TEACHING ETHICS TO ATHLETIC TRAINING STUDENTS FROM CAATE ACCREDITED UNDERGRADATE ATHLETIC TRAINING EDUCATION PROGRAMS

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Authorization to Submit
Abstract

Athletic Training is service-oriented and care giving in nature. Certified athletic trainers provide ethical care for the mental and physical well-being of the patient. Certified athletic trainers must be able to make appropriate ethical decisions concerning the medical treatment for patients.

The purposes of this study were to describe variables of professional preparation in ethics education by athletic training education program directors and certified athletic trainer clinical instructors; evaluate teaching methods of ethics; evaluate the cognitive ability in principled reasoning to apply ethical principles of the NATA Code of Ethics; and offer guidelines for education in ethics of care.

An assessment instrument was developed to describe and analyze: 1) the demographics of the certified athletic trainer participants, 2) the formal ethics education of the participants, 3) how their athletic training students are taught ethics of care, 4) how they teach ethics of care, and 5) how well they could apply principled reasoning to the NATA Code of Ethics principles.

A stratified systematic sample of 100 CAATE-approved undergraduate athletic training education programs was used. From these programs, 426 certified athletic trainers were selected. One-hundred six (25%) certified athletic trainers (54 male; 52 female) completed the survey representing 86 of the 100 programs selected.

Certified athletic trainers must follow several rules and codes. Athletic training students must be taught specific knowledge, including foundational behaviors of professional practice. As identified throughout this study, there is an appearance that there is no common thread of ethics education either as trained professionals or as teaching and mentoring
Sixty-nine of 106 participants (65%) completed the principled reasoning portion of five scenarios using a Likert response of strongly agree to strongly disagree. In all questions, participants chose other than strongly disagree 18% to 39% of the time. If the preferred pedagogical form of teaching ethics occurred, certified athletic trainers would have absolutely answered strongly disagree.

The overall impression is that most certified athletic trainers lack appropriate training in ethics education which may limit their ability to communicate appropriate ethical decision making information to students. Athletic training educators may want to examine how ethics education is being implemented. By developing a self understanding of values through reflection, practice, and communication, a certified athletic trainer can begin to provide quality ethics of care education.
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CHAPTER ONE

Introduction

Overview of the Study

The profession of Athletic Training is service-oriented and care giving in nature. Certified athletic trainers provide medical treatment to athletes and the physically active individual. Much like nurses, physical therapists, emergency medical technicians, and physicians, a certified athletic trainer is to provide ethical care for the mental and physical well-being of the patient. For this reason, they must be able to make appropriate ethical decisions concerning the medical treatment for patients.

Students pursuing a career in athletic training complete rigorous coursework and clinical experiences from a Commission on Accreditation of Athletic Training Education Programs (CAATE) accredited athletic training program prior to sitting for a national certification examination. Athletic training education uses a competency-based education model and provides educational opportunities in classroom and clinical settings. Students gain knowledge and necessary skills in the classroom and apply this information in a clinical setting. These academic settings allow for interaction between the student and various individuals including: the athletic training education program director, athletic training faculty, physicians, certified athletic trainers, approved clinical instructors, and clinical instructors who may or may not be certified athletic trainers. These professionals provide the educational and professional development of the athletic training student.

The purpose of this study is to understand how an athletic training student, an apprentice for providing healthcare, learns to care for a patient and make appropriate ethical decisions regarding medical treatment. As previously mentioned, athletic training education
utilizes the classroom setting for students to apply their knowledge and develop psychomotor skills. It is from both settings that students must ferret out how to provide the best care for a patient supported by appropriate ethical decisions. An assumption is that students will study and model actions of the mentors and leaders of their athletic training education program and critique how these individuals interact with their patients, and, thus, learn ethics of care. This study focuses on two of the different personnel who directly affect the ethics of care pedagogy for athletic training students: the athletic training education program director and certified athletic trainer clinical instructor.

