role stress into two types, role conflict and role ambiguity. Role conflict occurs when individuals are required to perform roles that conflict with their personal value system or when they must perform two or more roles that conflict. Role ambiguity occurs when the role that an individual is to undertake is not "clearly articulated in terms of behaviors or performance levels expected" (p. 99).

Strohschein, Hagler, & May (2002) expressed a concern that students and new practitioners often perceived an inconsistency between theory and practice. Strohschein, Hagler & May (2002) cited an example of a realistic dilemma; "As education programs in the United States and Canada move toward graduate degree entry level, there may be some apprehension on the part of clinical educators with an undergraduate degree who are expected to provide supervision for graduate students" (p. 4). The same could be said for new graduates who are functioning as clinical instructors or for the well-established clinician who now finds him or herself in the role of an educator.

Strohschein, Hagler & May's (2002) ideas on role ambiguity were reflected by Tierney & Rhodes (1993) as they examined the impact of the socialization process on faculty members. They found that the experiences one has prior to becoming a faculty member "frame how an individual approaches his or her job" (Tierney & Rhodes, 1993, p. 74). Such experiences are important for athletic training educators as their experiences

will frame how they select and present information to athletic training students. Tierney & Rhodes (1993) further stated:

> For faculty to place higher emphasis on teaching, for example, they must be socialized in graduate school about the importance of teaching. The implications of such an idea may be that all graduate students who intend to become faculty need to take a course on teaching, or that a course might be co-taught with a faculty member (p. 75).

The teaching experience in graduate school would allow graduate students to have exposure to educational theories and methodologies and may better prepare them as future athletic training educators.

Relevance To The Study

Clinical instructors spend a great deal of time and energy with the athletic training students they are assigned. However, the creation of an educational environment by clinical instructors and how that environment came to be must be explored to make the clinical assignment more conducive to the achievement of educational goals and objectives. This may be achieved by recognizing the distinction between classroom instruction and clinical instruction and identifying the stresses that face certified athletic trainers during the metamorphosis from clinician to clinical educator.

Chapter 2 Summary

This literature review focused on four areas: 1) the history of the NATA, 2) socialization theory, 3) clinical educators' instruction, and 4) the "theory-application" gap.

The NATA was founded in 1950 with the first undergraduate programs recognized in 1969. January 2004 saw the implementation to a single route to NATA certification which helped to standardize athletic training education. The knowledge of the profession's past has shaped the future. Professional socialization is composed of anticipatory and organizational socialization. Anticipatory socialization contains socialization aspects that are acquired prior to entering the work setting, while organizational socialization includes those socialization processes that occur after entering the work setting (Pitney, Iisley & Rintala, 2002).

A third point in the review stressed that a good educator is not necessarily a good clinician and a good clinician is not necessarily a good educator. Strategies can be implemented in athletic training education to make clinicians better educators.

Finally the literature review examined the "Theory-Application Gap" that exists between information presented in the classroom and the clinical setting.

Therefore, because of the dynamics involved in athletic training education, it is essential that the development of "excellent" clinical instructors be identified so that a more thorough understanding of clinical instruction is developed.

CHAPTER 3

RESEARCH DESIGN

The purpose of this research was to answer questions regarding the socialization processes experienced by excellent clinical instructors utilized by the Commission on Accreditation of Athletic Training Education (CAATE) Accredited Athletic Training Education Programs. The questions addressed include:

1) What are the characteristics of ATCs acting as clinical instructors in CAATE accredited institutions?
2) How was excellence achieved by clinical instructors in CAATE Accredited Athletic Training Education Programs? What were the educational backgrounds, educational beliefs and assumptions associated with excellent clinical instructors?
3) What were the characteristics of the socialization processes they experienced to become excellent clinical instructors?

Sample

As of July 6, 2006, there were 353 CAATE Accredited Undergraduate Athletic Training Education programs in the United States (www.caate.org, 9/06). These CAATE Accredited Athletic Training Education programs operate in 48 states and the District of Columbia. The two states which do not currently have an institution sponsoring a CAATE Accredited Athletic Training Education program are Alaska and Rhode Island. This resulted in the average number of CAATE accredited institutions per state that has a sponsoring institution as 7.204 per state (353/49). The NATA has divided the United States into 10 districts, with District IV consisting of Illinois, Indiana, Michigan,

Minnesota, Ohio, Wisconsin, Ontario and Manitoba. The Canadian provinces do not sponsor CAATE accredited institutions. District IV sponsors 82 CAATE accredited institutions. Therefore, the average number of CAATE accredited Athletic Training Education Programs in states that comprise District IV is 13.66 (82/6). District IV represents 23.22 percent of all the CAATE Accredited Athletic Training Education Programs in the country (82/353) and can serve as a representative sample of the country as a whole. In addition, the researcher resides in District IV and could easily interact with a sample of universities from this district for this study.

Eight of the CAATE accredited public institutions within a District IV state served as the purposeful sample. The researcher's institution was omitted, but served as a pilot study for the procedures and questions that were utilized in this research project. The eight public institutions were placed into one of four different research quadrants. Large NCAA Division I institutions accredited within the last five years; large NCAA Division I institutions accredited longer than five years; NCAA Division II institutions accredited within the last five years; NCAA Division II institutions accredited longer than five years. The institutions were placed in their respective quadrants in Table 1 below.

Table 1: Duration of Accreditation and NCAA Division

	NCAA Division I Schools	NCAA Division II Schools
Newly Accredited Within the last 5 years	University 1 University 2 University 3	University 6 University 7
Accredited Longer than 5 years	University 4 University 5	University 8

This categorization was utilized as it differentiated the public CAATE accredited institutions within the state surveyed based on the size of the institution and length of accreditation. These two factors are likely to have an impact on the quality of instruction. Institutional size was important as the larger institutions frequently have access to more resources, training opportunities and credentialing. Length of time of accreditation may potentially influence "excellent" clinical instruction as the longer a program has been accredited, the longer the program has adhered to national guidelines and the concept of accountability. This arrangement was useful to the researcher in that it grouped together like schools in regard to resources and required credentialing of staff and time of accreditation, and provided a good cross-sectional portrait of athletic training education.

Instrumentation

The current "state of affairs" in clinical instruction was outlined via survey research. "Survey research allows an investigator to get a 'snapshot' of what is happening at a given time or situation and then allows the investigator to determine how that snapshot influences other behaviors or situations" (Turocy, 2002, p. S-174).

An existing survey instrument was identified. This instrument was developed by Dr. Weidner with the purpose to "help select, train, and evaluate Approved Clinical Instructors (ACIs) for athletic training" (www.nataec.org/html/clinical_evaluation_tools.html). This instrument was used by program directors of the respective CAATE accredited programs in the selected state in NATA District IV to rate their on-campus clinical instructors. A second instrument was developed to collect demographic data from clinical instructors at the institutions selected for this study. All data remained confidential and locked in a secure area.

Procedure

The researcher sent letters to program directors from eight CAATE accredited public institutions within one state in NATA District IV inviting them to participate in the research project. The letter also asked the program director to identify the number of full-time, on-campus, non-faculty, non-graduate assistant ACI/CIs who were ATCs utilized by their athletic training education program. If notification was not received by the researcher, attempts were made to contact the program director by e-mail and phone. Once confirmation to participate was received of the program director and the full-time ACI/CIs were identified, the program directors were asked to rate their on-campus ACI/CIs who were ATCs using the "Selection, Training, and Evaluation of Athletic Training Approved Clinical Instructors" developed by Dr. Weidner at Ball State University in Muncie, Indiana. Standard 4.0 dealing with effective instructional skills was the standard that was utilized. This approach paralleled the work of Lauber, Toth, Leary, Martin & Killian (2003). As compared to the Lauber, Toth, Leary, Martin & Killian study, in this project, faculty members were not identified to be surveyed nor were graduate assistants.

Upon receipt of the surveys from the respective program directors, the ratings forms were tabulated to determine the clinical instructors receiving the highest ratings in each research quadrant. The clinical instructors with the highest ratings in each research quadrant were identified as "excellent". The clinical instructors with the top two ratings in each research quadrant were selected and asked to complete a demographic survey and to participate in a face-to-face interview. This process constituted elite interviewing,

because the respondents were selected based on their excellence demonstrated as clinical instructors at their respective clinical sites.

Modifications were made to the initial plan to accommodate a less than complete response. Responses were only received from institutions in three of the quadrants. Table 3, in Appendix D, reveals the quadrant into which each institution fell with the associated response from the respective institution's program director and the clinical instructor's willingness to participate.

Table 2 displays the final participation sample:

Table 2: Program Directors Ratings of ACI/CIs

	NCAA Division I Schools	Program Director's Ratings of CIs	NCAA Division II Schools	Program Director's Ratings of CIs
Newly Accredited Within the last 5 years	University 2	4.69	University 6	3.125
		4.538		2.63
		3.769		Avg:5.755/2= 2.8775
		Avg:12.997/3= 4.332		
Accredited longer than 5 years	University 4	4.15	N/A	
		3.769 This CI declined participating		
		3.69		
		Avg:7.84/2= 3.92		
			Overall Ratings Average: 26.211/7= 3.7444 out of 5	

Once the "excellent" clinical instructors were identified and meeting times arranged, the researcher traveled to meet with each of the "excellent" clinical instructors. After brief introductions, the "excellent" clinical instructor was asked to complete a demographic survey. Once the demographic survey was completed, a face-to-face

interview was performed and digitally recorded. Procedures for the face-to-face interviews paralleled those performed by Nahas (1998) in her phenomenological study of nursing students. That is, semi-structured, open-ended interviews lasting up to one hour were recorded and performed with the "excellent" clinical instructors. The respondents were asked to describe the socialization processes they have experienced. A semi-structured interview protocol was used to assist the researcher in focusing on socialization (See Appendix E). The protocol addressed the following issues: demographic information; undergraduate experience as an athletic training student, perceptions of preparedness to work with athletic training students after undergraduate education; perceptions of preparedness to work with athletic training students after graduate education; characteristics and style of their best teacher in college; athletic training experiences that have particularly affected respondent; the respondent's feelings pertaining to the role of the clinical instructor and athletic training education; experiences that have helped to prepare the respondent to teach athletic training students; experiences the respondent wished they had in their athletic training education; the respondent's feelings on providing multiple experiences when dealing with athletic training students.

Analysis

Nahas (1998) utilized seven steps described by Colaizzi to analyze her study. They were adapted and applied to this study. The steps utilized included:

1) Reading and re-reading all of the informants' transcribed interview data.

2) Extracting significant statements or phrases that relate to socialization from each of the informant's descriptions.

3) Formulating meanings from these significant statements or phrases.

4) Organizing these meanings into clusters of themes.

5) Integrating results into an exhaustive description of socialization.

The taped interviews were listened to a second time and key points were written down. The researcher examined each transcript and documented the key points to identify a general understanding of the respondent's experiences. The transcripts were coded by the researcher to identify significant statements and phrases. Through multiple readings, themes stood out to the researcher and sub-themes emerged. The researcher organized these themes into clusters, being careful to ensure major themes and points were not omitted.

Demographic Results

Program directors from eight different CAATE Accredited Athletic Training Education Programs were asked to provide names of the non-faculty/non-graduate assistant Certified Athletic Trainers that function as ACI/CIs for their respective institutions. Of the eight, five institutions replied. The program directors were then asked to rate each of their ACI/CIs according to Dr. Weidner's ratings form. Ratings were received on 21 different ACIs and all were ranked within their own institution. The top two from each institution were contacted via U.S. Postal Service and e-mail to participate in a face-to-face interview. The ACI/CIs from one of the institutions did not return the request to participate. One of the ACI/CIs from another institution responded, but noted that they were not interested in participating in the study. Of the other three schools that responded, one respondent stated that he was not interested in participating. Therefore additional respondents were identified from the schools that did respond with the final result being seven respondents who indicated that they were interested in participating in

this research project. Three came from one institution and four came from the other two institutions.

The range of the ratings scores for the seven selected for face-to-face interviews was 2.63 to 4.69 out of 5.0. The average score was 3.7444 (26.211/7). The demographic makeup of these individuals is described in Table 4a and 4b in Appendix F. A profile of each respondent is located in Appendix G.

Of the seven participants, five were male and two were female. To help with confidentiality issues, the respondents' gender was not displayed and male pronouns were used to represent all respondents. In addition, the institutions where the respondents currently work were not identified. The average years of certification were 17.8 with 16 average years of teaching clinical courses. Five of the respondents attended an internship undergraduate program; one attended an NATA accredited undergraduate program; the final respondent graduated from a CAAHEP accredited undergraduate athletic training education program. An interesting note on this last individual was the fact that he started in an internship program that was converted to a CAAHEP accredited program prior to his graduation. All seven individuals have a master's degree, and two of the seven hold PhDs. Two individuals earned teaching certificates. Four have had formal training in the field of education, and three teach classroom courses for credit. On average, each individual worked at 1.5 institutions prior to their current employment.

In the presentation of the data, quotations have been modified to remove extraneous words so that the prose reads more smoothly.

CHAPTER 4

FINDINGS

As the data were gathered, a redundancy was found in the research questions as originally stated. Thus in an effort to be parsimonious, I have refined and restated the research questions as follows:

1) What are the characteristics of ATCs acting as clinical instructors in the Commission on Accreditation of Athletic Training Education Programs (CAATE) accredited institutions?
2) What were the educational goals and beliefs towards athletic training education associated with excellent clinical instructors in the CAATE accredited athletic training education programs?
3) What were the characteristics of the socialization processes they experienced to become excellent clinical instructors?

In the presentation of data, the educational backgrounds as it relates to research questions 1 and 3 will be discussed. It was redundant to discuss this in relationship to research question 2.

This section answered these questions by identifying themes that emerged from the face-to-face interviews and supporting these themes with the appropriate data.

Research Question 1

After reviewing the transcripts as they related to the first research question of what are the characteristics of ATCs acting as clinical instructors in the Commission on Accreditation of Athletic Training Education Programs (CAATE) accredited institutions, I found, five main characteristics, each with sub themes. These characteristics included:

attending an internship institution for their undergraduate work; obtaining an advanced degree which allowed for the accumulation of more experiences; obtaining job experience prior to their present positions; being a good clinician; believing that their first responsibility is to the athletic department. Each of these characteristics were further divided into components.

Attending an Internship Undergraduate Program

Attending an internship program as the route to become eligible to sit for Board of Certification Examination emerged as a strength of "excellent" clinical instructors. As a result of attending an internship program, three sub-themes emerged. Many of the institutions that the respondents attended for their undergraduate education had employed athletic training staffs of two. By having small athletic training staff sizes, the athletic training students had the opportunity to immediately be exposed to immediate and intensive "hands-on" opportunities and the accumulation of many clinical hours of athletic training experiences. This section explores these trends and supports them with findings from the research.

Small Staff Sizes

Six of the seven respondents attended an internship program for their undergraduate education. Respondent 5 started in an internship program, but the program received Commission on Accreditation of Allied Health Education Programs (CAAHEP) accreditation prior to his completion of the program, and he therefore graduated from a CAAHEP accredited program. Respondent 7 graduated from a NATA accredited program. All were exposed to the internship program as Respondent 7 attended graduate school at an institution that sponsored an undergraduate internship program.

The reason that the respondents were thrust into immediate hands-on experiences may be due to the fact that many of their undergraduate institutions sponsored certified athletic training staffs of two. This was cited by respondents 3, 4, and 6 while respondent 7, who graduated from the NATA accredited program, reported four certified staff members. The following statements from Respondents 1 and 6 exemplify how they would step in to assist the certified athletic training staff member:

> Essentially we were responsible for just about everything. Pre-practice, pre-game preparation, treatments of student athletes, rehab, injury evaluation, and we would consult with one of the certified's on board to determine whether or not someone needed to go to the hospital or to see one of the physicians. Essentially we were working within the role of what a certified athletic trainer would work (Respondent 1).

> Students were assigned to a sport. . . Athletic training students made a lot of their own decisions. There were times when the staff ATC was on the road, that we as students ran the facility. . . The level of sophistication was much lower. It was a lot of emergency care. If we had somebody for rehab, we knew what they were supposed to do. I mean it was ice and heat and stretching and taping. The level of sophistication was still evolving at that point (Respondent 6).

Hands-on Experiences

All respondents reported numerous clinical experiences, hours and opportunities to become actively involved in their athletic training education. The term used by most was "hands on."

These "hands-on" opportunities allowed the athletic training students to become responsible for all aspects of the teams' healthcare from pre-practice treatments to game coverage to traveling as athletic training students without the supervision of an ATC. Many of the respondents reported being assigned to teams early in their undergraduate career. Respondent 3 recalled that athletic training students at his school were not assigned to work with a team but remained in the athletic training room, and the athletes signed up on a board for treatments. When athletic training students were done working with an individual, they called the next name on the board for treatment. It didn't matter what sport the athletes played. The athletic training students just took the next athlete listed on the board.

Respondent 6 recalled his experience as an undergraduate athletic training student with these words:

> It was a lot less formal than it is now. Everything we learned we kinda learned hands-on. You learned everything in the athletic training room. I took the Cramer course as a high school student. You knew how to tape. That's what you did in those days. We were essentially taping machines for football (Respondent 6).

Accumulation of Clinical Hours

The undergraduate athletic training education of the respondents also focused on the immense number of clinical hours they acquired while in the athletic training room. The requirement for an individual attending an internship program was the accumulation of 1,800 clinical observation hours in a 4-year period. This number was lowered to 1,500 hours in the early 1990s. NATA accredited programs required students to accumulate a minimum of 800 hours. Respondent 7, who attended a NATA accredited undergraduate

institution, still acquired many more clinical hours than were mandated. Respondent 7 reported that fellow undergraduate students competed to see who could acquire the most hours. He stated that he and his classmates accrued "mega hours" in the neighborhood of 2,500 to 3,000, and each individual athletic training student "tried to get as many as you could and write them on the wall."

Summary

Attending an internship program gave the respondents the opportunity to immediately work in the athletic training room. The respondents reported that their undergraduate institutions had small athletic training staffs, with some reporting staff sizes of two. These small staff sizes enabled the athletic training students to immediately start work in the athletic training room, learn "hands-on," and accrue many athletic training room hours.

Upon graduation, all the respondents interviewed sought an advanced degree.

The Acquisition of an Advanced Degree

The acquisition of an advanced degree is the second common characteristic that emerged after talking with the respondents. All of the respondents interviewed hold a minimum of a master's degree, although the minimum requirement to enter the field of athletic training is a bachelor's degree. The National Athletic Trainers Association cites that 70 percent of Certified Athletic Trainers have a master's or doctorate degree (The Facts About Certified Athletic Trainers brochure from the NATA). Earning an advanced degree provided these individuals the opportunity to function as graduate assistants and to gather additional clinical experiences. By continuing their education and earning a master's degree, the clinical instructors had gained four things: these individuals were

responsible for clinical decision making; some taught undergraduate students; they were permitted to see the transition to an accredited program as institutions scurried to meet the January 1, 2006 mandate; a difference between athletic training and sports medicine became distinguishable during their preparation.

On Their Own

Respondents 2 and 4 both were placed in high school settings during their graduate assistantships. Generally, in the high school setting, graduate assistants are certified, and make their own decisions. There are no athletic training staff members to whom graduate assistants treating high school athletes can turn to when they have questions. Also, there is limited access to physicians. Whereas, graduate assistants providing athletic training services for their institution can refer to certified staff athletic trainers, team physicians or other graduate assistants for support. In response to being placed in the high school by himself, Respondent 2 had this to say:

> I think graduate school prepared me to become independent, working independently, making decisions on my own. I was out at a school by myself, and I was responsible, and there is no one else there. As an undergrad, you always have someone to turn to. . . . It forced me to be independent and make decisions and it forced me to be in that supervisory role (Respondent 2).

Respondent 4 recognized the fact that being in the high school setting for his graduate assistantship forced him to mature as an athletic trainer because he was the one making the decisions. "If I screwed up, it was my fault and the kid could maybe get hurt because of me" (Respondent 4).

Gaining Teaching Experience

A second sub-theme that developed from the respondents having advanced degrees was that they gained teaching experiences during graduate school. Respondent 6 received a teaching certificate in secondary physical education, psychology and sociology, and Respondent 7 received a teaching certificate in special education K-12. The other respondents did not have teaching certification, but four of the seven reported some formal training in the education field. The training that the respondents received during graduate school played a significant role in developing their attitude towards the education of athletic training students. Respondent 6 recalled his efforts to learn the teaching profession during graduate school as:

> I was so hungry for knowledge on my own. I was reading everything I could get my hands on. Everything that was written in the field, I think I read. Arnheim and O'Donaghue you read cover to cover to prepare for certification. About 1976 is when Hoppenfeld came out and they never made another edition of it. They made it right the first time. That's my feeling on that one. You don't need to do it again (Respondent 6).

Respondent 6 had some training in education as an undergraduate and compared himself to others in his education classes:

> Having (teaching certification and) a degree in psychology, I thought a lot of the education classes were common sense. But when I got out and was around people teaching other classes, I realized that I do have a pretty good education here (Respondent 6).

He continued by commenting on the skill of his college professors:

> I had some great instructors. All were male who went to school on the G.I. Bill after World War II or Korea. Then they went out and taught, and got an advanced degree when they were teaching at the high school or elementary level and eventually worked their way into a college teaching job. They didn't come out (graduate) as collegiate instructors. They didn't just go to school. They really had the practical experience. Today people are getting a lot of theory from a lot of theorists but they haven't sat in there and done the job (Respondent 6).

Respondent 5 didn't teach academic courses as part of his graduate assistantship position, but functioned as a teaching assistant for rehabilitation and assessment courses. This helped him learn the priorities of rehabilitation and allowed him to identify when an athletic training student was struggling with rehabilitation progressions. Although Respondent 5 does not currently teach academic courses for credit and reports no desire to formally teach, he commented that his ambition was to stay within the college setting. Therefore, he "needed to know how to teach."

Graduate school provided graduate athletic training students opportunities to supervise undergraduate athletic training students. Teaching undergraduate courses gave the graduate students a chance to review and provide practical application to the material that was covered in the classroom. Respondent 3 found this helpful as first-year athletic training students' knowledge and skills paralleled what he was teaching in beginning and advanced athletic training courses. Knowing that you have to teach the academic portion of athletic training education forced Respondent 3 to feel prepared in his lesson plans, because if you're going to teaching something, "you feel like you have to know it well" (Respondent 3 interview).

Becoming Familiar with Accreditation Standards

Three of the respondents went to graduate school in the 1980s or earlier. While they currently work in Commission on Accreditation of Athletic Training Education (CAATE) accredited programs, they did not gain experience working in an accredited program while attending graduate school. The other four respondents worked in graduate programs that sponsored undergraduate accredited programs. Since a majority of these individuals attended an internship program throughout their undergraduate experience, they were unfamiliar with the accredited curriculum. By working in a program that was working towards accreditation or one that was accredited while they were in graduate school, they began understanding the expectations of a curriculum-based program. Respondent 1 referred to this as a "state of flux." While their graduate assistantship responsibilities focused on athletic training services in the athletic department, the respondents could see the changes made during the transition to an accredited institution, helping streamline their work with athletic training students. This is supported by the following statement from Respondent 1:

> I think my last year in grad school was easier to deal with students because you knew the direction that we were going and you knew some of the things you could do and couldn't do anymore (Respondent 1).

Athletic Training Versus Sports Medicine

The final sub-theme resulting from interviewing ATCs with advanced degrees was the emergence of the dividing line between "athletic training" and "sports medicine." Many people ask what the difference is, and the usual definition of sports medicine is something like this: an umbrella term that encompasses all disciplines that deal with the

care and performance of athletes. This could include things such as weight training, sport psychology, sport nutrition, varying medical specialities (orthopedics, oncology, internal medicine, opthamology, etc).

Athletic training is providing the day-to-day care and preparation that athletes need in order to compete. Respondent 7 described the distinction between the two as:

> Undergraduate (focused on) athletic training. While in graduate school I learned about sports medicine. Athletic training includes basic evaluation, taping, wrapping and bracing. But I didn't see the interaction with physicians, didn't see an x-ray, did everything by myself. Sports medicine introduced me to pharmaceuticals, various diagnostic techniques, different types of orthopedic evaluations and I worked with physicians one-on-one daily (Respondent 7).

Summary

All the respondents attended graduate school and earned a master's degree. Graduate school attendance allowed the respondents a chance to secure graduate assistantship positions resulting in opportunities to gain and enhance their experiences. Respondents took responsibility for their decisions, were on their own, gained teaching experiences, were exposed to accreditation standards, and learned the distinction between athletic training and sports medicine.

Respondents also shared their prior job experiences, as described in the next section.

Prior Job Experience

Six of the seven respondents reported at least one full-time position prior to their current employment. Of the six that were previously employed, three were previously employed at one institution, and two were previously employed at two institutions. The

sixth was employed at three institutions prior to his current employment. The former employers consisted of six different universities, two clinics, one high school and an Olympic Training Center. Varied work experience enhanced the respondents' relationship with and ability to mentor athletic training students.

Respondent 7 recalled his first job at a high school. It gave him the opportunity to learn and make decisions, both good and bad. He started an athletic training program, and taught athletic training skills to high school students. Respondent 7 then recalled his experience at an NCAA Division I institution and stated that it "shaped me more than I realize. That was six years of really good people." Respondent 7 was a head ATC at the age of 24 and was probably one of the youngest NCAA Division I head ATCs at that time. He reported that was, "scary because the athletes were the same age as I was."

Respondent 6 laid the foundation for a small college's athletic training program- literally and figuratively,

> I went to work at a small college as their first athletic trainer my first job out of graduate school. Great athletic directors, super supportive, letting me do a lot of things. It was a learning experience, an enriching experience and a rewarding experience. My first summer there, I literally made an athletic training room, that is I laid block and mixed mortar. I got light fixtures and electrical work from some guys in the physical plant for a couple cases of beer. That was really rewarding...The thing that influenced me more than anything was having my own students where I was in charge. I had the responsibility to help these people learn my profession and try to transmit my enthusiasm to them. That was both a challenge and rewarding at the same time (Respondent 6).

Respondent 2 recalled his experiences in two different employment settings, one at a college and one with the United States Olympic Training Centers.

> My experiences with the Olympics and the Para-Olympics were life-changing experiences. Where you see the human drive and all that we're capable of regardless of our abilities or our disabilities. I think those are opportunities I wouldn't have had anywhere else. . . I've been part of national championship basketball teams, which is an incredible experience. You go through all the pre-season, all the season, all the daily practices and the injuries. There are ups and downs in this field, and some days it's just overwhelming and there seems like there's more downs than ups. To be a part of the success, not that winning is the whole reason we do this, to be a part of a national championship and see the success and see that this is what they've been striving for and you are a part of it. I think it's exciting, and it's rewarding, and it's fun to be a part of that (Respondent 2).

When asked to think about all of his experiences and remark on which experiences in his background prepared him for educating today's athletic training student, Respondent 2 continued with:

> Well I think all of them for a variety of reasons. You work in different settings. I've worked the high school level, Division III, Division II, and the USOEC. I think you do have a variety of sports, a variety of coaches, a variety of administrators and a variety of athletic training students. You deal with so many different people, the more different sites you're in and different approaches, the more you're able to bring to the table (Respondent 2).

Experience in a variety of settings is important for athletic training educators. By participating in a variety of experiences, ACI/CIs can bring that knowledge to the clinical environment and act as a resource for the athletic training student. These experiences also shaped the ACI/CI into a good clinician within the field of athletic training. The following section will explore this trait.

Being a Good Clinician

A fourth theme central to the characteristics of ATCs acting as clinical instructors in CAATE accredited athletic training education programs is that they all have skills necessary to be a good clinician. This characteristic has been identified by Weidner and Henning (2004) as one of the four domains of clinical teaching knowledge: "ACIs must be knowledgeable of the subject matter within their field" (p. 341). Clinical instructors must be willing to share their knowledge with athletic training students and also acknowledge their own personal and professional weaknesses (Weidner & Henning, 2004).

Respondent 3's learning experiences included a lot of manual therapy techniques such as joint mobilizations and proprioceptive neuromuscular facilitation (PNF). Such training was unique at the undergraduate level. Respondent 3 commented on his undergraduate experience with manual therapies and the role they played in his development into a good clinician:

> I didn't know that a lot of the skills I was being taught as an undergrad were not being taught at other athletic training programs. . . I feel very fortunate to have come out of my undergraduate program with a lot of knowledge and skills that a lot of people didn't have, such as manual therapy skills. . . The thing that affected

me the most was that I had different skill sets than others from other programs. . . Manual therapy has been most influential, that's why I like athletic training, it's hands on, you do it (Respondent 3).

This hands-on approach was called upon when Respondent 3 went overseas with a delegation of U.S. athletes. Respondent 3 recalled traveling with the U.S. Olympic Teams and how he adapted to the limited modalities and rehabilitation equipment available:

> In Yugoslavia, we had one bucket of ice for the whole U.S. delegation, and I don't know if we had any modalities to be honest about it. So I was glad that I was able to do hands-on skills. What are you going to do? You gotta do something. I could do joint mobs and PNF (proprioceptive neuromuscular facilitation), muscle energy or whatever, and I could do some of that stuff. That influenced my career a lot, being able to do those skills (Respondent 3).

When the respondents were asked if they felt appropriately prepared to teach today's athletic training student, six of the seven respondents responded with a yes due to their clinical skills and their previous experiences. It was generally felt that the more experiences an individual acquired, the more knowledge they passed onto future athletic training students. They had more to look back on. They could and can help athletic training students understand techniques that work and those that might not work, so that athletic training students wouldn't repeat a mistake. Respondent 3 summarized the need for experiences by stating, "experiences increase your knowledge base so that you have more to pass on."

Respondent 5 was identified as an "excellent" clinical instructor with high ratings. He believes he has good clinical skills, but does not feel appropriately prepared to provide

learning experiences for athletic training students. With high ratings from his program director and a bit of teaching experience, why does Respondent 5 feel inappropriately prepared to provide learning experiences for today's athletic training students?

> Because all my knowledge goes to the elite athlete. I don't need to know how to teach, but I went to graduate school because I wanted to work in the college setting, there you need to know how to teach. Right now (at his current position in the collegiate setting) I don't need to know how to teach. My main focus is towards the student athlete (Respondent 5).

This makes a bit of sense due to the fact that as an undergraduate athletic training student, all the information that one receives relates to providing healthcare services. In the collegiate setting, the focus is the healthcare of the student athlete. Athletic training students aren't taught to relate information to anyone other than their patients. But when Respondent 5 was asked if he felt like he does a good job as an ACI, he had this to say:

> If there is a circle for the ACI maybe, maybe not; if there is a circle for athletic training maybe I'm good because I want to be a master of athletic training. I don't want to be a teacher of athletic training. A teacher knows the textbook in the ACI model described previously. Do I do a good job on that? Yeah sort of, but I don't really care about it. I want to be a master of every single aspect of athletic training. But if I see the AT circle, I think I'm good because if a student asks, I will teach them whatever they want. But I don't need five or six of them. Athletic training is so much information, I can't give what I've got to that many people. Like the movie *Karate Kid*, Mr. Miyagi is a master of karate. I don't want to use the word teach, because it is related to teacher. But Mr. Miyagi gives whatever he

has to just one kid. But the teacher model for the NATA is one teacher for six to eight people. If I want to be at the level of master, I don't need five or six people, I want to have just one or two (Respondent 5).

Being a good clinician was identified as a strong attribute of these "excellent" clinical instructors. The following section will detail to whom these individuals primary responsibilities lie.

Athletics First, Academics Second

Where are the loyalties of these "excellent" clinical instructors? The individuals interviewed were neither full-time faculty members nor graduate assistants. All were paid primarily by their departments of athletics to provide athletic training services to the universities' athletic teams. The respondents recognize that they have primary responsibility to the department of athletics and "the healthcare of our student athletes" as described by Respondent 1, but are committed to using their setting to educate athletic training students. Respondent 3 agreed by stating, "My number one job is to take care of the players and keep them healthy and keep them out there. If I don't do my job here, I won't have a job educating students."

Another dilemma that these ACIs experience is the liability that may be involved in having athletic training students practicing clinical skills on patients. If an athlete re-injures themselves during rehabilitation or is burned by the inappropriate use of a hot pack, who is responsible? The athletic training student? No, it is the staff member assigned to work that sport.

At the end of the day, I'm responsible for anything that happens. I'm going to give you (the student) independence. But you need to understand that while you

are here, we're doing things my way because I'm responsible. I'll give you input. I'll let you make changes. But you have to understand that when you leave, you can go out and do it however you want. But when you're here, you're going to do it the way that we do it (Respondent 2).

While the ACI/CI's main responsibilities are to the athletics department and to the student-athlete, many feel that a portion of their responsibilities are to help educate athletic training students and that the duties to athletics and to the ATEP are combined. Respondent 6 felt that until about 10 years ago, the service to the athletics department and the education of athletic training students was never a duel role, but one multifaceted position. He continued by stating:

> I never saw it as a second role because I remember reading an article in the *Physician and Sportsmedicine* saying that athletic trainers were one of the best health educators there were, that we as a profession were natural teachers (Respondent 6).

Respondent 6 gave an example of how he currently combines the teaching and clinical supervision aspects of his job by stating,

> It's all part of the same job. If I got a student that's helping me get the baseball team ready, if there is something they don't know how to do and I'm doing it, I'm going to show them how to do it. I may say I want stretches done this way or that way, and I'm standing at the table next to them while I'm doing somebody else, keeping an eye on them and watching what they're doing. I don't think it's really that big of a challenge. I think it's a bigger challenge in football where you've got a lot of students. But when they're with the sports I'm with, I've got two or three

students with me at a time. So it's not really that big of a challenge. I think it integrates itself pretty well. It's just a matter of talking while you're doing it many times (Respondent 6).

Respondent 7 preferred to combine athletic training services and athletic training education in the clinical setting, but noted that it may be hard to do both at a high level at institutions where athletic teams are expected to win and bring money into the institution.

> The coaches don't understand what you have to do with it. My goal is to get athletes back to competition as quickly and safely as you can and that will take away from the education of the students. Sometimes you don't have the opportunity to share the knowledge with the student due to coaches' demands...Would love to do both, but the real world of athletics won't provide for this. We still have to understand who our provider is...Major sports are a little different than minor sports. It's not that the coach is less stringent or less motivated, but there are different levels and we have to understand that...You need to be aware of the situation. You need to be aware that they are here. I can't just be in my own little world and look at somebody and not bring the athletic training student into the play. I think it's hard for the clinician to switch to teaching mode, instead of just getting it all done. We get caught up with what we do and then we have to put it in terminology that they (the athletic training students) understand. Students have different levels. I think the athletic training educators understand that. The NATA, the BOC, the CAATE understand that. I don't think it has been conveyed to the coaches, and I think that's where we let down a little bit. We tell the coaches how we're going to do it. I don't think they

have a full grasp of what it is to educate the students. If I'm gone for an hour and a player needs to find me, I'm doing something other than what they demand. Some are great, others not, so it really varies on each coaching style. The administrator, athletic directors the whole of athletics are left out sometimes, and I think we missed the boat on that. I think it's everywhere. Members of staff can only supervise so many students, and students can't do their own thing anymore. The coaches don't care. The administrators don't care. We need to be very open as to what their (the coaches) demands are. Sometimes we take our way of thinking and force it upon people and forget that it needs to be a collaborative effort. Coaches don't understand why a kid can't cover an 8 p.m. practice. A lot of that is communication. A lot of that education, now where that comes from in each university setting, I don't know (Respondent 7).

Research Question 1 Summary

The first research question, "What are the characteristics of ATCs acting as clinical instructors in Commission on Accreditation of Athletic Training Education Programs (CAATE) accredited institutions?" has been addressed in this section. Five main attributes emerged. While each characteristic was indeed important, these attributes in combination with one another were what set the "excellent" clinical instructor apart from the "average" clinical instructor. The five attributes were each illustrated with text derived from face-to-face interviews. These attributes were: attending an internship institution for their undergraduate work; obtaining an advanced degree which allowed for the accumulation of more experiences; obtaining job experience prior to obtaining their present position; being a good clinician; seeing their first responsibility to be to the

athletic department while simultaneously finding ways to educate athletic training students. The next section explored research question number 2 and the educational goals and beliefs these "excellent" clinical instructors displayed as they educated athletic training students.

Research Question 2

The second research question was modified to read, "What are the educational goals and beliefs towards athletic training education of excellent clinical instructors"? This section begins with a discussion of how the respondents came to understand and be committed to the teaching techniques they employ. Then I discuss the educational goals that the respondents have for athletic training students, followed by a consideration of the perspectives that the respondents have regarding athletic training education.

The Development of Educational Philosophies

How did these "excellent" clinical instructors develop and implement the educational strategies they currently employ when educating athletic training students? The respondents were asked, "What does learning mean to you?" The answers to these questions laid the foundation for explaining the educational goals and beliefs that these "excellent" clinical instructors have when educating athletic training students.

What Does Learning Mean To You

How do the interviewees perceive student learning? Most commented on the different learning styles that athletic training students may have as related to their Approved Clinical Instructor (ACI) training. Respondent 7 tries to relate to each individual athletic training student's learning style but admits that, "I can't always do that." In regard to

educating future professionals, the respondents were asked, "What does learning mean to you?" The responses to this question could be placed into four themes.

1) Acquiring knowledge so that it could be put into practice. Respondents 1, 2, 3, 4 and 6 commented on the acquisition of knowledge and the application of that knowledge.

- "Learning to me means acquiring knowledge both through formal education and through practicing things on your own. . . . I think learning is the acquisition of knowledge and putting that knowledge into practice, be it a skills set or whatever it may be" (Respondent 1).
- "I think it (learning) is getting a concept, understanding it and being able to practically apply it" (Respondent 2).
- "Acquiring knowledge is most important. You've gotta have the knowledge and skills in order to perform at a high level in your job" (Respondent 3).
- "If they (the ATS) can take it (knowledge) and use it on the field or in a rehab setting. . . effectively and the right way" (Respondent 4).
- "They integrate and apply that knowledge in a real situation" (Respondent 6).

2) Providing amble opportunities for athletic training students to practice their skills.

- "Learning is taking a concept, understanding it and being able to apply it. It's not just being able to regurgitate it or to memorize it long enough to spit it back, or speed through a check-off and not being able to do it again" (Respondent 2).

3) Learning is continuous, is a theme that Respondents 3, 5, and 7 all appeared to agree upon.

- "Learning is continuous. I don't thing we ever stop learning. . . . We need to challenge ourselves and our practices and the only way we can do this is by learning" (Respondent 3).
- "Learning is never ending. . . . Learning is fun and is always changing. . . . As an older ATC, I enjoy learning. But as a student it is hard to understand all the different views" (Respondent 5).
- "Learning is not stagnant, not absolute, but continuous" (Respondent 7).

4) Respondent 7 established the fourth theme that learning is a planned, collaborative effort.

- "Learning is a collaborative effort. . . . Learning is scary. The more you learn, the more you realize you don't know. . . . Learning is planned. Each setting provides a unique learning experience, be it in the classroom, clinical, on the field or during travel. . . . You have to want to learn. Some people shut it off" (Respondent 7).

Experiences Increase Competency

How else was "excellence" achieved by these clinical instructors? The overriding themes that emerged were competency, vast experiences, and perfected or practiced skills. These factors ultimately lead to excellence as both a teacher and clinician. Six of the seven interviewees felt well-prepared to provide learning experiences for today's athletic training student due to confidence built from past experiences and clinical competency. Respondent 3 supported this notion by stating:

> I think there is something to be said about experience. When you're talking about something, you can bring experiences into it (Respondent 3).

The idea that competency of athletic training knowledge, experience in athletic training situations and skills in evaluation, treatment and rehabilitation lead to teaching excellence was summed up when Respondent 6 described good teaching by stating:

> Competence in the field. Knowing what you're talking about and being able to communicate that. . . I want people to know what they are doing and why they are doing it. Don't get locked into one type of thinking. A lot of people are doing something just because it's there. They push buttons, and a light comes on, and they walk away, and they've done their job. I think it hurts the profession and it certainly is not providing the best clinical care (Respondent 6).

Summary of the Development of Educational Philosophies

Teaching techniques utilized by the respondents as they educate athletic training students were described. Respondents also described their best teachers in college and the meaning of learning. The field experiences the respondents had that related to increased teaching competency were also explored.

Understanding what experiences shaped these individuals as educators and professionals led to an outline of the respondents' educational goals and beliefs as they relate to athletic training education.