**Athletic Training Education Program Director**

A main contributor to athletic training students’ education is the program director. This individual, who possesses credentials of a certified athletic trainer, is the leader and manager of the educational program that delivers the instruction that teaches students how to make ethical decisions regarding a patient’s healthcare. However, demands of the program director’s position have recently increased because of changing accreditation standards and cultural change of athletic training education. Hence, the nature of the program director’s position has evolved to become focused more on the management of athletic training student education: organizing and administering the educational program including curricula development, management of affiliated sites and clinical instructors, fiscal and budgetary involvement, and concentration on the daily operations of the education program.

At the same time, the role for a program director includes supervising, guiding, and mentoring athletic training students who are completing the academic and clinical requirements necessary to become a certified athletic trainer. The program director is ultimately responsible for the didactic and clinical education of athletic training students.
This individual, who must have full faculty status and responsibilities of the sponsoring institution, is also required to demonstrate teaching, service, and scholarship as required by the hiring college or university. In regards to this study, little is known as to how effective the program director is in the role of mentoring or teaching ethics of care. Much is assumed as to how the ethics of care is transferred to athletic training students through the actions of the program director or other certified athletic trainers, who monitor and mentor athletic training students.

Certified Athletic Trainer Clinical Instructor

Two members of the athletic training education team include the approved clinical instructor and the clinical instructor. The approved clinical instructor (ACI) is a certified athletic trainer or other qualified health care professional trained to provide formal instruction and evaluation of athletic training students in the clinical setting (CAAHEP Standards & Guidelines, 2001). The clinical instructor is a certified athletic trainer or other qualified health care professional. The clinical instructor (CI) is an educator and supervisor, but does not formally evaluate the student (CAAHEP Standards & Guidelines, 2001). These individuals assist athletic training students in the development of psychomotor skills and clinical proficiencies (NATA Education Council Clinical Education Definitions, Retrieved July 22, 2006).

Much of the athletic training research regarding education of athletic training students focuses on the effectiveness, behaviors, and characteristics of the clinical instructors. Researchers have shown that best student learning is facilitated by those clinical instructors who model professional behavior (Weidner & Laurent, 2001), communicate effectively (Platt Meyer, 2002; Swann, 2002) and are accessible (Pitney & Ehlers, 2004) to the students. In
the current study, ethics of care is assumed to be learned through role modeling and environmental impact from the clinical instructors’ actions. Because clinical education is a large part of the academic requirements for athletic training education, and students are to learn ethics of care, clinical instructors must be caring and ethical leaders and mentors.

In theory, students should acquire the rudimentary athletic training knowledge and psychomotor skills taught in the classroom setting and then apply best ethics of care practices in the clinical setting. However, how do students know the ethically correct decisions for providing optimal healthcare? How do they recognize professional behavior? Prescribed educational competencies and clinical proficiencies are taught in the classroom, but what professional behaviors must be acquired to provide the best healthcare?

*Educational Competencies*

Historically, educational competencies and clinical proficiencies as identified by the National Athletic Trainers’ Association (NATA) Education Council and former Joint Review Committee on Educational Programs in Athletic Training (JRC-AT), now CAATE, are the foundation for athletic training student education. A competency is defined as knowledge or skill essential to performing the specific job, whereas a clinical proficiency is defined as the application of the skill and utilization of the knowledge and skills in a decision-making situation (NATAEC Competencies, July 7, 2006). The 2001 Athletic Training Educational Competencies and Clinical Proficiencies (3rd edition) were divided into twelve content areas and then further categorized into cognitive, psychomotor, and affective domains, of which two affective domains were directed towards ethics. Currently, the 2005 Athletic Training Educational Competencies and Clinical Proficiencies (4th edition) are divided into thirteen content areas consisting of cognitive and psychomotor domains and clinical proficiencies. A
new content category, Foundational Behaviors of Professional Practice, was added to this edition replacing the affective domains of the third edition competencies. This category includes ethical principles which practicing certified athletic trainers are to apply to the profession (NATAEC Athletic Training Educational Competencies, 2006). Rationale for the change may have been the difficulty of assessing the affective domain of ethical behavior. It was with the new edition of competencies that the change from Bloom’s taxonomy of cognitive, psychomotor, and affective learning and assessment was replaced by a psychometric approach to assessment.