Educational Goals of the Excellent Clinical Instructors

The clinical instructor continues to play a huge role in the development of athletic training students. Athletic training students typically spend six to eight hours per week with an athletic training faculty member in various classes, learning the didactic information required of an athletic trainer. On the other hand, the athletic training student could easily spend fifteen to twenty hours (or even more) in their clinical assignments

with their clinical instructor. It is with the clinical instructor that athletic training students will have the greatest opportunity to practice and refine their athletic training skills. This point was illustrated by Respondent 1:

> If you're the instructor of a modalities course, you've got those kids three or four hours a week. Then I've got them for another 20 hours per week when we're actually going to integrate those skills that they've learned with patients, with student-athletes, whomever it may be (Respondent 1).

The educational goals that the "excellent" clinical instructors interviewed had for the athletic training students under their supervision fell into one of the following four themes: to prepare the athletic training student to pass the Board of Certification (BOC) examination; to provide an environment where the athletic training student could acquire a variety of athletic training experiences; to prepare the athletic training student to enter the athletic training profession; to have the athletic training student value learning. This section explored these four areas.

Goal 1: Prepare Athletic Training Students to Pass The Board Of Certification Examination

The most obvious goal that the respondents reported was to prepare athletic training students to take the Board of Certification (BOC) examination (Respondent 2). Respondent 7 believed that basic information exists regarding athletic training that all athletic training students must possess. A basic understanding of anatomy, medical terminology, evaluation techniques, biomechanical principles, treatment protocols and interpersonal skills are paramount. Athletic training students should know what is

expected of them when answering a question or solving a problem given to them by their clinical instructor.

> This is not teaching for the test. There is information they need to know. Then they can become a little more abstract in their thinking and thinking deeper on how this relates to what they do in the real world (Respondent 7).

Goal 2: Help Athletic Training Students Acquire Relevant Experiences

Field experiences are crucial to the athletic training students' development. Respondent 2 described how he creates learning experiences for athletic training students:

> I try to give them as much experience as possible. I'm not going to put them in a situation they are not prepared for or not able to do based on their classroom knowledge. But I want them to try and start evals and at the beginning, take a history and observe, and at least get that. . . An athlete comes in with an injury, what should we do now? What should we do in two weeks? What should we do in a month? Get them to think critically and to make plans as much as possible. Then I'll look at it and I'll tell them what I think, and I'll ask what do you think we should do with this person? What should we do for treatment? What should we do for rehab? Try to make them make decisions, and if I disagree with it, I'll explain what I think we should do because of the findings that we found. . . Make them aware of what's real. I think it's very easy to get concepts in your mind based on the book. Little things, like they come out thinking every injury you look at is going to have an obvious answer, an obvious assessment, and that's not the case.

Sometimes it's very cut and dry. Sometimes you never know what it is. And, sometimes you just treat the symptoms (Respondent 2).

Respondent 5 revealed how he might handle an injury situation with an athletic training student during practice:

> Normally during an injury situation, "Come with me. Put your gloves on." If they are comfortable, I always provide an experience for them. If an athlete is puking, sometimes we have to deal with nausea, a huge gash. Are you (the athletic training student) ready for it? I go over the rules for practice. If I don't go onto the floor, you don't go either. We don't need to run out on the floor every time someone falls down. Then we talk about the injury, then the rehab (Respondent 5).

When asked if athletic training students are involved in his clinical setting, Respondent 7 stated:

> Students are involved with the athletes. They have to be involved. Learning is hands-on depending on the situation. A player is down in a game in front of 15,000 people, I need to do what I have to do to combat the situation. Practice is a bit less stringent. It's stringent to the coach, but not to me. So there is a time and place, but the students are definitely involved (Respondent 7).

While these "real life" experiences are great for athletic training students, they are unfortunate for athletes. But athletic training students need to be present to take advantage of learning situations even if they have not had a formal class regarding the situation. It is important for athletic training students to see and many times feel what is

going on, as that may be their only chance to experience such an injury or situation. Respondent 3 commented on the importance of being in the right place at the right time:

> Anytime we get something good in here, I try to get the students to feel it, which is a problem because you can't do a test until you've had the class. I'm sorry but maybe they're working football and there's an ACL (injury). This may be their only chance (to be involved in that situation). I may have to help them, but they feel it because they need to feel it. It's something you'll never forget. . . We do try to get the kids involved, and that's the hard part with this whole educational thing. They cut back their hours and try and have them not do these things. You can only work so many hours and you can't touch the people. I feel really bad for them, because the opportunities in the clinical setting are there when they're there. I mean you can't make them up. You can't create injuries. I feel real bad if it's four o'clock and they have to go home because they got their three hours, and from four to six you get a good injury. They just missed an opportunity, and they never get to see that broken arm again or what ever it might be. The only way you see things is if you're there when it happens, and unfortunately you have to wait a lot for it to happen (Respondent 3).

Respondent 1 described how he has dealt with senior athletic training students:

> When it gets to be January and February and you're talking about taking your certification exam in April, you just about got everything wrapped up. I mean, you should be able to handle just about any situation that comes your way. And I think that's one thing that I've really tried to do the last couple of years is say, "It's your show. I'll be here if you need help, but you're going to be the one that

does it." And I think some have gotten a lot out of it, and for some, it's been a real eye opener (Respondent 1).

How exactly were athletic training students involved during their clinical rotation with the respondents? Were they actively participating in the healthcare of the athletes or were they just performing menial tasks like taking laundry down, filling water bottles or coolers, or wiping down counters?

> Students aren't just used for menial tasks. They're going to do what I'm going to do. Whatever they're going to do, I'm going to do. If they're going to clean, I'm going to clean. If I'm going to tape, they're going to tape. If I'm doing rehab, they're going to help with rehab (Respondent 7).

While a portion of their clinical time is spent unengaged, athletic training students can practice athletic training skills or perform daily chores. This is illustrated by Respondent 1:

> I had a prime example a couple of years ago. I had a kid that came down every day at one o'clock and what's the first thing he did? He filled up water bottles and coolers. I said, "is this a problem?" He said, "No." "If I'm not here, you're going to do it and one day I want to do what you do, so it's not that big of a deal". . . My feeling is it's all part of what we do as an athletic trainer. No different than if you've got a student-athlete that sprains an ankle and they come in and you look at them, that's all part of it. Yes, it does get tedious, and, yes, it gets boring. And there are times when I will go and set up the football field by myself and do it in half the time it takes three students, just to prove a point that you're going to have to do this if you want to work in this field (Respondent 1).

While the current climate of athletic training education requires that athletic training students be within auditory and visual supervision of their supervising ATC, it must be understood that athletic training students provide a service to the athletic department and to student-athletes while they are participating in their respective clinical rotation. This was supported by Respondent 1:

> I think the biggest thing is making sure our athletic training students understand although they're not part of the workforce, they are there to provide a service. Part of their clinical education is to provide a service to the student-athletes (Respondent 1).

Goal 3: Prepare Students to Enter the Workforce

Another goal that "excellent" clinical instructors had for athletic training students they supervised was to instill the knowledge and skills necessary for athletic training students to become productive athletic trainers in the workforce, where they can work independently, make decisions and know how to function as Certified Athletic Trainers. Athletic training students must realize that once they are out in the workforce, especially if they are working with a professional, collegiate or high school athletic team, they are not going to have a 20 or 30 hour work week. There is not "always going to be someone there to make decisions for you. You need to start to make some of those on your own" (Respondent 1).

Athletic training students are in the ideal environment to build in the experiences of other professionals. They meet with other allied healthcare providers during clinical rotations and have access to various Certified Athletic Trainers, exposing the athletic

training student to a number of different philosophies and strategies in the management of athletic injuries.

> I try to get across to the students here, that you have so many different clinical instructors that you cross paths with. You don't have to agree with all of them, but get exposure to all of them and say, I like this that they do, I don't like this that they do. This is how I would want to do it and this is how I wouldn't. . . You're never going to have this opportunity again where you've got so many other people to go to for advice and someone else is responsible (Respondent 2).

Respondent 1 reinforced that undergraduates always have someone to turn to:

> This is the last time you're ever going to deal with six certifieds on a daily basis within two buildings. Take advantage of the time you have here and make sure that when you leave in May, you can go out and you can function on your own (Respondent 1).

Goal 4: Encourage Students to Value Learning

A final goal that many "excellent" clinical instructors had for athletic training students was a growing "thirst for knowledge" and valuing learning for learning's sake. Developing a thirst for learning may be incredibly hard to do for students who are so grade driven, but they must develop a mindset of "I want to know this because it's going to make me better at what I do" (Respondent 6). Respondent 7 stated, "Learning is scary. The more you learn, the more you realize what you don't know." It is interesting to note that the comments regarding the importance of encouraging athletic training students to develop a value for learning came from the two clinical instructors who have a teaching certificate and have been trained as educators.

In this section, I have summarized the goals that these "excellent" clinical instructors have for their athletic training students. Next we turn to the excellent clinical instructors, perceptions about athletic training education.

"Excellent" Clinical Instructors' Thoughts Regarding Athletic Training Education

This section examines the role that the respondents feel they play in athletic training education in conjunction with the thoughts that they have towards athletic training students and athletic training education. Four themes emerged regarding the perceptions of the respondents towards athletic training education. They believe: 1) A primary role of the clinical instructor is to provide an environment where the athletic training student can take the information learned in the classroom and integrate that information in the clinical setting; 2) Athletic training students who are pro-active receive a better education; 3) Today's athletic training students need more clinical exposure; 4) Athletic training students need clinical exposure in a variety of settings.

Belief 1: Bridging the Gap Between the Academic and "Real" World

When asked, "What is the role of the clinical instructor in the education of today's athletic training student?" Excellent clinical instructors focused on providing an environment where athletic training students could practice and expand the knowledge that they received in the classroom. The role the clinical instructor plays is critical as the athletic training student will be spending approximately 20 hours per week with their clinical instructors in the clinical setting versus 3 to 6 hours with the athletic training faculty member. Due to the clinical expertise required of athletic trainers, Respondent 4 feels that the role of the clinical instructor in athletic training education is huge. With the changes in athletic training education, the role of the clinical instructor may not be

exactly defined, as Respondent 6 pointed out. "I think it's still evolving. We are still trying to figure out just what are we supposed to do in some cases." For the most part, the clinical instructors interviewed felt that they should be "bridging the gap" (Respondent 2). The "gap" that needs to be "bridged" is the gap formed between the academic coursework required of athletic training students and the clinical experience required of athletic training students. Scenarios presented in the classroom are often presented in ideal situations. Clinical rotations give athletic training students the opportunity to see the discrepancies that exist between information presented in the classroom and the "real" world applications that need to be done on a daily basis. This concept is described by Respondent 7:

> (The clinical instructors role is to) bring the academic educational world to the clinical setting through integration, instruction, supervision, teaching through taking the knowledge they learned in the academic setting to make sure the athletic training student is evolving into a good clinician. You have to watch and critique them. Don't be afraid to tell them what they do well and don't do well (Respondent 7).

Clinical instructors are responsible for integrating what athletic training students have learned in the classroom with "a real world setting" (Respondent 1). Respondent 1 continued:

> I think that we have to identify through the use of our educators and through our students the strength of our students- - what they can do, what they can't do. Make sure we push them as far as they can within their clinical rotations (Respondent 1).

Respondent 2 supported Respondent 1 by commenting on the difference between describing a situation and actually experiencing the situation:

> I can lecture these guys if they come into spring ball or two-a-days. I can give them a 45 minute lecture on what it's going to be like out there. But until they see the chaos, they can't understand it. I think that we're able to be there to help with their education or make it practical so they grasp the concepts better, where they can see it in action. (They) see that sometimes this works and sometimes this doesn't and (I) kinda help them put all the pieces together and complete the picture (Respondent 2).

Respondent 3 agreed that clinical instructors need to support classroom education with clinical education:

> Perfect the skills that they have learned in the classroom. Anytime we get something good in here, I try to get the students to feel it (to experience what that injured body part feels like through palpation or special testing)...maybe they're working football and there's an ACL, this may be their only chance (to experience an injury to this extent). I may have to help them, but they feel it because they need to feel it. It's something you'll never forget (Respondent 3).

Respondent 6 wanted athletic training students to view athletic training from medical and competitive athletics perspectives. Athletic training students need to be aware of medical issues, bio-mechanics involved in athletics and that often times the competitive athletics perspective is quite a bit different from a purely medical perspective. The medical perspective would focus on the injury and the healing process, often times with a delayed return to activity. The competitive athletics perspective often times focuses on

wins and losses, financial gains to both the athlete and the institution, and the fact that many times athletes are returned to play prior to being totally healed.

Respondent 7 is interested in acting as a mentor for athletic training students to help them define the profession of athletic training. "It's not all about winning. It's not all about losing."

> I'm going to show them the real world of athletic training, from the side they don't see. Interaction with the physician. Interaction with coaches and athletes. Seeing what works on the side that maybe they don't get instructed in class on. Balance, time management and communication (Respondent 7).

Respondent 5 wanted athletic training students to see that not everything is a textbook scenario. "Rehabilitation is not 1, 2, 3, 4, 5, 6. Sometimes it's 1, 3, 4, 2" (Respondent 5). Respondent 5 continued:

> I have a bit of an old-school mentality, so the athletic training student needs to watch me carefully when I'm doing something like taping. . . My rule is I'll show and explain a skill step by step. I feel that I've done enough for them at that time. It is the student's responsibility for follow-up. If the student has questions, asks to see it again or asks why a certain procedure was done, my responsibility is to respond to them. When I show something to them with an explanation, that's my role. It is the student's responsibility to ask questions. Same goes with rehab, I explain to them why (things are done) psychologically, physiologically and functionally. It is the student's responsibility to ask questions. One time is not enough. Students must ask questions. Let them practice, and if they have an opportunity to use the skill, use it. The athletic training student should come to me

and ask to repeat a demonstration if they have questions. I shouldn't have to come up with the information by myself (Respondent 5).

While the clinical instructors interviewed felt it is important to provide an environment for athletic training students to practice and develop the skills learned in the classroom, they also felt it was important for athletic training students to be pro-active in their education.

Belief 2: Pro-Active Students Get a Better Education

> Students who are aggressive get a lot better education than those who are passive. The aggressive ones will come watch and ask questions and I can help them while I'm doing the activity or whatever (Respondent 3).

The above statement highlights the feeling the respondents had toward the education of athletic training students. That is, athletic training students need to be pro-active as they pursue their athletic training education. Those who actively participate, seek opportunities to get involved and are truly passionate about their athletic training education will receive a much better athletic training experience than a student who is passive towards his or her educational experience.

Once a clinical instructor is comfortable with an athletic training student's skills, most hand the reins over to the student. This was illustrated by Respondent 1, who stated:

> I always tell them I will let you do as much as you want to do. I don't have a problem with that. But at the same time, if you're sitting in the corner and you show no interest to get involved, I'm not going to come up to you everyday and say, go take a look at this person or can you go out and do this (Respondent 1).

This idea was further supported by Respondent 2:

> I've tried to force people to get involved, and I've forced them to do stuff. I've backed off on that. There are certain things that have to get done everyday. But if you choose to learn and want to get involved and make an effort, then I will help you all that I can. But I have stopped forcing people to get involved and be interested when they don't want to. It's their experience, and it usually just makes me crazy forcing people to do stuff. Some people are there, but they really don't want to be there and I only force them so much (Respondent 2).

Respondent 3 added, "I'll teach you anything you want, but you have to ask me." Athletic training students become more aggressive towards their education and "stand on their own" (Respondent 2) when they become comfortable and confident in their knowledge.

> If the student is comfortable, they're going to be willing to do more, and try more and get more involved. If they don't feel comfortable for whatever reason, I think (that) deters from the experience (Respondent 2).

There are issues related to athletic training that may not be appropriate for athletic training students and incidents or personal matters involving an athlete may have to be screened from athletic training students. This is illustrated in the following example:

> You have to communicate to the students, and I think they understand that sometimes it's a teachable moment and sometimes it isn't. Certain things I don't expose them to. I've tried telling them everything, and I've tried telling them nothing. I'm somewhere in the middle. It's hard. You have to keep that balance. They're still students. They're still 17, 18, 19, and some things they don't need to know. I want to tell them everything, so they don't fail in the future, but that's not

> realistic and you've got to find that balance of when they're ready. Eventually you have to push them out of the nest and let them go. . . I've tried letting them know everything. But in my experiences, I've found that they are not mature enough to handle some things. Most of my issues with coaches I don't share with the athletic training student. . . We have athletes with some psychological issues. I don't share that with them, to protect the athlete's confidentiality. A lot of times it's their peer. We have MRSA (Methicillin-Resistant Staphylococcus Aureus Bacteria) I let them see that from a distance, but I don't get them involved. That's me not wanting them to be exposed to it more than they have to (Respondent 2).

Not only did the respondents feel that athletic training students should be pro-active in their athletic training education, they also felt that the current educational model restricts athletic training students' clinical experiences.

Belief 3: Athletic Training Students Need More Clinical Experiences

The lack of clinical experiences in medical education has been described by Dr. Herbert Fred (2005) as "Hyposkillia." Athletic training education is no different, and athletic training students need clinical exposure to develop and thrive. Some respondents felt that the current athletic training educational model is somewhat to blame for the decrease in clinical experiences that athletic training students acquire. This is supported by Respondent 6:

> The frustration that I think a lot of athletic trainers feel with the current educational model is there is not enough hands-on (opportunities for athletic training students). They're certainly not getting the experience I had. They just don't get enough opportunity to practice the profession (Respondent 6).

Respondent 3 commented that in the current educational model, athletic training students could theoretically become certified without entering the clinical setting.

> It looks like today you can almost get certified without going to the clinical setting, and I think that is wrong because one thing about knowledge is being able to impart that knowledge. I think you have to have the combination of both or you're not going to be well-rounded. You might get certified, but you're not going to be very good at it. Experiences are crucial (Respondent 3).

The clinical instructors interviewed all commented on their undergraduate experiences and how they were thrust into performing activities in the athletic training room early in their education. Many traveled without ATC supervision. Respondent 7 recalled that he tried to get as many hours in the athletic training room as possible and would have a competition among the undergraduates by posting their hours on the wall for all to see. Sometimes these "Mega Hours" would total up to 2,500 to 3,000 and that was for an individual who went to a NATA accredited program when the minimum hour requirement was 800.

While these "excellent" clinical instructors acquired many hours in the athletic training room, their academic preparation consisted of somewhere between two to six courses, in stark contrast to the multitude of courses required for athletic training students today. It appears that the educational pendulum has shifted from that of fewer academic courses and many clinical hours to that of more academic preparation at the expense of clinical hours. Examples of the effects on today's athletic training students of not gaining the exposure of meaningful experiences follow.

Respondent 1 commented on the variables associated with athletic training students' clinical time. Items like not scheduling athletic training students for extensive hours per week, allotting appropriate days off, scheduling around work and personal schedules all needed to be considered.

> I think one of the biggest things was dealing with time issues. Like I said, when we went through and you were assigned to men's basketball, you were there for everything men's basketball did, unless you had class. And for us (presently) I know that was a big hold up when all of a sudden they are supposed to be here 15 to 20 hours per week, and we need to work around this and we need to work around their work schedules. It was tough, I think, for a while trying to adjust to that. My thoughts were this should be a priority in your life, and a lot of times this didn't seem like it necessarily was (Respondent 1).

Injuries can't be created. Athletic training students need to be present when these incidents occur. If they are not, athletic training students lose valuable often irreproducible clinical experiences.

> We do try to get the kids involved, and that's the hard part with this whole educational thing. They cut back their hours and try and have them not do these things. You can only work so many hours and you can't touch people. I feel really bad for them because the opportunities in the clinical setting are there when they're there. I mean, you can't make them up. You can't create injuries. I feel real bad if it's four o'clock and they have to go home because they got their three hours, and then from four to six you get a good injury. They just missed an opportunity, and they never get to see that broken arm again or whatever it might

be. The only way you see things is if you're there when it happens, and unfortunately you have to wait a lot for it to happen (Respondent 3).

Inexperienced undergraduates carry deficiencies on to graduate school.

I can see differences in graduate students and where they come from. They come in with very different knowledges even though they are all certified. I think they are a lot less experienced when they come in as graduate students, because they haven't been on their own. When you go on your own the first time, hopefully you start to sweat a little bit and your heart rate goes up because you're thinking, "Oh my goodness, I'm about to take care of a patient and if anyone drops the ball, it's me." I think they miss out on some of that (as undergrads) because there's always a Certified (Athletic Trainer) with them. They don't really have that fear that goes to your heart that I really think helps you in a lot of ways. . . They come in here, and they're certified. We throw them to the wolves. They haven't had the experience at their school previously, and they haven't been on their own yet. It's all sort of magical that all of a sudden, you take one test and a day later, you're certified. But what really changes between this day and that day? Nothing, except you passed an exam. (It's) not because you suddenly had more knowledge on that day, yet we expect (you) to be knowledgeable just because you have some letters behind your name (Respondent 3).

Getting today's athletic training student to gather more experiences appears to be crucial in the minds of these "excellent" clinical instructors. A lack of experiences and personal skills is a noticeable trend in the medical education community. One solution is

to have the athletic training student view and participate in different experiences in varied settings determined by the program's clinical coordinator and the clinical instructors.

Belief 4: Athletic Training Students Must See Different Aspects of Athletic Training

Where do athletic training students gain learning experiences, and do these experiences really matter? These two questions were asked of all of the respondents. While some commented on the value of learning within the classroom and other non-traditional athletic training clinical sites, most emphasized the importance of dealing with different sports and different levels of athletic competition. Before this point is explored further, it is important to illustrate Respondent 6's point that many athletic training students don't understand sports and the mechanics involved in a particular sport.

> One of the things that is happening is that some kids really don't understand sports well. So I've got to teach them about sports, trying to get them to integrate with the sports and really use what they learn in their classes. Kinesiology, I think in particular, is huge for an athletic trainer. Take what they learned in the classes and start making it practical, then add to that a knowledge of the sport we're working with at a particular time (Respondent 6).

Respondent 6 continued by contrasting the exposure athletic training students may get at football, swimming, track and baseball.

> There is a lot of variability there (between sports). The sport itself affects learning. Football is a very high intensity environment. You have a lot of coaches. You have a lot of athletes. Swimming is sorta cerebral. You're in there with a lot of analysis looking at strokes, looking at mechanics. Their personalities and the approaches you take are going to be different. They're both competitive, but your

approaches will be different: how you speak to them, what you tell them, how you break things down for them. Football players don't talk about mechanics a lot. Swimmers are all mechanics. Track people are mechanics. It really depends on where you're at. Baseball is a little in between. I don't think anything has been analyzed more than baseball. Who has more statistics than baseball? That affects the clinical approach you gotta have with these people. Part of what you have to do to relate to these people to get them to do what you want them to do because an awful lot of what we do deals with rehab of orthopedic injuries. From the educational standpoint, the student has to gear into that too, and understand that it's a little bit different between sports. Swimming and track you can probably ask me questions and get pretty good explanations. At football, I may tell you to wait until later because I can't deal with this now because it's too intense of an environment. So that's going to delay things a little bit and make it a little bit less efficient, because they're not going to get the feedback right at that moment (Respondent 6).

Respondent 2 commented on the value of experiencing different clinical settings stating:

> Different settings are going to offer different opportunities. If they're at a clinic rotation, then they may get exposed primarily by doing. They're shown how to set up ultrasound and they're following through. If they're in the ER (emergency room), they're primarily observing. . . Each rotation presents different things. You're going to have specific injuries that are more common in certain sports. Certain things happen in hockey that doesn't ever happen at football, and vice-

versa. Football for example, the sheer number and the contact/collision nature of the sport exposes the student to so much more. I think it offers more learning opportunities because there's so much going on all the time (Respondent 2).

Not only is it important for athletic training students to gain clinical experiences with different athletic teams, it is also important for them to gain clinical experiences with athletics at different levels of competition.

I think it (the experiences) varies. Unfortunately I think it varies probably a lot. . . With our athletic training facilities here, I think that's why it's important to have upper body or lower body or collision sports. I think you get a lot different perspective when you see a gymnast. They do a trick and they fall, and they get right back up, versus a tennis player who gets hurt in a minor way and is out. I think you need to see a variety of things and the personality of the athletes in the sports. . . The level of the school is different as well between Division I, II, III or NAIA. A different level school, the urgency is different and the healthcare and the doctor's actions are different in the healthcare (delivery). The experiences are that much more different. Maybe better, maybe worse. Maybe they get more attention at a smaller school. Maybe worse in that you don't get to work as closely with the doctor or see 10 MRI's in two weeks (Respondent 3).

Respondent 7 also commented on the importance of having athletic training students experience different divisions and schools of different sizes.

Respondent 5 compared experiences at football versus the sport he covers, basketball, where he tries to be pro-active to limit the number of injuries he sees by incorporating prehabilitation with his players.

> Football injuries occur almost everyday, and basketball, no. So it's really difficult to talk about injury assessment or rehab because the athletic training student doesn't see it at basketball. But for football, they can see step one through step five. Even little things, removing shoulder pads, removing shoes and socks, everytime they get taped. . . The athletic training students say basketball is really boring because the athletes don't get hurt. I explain to the athletic training student, once the athlete gets hurt, there is nothing we can do. We can do rehab, but the best thing is they don't get hurt. I spend more time before injury rehab in prehab or prevention with balance exercises and mental mind set. . . When the athletic training student goes to different sports, the athletic training student needs to be prepared for different views (Respondent 5).

In the clinical setting, fast, quick, correct decisions need to be made, and athletic training students aren't getting this "critical decision making time." ACI/CIs can work with athletic training students in a controlled environment, but the "real world" of athletic training is in an uncontrolled environment.

Summary of Research Question 2

Research question 2 examined the educational goals and feelings that "excellent" clinical instructors had towards athletic training education. Before these goals and thoughts could be examined, the activities that shaped the respondents' educational philosophies were briefly outlined. Comments were discussed pertaining to the respondents' best teachers in college and their thoughts on learning.

The educational goals of the excellent clinical instructors were based on one of four different themes. The respondents wanted athletic training students to be able to pass the

BOC examination, acquire a variety of experiences, develop and become proficient with the skills that are needed to become a productive professional, and to value learning.

The beliefs that the respondents had about athletic training education also fell into four different themes: what is taught in the classroom must be reinforced by bridging the gap between theory and practice; proactive students who take an active role in their education have a more meaningful learning experience; athletic training students currently are not getting enough clinical experiences; and athletic training students must experience a variety of clinical settings.

The next section addresses the third and final research question regarding the characteristics of the socialization processes that the "excellent" clinical instructors experienced.

Research Question 3

The third research question addressed the characteristics of the socialization processes that these "excellent" clinical instructors were exposed to on their way to becoming "excellent". This section re-introduces the concept of professional socialization and explores the socialization processes that these "excellent" clinical instructors underwent in their undergraduate and graduate experiences and once they entered the profession as a professional. I discuss the anticipatory socialization that molded and shaped the respondents and specific examples of anticipatory socialization events. The academic coursework these individuals were exposed to is outlined, followed by a description of the professors the respondents encountered as the profession evolved from a male-dominated field to one where females also are in the classroom and athletic training room. Positive organizational socialization experiences are described, followed by

negative organizational socialization experiences the respondents encountered in the job setting.

Research question 3 also explores the experiences the respondents wish they had as they developed into athletic training professionals. The experiences desired of the respondents included more formal academic coursework, more training and exposure to educational methodologies, and a better understanding of the new competencies that today's athletic training students need to demonstrate.

Professional Socialization

Sabari (1985) divided the preparation of becoming a professional into two segments: the formal academic preparation and a period of clinical training. The culmination of the academic and clinical training, in which the individual learns the professional skills, values, attitudes and behavior norms is termed professional socialization (Pitney, Iisley & Rintala, 2002, p. 63). Professional socialization includes both anticipatory and organizational socialization. "Anticipatory socialization includes aspects of socialization before entering a work setting or organization, whereas organizational socialization entails processes that occur after entering the work setting or organization" (Pitney, Iisley & Rintala, 2002, p. 63).

Socialization processes are key components in an individual's transition from student to a contributing professional. The rest of this section explores the anticipatory and organization socialization processes that have shaped and molded the respondents.

Anticipatory Socialization

Anticipatory socialization includes experiences and knowledge acquisitions that occur during a student's preparation to become a professional. Pitney, Iisley & Rintala (2002)

described anticipatory socialization as those aspects of socialization that one encounters prior to entering the work setting. An individual learns to become a member of a particular group of which he/she does not yet belong. It is during this preparation phase that athletic training students are taught how to be athletic trainers, not only with technical skills, but in their demeanor, communication, and thoughts. While many of the psychomotor skills required of an athletic trainer are related to the CAATE Standards, other skills are not addressed by the accrediting agency at all. Omitted lessons from the curriculum include how to set up for games and practices, what to do on road trips, and how to relieve stress.

My discussion of the anticipatory socialization processes of the respondents is divided into the following categories: a description of the overall undergraduate socialization experience; specific examples that the respondents believe have shaped them in one way or another; a description of the formal coursework the respondents undertook; and finally a description of the teachers that taught the respondents and the introduction of females into athletic training education.

Undergraduate Anticipatory Socialization. As stated several times in this dissertation, six of the seven participants initially attended an educational institution that sponsored an internship program. One of the programs was an internship program until receiving Commission on Accreditation of Allied Health Education Programs (CAAHEP) accreditation while the participant was in his second year. The seventh participant attended a NATA accredited institution for his undergraduate degree then, attended a graduate program that sponsored an undergraduate internship program. While this program was NATA accredited, Respondent 7 reported that athletic training students

performed athletic training duties without direct supervision. The undergraduate internship programs had limited formal academic work, but the clinical component required many hours, up to 1,800 observation hours at one time. Respondent 7 did not attend an internship program, but accrued "mega hours" in the range of 2,500 to 3,000 hours.

Many institutions simply did not have the appropriate athletic training staff to meet their medical responsibilities. Respondents 3, 4 and 6 reported that when they were undergraduate students, their undergraduate institution employed two certified athletic trainers. This forced their athletic departments and athletic training staff to rely on athletic training students to cover athletic practices or travel to athletic events unsupervised. When these "excellent" clinical instructors were undergraduate students, they were assigned to an athletic team and were responsible for all aspects of that team's medical coverage. They reported early in the fall, often before the start of school for pre-season football, volleyball, cross country and tennis practices. They stayed with their assigned team over breaks and were required to stay past the end of school if their assigned team continued playing after graduation.

The respondents had amble opportunities as undergraduate students to get their hands "dirty" in the field of athletic training and gain "hands-on" experiences.

> Essentially we were responsible for just about everything, pre-practice, pre-game preparation, treatments of student athletes, rehab, injury evaluation. Then we would consult with one of the Certifieds (Athletic Trainers) on board to determine whether or not someone needed to go to the hospital or to see one of the

physicians. . . Essentially we were working within the role of what a certified athletic trainer would work in (Respondent 1).

Respondent 6 continued by stating:

Students were assigned to a sport. . . Athletic training students made a lot of their own decisions. There were times when the staff ATC was on the road, that we as students ran the facility (Respondent 6).

The athletic training students in these internship programs essentially functioned as substitute staff, in an environment that was less formal than it is today.

The level of sophistication was much lower. It was a lot of emergency care. If we had somebody doing something for rehab, we knew what they were supposed to do. I mean it was ice and heat and stretching and taping. . . We were essentially taping machines for football (Respondent 6).

The availability of vast experiences for these "excellent" clinical instructors when they were students played an important role in their development as health care professionals and clinical instructors. They practiced and perfected their craft, and often made decisions on their own without supervision. Medical students and allied health students, in current educational programs lack experience and critical thinking skills, a situation defined as "hyposkillia" or a "deficiency of clinical skills" (Fred, 2005, p. 255).

By definition, those afflicted are ill-equipped to render good patient care. Yet, residency programs across the country are graduating a growing number of these "hyposkilliacs," physicians who cannot take an adequate medical history, cannot perform a reliable physical examination, cannot critically assess the information they gather, cannot create a sound management plan, have little reasoning power,

and communicate poorly. Moreover, they rarely spend enough time to know their patients "through and through." And because they are quick to treat everybody, they learn nothing about the natural history of disease (Fred, 2005, p. 255).

These sentiments are reflected by certified athletic trainer Dr. Kenneth Knight at Brigham Young University in Provo, Utah:

> Newly graduated athletic trainers suffer from a similar malady. Recent graduates possess great knowledge and skills, but suffer from an inability to apply their knowledge and skills when dealing with actual patients (Knight, 2008, p. 79).

The roots for "hyposkillia" haven't been identified yet, but Dr. Fred believes that "hyposkillia" may stem from a decrease in required clinical experiences and the use of technology to diagnose and treat patients rather than clinical skills and patient interaction.

What Experiences Have Really Affected You. The anticipatory socialization process is initiated when athletic training students first step into the athletic training room. Athletic training students have opportunities to learn how athletic trainers communicate, deal with injuries or handle pressure situations. This is depicted by Respondent 6 as he described his undergraduate experience:

> One of the ATCs was also a physical therapist. Both were very knowledgeable and big on professionalism. Athletic trainers at that time wore white pants. It was drilled into us that this was a profession and we were going to be professionals. We took a lot of pride in ourselves. There was a lot of pride in being here, because if you didn't tow the line, you'd be shown the door pretty quick (Respondent 6).

Respondent 2 recalled the first time he felt his first positive valgus test for a medial collateral ligament tear.

> I know who it was on. I know what training room I was in. I know everything that happened. When you can see what's wrong, make that assessment, get someone back to activity, I think those are great positive experiences (Respondent 2).

Respondent 3 realized that not every athletic training student learned the skills he acquired when he was an undergraduate student. Respondent 3 was exposed to and became fairly proficient with manual therapy skills (joint mobilizations, proprioceptive neuromuscular facilitation, muscle energy and manual resistance exercises) during his undergraduate education. Athletic training students from other institutions were not trained in these skills.

> I didn't know that a lot of the skills I was being taught as an undergrad were not being taught in other athletic training programs. . . I feel very fortunate to have come out of my undergraduate program with a lot of knowledge and skills that a lot of people didn't have (manual therapy skills). . . The thing that affected me the most was that I had different skill sets than others from other programs (Respondent 3).

Respondents 4 and 5 talked about the mistakes they made during their anticipatory socialization process. Respondent 4 was in the high school setting for his graduate work. This setting helped him to mature as an athletic trainer because he was the only person making decisions. "If I screwed up, it was my fault and the kid could maybe get hurt because of me" (Respondent 4). While Respondent 4's scenario was a "what if" scenario,

Respondent 5 remembered one instance in particular in which he made a mistake when he gave an athlete medication.

> One instance was with over-the-counter medications where an athlete had a concussion and asked if they could have some ibuprofen. I didn't know they had a concussion. I didn't check with anybody and gave the kid some ibuprofen. I got yelled at big time for that. I learned to communicate with others and the athlete, and to get a previous history. I also know when to use and not use medications. . . I had an internship at (name withheld) University. I knew how I wanted to do things and then would check with my supervisor to double check and to make sure. As a student or intern always ask, because my mistake will be their mistake. So always ask (Respondent 5).

Respondent 7 remembered the first road trip he took as an undergraduate. In graduate school he recalled the sport of gymnastics really scaring him because of the potential for danger and major injury, and with cyclists in the velodrome. Cycling really shaped how Respondent 7 reacts to injury because, in the velodrome, if one athlete goes down, all 15 will go down. He learned to prepare for disaster and triage.

Some anticipatory socialization processes that the respondents experienced were described in this section. These socialization processes included attending an internship program, acquiring many hours and clinical experiences. In addition, specific experiences were mentioned that played a significant role in the development of these individuals as professionals.

Formal Coursework. What about the academic preparation of these individuals? Were they thrown into the athletic setting and asked to perform, or were they given the

academic tools they needed to function as medical professionals? While the individuals interviewed had very positive comments on the experiences they acquired, most expressed a desire for better academic preparation heading into the profession. They sensed a lack of academic preparation may be influencing their actions as clinical instructors. Respondent 2 recalled taking core classes such as anatomy and physiology, chemistry and kinesiology, and basic and advanced athletic training classes. He received no formal training in modalities, therapeutic exercise or administration. Respondent 3 also recalled taking just two athletic training courses. Respondent 1 outlined his athletic training curriculum.

> We had a few formal classes that we actually went through. I think we had to pickup eight or nine additional credits. It was just a small blurb in the bulletin if you wanted to do an athletic training internship. A lot of your courses were already covered through Health and Fitness Management or PE or Health Education. Your physiology, chemistry, anatomy and a core of athletic training courses which was a rehab course, a modalities course, administration course, prevention and care. I'm hard-pressed to come up with another one (Respondent 1).

Most all the respondents expressed a desire to have more formal coursework in the field of athletic training and a course or two in educational methodologies. This point will be expanded later in this paper. Who provided the instruction, limited though it was, for our interviewees as undergraduate students? The next section will explore this topic.

Best Teacher In College. "Who was your best teacher in college?" There were a variety of responses as to the topics that these individuals taught. Most subjects covered

the sciences, and few were actually in the athletic training discipline. The courses included: kinesiology, biomechanics, nutrition, human anatomy and physiology, and rehabilitation. When asked what made these teachers so good, the responses included the ability to be open with the students and the expectation that students who put forth effort would get something out of the course. These teachers made things practical and had the experience, expertise and competence to relate their personal experiences to the materials being covered in class. This helped "humanize" the material, as stated by Respondent 2.

Other respondents stated that great teachers had a "passion" for teaching, and were very logical and detail-oriented in their teachings. Respondent 3 recalled his best teacher in college in this way:

> Bob was quiet, but he went into a lot of detail. He would be one of those that if you asked him what time it was, he'd tell you how to build a watch. He'd go into a lot of detail (Respondent 3).

Respondents noted that their best teachers clearly communicated expectations as to what needed to be done in order to succeed in the course. Respondent 6 felt that expectations are not as clearly communicated today and a better job needs to be done, especially because more of today's athletic training students have to work in order to pay for their schooling and have less time to focus on school.

> Let's have performance objectives, learning objectives written down, then general expectations; participation, grading, examination structure in an organized fashion so students know what their getting into. Seventy-five percent of students have jobs at this institution. You can't be changing things at the last minute on them (Respondent 6).

Another characteristic of great teachers was the successful integration of skills from the classroom to athletic training room. These instructors demanded perfection and required students to envision the entire picture of the lesson and how it would impact their role as athletic trainers. Respondent 7 recalled his best teacher opened the respondent's mind to treating an ankle injury. "It's more than just treating an ankle, and throwing an ice bag on it, and treating with modalities."

Respondent 6 used the teaching techniques of his best teacher in college. In his dealings with athletic training students, Respondent 6's current philosophy is that a logical progression in elementary concepts needs to be presented, built upon, developed into more advanced concepts, and integrated in practical use. He described a lesson:

> In my modalities class, you present some basic physiological principles, then basic scientific principles and then you're going to start bringing in more advanced principles of both and advancing those on how they interact with each other and what they do. So after the end of the course they've got that element in there and then you integrate that with clinical practice and clinical decision making (Respondent 6).

Respondent 4 incorporated problem-based learning into his teachings with athletic training students, who were given a scenario or case study. The athletic training students are given limited information of the situation and have to identify what things they need to know in order to define the problem, what strategies they can employ to correct the problem and what they may need to do in the future to prevent the problem. This is done in a group setting first, so ideas can be discussed and evaluated. Then the process is done

individually. Athletic training students piece together the full picture, taking an abstract problem with many possible solutions and coming to an educated justifiable resolution.

Male Teachers and the Advent of Female Teachers: A Time Of Transition. While the focus of this paper is not the type of instructor a student had, it must be noted that the elder interviewees were socialized into the athletic training profession when the field was male-dominated, and the addition of female ATCs and female athletes interacting within the athletic training room changed the way things were done. Respondent 6 described the era prior to Title IX:

> I had some great instructors. All were male who went to school on the G.I. Bill after World War II or Korea, and then went out and taught and got an advanced degree. When they were teaching at the high school or elementary level, [they] eventually worked their way into a college teaching job. They didn't come out as collegiate instructors. They didn't just go to school. They really had the practical experience. Today people are getting a lot of theory from a lot of theorists, but they haven't sat in there and done the job (Respondent 6).

The three elder respondents were undergraduates in the 1970s and '80s. All had male teachers predominantly in the classroom, and their clinical instructors were 100 percent male. These individuals experienced small athletic training staffs usually with two ATCs. The athletic training room when Respondent 7 was an undergraduate became co-educational his junior year. Respondent 6 described the influx of women into the field and the addition of the first female ATC at his undergraduate institution:

> There were two staff ATCs when I was an undergraduate, both were male. The women's athletics were out of the physical education department. In January of

> 1975 with Title IX, the female athletes left the physical education department and merged with athletics. We were the first school to hire a female ATC in the conference in 1975. Sports were growing, females were coming into the profession. This was a growth period for the profession (Respondent 6).