In the third competencies edition, two items within the affective domain that related to ethical issues were:

1) Defends the moral and ethical responsibility to intervene in situations that conflict with NATA standards, and 2) Accepts the professional, historical, ethical, and organizational structures that define the proper roles and responsibilities of the certified athletic trainer in providing health care to athletes and others involved in physical activity. (NATA Athletic Training Educational Competencies, 1999, p. 80)

The fourth edition’s foundational behaviors focus on legal practices, advancing knowledge to deliver the best healthcare, patient care, ethical practice, and embodies values of athletic training professionalism (NATAEC Athletic Training Educational Competencies, 2006; NATAEC Competencies, Retrieved January 27, 2007).

An underlying assumption throughout the educational process is that the clinical instructors and program director have the skills and knowledge to teach all competencies and clinical proficiencies. It is also assumed that these individuals have the skills and knowledge
to teach the foundational professional behaviors. However, certain assumptions are problematic because an individual is a caring mentor does not necessarily mean that they know how to teach ethics of care or that they have a background in the educational principles of ethics of care. One of the chronic problems of teaching ethics is the rhetorical question, can ethics be taught? If so, how do we teach ethics? Pedagogy of teaching ethics is a complex process involving the content of ethics, as well as the methods for teaching ethics (Fox & DeMarco, 1990; Reimer, Paolitto, & Hersh, 1983).

Purpose of the Study

Little is known about the teaching of ethics of care in athletic training. Considering that the athletic training education program director and certified athletic trainer clinical instructors have a responsibility to teach ethics, important questions arise. Do the program director and certified athletic trainer clinical instructors possess effective leadership and ethics of care attributes? Are the athletic training education program directors and certified athletic trainer clinical instructors sufficiently educated and experienced in guiding athletic training students in ethics of care? And if they are not prepared, what can be done to develop their leadership and mentoring roles to guide students? It has been stated “Athletic training faculty and instructors need to address issues specific to [ethical care] leadership and not merely those of management and administration” (Kutz, 2004, p. 16).

With these concerns in mind, the purposes of this mixed methods survey study are:

1) To evaluate the athletic training education program director’s and certified athletic trainer clinical instructors’ cognitive abilities in principled reasoning to apply the four ethical principles of the NATA Code of Ethics;
2) To describe selected variables of professional preparation in ethics education by program directors and certified athletic trainer clinical instructors;

3) To evaluate selected variables of teaching ethics in CAATE accredited athletic training education programs; and

4) To offer guidelines for education in ethics of care for athletic training education program directors and certified athletic trainer clinical instructors.

In the quantitative section of the study the statistical research questions are as follows:

1) What is the difference of principled reasoning in ethics of care between the athletic training education program directors and the certified athletic trainer clinical instructors?

2) What is the general knowledge of the athletic training education program director as it relates to ethics and ethics of care, preparation to teach ethics of care, and incidence of teaching ethics of care?

3) What is the general knowledge of the certified athletic trainer clinical instructors as it relates to ethics and ethics of care, preparation to teach ethics of care, and amount of time dedicated to teaching ethics and ethics of care to athletic training students?

4) What is the difference between the athletic training education program director and certified athletic trainer clinical instructors in ethics and ethics of care general knowledge, preparation to teach ethics of care, and amount of time dedicated to teaching ethics and ethics of care to athletic training students?

5) What guidelines would be necessary for education in ethics of care not previously developed for the athletic training education program director and certified athletic trainer clinical instructors?
Therefore, this study attempted to develop an understanding of the knowledge of ethics of care, teaching methods used by program directors and certified athletic trainer clinical instructors, and the amount of time dedicated to teaching and developing ethics of care attributes within athletic training students. It also identified the cognitive ability in principled reasoning of these individuals. This study could assist athletic training educators examine the necessity for greater interaction in developing ethics of care attributes for students, and should help educators develop ethics of care teaching guidelines to use in the classroom setting.

Significance of the Study

Athletic training education involves educating students to provide health care to others. The significance of the present study lies in what we can learn about ethics of care and its effect on the education of the athletic training students and their future patients. Because ethics of care can potentially positively and negatively affect future patient healthcare, the more we know about the teaching of ethics of care, the more we may positively affect athletic training students and thus good patient care.