The field of athletic training and athletic training education changed with the addition of females into the male-dominated profession during the 1980s and '90s. In addition to outlining the types of teachers these individuals had, this section also identified the coursework these individuals took, which was minimal, and the internship program where all accrued many hours and experiences.

While the type of institution, the formal or lack of formal coursework, and the individuals with whom the interviewees were socialized set the foundation for their socialization processes, other experiences played a role in the professional socialization of these individuals. Specific examples of the organizational socialization processes in which these individuals participated will be described.

Organizational Socialization

Professional socialization is divided into two components, one being anticipatory socialization which was presented in the previous section. The second component of professional socialization is termed organizational socialization. Organizational socialization includes the processes that occur after the individual enters the work setting (Pitney, Iisley & Rintala, 2002). This section describes the organizational socialization experiences as reported by the respondents.

Organizational Socialization Experiences.

> I had a student-athlete with some significant mental illness and had to react to that on a road trip, and those are things I don't think we necessarily are educated in that well. And at the time you have to make a decision and you hope you make the right one. You realize this decision that I make may affect this kid for the rest of his life, by whatever we are going to do today and then having to call the parents and tell them what happened. That was a rough 36 hour period. That really isn't related to anything on-the-field. But again, those are all things that happen with the job (Respondent 1).

The above experience described by Respondent 1 would not typically involve the athletic training student, as athletic training students aren't mature enough to deal with some situations (Respondent 2).

Respondent 2 recalled experiences drawn from his experiences with The United States Olympic and Para-Olympic athletes and their extraordinary human drive and desire to succeed. Respondent 3 also commented on his international experiences while traveling with U. S. national teams.

> In Yugoslavia we had one bucket of ice for the whole U.S. delegation, and I don't know if we had any modalities to be honest about it. So I was glad that I was able to do hands-on skills. What are you going to do? You gotta do something. I could do joint mobs and PNF (proprioceptive neuromuscular facilitation), muscle energy or whatever, and I could do some of that stuff. That influenced my career a lot, being able to do those skills (Respondent 3).

In the above example, it was the skills and knowledge that Respondent 3 acquired during the anticipatory process that were then used in the development of organizational socialization.

Respondents 2 and 7 revealed that the athletic trainer's primary purpose was to provide medical care, but to see the athletes and teams practice day in and day out and succeed also provides them with satisfaction. "It's never been about the game, but working in the athletic training field. The victories and championships don't really matter" (Respondent 7).

> I've been part of national championship basketball teams, which is an incredible experience. You go through all the pre-season, all the season, all the daily practices and the injuries. There are ups and downs in this field and some days it's just overwhelming and there seems like there's more downs than ups. To be a part of the success, not that winning is the whole reason we do this obviously, to be a part of a National Championship and see the success and see that this is what they've been striving for and you're a part of it. I think it's exciting and it's rewarding and it's fun to be a part of that (Respondent 2).

A tragic event that requires the implementation of an emergency action plan can allow an individual to come away with positive thoughts and feelings. This was the case for Respondent 4 when the emergency action plan was set to action at his institution during a summer youth camp.

> One camper caught a forearm to the head and almost died. We had the right steps in place and did the right things. It all fell together right because we did it right in the past and knew the emergency action plan. I had a flood of emotions

> afterwards. You do what you need to do at the time and 20 minutes later the camper was in surgery. Afterward you really think about it (Respondent 4).

Every athletic trainer hopes that they never have to initiate the steps of their emergency action plan. But if they do, it is nice to know that everything ran smoothly.

Respondents 6 and 7 developed their own athletic training programs at their first jobs after graduation. Respondent 6 was employed by a small college and Respondent 7 had a job at a high school. Both established programs using their own athletic training students and educated these budding healthcare professionals.

> I literally made an athletic training room. That is, I laid block and mixed mortar. I got light fixtures and electrical work from some guys in the physical plant for a couple cases of beer. That was really rewarding. . . The thing that influenced me more than anything was having my own students where I was in charge. I had the responsibility to help these people learn my profession and try to transmit my enthusiasm to them. That was both a challenge and rewarding at the same time (Respondent 6).

Respondents described some of the socialization experiences they encountered once they secured a position as an athletic trainer. Since they were employed, these experiences can be described as organizational. These situations provided the respondents with additional experiences in which to practice their craft. These situations placed the respondents in unique situations where they had to make decisions and to utilize the skills they have acquired.

Negative Organizational Experiences. With the joys and tribulations that athletic training professionals may encounter, negative experiences also shaped these individuals.

The amount of time athletic trainers spend at work and the variety of individuals the athletic trainer must answer to, lead to burnout.

> Negative experiences are the stressors in this field, and the fact that often times you feel like you're in a no-win situation because you're trying to please coaches, athletes and often times parents. And you've got students and you've got the athletes themselves, you've got athletic training students. You've got all these populations that want something from you. Not all of these people have realistic goals or expectations, and you're trying to please them and have to deal with the repercussions when you can't. . . It's frustrating. It's all the same old stuff. I mean the hours, all this stuff, it's tiring. It's a job that takes a lot out of you. There's a lot of emotion, highs and lows everyday. I try to get up every morning and be ready for anything. Just so you don't let it drive you crazy (Respondent 2).

Another negative topic that affected the organizational socialization of these individuals involves program administration. Respondent 1 fears writing reference letters for athletic training students who may perform poorly. What are the repercussions for the individual who wrote the reference letter, especially if the certified athletic trainer is interested in a future position at that institution?

> I'm very hesitant to write a letter of recommendation and put my name with a student unless I know they're not going to embarrass me and they're going to do a good job wherever they're going, be it for a job, a GA position. We had a student, a GA position, starting fall of '08 and again, you know, write the letters, make phone calls, not really go out on a limb, but you know, paint a good picture for this guy, cause he did a good job in the two years that he worked with me. And

get a phone call two weeks ago, he decided not to take the GA position. I'm real hesitant to put my name with these kids right now. Because I don't know, somewhere down the road, let's say I want to go to that institution for a job and all of a sudden, well you signed for Joe Smith and then he ended up bailing on us, so you know what, we don't want you either. And that's a concern of mine. And that's got me thinking bad things (Respondent 1).

Another concern is when individuals responsible for the accreditation of the ATEP do not see the process through to completion, leaving others the responsibility to pick up the slack, also contributes to burnout and a negative experience.

Finally, for these "excellent" clinical instructors who accrued so many hours and experiences as undergraduate students, there is frustration with the current educational model limiting athletic training students' exposure to clinical experiences. The respondents were trained one way, and today's athletic training students are educated a different way as described by Respondent 6.

> The frustration that I think a lot of athletic trainers feel with the current educational model is there is not enough hands-on. It doesn't seem like the students are getting, they're certainly not getting the experience I had. They just don't get enough opportunity to practice the profession (Respondent 6).

Summary

This section described professional socialization experiences of the "excellent" clinical instructors. Professional socialization was divided into two components: anticipatory and organizational. Anticipatory socialization consists of skills, knowledges and attributes that one acquires prior to entering the workforce. Organizational

socialization includes attributes that one develops after entering the workforce. Examples of the anticipatory and organizational socialization experiences that shaped how the respondents think and act were provided. The next section examines the experiences that the respondents wish they had had.

Desired Experiences

The individuals interviewed for this research project mentioned the importance of gaining and having experiences related to educational methodologies and formal coursework. This section details the experiences they wished they had during their preparation as athletic training professionals. The areas of deficiency fall into one of two broad categories: a desire to have more formal training and the sense that many of the individuals interviewed do not have a thorough grasp of the current competencies required of CAATE institutions. The formal training involves additional coursework in courses such as modalities, rehabilitation, administration, nutrition and psychology and the inclusion of educational methodologies in their coursework. Many of the CAATE competencies are new to the individuals interviewed, and they may be unsure of how to perform these tasks properly, or evaluate athletic training students as they perform them. This section focuses on these implied deficiencies, starting with a desire to have more formal training.

A Desire for More Formal Academic Training

Five of the seven interviewees attended an undergraduate institution that sponsored internships that prepared them to sit for the NATA Board of Certification examination. One respondent started his career in an internship program, but the institution became Commission on Accreditation of Allied Health Education Programs (CAAHEP)

accredited during his undergraduate tenure. The seventh respondent attended an NATA accredited program.

While all seven individuals reported a hands-on, experiential learning environment where they acquired "mega hours" (Respondent 7), the academic course offerings in athletic training education were limited in scope and breadth. Respondent 3 took only two athletic training courses as an undergraduate: a basic and advanced athletic training course.

> We took the core classes, anatomy, chemistry, kinesiology and then we had basic and advanced athletic training. At that point, we didn't have any modalities or rehab, or administrative classes (Respondent 2).

This was reinforced by Respondent 1, who stated:

> The educational component was not much at that time. We had few formal classes that we actually went through. I think we had to pick up eight or nine additional credits. It's just a small blurb in the bulletin if you wanted to do an athletic training internship. A lot of your courses were already covered through Health and Fitness Management or PE or Health Ed. Your physiology, chemistry, anatomy and a core of athletic training courses which was a rehab course, a modalities course, administration course, prevention and care. I'm hard-pressed to come up with another one (Respondent 1).

The lack of academic courses could be due to the fact that the preparation of athletic training students, according to Respondent 6, was a lot less formal than it is now. Everything then was learned in the athletic training room, hands-on. Athletic training students learned how to tape. They were "taping machines" (Respondent 6).

> The level of sophistication was much lower. It was a lot of emergency care. If we had somebody doing something for rehab, we knew what they were supposed to do. I mean it was ice and heat and stretching and taping. The level of sophistication was still evolving at that point (Respondent 6).

Respondent 2 summed up his preparatory deficiencies by stating:

> I would say more actual classroom learning. I think if I had a class in modalities, that would have been beneficial. Modalities for sure. An administrative class would have been beneficial. More in-depth rehab classes would have been beneficial. . . I would have liked it if we would have had more emphasis in nutrition and more emphasis on psychology, because those are two areas that are a huge part of what we do on a daily basis (Respondent 2).

The topic of more training in educational methodologies is discussed next.

A Desire for Educational Methodologies

> I've always had a role in education. There's never been a time when I have not. There has never been a semester when I haven't been an instructor at some level. . . I was prepared as a teacher. . . I understood when I came into the profession I was going to be teaching the profession. That was part of the expectation when you entered the profession (eldest and most senior of the respondents, Respondent 6).

The above statement introduces this section because of the message it portrays. Respondents 6 and 7, through their academic careers, have become certified as teachers and have been trained as teachers. Respondent 6 was certified to teach secondary physical education, psychology and sociology. Respondent 7 was certified as a K-12 special

education teacher and has since gone on to receive his Ph.D in kinesiology and still practices as a clinician. He is not a full-time faculty member. They have been joined by Respondent 3 who also earned his Ph.D. in kinesiology and still practices as a full-time clinician, teaching one academic course a year. Respondent 3 did not acquire teaching certification through his master's degree, but received some pedagogy training while doing Ph.D. work.

The other respondents expressed a desire to have more training in educational methodologies and strategies, and felt that the additional skills would help them guide athletic training students under their supervision (Respondents 1, 3 & 4).

> When we talked about the education, formal training in education, I've got none. My bachelor's degree is basically a combination of Health Ed and PE. There's very little as far as the theory of education and how to go out and teach. I think that's one thing that if I would have had that, I could do a better job with our students (Respondent 1).

> Maybe more experience with lesson plans early on or how to time so how do you know it's going to go an hour or whatever, this topic, how to get it in the timeframe I need to get it in to, the content. I think that's something you learn over time, is how you've got twenty minutes, you know you've got a lesson plan that's going to continue on in the next class or not or do you really want an hour and twenty minutes. And some stuff you can continue that's fine. But some stuff you want done that day. You really don't want to run over that day, it's not continuous, it make it disconnected more I think (Respondent 3).

While many of the respondents admit wanting more training in educational theories and methodologies, Respondent 5 had no desire to be an educator and wants only to provide healthcare services to the elite athlete. His sentiments are summed in the following statement:

> I don't want to be the educator. But I work at a college and people look at me as an educator. I am here because I want to take care of the student-athlete. I don't have any wish for the teaching aspect at all (Respondent 5).

Respondent 5 ironically had the highest rating from his program director for his institution and the third highest rating of the seven interviewees from the program directors overall.

This section examined the experiences that these "excellent" clinical instructors wish they had had in their academic preparation. These deficiencies focused on a desire to have more formal academic training pertaining to the field of athletic training with additional courses in modalities, rehabilitation and administration, with a second focus on some type of training in educational methodologies and theories. The next section focuses on the new competencies and skills that are continually being introduced to ATEPs that are unfamiliar to the clinical instructors evaluating them.

New Competencies Abound

Strohschein, Hagler, & May (2002) expressed a concern that students and new practitioners often perceive an inconsistency between theory and practice. Strohschein, Hagler & May (2002) cited an example of a realistic dilemma: "As education programs in the United States and Canada move toward graduate degree entry level, there may be some apprehension on the part of clinical educators with an undergraduate degree who

are expected to provide supervision for graduate students" (p. 4). This phenomena is currently presenting itself in the area of athletic training education where new graduates are functioning as clinical instructors who are deficient in clinical skills and well-established clinicians are expected to determine proficiency of skills and competencies that may be unfamiliar to them. The interviewees felt that they did not grasp the new competencies that have been added to athletic training education since they graduated. An example being the concept of joint mobilizations and the use of the convex-concave rule as related to the use of manual therapy and mobilizations (Athletic Training Educational Competencies 4th Edition, 2006, p. 30). And since these individuals work in the clinical setting and not the academic, they receive very little feedback on what the new competencies are and how to properly perform them. This section deals with the clinical instructors' frustration with evaluating clinical proficiencies about which they may know nothing.

Some of this frustration stems from the fact that the respondents do not know when new skills and theories are introduced in the athletic training education curriculum. "Kids have a better knowledge base and I have to stay current," stated Respondent 7. Students are assigned to clinical instructors and it's "here you go, here is a student, teach them." It is left up to the clinical instructor to find out, can this kid tape, can this kid do an evaluation or can't they. This is illustrated by Respondent 3:

> I don't know for sure what they've been taught or not taught, or what they don't know. I don't know where to begin. Because sometimes you just don't know where to begin, because you have so much knowledge that they don't have yet (Respondent 3).

Respondent 3's statement is further supported by Respondent 2:

> There are classes that they take that I haven't taken, and it's hard to necessarily do it because you don't know what they (the faculty) are teaching. Ideally, if we could sit in on every class the students take and know what they're being taught, that would be beneficial. But at the same time, that's not necessarily realistic for us to sit in on all those classes at the same time as well. . . I think sometimes having a better understanding of what exactly they're being taught in the classroom setting would probably benefit us (Respondent 2).

Not only are the clinical instructors frustrated that they are not aware of what is being taught in the classroom, they are frustrated with the clinical competencies they are asked to evaluate. Some of these competencies the clinical instructor has never seen or heard of. Nevertheless, they must determine if an athletic training student is proficient. Instructors also question the practicality of some of the special tests and skills that the athletic training students are required to perform. A proficiency may state an athletic training student has to perform a knee evaluation and check all boney landmarks, all soft tissue palpations, all manual muscle tests, all neurological checks and all special tests. In reality, many of those procedures will not be done on 90 percent of knee evaluations. The student has to learn the process. The clinical instructors want them to learn "real world" applications. If an athlete gets hurt in a game, a complete evaluation will not be given to that athlete on the field. The injury site will be evaluated and an on-the-field diagnosis will be made with five to six special tests, not the 40 or so the educators are saying are necessary. This point is illustrated by Respondent 1:

> My knowledge in what I actually learned as far as athletic training goes was based on five or six courses through an internship program. We've got students that come to us with proficiencies, especially when we start getting into some of these special tests, I've got no idea. I've never seen them before. And that gets frustrating. Then we're supposed to check these kids off on things, and I have no idea what they are. Or if I have to sit down and look at their book before I can go through it with them to determine what are we actually looking at here? It goes back to, you may learn 40 different special tests for the knee compared to the seven that I do on a regular basis. And if you do these seven, you're probably going to be okay. So I think that is the integration between what they're taught in the classroom and then the real world. It's half-time at a football game, I don't have time to do a whole assessment here of the knee. I need to figure out whether or not this kid's still got an MCL, ACL and their meniscus intact. That is all I need to do. I don't need to do all these other things (Respondent 1).

A majority of these "excellent" clinical instructors received on-the-job training through internship programs and athletic training education is continually evolving, leaving many clinical instructors feeling frustrated due to the addition of new athletic training competencies. Either these clinical instructors were not taught the material when they were athletic training students or they weren't informed of new competencies when they were implemented. The combination of these issues with their perception of what should happen in the "real world" when an athlete gets injured, as opposed to the "academic world," has left many clinical instructors disheartened with athletic training education.

Research Question 3 Summary

The third research question focused on the socialization processes that these "excellent" clinical instructors experienced to become "excellent". The aspects of professional socialization were described, and the components of anticipatory and organizational socialization detailed. Anticipatory socialization experiences, those experiences prior to entering the workforce, that were common to all the interviewees included many hands-on activities and numerous clinical time in the athletic training room. While most interviewees attended an internship program during their undergraduate preparation, they worked with small athletic training staffs that were mostly male and had little academic coursework as it pertained to the athletic training profession.

Organizational socialization experiences, or those socialization experiences one encounters after entering the workforce, were also described, followed by an outline of experiences these individuals wish they had had. The interviewees regret not having more coursework in the field of athletic training and educational methodologies, and they expressed a sense of frustration in not being up-to-date on current competencies required of today's athletic training students.

Chapter 4 Summary

Three questions framed the structure of this research:

1) What are the characteristics of ATCs acting as clinical instructors in the Commission on Accreditation of Athletic Training Education Programs (CAATE) accredited institutions?

2) What were the educational goals and beliefs towards athletic training education associated with excellent clinical instructors in the CAATE accredited athletic training education programs?

3) What were the characteristics of the socialization processes they experienced to become excellent clinical instructors?

Regarding research question 1, five themes emerged. First, the excellent clinical instructors interviewed overwhelmingly attended an internship program for their undergraduate education. Attending internship programs for their undergraduate education thrust the interviewees into practicing athletic training skills since certified athletic training staffs were small, the interviewees were able to accumulate many clinical experiences and practice hands-on skills. Second, the respondents each earned advanced degrees which assisted them in clinical decision making. They also taught undergraduates, which helped them become familiar with accreditation standards and to distinguish between sports medicine and athletic training. Third, the respondents had job experience prior to their present position. Fourth, the respondents classified themselves as having good clinical skills, and fifth, respondents reported that their primary responsibility was to the department of athletics.

Research question 2 pertained to respondents' feelings toward athletic training education. Respondents were asked to reflect on their best teacher in college and the meaning of learning. The educational goals that respondents had for athletic training students included: passing the certification examination, acquiring clinical experiences, preparing for the workforce and learning to value learning. The respondents' beliefs and assumptions towards athletic training education included: training should bridge the

"gap" between classroom and clinical; pro-active athletic training students receive a better education and experience; athletic training students need more clinical experiences; and athletic training students must see different aspects of the athletic training profession.

Research question 3 examined the anticipatory and organizational socialization experiences of the respondents and concluded with a discussion of the experiences they wished they had had. Their anticipatory socialization experiences included their undergraduate education, their coursework, and the influence of their professors. Organizational socialization experiences included admitting student-athletes for psychological evaluation, working national events (Olympic and Para-Olympic) with limited resources, activation of an emergency action plan, being part of championship teams and development of an athletic training room from scratch. Negative experiences focused on how athletic trainers cannot please everyone as coaches, players, administrators and parents all want something different from the athletic trainer to frustration with the current educational model. Respondents also indicated they would have appreciated more formal coursework, training in educational methodologies, and the opportunity to develop a better grasp of the educational competencies required by the CAATE.

CHAPTER 5

DISCUSSION

Three research questions formed the basis for this research project. These research questions were:

1) What are the characteristics of ATCs acting as clinical instructors in Commission on Accreditation of Athletic Training Education Programs (CAATE) accredited institutions?
2) What were the educational goals and beliefs towards athletic training education associated with excellent clinical instructors in the CAATE accredited athletic training education programs?
3) What were the characteristics of the socialization processes they experienced to become excellent clinical instructors?

Chapter 5 is divided into four sections. The Summary of Findings outlines the research findings. This is followed by a Discussion of Key Points, Implications/Recommendations for Practice, and Future Research Suggestions.

Summary of Findings

The basic findings that emerged from this research concerned the ideas and processes that approved clinical instructors (ACIs) and clinical instructors had pertaining to athletic training education. This summary is divided into three sections pertaining to the three research questions.

Findings for Research Question 1: Characteristics of ATCs Acting as Clinical Instructors

Five themes emerged in the response to Research Question 1: 1) the respondents attended an internship undergraduate program where they acquired vast clinical and

hands-on experiences; 2) the respondents acquired an advanced degree which allowed them to gather additional experiences within the profession; 3) the respondents had job experience prior to their current position; 4) the respondents all consider themselves good clinicians; and 5) the respondents' primary duties are to the athletic departments for which they work and their secondary duties are to the academic departments to which they act as clinical instructors.

Findings for Research Question 2: Goals and Beliefs Regarding Athletic Training Education

Goals in Athletic Training Education

Four goals emerged when the clinical instructors were questioned about their role in athletic training education. The clinical instructors want to: 1) prepare athletic training students to take their Board of Certification Examination; 2) give athletic training students as much practical experience as possible; 3) prepare athletic training students to immediately enter the workforce; and 4) to have athletic training students value learning.

Perceptions Regarding Athletic Training Education

Research Question 2 then explored the perceptions the respondents had towards athletic training education and four main ideas emerged.

The first was that the clinical instructor's purpose is to bridge the gap between theory and practice. The second idea was that athletic training students who are pro-active in their educational pursuits receive a better education than those students who are passive. A third idea was that athletic training students need more clinical experiences. Finally, athletic training students should be exposed to a variety of clinical settings. Each clinical setting, including lower body intensive (i.e., basketball and track), upper body intensive

(i.e., volleyball and tennis), equipment intensive (i.e., football and hockey), and general medical (i.e., physician's offices, physical therapy clinics), offers unique experiences with different clientele.

Findings for Research Question 3: Socialization Processes Experienced by Excellent Clinical Instructors

The clinical instructor participants identified and described their anticipatory and organizational socialization experiences. Additionally, they identified the experiences they desired. These included: a desire for more formal academic training in athletic training related classes; instruction in educational methodologies; and knowledge of new competencies required of athletic training students.

Summary

This section briefly summarized the findings from the three research questions central to this study. The findings highlighted key elements in the development of the "excellent" clinical instructors.

Discussion of Key Points

Two key points emerged from this research project. First, although the participants in this study obtained more hands-on clinical experiences as compared to current athletic training students, neither group was exposed to pedagogical strategies or methods in the didactic portion of their athletic training education. Therefore, clinical instructors of the future may find themselves lacking not only sufficient clinical experiences but also sufficient teaching preparation. They have less clinical practice time than in past years and have little preparation concerning how to effectively implement and deliver athletic training content knowledge to athletic training students in their classrooms. Second,

ACI/CIs feel ill prepared evaluating athletic training students' clinical proficiencies. Their education did not address evaluation techniques nor have they been exposed to many of the current clinical competencies.

The field of athletic training (like other allied health fields, such as physical therapy, occupational therapy and physician's assistants) is feeling the tension between theory and practice in the education of prospective professionals in their fields. How much theory should be balanced with practice to prepare the student to enter the profession is the thin line that needs to be navigated.

In athletic training education and this project in specific, it appears that the clinical instructors think of effective teaching as effective clinical practice. When they reflected upon their interactions with athletic training students, the respondents did not give much thought to what Shulman (1986) calls pedagogical knowledge and pedagogical content knowledge. Pedagogical knowledge pertains to knowledge of basic teaching skills, and pedagogical content knowledge concerns deep knowledge of how to teach effectively within one's particular field. Recently graduated athletic training students who become clinical instructors have had more exposure to subject matter in their courses than their counterparts who graduated fifteen or more years ago, but less clinical experience than their senior counterparts. Furthermore, athletic training education today does not address basic pedagogical issues nor how to teach specific content knowledge. Thus, the preparation of athletic training educators today results in professionals who not only have limited clinical skills but also limited knowledge and skills as teachers.

In summary, athletic trainers used to have much opportunity for clinical practice, but no training on how to *teach* those clinical skills. Current athletic training students and

recently graduated athletic trainers have less clinical experience coupled with no training in educational methods; however they have had more exposure to subject matter in their courses. These individuals are then going into universities to educate athletic training students, although they have limited preparation to do so. This trend is occurring not only in athletic training education, but also in other allied health education. Lack of attention to preparation in clinical practice has been termed "Hyposkillia."

Hyposkillia

"Hyposkillia," a term coined by Herbert Fred M.D. (2005, p. 55), describes the lack of skills that today's medical students have in their dealings with patients. Dr. Fred believes that physicians of today do not take the time to get to know their patients, and their clinical skills wane due to their reliance on technology to diagnosis an illness. Dr. Fred believes that physicians today do not take the time to perform a complete clinical evaluation. While an illness or injury could possibly be diagnosed without specialized testing, a diagnosis is not made until all the technological tests have been completed. Many of the respondents who participated in this research commented on the lack of practical experience possessed by today's athletic training graduates.

This is not a trend isolated to the field of athletic training, but a trend throughout the medical education community. Dr. Fred (2005) described the increasing number of "hyposkilliacs" who are graduating from medical schools:

> Physicians who cannot take an adequate medical history, cannot perform a reliable physical examination, cannot critically assess the information they gather, cannot create a sound management plan, have little reasoning power, and

> communicate poorly. . . They learn to order all kinds of tests and procedures but don't always know when to order or how to interpret them (Fred, 2005).

Dr. Fred's comments are supported by Kenneth Knight PhD, ATC, in his editorial regarding the critical thinking skills of recently-graduated athletic trainers:

> Comments from many athletic trainers over the past few years convince me that newly graduated athletic trainers suffer from a similar malady. Recent graduates possess great knowledge and skills, but suffer from an inability to apply their knowledge and skills when dealing with actual patients (Knight, 2008, p. 79).

Respondents 1, 2, 3, and 6 also commented on the lack of clinical experiences and decision making skills that today's athletic training students receive. This lack of experience reinforces Dr. Fred's and Dr. Knight's theory of "Hyposkillia".

What led to this lack of problem? Why did athletic training students in the past acquire more clinical hours than students of today? Could it be due to the upgrading of the profession? Could the professionalization of medical education be to blame? A bachelor's degree was all that was required to enter the field of physical therapy; that requirement was changed to a master's degree and now the entry point for a clinician in physical therapy is a doctorate of physical therapy. The Doctorate of Physical Therapy is a clinical degree basically requiring a student to acquire a four-year bachelor's degree, and then he or she must apply to physical therapy school. Once in physical therapy school, the student is trained clinically to become a physical therapist. Nursing now requires a four-year degree. The entry point for athletic training could change from a bachelor's to a master's degree (NATA News, April 2009). Specifying requirements and demanding more academic preparation elevates the professionalism of these fields,

protects students, and limits the number of clinical hours expected from students but does not educate these individuals in pedagogical issues or how to teach the content knowledge they have acquired.

One major dilemma that has emerged in the field of athletic training education is that of limited clinical experiences. Respondents 1, 3, and 6 felt athletic training education has lessened the clinical experiences required by athletic training students, leaving an unrealistic picture of the profession. The clinical instructors interviewed felt that athletic training students need more clinical exposure to gain experiences and to hone their athletic training skills.

According to I.5 of the CAATE Standards for the Accreditation of Entry Level Athletic Training Education Programs (revised 9-11-07), all requirements of an athletic training education program must be based in course credit. This means that the clinical hours athletic training students acquire for a course have to be stated in the syllabus. It is recommended that the syllabus has an upper and lower limit for hours.

Section J3.5 of the CAATE Standards for the Accreditation of Entry Level Athletic Training Education Programs (revised 9-11-07) states that athletic training students must be treated as any other student working on campus. Two common examples are utilized. Work study students and student-athletes are limited to working 20 hours per week; therefore the general rule of thumb is that athletic training students should work no more than 20 hours per week in clinical placements. Some athletic trainers feel that this is an injustice to the athletic training student because the real world of traditional athletic training is not based on a 40-hour work week. The limits misrepresent the demands of the profession.

Athletic training students must be permitted relief days from clinical experiences, even though the athletic trainer of a sport might not have a day off. Athletic training students do not have to report early for preseason camp or stay over Thanksgiving, Christmas, semester or spring breaks even if their clinical assignment may be actively participating at that time. In contrast to the usual situation today, Respondent 2 reflected back to his undergraduate experiences:

> I think you were assigned usually to teams. At that time you were assigned more to sports than to clinical instructors, and you almost always came back for camp, so you were there (in the athletic training room or with that sport) all the time (Respondent 2).

Clinical instructors (Respondents 1, 3 and 6) complained that athletic training students do not spend enough time in the athletic training room securing clinical experiences. This contrasts with the experiences reported by the respondents where they spent many hours in the athletic training room, practiced critical decision making, and utilized opportunities to practice their athletic training skills.

Respondents 3 and 6 felt that the current educational model is too restrictive in allowing athletic training students to accumulate clinical experiences and opportunities to practice clinical skills. These deficiencies are seen in graduate assistants as well. Respondent 6 commented on his frustration with the current educational model:

> The frustration that I think a lot of athletic trainers feel with the current educational model is there is not enough hands-on. . . . they're certainly not getting the experience I had. . . . They just don't get enough opportunity to practice the profession (Respondent 6).

Why the decrease in clinical hours? Some athletic trainers may say it is due to the increased supervision requirements placed on clinical instructors of athletic training students. The CAATE Standards protect athletic training students so that they are not over-worked or placed in a litigious situation. However, allowing athletic training students to act as a regular college students and have time off from clinical duties paints an unrealistic picture of the traditional athletic training setting.

Since athletic training is so "clinically based," as described by Respondent 4, the knowledge and skills acquired in the classroom need to be put to practice and refined. Many times this occurs in the clinical setting. The current Commission on Accreditation of Athletic Training Education (CAATE) Standards for Accreditation of Entry-Level Athletic Training Education Programs requires 75 percent of an athletic training student's clinical time must be under the supervision of a certified athletic trainer. While it is important for athletic training students to be exposed to other allied health settings and professionals, a minimum of three-quarters of their clinical time has to be spent with a certified athletic trainer. Why this requirement? One reason may be that athletic training students have to be socialized into the field of athletic training. The processes of anticipatory and organizational socialization are continual. Athletic training students see how athletic training faculty act in their professional environment and how athletic training clinicians interact with each other, athletic training students and student-athletes. What an athletic trainer does and how an athletic trainer is supposed to act is constantly reinforced to athletic training students. Is this how athletic trainers learn how to teach?

Inadequate Preparation

Another key finding focuses on the fact that ACI/CIs feel ill prepared in evaluating athletic training students' clinical competencies. The individuals interviewed reported feeling ill prepared evaluating athletic training students' clinical proficiencies. Three areas emerged that can be addressed concerning this feeling of inadequacy: 1) The classes the respondents' took during their undergraduate education regarding athletic training were few in number; 2) The respondents would like to have had coursework in educational methods and strategies; 3) Many of the proficiencies that are required of athletic training students today were not learned by the ACI/CIs who are evaluating them. Thus, the ACI/CIs need to be educated regarding these changes as well as changes in accreditation and athletic training educational reform.

Lack of Formal Coursework

The formal coursework pertaining to athletic training was limited when the respondents were pursuing their education. Coursework usually consisted of some anatomy and physiology, chemistry and kinesiology with a basic and advanced athletic training course (Respondents 2 and 3). The respondents reported very limited exposure to courses such as orthopedic assessment, modalities, rehabilitation and administration. However, athletic training education has evolved to address this matter. The Fourth Edition of the Athletic Training Educational Competencies (2006) has addressed these areas in the twelve content areas required of accredited athletic training education programs. Athletic training students today receive instruction in these courses and additional courses like pharmacology, pathophysiology and general health assessment.

Coursework in Educational Methodologies

While two of the respondents received teaching certification through their undergraduate education and one through his attainment of his Ph.D., there was no coursework or emphasis on educational methodologies during their athletic training education. Additional coursework in the area of education would have assisted these ACI/CIs in developing and implementing a better educational atmosphere at their clinical sites. Probably, the best way to address this deficiency is to incorporate educational methods into the fifth edition of the Athletic Training Educational Competencies being drafted at this time. By incorporating educational methods and strategies into the body of athletic training education, athletic training students will learn the skills necessary to become competent clinicians and educators, enhancing athletic training education for all.

Additional Educational Competencies

Due to the increased coursework required of athletic training students in today's athletic training education programs, athletic training students "have a better knowledge base" (Respondent 7) than many of the ACI/CIs evaluating them. The clinical instructors are not sure what athletic training students are taught in class and many times are required to evaluate students on skills they themselves are not aware of or not been taught themselves. This places the clinical instructor at a disadvantage and often requires them to look things up prior to a meeting with the athletic training student. While this situation in many cases may help the clinical instructor learn a new skill or test, how can they appropriately evaluate as skill or proficiency they themselves may not be competent in or may not have performed in many years? Athletic training education programs can help

rectify this scenario by educating their respective clinical instructors concerning new skills and proficiencies as well as accreditation and educational reform updates.

The issues addressed in this section suggest big implications for curriculum design in athletic training education. Not only do athletic training educators need to possess the requisite clinical skills and content knowledge, but they also need to possess some degree of pedagogical skills and need to be able to apply those pedagogical skills as they teach the content knowledge to prospective athletic training students. This attention to pedagogical skills and pedagogical content knowledge should be incorporated into the athletic training curriculum. These issues are important not only in athletic training education, but also in other allied health fields.

Implications/Recommendations for Practice

This is a study about a particular emerging profession and thus, it speaks to the athletic training profession. But it has relevance to the preparation of other professionals in the university today. This study helps us to see that in many professions there is a tension between the audiences of potential learners. By opening a window on the athletic training profession, a window is provided on the broader questions in a number of professional fields that concern practical training and advancing knowledge. Athletic training is a microcosm for the dilemmas confronting most applied professions.

A number of different audiences need to be addressed regarding the implications and recommendations that stem from this research: the Commission on Accreditation of Athletic Training Education (CAATE); athletic training educators; and athletic training students.

Recommendations for the Commission on Accreditation of Athletic Training Education (CAATE)

Recommendation 1: Incorporate educational methods and strategies into athletic training education and the Athletic Training Educational Competencies.

Discussion: The Fourth Edition of the Athletic Training Educational Competencies (2006) do not contain competencies that emphasize teaching athletic training students. The Athletic Training Educational Competencies describe skills that are necessary to work as a clinician, not as an educator, resulting in instruction in subject matter content knowledge, but no training or exposure to subject matter pedagogical knowledge or curricular knowledge (Shulman, 1986). Competencies should be incorporated that address these areas of deficiency.

Respondent 4 suggested that graduate students be required to help teach classes. When Respondent 4 was a graduate student, teaching was not required but at the institution where he currently works, graduate students are required to act as teaching assistants and lecture. "I think that's really good because it gives them some experience doing that" (Respondent 4).

These "excellent" clinical instructors build upon basic athletic training concepts when they deal with athletic training students. The progression is discussed in the *Clinical Instructor Educator Seminar Handbook* (2001) where essential teaching elements are presented. These essential teaching elements include requisite knowledge of athletic training by the ACI. It is important to note that the possession of the requisite knowledge, "does not guarantee effective teaching or learning" (*Clinical Instructor Educator Seminar Handbook*, 2001, p. 20). The second essential teaching element involves

"transformation," which is "the process of the instructor transforming what is known into material that can be taught to others" (*Clinical Instructor Educator Seminar Handbook*, 2001, p. 20). Third, the excellent clinical instructor must develop "instructional performance." Instructional performance is the art of teaching as it takes place in the classroom, laboratory and clinic, and the teacher/student interactions that take place in venues. Reflective evaluation of the teacher is the fourth element and entails review and analysis of both the instructor's and student's performance of a given task and how a particular situation was handled be it in the classroom or clinical setting. Finally, comprehension is enhanced as the teacher, or in this case, the clinical instructor, learns from the actual teaching experience based on what worked well and what didn't. Not only does the athletic training student learn from the experience, but so does the clinical instructor.

Athletic training education programs should try to build a staff of clinical instructors who have clinical experience and practice with educational methods and strategies, (Respondents 3, 4, 6, and 7) to create an optimal learning environment for the athletic training student. Conversely, it is recommended that athletic training faculty not only have experience in educational methodology, but possess substantial clinical experience. This may be hard to achieve because faculty ATCs are often required to do research and publish and do not have time to provide healthcare services for the athletic department. But it is the clinical instructor who has experience in both teaching and working in the field that will make a bigger impact on athletic training students. Clinical instructors who have experience in educational methodologies and strategies will be better prepared to construct a more optimal learning environment, and athletic training faculty who have a

wealth of clinical experience will be able to relate to the clinical demands that the profession dictates.

Rationale: The respondents in this research desired more coursework pertaining to educational methods and strategies. The current athletic training competencies do not address educational methods or strategies. By including educational methods and strategies in the current athletic training educational competencies, athletic training students will at least be exposed to them and will therefore be able to utilize those skills once they become ACI/CIs.

***Recommendation 2*:** Better communication with all constituents who are involved in athletic training education, the athletic departments and governing agencies of which athletic departments are members, must be established and on-going.

Discussion: It may be time to include athletics departments and their respective organizations (conference offices and governing bodies, such as the National Collegiate Athletic Association (NCAA) and National Association of Intercollegiate Athletics (NAIA) etc.) in athletic training education and athletic training education reform as supported by Respondent 7. Athletic department coaches and support staff must understand the duel role the approved clinical instructor/clinical instructor (ACI/CI) has and its impact on athletic training education. A collaborative effort must be made by all playing a part in the education of athletic training students for athletic training education to prosper. Clinical instructors are placed in a difficult spot trying to provide appropriate healthcare coverage to the athletes and their athletic departments (which ultimately pay their salaries) and to the academic side of campus. It is hard to switch back and forth between the two roles, as explained by Respondent 7. However, the coaches, athletic

directors and governing bodies, do not understand the role the staff athletic trainer has to athletic training education (Respondent 7).

In addition, the governing bodies of athletic training (the BOC) and athletic training education (the CAATE) should consider meeting and educating the governing bodies of athletics (NCAA, NAIA, league offices) to establish open lines of communication so that the needs of the athletics department and the needs of athletic training education can both be met. There are ample opportunities to gain meaningful clinical experiences through intercollegiate athletics, but all involved parties need to understand the requirements, needs and limitations of each agency.

Rationale: Involving all parties impacted by athletic training education reform will produce a better environment for all involved.

Recommendation 3: Continue to research to explore whether the entry-level athletic trainer should hold a bachelor's degree or master's degree.

Discussion: Currently the entry-level degree required to practice athletic training is a bachelor's degree. As the findings to research question 2 indicate, there is great concern among the respondents regarding the lack of clinical experiences that athletic training students are getting in their athletic training education. Having a master's degree is not important, but the experiences are. Where and how do athletic training students best get these experiences? Athletic training students have to complete their athletic training education in a minimum of two years and a maximum of four years. Upon graduation with a four-year athletic training degree, many seek to further their education and to gain further experiences at graduate school.

Having the entry-level requirement for athletic trainers be a master's degree may further decrease the clinical experiences acquired because graduate students are exposed to clinical experiences for only two years. The change would also negate graduate assistantship opportunities. By increasing the academic preparation of athletic trainers, athletic training is being professionalized like many other healthcare professions. However the clinical experiences of those "better academically prepared" individuals will be severely limited. This means that graduate experiences in conjunction with undergraduate experiences are required to accrue the number of clinical hours that professionals in the past accrued.

Increasing the qualifications to become an athletic trainer is part of the professionalization process. Currently one can prepare to sit for the BOC examination after completing a bachelor's degree. Discussions continue about increasing the minimum education requirements to a master's degree, as alluded to in the April 2009 issue of the NATA News. Sara Brown MS, ATC, chair elect of the NATA Education Council believes that the time has come to re-evaluate the minimum qualifications for entry-level athletic trainers to be on pare with the health care providers who have at least a master's as an entry-level degree.