CAATE mandates specific educational concepts for the athletic training students, however, a mandated study of ethical principles does not always equate to practiced ethics of care. The educational professionals who directly affect the teaching of ethical principles and, thus intentionally, ethics of care are the program directors who in the last few years have become managers of the education process. Time constraints of the position may affect the teaching of ethics of care. For example, to meet CAATE standards, the job description of athletic training education program directors’ appear be moving towards a managerial model to meet the need of a 300% increase in new education programs over the past five years that
are certifying athletic training students. As CAATE standards are now written, one questions the managerial duties of the program director considering the needs of the standards. Does the athletic training education program director have adequate preparation and time to support ethics of care leadership? Constraints from research, service, as well as promotion and tenure requirements may not support the educational responsibility for teaching ethics of care to the student.

A study on ethics of care leadership was needed to examine the certified athletic trainer clinical instructors who educationally help prepare the athletic training students, because if there is a dearth of knowledge and application by the athletic training educators, the student and patient will be adversely affected causing possible legal and ethical ramifications for the certified athletic trainer. If the teaching of ethical principles and thus teaching ethics of care is not emphasized, the education of the athletic training students, the relationships between the program director, the certified athletic trainer clinical instructor, and the student may be affected, as well as the general care for the patient.

Because the hypotheses are supported with this study, further research should examine the relationship of athletic training educators teaching and mentoring ethics of care to undergraduate athletic training students in the clinical setting. Application of data from this study should help athletic training educators examine the necessity for greater ethical interaction with athletic training students in the classroom and the clinical setting. Perrin and Lephart (1988) wrote “From the student’s perspective the classroom credibility of an athletic trainer may be questioned if the athletic trainer is not involved in performing the daily responsibilities of a clinician” (p. 42). Furthermore, it is the moral responsibility of the program director to be proactive in the support and development of ethics of care for the
athletic training students in all settings. Athletic training educators should use the results to emphasize the need for providing a positive influence with students in developing effective patient care.

Assumptions

1. The population is representative of the athletic training education program directors and certified athletic trainer clinical instructors.

2. The survey instruments are valid and reliable.

Limitations

1. The data can only be generalized to CAATE-accredited Athletic Training education programs.

2. Data from the study may only be indicative of a sample of athletic training education program directors and certified athletic trainer clinical instructors at an institution that offers a CAATE-accredited Athletic Training education program.

Delimitations

1. The data will be delimited by the honesty and accuracy of the participants involved within this study.

2. This study will be limited to only athletic training education program directors and certified athletic trainer clinical instructors at institutions that offer a CAATE-accredited Athletic Training education program.

Definition of Terms

*Approved Clinical Instructor:* An Approved Clinical Instructor (ACI) is a Board of Certification (BOC) Certified Athletic Trainer with a minimum of one year of work
experience as an athletic trainer, and who has completed Approved Clinical Instructor training. [CAAHEP Standard IB1c(1)(a)(b)]

**Athletic Training Education Program Director:** This individual shall have a recognizable department responsibility for the accountability of the day-to-day operation, coordination, supervision, and evaluation of all aspects of the athletic training educational program. He/She shall be a full-time employee of the institution and shall be a member of the teaching faculty. He/She shall have current NATA BOC recognition as a certified athletic trainer and have appropriate experience, in the clinical supervision of athletic training students. (CAATE Standards, 2005)

**Athletic Training student:** An individual who is fulfilling the requirements to become a certified athletic trainer. The athletic training student is enrolled in a CAATE-accredited entry-level athletic training education program. (NATAEC Clinical Education Definitions, Retrieved August 9, 2006)

**Board of Certification (BOC):** An independent non-profit corporation responsible for the certification of entry-level athletic trainers and establishment of requirements for maintaining the status as a certified athletic trainer. Originally known as NATABOC, but in 1989 became separate entity. (BOC Our Mission, Retrieved July 28, 2006)

**Commission on Accreditation of Allied Health Education Programs (CAAHEP):** CAAHEP is a nationally recognized allied health education accreditation organization of which its purpose is to accredit entry-level allied health education programs. CAAHEP granted accreditation to programs for the Athletic Trainer upon the recommendation of the Joint Review Committee on Educational Programs in Athletic Training (JRC-AT) until June 30, 2006. (CAAHEP Publications, Retrieved July 28, 2006)
Commission on Accreditation of Athletic Training Education Programs (CAATE):

CAATE is the accreditation agency that develops, maintains, and promotes standards of quality for athletic training education programs. This agency became the accrediting agency for athletic training education programs on July 1, 2006.