A finite number of hours exist in the professional preparation of the athletic training student. These hours must be divided between the didactic preparation of the student and the clinical preparation of the student. As athletic training education has evolved, increased academic coursework has been added. As a result, clinical experiences have been compromised. Upgrading the profession of athletic training by increasing the didactic coursework and limiting the number of clinical hours protects the athletic

training student in some ways, but reducing potential clinical experiences leads to the need for a combination of undergraduate and graduate experiences to adequately match that which had previously been achieved. The lack of experiences is evident in this statement by Respondent 3 as he commented on the graduate students at his institution:

> I think they are a lot less experienced when they come in as graduate students, because they haven't been on their own. . . . They come in here and their certified, we throw them to the wolves. They haven't had the experience at their school previously and they haven't been on their own (Respondent 3).

An effective balance must be established between a student's didactic and clinical experiences. Making the entry-level into the profession of athletic training a master's degree will further decrease the clinical experiences athletic training students will acquire, as the graduate student will have a maximum of two years to gain clinical experiences, thereby increasing "hyposkillia" unless other concessions are made.

Clinical instructors act as conduits to promote the profession through the emphasis of clinical skills, whereas athletic training educators promote the profession through academics with the emphasis on research. The increase in academic preparation helps to professionalize the athletic training profession, at the expense of clinical prowess.

Rationale: There are finite opportunities in athletic training education to include didactic and clinical experiences. If more didactic coursework is mandated, less time is available for clinical experience. If athletic training education moves to a master's degree as entry level, less clinical experiences will be gathered prior to that individual being graduated. Ultimately as the individual progresses in the profession, they will have fewer experiences to draw from as they become ACI/CIs in the future.

However, if the profession of athletic training wishes to compete with other allied health care professions, moving the entry point to a master's degree needs to be explored.

Recommendations for Athletic Training Educators

Recommendation 1: Work to change the academic culture in athletic training education so that clinical expertise is rewarded.

Discussion: Increasing academic qualifications are needed to meet the demands of the academic requirements of the university in research and publication, but these increased qualifications do so at a cost to clinical experiences.

Athletic training students' clinical experiences have drastically decreased from the time when the respondents to this research were students. Requiring a master's degree to enter the profession of athletic training is again being discussed. The requirements of athletic training faculty to perform and publish their research may actually make the problem worse. Athletic training students who aspire to become athletic training faculty will go to graduate school to work on their master's degree. What options do they have as graduate assistants? 1) To accept a traditional athletic training position thereby gaining additional clinical and professional experiences; or 2) To accept a position teaching undergraduate athletic training students. If they accept the traditional athletic training graduate assistantship position, they will enhance their expertise in the field, but will not receive training in educational methods or strategies. If they accept a teaching position, they will receive feedback from students and athletic training faculty regarding their methods, but will be teaching with very limited clinical experience. In either situation, since athletic training education currently only addresses subject matter content knowledge, neither the clinician nor the academician is developing subject matter

pedagogical knowledge or curricular knowledge, both integral components of effective teaching (Weidner & Henning, 2004; Shulman, 1986).

The athletic training graduate student pursuing a Ph.D. will likely apply for a graduate assistantship or fellowship working with athletic training faculty who can assist with instruction or research. Once again, the potential to gain clinical experiences will suffer. The next step for the doctoral student with the clinical experience of an undergraduate is to apply for a faculty position. He or she has never been in an unsupervised environment making return-to-play decisions or rehabilitation plans. Generally, athletic training faculty members are required to generate research, write grants and publish papers. These are all worthwhile endeavors necessary to the profession, but athletic training faculty who have progressed from bachelor's degree to master's degree to doctorate have little clinical experience and, due to the requirements of their position (research and publishing), have little clinical skills. Athletic training students who intend to become clinicians see this as a deficiency, and the students who aspire to become academicians follow in the footsteps of faculty, perpetuating the decline in mentoring through practical experience.

Universities are engaged in developing new knowledge through research and need to establish ways to link practical training with the important commitment of the university to create knowledge. The dilemma of increased credentialing, while well intentioned, may well undermine the practical abilities of the profession.

One idea may be to require faculty ATCs to acquire a certain number of clinical hours in the athletic training room per year or to develop an Athletic Trainer Educator Certification modeled after the Certification for Nurse Educators (CNE) through the

National League for Nursing (NLN) www.nln.org/facultycertification/index.htm, 4/2/10.) The goals of the CNE Certification include:

1. Distinguish academic nursing education as a specialty area of practice and an advanced practice role within professional nursing
2. Recognize the academic nurse educator's specialized knowledge, skills, and abilities and excellence in practice
3. Strengthen the use of core competencies of nurse educator practice
4. contribute to nurse educator's professional development

(www.nln.org/facultycertification/index.hth, 4/2/10).

Rationale: Changing the academic culture will require faculty athletic trainers to stay proficient in their athletic training skills as well as provide the vital research and publication link to further the profession.

Recommendation 2: Establish better communication with ACI/CIs regarding accreditation and curricular issues.

Discussion: Athletic training education program (ATEP) program directors must do a better job communicating with their ACI/CIs. They need to be informed of accreditation updates, curricular changes, psychomotor competency updates and proper evaluation techniques of psychomotor skills as depicted by Respondent 1.

More communication needs to be established between the ATEP and clinical instructors to streamline the preparation of athletic training students, and to define what is expected of each athletic training student and each clinical site in regard to the development of the athletic training student. This involves informing ACI/CIs of what is

being taught in the classroom and documenting the skills that each athletic training student has mastered.

Rationale: Better communication from the ATEP was desired from the respondents. This communication should focus on accreditation updates, skill proficiencies, and changes in athletic training education. The incorporation of this suggestion will produce better athletic training students and ultimately better clinical instructors.

Recommendation 3: Athletic training students need to understand the nature of the work and what the athletic training profession is like.

Discussion: Athletic training educators and ACI/CIs need to work together to portray correctly the athletic training profession. There appears to be a line of separation between the academic and clinical sides of athletic training education as denoted by the Theory Application Gap, identified by Carr & Drummond (2002), and discussed in Chapter 2.

Rationale: By having decreased clinical hours, athletic training students are getting an unrealistic view of the demands placed on athletic trainers in the work setting.

Recommendation 4: Require all graduate students to teach.

Discussion: Athletic training students either undergraduate or graduate, don't receive training in educational methodology. Graduate students are sometimes expected to teach undergraduate classes, but often do so with no educational background or methods. Athletic training students should be exposed to educational methodologies in their undergraduate years and practice those skills on into graduate school. Requiring graduate students to teach will instill in them the skills needed when they become clinical instructors upon graduation.

Rationale: Athletic trainers are often natural born teachers (respondent 6) but need to develop educational skills. Pitney, Iisley & Rintala (2002) state, "the more formal anticipatory socialization process begins during an undergraduate professional education" (p. 65). Incorporating educational methods in undergraduate athletic training education programs exposes students to educational skills. Requiring graduate students to teach undergraduate athletic training students reinforces the educational environment. Hence, a need for educational competencies in athletic training education has been identified. The result will be athletic trainers who not only have clinical experiences but experiences in creating and implementing proper educational environments.

Recommendations for Athletic Training Students

Recommendation 1: Become proactive towards your athletic training education.

Discussion: The quality of a student's athletic training education is directly related to the involvement and experiences actively sought during undergraduate and graduate education. The best-prepared athletic training students seek practical experiences, arrive early to practices and assignments, and stay late and continually work on polishing their athletic training skills. Repetition of athletic training skills is crucial. Skills that have already been evaluated need to be reviewed, practiced and refined. Athletes continually practice the fundamental skills of their sport. Basketball players practice dribbling and shooting; baseball players practice throwing, catching and hitting. Even the most basic fundamental athletic training skills such as taping, modality usage, manual therapy techniques, and basic first aid and injury evaluation need to be practiced and reviewed. Athletic training students who actively participate, seek opportunities to get involved, and

are truly passionate about his athletic training education will receive a better educational experience than students who are passive towards their educational experiences.

The desire to mentor athletic training students who are proactive in their educational pursuits is indicated by a comment made by Respondent 3 who stated, "Students who are aggressive get a lot better education than those who are passive."

The proactive athletic training student demonstrates that he is ready to take on additional responsibilities by taking the initiative to perform skills in which he is proficient. He seeks to ask questions. If he has questions regarding rehabilitation protocols, he asks the clinical instructor if he can carry out a rehabilitation plan. Once the athletic training student gains the confidence of the clinical instructor, the clinical instructor is more likely to hand over the reins (Respondents 1, 2 and 3).

Athletic training students become more proactive towards their education and "stand on their own" (Respondent 2) when they become comfortable and confident in their knowledge.

The clinical instructor has a duty to the athletes to provide care. However, circumstances may arise with student-athletes which are not appropriate for athletic training students to experience. These circumstances may revolve around confidentiality, athlete's safety or game situations (Respondents 2 and 7).

Athletic training students must realize the skills taught in the classroom and evaluated by their ACIs portray the process of the skill. The actual applied skill may be entirely different. For example, a taping procedure can be modified to meet the needs of the injury and the athlete. Spending a half-hour on the field doing a knee evaluation is unacceptable. The athletic training student has to determine what needs to be done on the

field and to perform those skills in the most effective and efficient way possible. This point is illustrated by Respondent 1:

> It goes back to, you may learn 40 different special tests for the knee compared to the seven that I do on a regular basis and if you do these seven, you're probably going to be ok. . . It's half-time at a football game, I don't have time to do a whole assessment here of the knee. I need to figure out whether or not this kid's still got an MCL, ACL and his meniscus intact. That is all I need to do. I don't need to do all these other things (Respondent 1).

Rationale: Students need to take an active interest in their own education. Discrepancies are being seen in graduate students as well. Athletic training students who are proactive develop into athletic trainers who become proactive in the profession. These proactive individuals then become the educators of tomorrow's athletic training students and the change agents needed to promote the athletic training profession.

Recommendation 2: Athletic training students need to see different aspects of the athletic training profession and to develop an understanding of and appreciation of sport skills.

Discussion: Athletic training students must participate in clinical experiences that involve upper body intensive activities, lower body intensive activities, general medical exposure and equipment intensive activities. Athletic training students must also spend time with as many different sports as possible and understand the skills, positions and strategies.

Rationale: By understanding the biomechanics involved in various physical skills, athletic training students will understand the movement patterns involved and will be more adept at evaluating, treating, and rehabilitating a broader range of conditions more effectively.

Recommendation 3: Remember that your actions not only reflect upon you, but you ACI/CI as well.

Discussion: Clinical instructors want athletic training students to excel. Clinical instructors will assist athletic training students if they seek an active role in their development. The hours spent with the clinical instructor eventually culminate with the request for a letter of reference. The athletic training student must be competent and possess the skills that are essential for an athletic training professional in order to earn a supportive reference letter. Athletic training students must realize that a reference letter reflects upon the student, the clinical instructor and the profession. Athletic training students must realize that the clinical instructor places his professional reputation on the line each and every time he makes a referral on the student's behalf or writes a letter of recommendation, therefore, athletic training students should represent their ACI/CIs with the respect they deserve.

Rationale: Clinical instructors provide a vital role in athletic training education supervising athletic training students. Clinical instructors also have professional goals and desire to advance through the ranks just like the athletic training student greenhorn. Therefore clinical instructors must be careful how they support athletic training students seeking jobs so that the clinical instructor's name and reputation are not tarnished by an athletic training student's decision to renege on a promise. An example exists when Respondent 1 mentioned that he was hesitant to write letters of recommendation for athletic training students. He had written a letter for a student who was applying for a graduate assistantship, but turned it down when it was offered. Respondent 1 worries

about the ramifications that may develop if he in turn would apply for a position at that institution.

This section examined the different audiences addressed regarding this research project. The BOC and the CAATE were addressed and suggestions were made regarding communication with all shareholders in athletic training education and the professionalization of the field by making the entry point a master's degree. Recommendations were made concerning the incorporation of educational competencies into athletic training education. The current academic system and requirements for faculty promotion perpetuate the issue of "hyposkillia." Finally, athletic training students were called upon to be more proactive in their education and be respectful of their clinical instructors as they pursue employment in the athletic training profession.

Future Research Suggestions

Many ideas for future research emerged as a result of this study, but a limitation must be noted prior to expanding upon these ideas. The program directors selected for this research project were asked to rate the ACI/CIs whom they supervised on the basis of their ACI/CIs teaching abilities. However it must noted that the program directors' evaluations appeared to be based on the clinical instructors' clinical skills rather than their teaching expertise. In short, the "excellent" clinical instructors were selected because of the perceived "excellent" clinical skills the program directors believed they had. The following ideas for future research related to athletic training education emerged from this research project.

Athletic Training Education Paradigms

Further research should explore the "professionalization" of health care professions and the need for increased academic preparation. As mentioned, many healthcare professions require a master's degree minimum for entry-level. Currently athletic training has a bachelor's degree requirement for entry-level. Does the increased academic preparation take away from clinical skill development? The CAATE currently has no hour requirement for clinical experiences. The respondents in this research project reported that they accrued up to 3,000 hours of undergraduate experience over a four-year period. These hours were acquired prior to the January 1, 2004 accreditation mandate.

More didactic information is required of athletic training education as a move away from acquiring practical experience is sensed. The accreditation mandate has been in place for five years and it may be too early to determine what the appropriate balance is between clinical and didactic preparation. As the athletic training education pendulum swings from more clinical and less didactic to more didactic and less clinical, an effective balance between the two needs to be established.

Socialization of Athletic Training Education Faculty

Another area to explore further is the socialization process that must be undertaken by athletic training faculty as they ascend the academic promotion ladder. Colleges and universities are requiring faculty to publish research and secure grants to be promoted. More of their training is classroom and research dominated, again deemphasizing the clinical nature of the profession. If the curriculum is more academic in nature, there may be a push to have more Ph.D.s who possibly have fewer clinical experiences than ATCs in the field.

Currently, there are numerous opportunities for graduate assistants to act as teachers and research assistants. It seems likely that those with teaching and research backgrounds and thus limited clinical experience and expertise will go on to earn Ph.D.s and eventually be hired as professors to teach within an ATEP, reinforcing the didactic aspect of athletic training education. In essence, those individuals responsible for athletic training classroom instruction have limited experience in the field and may in fact be emphasizing the didactic aspect to their students, perpetuating the problem of decreased clinical experiences.

Therefore, research may be needed to examine the subject matter content knowledge, subject matter pedagogical knowledge and curricular knowledge that athletic training educators currently possess. Research should also determine where improvements could be made.

Replication of the Current Study of the Socialization Processes of ATEP Program Directors

This research examined the socialization processes of excellent clinical instructors identified by their respective program directors. The same protocol could be replicated identifying excellent program directors and determining the processes and experiences that they underwent to become excellent. It would interesting to see if they, too, had clinical experiences above 1,500 hours, if they attended internship programs or, as is being hypothesized, if they took a more direct academic route to their positions.

Teaching Styles

Students' learning styles were referred to many times throughout the interviews with the respondents and were described in ACI training workshops. No mention was made of

the respondents' teaching styles. Daniel Pratt (2002) described five teaching perspectives: transmission, apprenticeship, developmental, nurturing and social reform. Further research could determine where athletic training educators and clinical instructors new to athletic training education fall within the five perspectives and where more experienced clinical instructors and athletic training faculty fall. Longitudinal studies could be done on those clinical instructors just entering the field and how their dominate perspectives change over time. The same could be done with athletic training faculty.

Results Across the Country

This study could be replicated looking at clinical instructors and faculty members to see if similar results occur across the country. How does the respondents' experience compare to those of clinical instructors in other areas of the country?

Entry-Level Master's

Research needs to be established that determines the quality of the athletic trainer who graduates from an entry-level masters program, a CAATE accredited bachelors program and a graduate who obtains a masters degree after graduating from a CAATE accredited bachelors program. If "hyposkillia" is real, a comparison between these three programs would indicate any discrepancies, especially since an entry-level masters program has essentially the same requirements as a bachelor's degree program.

Entry-Level of the Profession

Finally, it is important to determine whether the entry point into the athletic training profession should remain a bachelor's degree or be elevated to a master's degree, and the implications for doing so. Elevating the entry-level of the profession to a master's degree would, in essence, displace all the undergraduate programs since the only route to enter

the profession would be with a master's degree. This would force colleges and universities to assess the feasibility and desire to offer a master's degree and determine the impact the loss of the undergraduate degree may have on their athletics programs.

Age as a Factor

Age did not play a role in the results of this research, but may play a role in how clinical instructors interact with athletic training students. Research could be done to look at the role age plays in how clinical instructors interact with athletic training students.

Role Females Play and have Played in Athletic Training and Athletic Training Education

While this study did not focus specifically on issues pertaining to women as athletic trainers, a few comments from respondents remind us that females have only been involved in athletic training during recent years. One of the respondents recalled the first female coming into the league he worked in during the mid 1970s. Since then the role of females in athletic training and athletic training education has expanded slowly at first and now rapidly. Research should be done to identify the obstacles, challenges, and changes that females have made in the athletic training profession.

Conclusion

This chapter was organized around four different sections: Summary of Findings, Discussion of Key Points, Implications for Practice and Ideas for Future Research. Each stated information that emerged from interview with clinical instructors.

The Summary of Findings described excellent ACI/CIs demographic background, educational backgrounds and experiences, thoughts on clinical education, desires of Clinical Instructors and the ACI/CIs primary responsibilities and allegiance.

The Discussion of Key Points focused on the respondents' socialization processes. Then the need for more clinical experiences for athletic training students was addressed along with current CAATE standards regarding clinical education. The theory of "Hyposkillia" was described.

Implications for Practice addressed three different audiences. The first audience was two organizational agencies, the Board of Certification and the Commission on Accreditation of Athletic Training Education (CAATE). The Board of Certification section included entry-level education needs. Regarding the CAATE, respondents suggested that communication be established with those outside the clinical education realm, such as athletic directors and NCAA administrators to inform them of athletic training education requirements so that a more streamlined educational system might be established. Incorporating educational methods into the athletic training educational competencies was a common request made by the respondents, who would like to see athletic training educators provide better communication with the ACI/CIs who work in their educational programs. The potential consequences of what respondents perceive as decreased clinical experiences by faculty members were outlined. It was strongly suggested that athletic training students become proactive in their educational pursuits, master the physical psychomotor skill and thought processes of the profession, and be prepared to call on those skills they may need in a given situation. The last suggestion given to athletic training students was to represent their ACI/CIs with the respect that they deserve. Respondents regretted not getting better representation from their former students in the field.

Future research possibilities included determining an appropriate balance between didactic and clinical education, and exploring the socialization processes of program directors and the ramifications of making a masters degree as the entry point into the athletic training profession.

APPENDICES

APPENDIX A

Invitation Letter to Program Directors

Dear Athletic Training Education Program Director:

I am writing to invite you to participate in a research project which will explore the socialization processes undertaken by clinical instructors that have allowed them to develop into "excellent" clinical educators. This study represents research being completed as a requirement to fulfill my Ph.D. in Higher Adult and Lifelong Education (HALE) at Michigan State University. I am asking you to participate in this study because of your position as Program Director of your Athletic Training Education Program and your ability to evaluate the clinical instructors you utilize in your program. Participation is entirely voluntary. There are no known risks associated with participation in this study.

I would like to send to you a short rating form for you to complete for each on-campus clinical instructor that is not a full-time faculty member or graduate assistant that your program utilizes. The form that I will send is based on a rating instrument called "Selection, Training, and Evaluation of Athletic Training Approved Clinical Instructors" developed by Weidner and Henning (2004). I expect that you will need to spend about 10 minutes completing the rating form per clinical instructor. I am sending this request to Athletic Training Education Program Directors at public institutions throughout the state that sponsor CAATE accredited ATEPs. I will use your responses to select clinical instructors to invite to participate in my study. While you may not directly benefit from your participation in this study, your participation in this study may contribute to identifying themes central to the education of athletic training students. All responses will remain anonymous and confidential protected to the maximum extent allowable by law.

I hope you will assist me in conducting this research on the socialization processes of clinical instructors. I would appreciate your returning the enclosed sheet providing me information about the clinical instructors in your program in the self addressed stamped envelope.

If you have concerns or questions about this study, such as scientific issues, how to do any part of it, or to report an injury, please contact the researcher at:

Joseph D. Susi II MS, ATC
2306 W. 4th Ave
Sault Ste. Marie, MI 49783
(906) 635-2161
jsusi@lssu.edu

You are also welcome to contact my project advisor, Dr. Ann Austin at aaustin@msu.edu. Should you have any questions or concerns about your role and rights as a research participant, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Director of MSU's Human Research Protection Program, Dr. Peter Vasilenko, at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 202 Olds Hall, MSU, East Lansing, MI 48824. Thank you very much for your time and consideration in this matter.