Caring: When an individual cares for someone else, the individual “must employ reasoning to decide what to do and how to best do it” (Noddings, 2002, p. 14). When caring for someone, an individual should show compassion, competence, confidence, conscience, and commitment to another individual. (Cronqvist, Theorell, Burns, and Lutzen, 2004)

Certified Athletic Trainer: An allied health professional that has a bachelor’s degree or master’s degree from an accredited college/university has fulfilled the requirements for certification as established by the BOC, and has passed the certification examination administered by the BOC. (BOC The AT Profession; Retrieved July 28, 2006)

Clinical Instructor: “A clinical instructor (CI) is a BOC certified athletic trainer or other qualified health care professional with a minimum of one year of work experience in their respective academic or clinical area.” [CAAHEP Standard IB1c(2)(a)(b)]

Code of Ethics: The expected behavior of a member of a particular profession.

Empathy: “The extent to which a person can sense, identify with, and understand what another person is feeling.” (Ganz, 2002, p. 110)

Ethics: To behave ethically is “to behave under the guidance of an acceptable and justifiable account of what it means to be moral.” (Noddings, 2003, p. 27)

Joint Review Committee for Educational Programs in Athletic Training (JRC-AT): The JRC-AT is a Committee on Accreditation representing the Athletic Training allied health profession under the CAAHEP umbrella. (JRC-AT; Retrieved April 28, 2006)
Leader: 1) Someone who has commanding influence or power (Berube, 1991, p. 719); 2) People who engage in leadership. (Northouse, 2001, p. 3)

Leadership: The capacity or ability to lead (Berube, 1991, p. 719); 2) Process whereby an individual influences a group of individuals to achieve a common goal (Northouse, p. 3); 3) An interaction between members of a group (Bass, p. 16); 4) “the process of influencing the behavior and attitudes of others to achieve intended outcomes.” (Ray, 1994, p. 6)

Mentor: A person who supports development, guides, teaches and cares for another individual; trusted counselor or teacher. (The American Heritage, p. 786)

Mixed Method Study: A study that involves the collection or analysis of quantitative and qualitative data that is collected concurrently or sequentially, and are integrated throughout the research process. (Creswell, 2003)

Moral Development: Process by which one learns to examine moral dilemmas; the knowing, valuing, and doing an action. (Lickona, 1991)

Moral Reasoning: Process by which one identifies a moral issue, examines the issue, and seeks to make the correct decision utilizing one’s values and beliefs while considering the values and beliefs of others. (Lumpkin, Stoll, & Beller, 2003)

Moral Values: How people value each other. (Lumpkin, Stoll, & Beller, 2003)

National Athletic Trainers’ Association (NATA): This is the professional membership organization for certified athletic trainers that advances the profession of athletic training and enhances the quality of healthcare provided by certified athletic trainers. (NATA About NATA, July 28, 2006).
Primary Clinical Setting: The clinical setting that the athletic training student spends the greater amount of clinical experience in, usually the college/university athletic training room setting.
CHAPTER TWO

Introduction

This chapter is divided into two parts. Part I is a history of the profession of Athletic Training and the education program evolution from pre-20th century days through current 21st century education. Part II identifies an ethics of care paradigm as it pertains to the education of students pursuing a career in Athletic Training. This overview will communicate the essence of how moral values, educators, and important guiding documents assist in teaching athletic training students how to make appropriate ethical decisions when caring for patients.

Part I – History of the Profession

Athletic Training & Athletic Training Education History

Pre-20th Century Athletic Training

The Athletic Training profession has been a “caring” profession from its earliest history. The profession probably began during Ancient Greece when boys, known as Paidotribes or ‘boy rubbers’, were hired to massage athletes during pre- and post-exercise (Gardiner, 1930). The paidotribe was as important for the athlete’s purposes as were physicians (Wright, 1925). Gardiner (1930), using drawings on vases from the 6th Century B.C. Greece, notes examples of training including a boy removing a thorn from an athlete’s heel and another boy pouring oil on an athlete for a rub down, probably after a workout. Vases, from about 480 B.C., show a group of trainers preparing remedies for sore muscles and a youth massaging a boxer (Gardiner, 1930). See Figures 1, 2, and 3 for these vases.
Figure 1. Boy removing thorn from a youth’s foot and oil being prepared to massage.
Gardiner, 1930, p. 81.

Figure 2. Groups of Epheboi and Trainers. Bottom Vase – Trainer second from left preparing for massage. Gardiner, 1930, p. 81.
The ancient athletic trainer was required to know anatomy, how certain foods affected the body with exercise, and the effects that various exercises had on the body. In the fifth century, the ancient athletic trainer developed a training regimen that included diet, massage, rest, and exercise that was a requirement for physical conditioning necessary for the athlete’s success (Gardiner, 1930; Klafs & Arnheim, 1973). Herodicus of Megara, a physician and probably the greatest Greek trainer, was known to be a teacher of Hippocrates, the Father of Medicine (Klafs & Arnheim, 1973; Pikoulis, Waasdorp, Leppaniemi, & Burris, 1998).

After Alexander the Great’s death, the rise of the Roman Empire, the support of Christianity by Constantine the Great, the demise of the ancient Greek Olympic Games, athletics were deemphasized because of the games’ violent nature (Gardiner, 1930; Miller, 2004; Spivey, 2004). The Romans had turned the Greek notion of Arete, striving for excellence, into decompetition which was the philosophy of anything for the triumph. Blood sports and gladiatorial spectators became the norm. Such a value structure could not be
supported in the radical new religion, Christianity which promoted peace and care (Miller, 2004; Olivová, 1984).

Interest in athletic activity and, subsequently, athletic training did not begin to grow again until the 19th Century when interest in gymnastics and team sports was revived in the United States (Ebel, 1999; Klafs & Arnheim, 1973). Building on the English education system, it was believed that sport was a means to teach character. Thus, it was then, that sport was introduced in schools in America, and with athletes came the need for athletic trainers. Not much is known about these early athletic trainers because no history was kept and/or they may have played a minor role in preparation of the athletes.

Rise of intercollegiate football in the late 1800’s and early 1900’s brought about the hiring of athletic trainers by higher education institutions to provide treatment to athletic injuries that were otherwise treated by coaches and physicians (O’Shea, 1974). Some of the first athletic trainers had little to no technical medical knowledge except to prescribe home remedies, apply ointments, and provide a rub down pre- and post-exercise (Klafs & Arnheim, 1973; O’Shea, 1974). Coaches began to disapprove of these old-fashioned athletic trainers because of “the drinking and swearing ‘know-it-all’ ditch-digger masquerading as the team trainer” (Bilik, 1956, p. 8). Changes in professional preparation of athletic trainers would soon come.

Early 20th Century Athletic Training

Several athletic trainers were hired in the early 20th Century at prominent universities. In 1914, Samuel E. Bilik, who became known as the Father of Athletic Training, enrolled in a pre-med program at the University of Illinois and was hired to work as an athletic trainer during the afternoons (Ebel, 1999, O’Shea, 1974). He published Athletic Training in 1916,
which is believed to be the first publication devoted to athletic training practices (Ebel, 1999). It was from this original publication that The Trainers Bible (Bilik, 1956) evolved, thus opening the avenue for further athletic training publications. This book was an invaluable asset for future athletic trainers as it contained information on diagnosing athletic injuries and provided techniques to assist in treating injuries. The information offered base knowledge to those practicing athletic training.

The 1920s brought further advancement to the profession of Athletic Training. Cramer Chemical Company, known today as Cramer Products Company, helped to further the athletic training profession. In 1920, Chuck Cramer, a pharmacist, founded a company to sell ointments and supplies to athletic training rooms (Ebel, 1999). In addition, he and his brother, Frank, traveled across the United States learning and teaching athletic training techniques from and to athletic trainers.