Sincerely,

Joseph D. Susi II MS, ATC
Doctoral Student
HALE Program Michigan State University

Name of University _____

Program Director's Name_____

Names of non full-time faculty/non-graduate assistant on-campus clinical instructors:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

All names and identifying information will remain anonymous and confidential.

APPENDIX B

Ratings Letter and Ratings Instrument

Appendix B

Dear Athletic Training Education Program Director:

Thank you for your interest in clinical education research. Enclosed please find the rating instrument that you will utilize to rate each of your on campus non-faculty / non-graduate assistant clinical instructors. Please fill out a separate survey for each on campus clinical instructor and return to me in the self addressed stamped envelope provided.

The Program Director Ratings Forms will then be compiled and selection of clinical instructors for face-to-face interviews will be performed. All responses will remain anonymous and confidential protected to the maximum extent allowable by law.

Participation is voluntary, you may choose not to participate at all, or you may refuse to participate in certain procedures or answer certain questions or discontinue your participation at any time without consequence.

There are no known risks associated with participation in this study and while you may not directly benefit from your participation in this study, your participation in this study may contribute to identifying themes central to the education of athletic training students.

Thank you for your interest and participation

Sincerely

Joseph D. Susi II MS, ATC
Doctoral Student
HALE Program Michigan State University

Athletic Training Education Program Director's
Rating Record of On-Campus Clinical Instructors

Questions for this record are from the "Selection, Training, And Evaluation of Athletic Training Approved Clinical Instructors" (ACI) developed by Dr. Weidner. Accessed from www.nataec.org/html/clinical_evaluation_tools.html. It is the survey instrument that will be utilized by program directors of Athletic Training Education Programs within the state of Michigan to rate their on-campus clinical instructors. The questions asked of the program directors represent those items in Standard 4.0 of Dr. Weidner's questionnaire where the instructional skills of ACI are examined.

Use the following scale to respond to the criteria listed below for this standard:
1 = Never; 2 = Seldom; 3 = Occasionally; 4 = Usually; 5 = Always

Criterion 4.1
The ACI collaborates with the Program Director and/or Clinical Education Coordinator to plan learning experiences.
1 2 3 4 5 Unknown

Criterion 4.2
The ACI implements, facilitates, and evaluates planned learning experiences with athletic training students.
1 2 3 4 5 Unknown

Criterion 4.3
The ACI understands the athletic training students' academic curriculum, level of didactic preparation, and current level of performance, relative to the goals of the clinical education experience.
1 2 3 4 5 Unknown

Criterion 4.4
The ACI takes advantage of teachable moments during planned and unplanned learning experiences by instructing skills or content that is meaningful and immediately applicable.
1 2 3 4 5 Unknown

Criterion 4.5
The ACI employs a variety of teaching styles to meet individual athletic training students' needs.
1 2 3 4 5 Unknown

Criterion 4.6
The ACI helps athletic training students' progress towards meeting the goals and objectives of the clinical experience as assigned by the Program Director and/or Clinical Education Coordinator.
1 2 3 4 5 Unknown

Criterion 4.7
The ACI modifies learning experiences based on the athletic training students' strengths and weaknesses.
1 2 3 4 5 Unknown

Criterion 4.8
The ACI creates learning opportunities that actively engage athletic training students in the clinical setting and that promote problem-solving and critical thinking.
1 2 3 4 5 Unknown

Criterion 4.9
The ACI encourages self-directed learning activities for the athletic training students when appropriate.
1 2 3 4 5 Unknown

Criterion 4.10
The ACI performs regular self-appraisal of his teaching methods and effectiveness.
1 2 3 4 5 Unknown

Criterion 4.11
The ACI is enthusiastic about teaching athletic training students.
1 2 3 4 5 Unknown

Criterion 4.12
The ACI communicates complicated/detailed concepts in terms that students can understand based on their level of progression within the athletic training education program.
1 2 3 4 5 Unknown

Criterion 4.13
The ACI encourages athletic training students to engage in self-directed learning as a means of establishing life-long learning practices of inquiry and clinical problem solving.
1 2 3 4 5 Unknown

Dear Dr. Weidner,

My name is Joe Susi and I contacted you last year regarding the survey you developed to evaluate ACI's. I have read the research article you wrote where you introduced the assessment form.

The reason that I am writing to you is to ask your permission to use your instrument to gather information for my dissertation. I am interested in exploring the socialization processes that influence an ACI/CI attitude towards education.

Specifically I am interested in using your Section 4.0 to have PD rate their ACI/CI's instructional skills. I will then use this data to identify ACI/CI's to interview to determine the socialization processes they encountered.

Could you kindly respond via e-mail as to the possibility of using this assessment. I can be reached at jsusi@lssu.edu. I have copied my advisor Dr. Ann Austin on this note as well.

Thank you for your time and consideration

Looking forward to hearing from you

Joseph D. Susi II MS, ATC

Program Director

Athletic Training Education

Lake Superior State University

That will be fine. Just reference appropriately. The form is copyrighted and registered. Thanks.

----- Original Message -----

From: "Joe Susi" <jsusi@lssu.edu>

To: <tweidner@bsu.edu>

Cc: <aaustin@msu.edu>; <jsusi@lssu.edu>

Sent: Wednesday, February 15, 2006 11:40 AM

Subject: Permission to use survey

Dear Dr. Weidner,

My name is Joe Susi and I contacted you last year regarding the survey you developed to evaluate ACI's. I have read the research article you wrote where you introduced the assessment form.

The reason that I am writing to you is to ask your permission to use your instrument to gather information for my dissertation. I am interested in exploring the socialization processes that influence an ACI/CI attitude towards education.

Specifically I am interested in using your Section 4.0 to have PD rate their ACI/CI's instructional skills. I will then use this data to identify ACI/CI's to interview to determine the socialization processes they encountered.

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assessment. I can be reached at jsusi@lssu.edu. I have copied my advisor Dr. Ann Austin on this note as well.

Thank you for your time and consideration

Looking forward to hearing from you

Joseph D. Susi II MS, ATC

Program Director

Athletic Training Education

Lake Superior State University

APPENDIX C

Invitation to Participate in Face-to-Face Interviews

Appendix C

Dear Certified Athletic Trainer:

You have been identified as a clinical instructor for the Athletic Training Education Program at your institution. The purpose of this letter is to invite you to participate in a research study that will explore the socialization processes undertaken by clinical instructors. Participation is entirely voluntary. This study represents research being completed to fulfill the dissertation requirements of the Higher Adult and Lifelong Education program at Michigan State University. I am asking you to participate in this study due to your position as a clinical instructor for your Athletic Training Education Program. There are no known risks associated with participation in this study.

I would like to arrange a time to interview you to get your input on some questions that have been developed to explore the processes that excellent clinical instructors have encountered that have made them so proficient in what they do. The interview would take approximately 1 to 1 1/2 hours and would be conducted at your convenience. Your identity and responses will remain anonymous and confidential protected to the maximum extent allowable by law.

I hope that you will assist me in conducting this research. While you may not directly benefit from your participation in this study, your participation in this study may contribute to identifying themes central to the education of athletic training students. If you would be willing to assist in this research project, please return the lower portion of this letter with the appropriate information in the self-addressed stamped envelope provided so that an interview time can be arranged.

If you have concerns or questions about this study, such as scientific issues, how to do any part of it, or to report an injury, please contact the researcher at:

Joseph D. Susi II MS, ATC
2306 W. 4th Ave
Sault Ste. Marie, MI 49783
(906) 635-2161
jsusi@lssu.edu

You are also welcome to contact my project advisor, Dr. Ann Austin at aaustin@msu.edu. Should you have any questions or concerns about your role and rights as a research participant, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Director of MSU's Human Research Protection Program, Dr. Peter Vasilenko, at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 202 Olds Hall, MSU, East Lansing, MI 48824. Thank you for your time and consideration in this matter.

Sincerely,

Joseph D. Susi II MS, ATC
Doctoral Student
HALE Program
Michigan State University

___ **I voluntarily agree to participate in the study**

_____ **Initials** **I understand that I cannot be a participant in this research project without being audio-taped during the interview process and understand that I will be audio-taped during the interview and that the information obtained by the researcher will be protected to the maximum extent allowable by law. Once all data has been gathered from the audio tape, the audio recording will be destroyed**

___ **I do not wish to participate in the study**

Name_____

Institution_____

Phone Number _____

E-Mail Address_____

APPENDIX D

Table 3: Responses from Program Directors and ACI/CIs

Appendix D

Table 3

Table 3: Responses from Program Directors and ACI/CIs

	Newly Accredited within the last 5 years			Accredited Longer than 5 years	
NCAA Division I Schools	University 1	University 2	University 3	University 4	University 5
Response From Program Director	None	Yes, will help with research	No, would not help at this time	Yes, will help with research	Yes, will help with research
Number of Clinical Instructors	N/A	8 3 selected	N/A	4 2 selected	4 0 selected
Response From Clinical Instructors	N/A	Top 3 selected	N/A	Top respondent yes; Second Highest no; Third highest yes; 2 interviewed	No response from any of the clinical instructors
NCAA Division II Schools	University 6	University 7	N/A	University 8	N/A
Response from Program Director	Yes, will help with research	Yes, will help with research		None	
Number of Clinical Instructors	2 2 selected	3 0 selected		N/A	
Response from Clinical Instructors	Top 2 selected	No response from any of the clinical Instructors		N/A	

APPENDIX E

Interview Protocol

Appendix E

Note: The protocol below identifies the primary interview questions for this study. However, since this is a qualitative study, there may be minor adjustments made to the questions based upon the flow of the interview.

Interview Protocol

Professional Socialization in Athletic Training Education
And it's Impact on the Development of Excellent Clinical Instructors

Interviewer:_____

Place:_____

Time:_____

Date:_____

Participant Number:_____

Introduction:

Once again, thank you for volunteering to participate in this research study. The purpose of this study is to identify the socialization processes that have shaped clinical instructors beliefs and practices. This interview consists of questions about your educational background and experiences, as well as your practice as a professional. There are no right or wrong answers.

Please be as honest and candid as you can in your responses. I promise to ensure you complete confidentiality. Other than myself, no one will have access to your specific responses except my academic advisor, Dr. Ann Austin. The pseudonym you selected will be used in place of your name and the name of your institution and any other potentially identifying information will be changed or not used in this study. When the study is complete, I will destroy the audio recording of our conversation.

Participation is voluntary, you may choose not to participate at all, or you may refuse to participate in certain procedures or answer certain questions or discontinue your participation at any time without consequence. This interview will take approximately 60 minutes. You may ask any questions regarding the research, and they will be answered fully. Results from this study may be presented at educational conferences or submitted for publication. I appreciate your time and valuable input.

Do you have any questions before we begin?

_____ **I voluntarily agree to participate in the study**
Participants Signature

Background Information
Clinical Instructor Demographic Survey

Name_____ Institution_____

Title_____ Are you a full time faculty member ____

Number of years Certified_____ Number of years teaching clinical courses_____

Circle One: Male Female Age 20-25 26-30 31-35 36-40

Undergraduate Degrees 41-45 46-50 51-55 56- over

Graduate Degrees

Certifications

Undergraduate Program at the time you graduated (Circle One)
Internship NATA Accredited CAAHEP Accredited CAATE Accredited

Graduate Program at the time you graduated (Circle One)
Internship NATA Accredited CAAHEP Accredited CAATE Accredited

Are you a Full-time employee of this institution? Yes No

Do you currently or have you ever held a teaching certificate? Yes No
If yes, what area of specialization?

Do you provide athletic training services for your institution? Yes No

What sports do you provide services for?

If you don't provide services for specific athletic teams, whom do you provide services to?

Are you currently or within the past 5 years been assigned as an athletic trainer with athletic training responsibilities with a team or sport? Yes No

If yes, which sports or teams?
Number of different sports you have worked with.

Do you teach any classroom courses for credit?

Have you had any formal training in the field of education?

Other institutions where you have worked?

1) Tell me a little bit about your undergraduate experiences as an Athletic Training Student.

2) Do you feel that you were appropriately prepared after your undergraduate education to work with Athletic Training Students? Why or why not?

3) Do you feel that you were appropriately prepared after your graduate education to work with Athletic Training Students? Why or why not?

4) Who was your best teacher in college?

5) What made them so good?

6) If you saw "good teaching" what would it look like?

7) Do you use any of their teaching techniques in your dealings with educating athletic training students?

8) What do you consider to be the aim of your teaching?

9) What athletic training experiences have really affected you? How have they affected you?

10) What is the role of the clinical instructor in the education of today's athletic training student?

11) How do you balance the shared role you have between athletics and academics?

12) What does learning mean to you?

13) Do you feel appropriately prepared to provide learning experiences for today's athletic training student? How and why?

14) What experiences in your background have prepared you for educating today's athletic training student?

15) What experiences do you wish you had that may have better prepared you for educating today's athletic training student?

16) How do you think the learning experience varies depending on where the learning occurs?

APPENDIX F

Table 4a: Demographic Makeup of Respondents

Table 4b: Demographic Makeup of Respondents (continued)

Appendix F

Table 4 a-b

Table 4a: Demographic Makeup of Respondents

	Current Title	Age Range	Number of Years Certified	Years Teaching Clinical Courses	Teaching Certification
Respondent 1	Coordinator of Athletic Training	31-35	10	7	No
Respondent 2	Assistant Athletic Trainer	36-40	16	10	No
Respondent 3	Associate Head Athletic Trainer	46-50	27	27	No
Respondent 4	Assistant Athletic Trainer	31-35	6	2	No
Respondent 5	Assistant Athletic Trainer	36-40	6	6	No
Respondent 6	Associate Athletic Trainer	56-over	32	32	Yes
Respondent 7	Assistant Athletic Trainer	51-55	28	28	Yes

Table 4b: Demographic Makeup of Respondents (continued)

	Undergraduate Program Type	Undergraduate Degree	Graduate Degree	Formal Training in Education	Teaches Classroom Courses	Number of prior institutions where employed
Respondent 1	Internship	Health and Fitness Management	Exercise Science	No	No	2
Respondent 2	Internship	Health and Fitness Management	Biomechanics	No	No	3
Respondent 3	Internship	Physical Education	Physical Education PhD in Kinesiology	Yes	Yes	0
Respondent 4	Internship	Biology	Athletic Training * Working on PhD	Yes	Yes	1
Respondent 5	*Internship when student started. Program gained CAAHEP Accreditation prior to their graduation	Athletic Training	Sports Management	No	No	1
Respondent 6	Internship	Psychology	Physical Education and Education	Yes	Yes	1
Respondent 7	NATA Accredited	Special Education	Special Education and Sports Medicine PhD in Kinesiology	Yes	No	2

APPENDIX G

Respondent Profiles

Appendix G

Respondent Profiles

Seven respondents were interviewed for this study, five of which were male and two female. To help preserve confidentiality of all these individuals, the respondents will be referred to as "respondents."

Respondent 1

Respondent 1 has been certified for 10 years as an athletic trainer and currently fills the title of Coordinator of Athletic Training Services for his institution. He received his undergraduate degree in Health and Fitness Management and his graduate degree in Exercise Science both from the same institution. This individual is employed by the institution that he received his degree from. The undergraduate program that he attended was an internship program and has since become a CAATE accredited program. This respondent is a full time employee of his institution and has been teaching clinical courses for seven years. Prior to being employed at his current institution, this individual worked at another university and a sports medicine clinic. While this individual acts as an Approved Clinical Instructor for his institution, he has no formal training in the field of education and has never held a teaching credential. This individual functioned as a graduate assistant athletic trainer during his graduate schooling and had very little interaction with athletic training students. The institution was in a "state of flux" as the institution was transitioning from an internship program towards CAAHEP accreditation. Respondent 1 has experience working a wide variety of athletic events and sports teams.

Respondent 2

Respondent has been certified for 16 years and holds the title of Assistant Athletic Trainer for the institution of which he works. He received his undergraduate degree in Health and Fitness Management from the institution that he is currently employed with and his graduate degree in Biomechanics from a MAC school. The undergraduate program was an internship program at the time of this individual's enrollment and is currently CAATE accredited. The graduate program was NATA accredited at the time of this individual's attendance. This individual is an Approved Clinical Instructor for his institution, but does not teach any classroom courses for credit nor has he had any formal training in the field of education. Hence, he has never held a teaching certificate. Respondent 2 cites experience with a variety of different sports, including college and international competitions as well as working with a sport that won a national championship. He was employed as a graduate assistant while he was in graduate school and was placed at a local high school. Prior to his employment with his current employer, this individual worked at two different universities and a national sports agency after graduate school.

Respondent 3

Respondent 3 has been certified for 27 years and functions as the Associate Head Athletic Trainer at his institution. He has been teaching clinical courses for 27 years as well. He received his undergraduate degree in Physical Education from an internship program and his graduate degree in Physical Education from the same institution. The graduate program was an internship program as well and this individual acted as a graduate assistant during his time there. This individual has also gone on to acquire his

PhD in Kinesiology from the institution of which he is employed. Upon graduation with his graduate degree, this individual was hired by his current employer. While this individual has gone through ACI training by his institution, he does not participate in psychomotor evaluation of athletic training students. This clinical instructor has never held a teaching certificate, but did take a class in pedagogy in his PhD training and currently teaches two classroom courses for credit.

Respondent 4

Respondent 4 has been certified for 6 years and currently functions as an Assistant Athletic Trainer and Clinical Coordinator for his institution. This individual was a non-traditional student who started his schooling at the age of 22 after working for a few years after high school graduation. This individual chose an internship program as it allowed him to start within the discipline right away. His undergraduate degree was in Biology and his graduate degree was in Athletic Training from the institution of which he is currently employed. During his graduate education, this individual was a graduate assistant and was placed at a local high school where he didn't have too much interaction with undergraduate athletic training students. He has been teaching clinical courses for 2 years. Prior to being hired by his current employer, this individual worked at a local regional medical center. This individual functions as an ACI for his institution and while he has never held a teaching certificate, he does teach some courses for credit. Respondent 4 has had three courses in the field of education and is currently working towards his PhD.

Respondent 5

Respondent 5 has been certified for 6 years and functions as an Assistant Athletic Trainer for his institution. This individual was a non-traditional student who graduated with his bachelors degree at the age of 28 or 29. The undergraduate institution that he attended was an internship program when he was admitted, but changed to a CAAHEP accredited program before he graduated. Hence his undergraduate degree was in athletic training. This individual then went to graduate school at a different institution and received a graduate assistantship and worked with the institution's athletic teams. His graduate degree is in Sports Management. This individual functions as an ACI for his institution and has been teaching clinical courses for six years. He has never had a teaching certificate and outside of ACI training, has no formal training in the field of education. This individual does not teach any classroom courses for credit and was employed at a different university prior to being hired by his current employer.

Respondent 6

Respondent 6 has been certified for 32 years and acts as an Associate Athletic Trainer and Adjunct Lecturer for his current institution. The undergraduate program that he attended was an internship program and is the same institution that he currently works for. His undergraduate major was in psychology with minors in sociology and physical education. Once accepted to graduate school, he received a graduate assistantship to work with the collegiate athletic teams. This individual's graduate degree is from the same institution as his undergraduate degree with majors in Physical education and education. This individual does state that at the time of his certification exam, an individual had to be certified as a teacher in order to sit for the examination. He has been teaching clinical

courses for 32 years and currently teaches modalities for his institution. This individual does have a secondary teaching certificate in physical education and sociology and does cite formal training in the field of education. This individual did work at a different university for 10 years before returning to his alma mater. While at this different institution, this clinical instructor started an athletic training education program and literally built an athletic training facility by laying block and mortar. He currently functions as an ACI for his institution.

Respondent 7

Respondent 7 has been certified for 28 years and currently acts as an Assistant Athletic Trainer and ACI for his institution. He has been teaching clinical courses supervising athletic training students for 28 years. This individual attended a NATA Accredited undergraduate program and majored in Special Education with a minor in athletic training. Upon graduation this individual went to graduate school at the institution that currently employs him. There, he had a graduate assistantship and majored in Special Education and Sports Medicine. This individual also completed a PhD from his employing institution in Higher Education Administration. This individual possesses a teaching certificate in special education K-12 and has had many courses in the field of education, although he does not currently teach any classroom courses for credit. This individual has worked at one other university and a high school prior to being employed by his current institution.

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