Another shift in athletic training occurred in the 1930s and 1940s. Several athletic trainers were hired in various collegiate settings across the nation, and the first group of athletic trainers, including the Cramer brothers, traveled to the 1932 Olympics with the U.S. team (Ebel, 1999). Historically, no athletic trainers or coaches were originally permitted into the arena with the athletes at the modern Olympic Games due to the De Coubertin statement of amateurism of the games (Guttman, 2002; Young, 1996). According to older Olympic and English definitions for amateur, it was thought that a “true gentleman amateur” did not hire others to assist with their training. This was disputed in the 1924 modern Olympic Games in Paris (Guttman, 2002; Young, 1996). The 1932 entrance of athletic trainers to the Olympic Games was a major turning point when athletic trainers were given the chance to assist others in well-publicized athletic events.
Mid-20th Century Athletic Training

Athenic training: The professional association. Professional associations help promote the specific livelihood of the profession by enhancing educational needs of the members, promoting collegiality among its members, and sharing knowledge about the profession. The original National Athletic Trainers Association was founded in 1938, but due to various reasons, including financial constraints, lack of communication between the association members, and World War II, it disbanded in 1944 (Ebel, 1999; O’Shea, 1974). Today’s National Athletic Trainers’ Association (NATA) was founded in 1950 at a meeting in Kansas City, Missouri, that was sponsored by Cramer Chemical Company (Ebel, 1999; Klafs & Arnheim, 1973). This new association, financed for the first few years by the Cramer Chemical Company, was established to develop professional standards for athletic trainers and disseminate knowledge (Hunt, 1998; Klafs & Arnheim, 1973). Another goal of the NATA was to advance the profession by seeking recognition by other healthcare providers and the public (Legwold, 1984).

As the association grew so did the need for leadership. William E. “Pinky” Newell was chosen to fill the position of executive secretary from 1955-1968 (Schwank & Miller, 1971). He provided the direction needed to bring the respect from the medical community to the profession. Newell... “changed athletic training from a craft made up of ‘eccentric characters’ and water boys to a profession that is respected by the entire medical community” (Legwold, 1984, p. 250). Under his guidance, the NATA and athletic training flourished. A scholarly research journal was created, the first code of ethics was developed and adopted, and a committee was appointed to oversee the development of guidelines for an athletic training education program (Ebel, 1999; Hillman, 2005; O’Shea, 1974). The Committee on
Gaining Recognition was formed to study how to enhance the athletic training profession (Delforge & Behnke, 1999).

*Athletic training: The birth of education and certification.* The importance of the Committee on Gaining Recognition to the association was vast; it assisted in catapulting the profession forward in gaining the recognition and credibility from the American Medical Association and allied healthcare professions by enhancing the education requirements and certification standards. The committee developed and submitted the first academic recommendations that were approved by the NATA Board of Directors in 1959 (Delforge & Behnke, 1999). The initial curricular recommendations stressed how to attain employment along with learning athletic training techniques. Athletic trainers were to complete secondary school teaching credentials, usually in Physical Education, along with completing prerequisites for Physical Therapy school acceptance (Delforge & Behnke, 1999; Klafs & Arnheim, 1973). The Committee on Gaining Recognition later divided into two subcommittees becoming the NATA Professional Education Committee (PEC) to focus on specific education guidelines, and the NATA Certification Committee which focused on the actual certification process (Delforge & Behnke, 1999). These two committees, working together but separately, further impacted the education program development and certification process for athletic trainers.

Interest in athletic training increased throughout the United States, but little growth in the development of athletic training education programs occurred in the 1960s. It was not until 1969 that the first athletic training education programs were recognized and approved by the NATA (O’Shea, 1974). The education programs and certification process flourished in the 1970s with an increased number of NATA-approved programs. The mid-1970s saw
athletic training education evolve into a separate entity as athletic trainers did not have to rely solely on physical education teaching credentials or physical therapy program completion for employment opportunities. For greater employment opportunities, athletic trainers were still encouraged to obtain these credentials, but the athletic training education program was able to now stand alone.

Not only was there an interest in collegiate students for athletic training, but also high school students took notice of the profession. With placement of athletic trainers into the high school scene, high school students wanted to become a part of the action. Cramer Products Company saw this interest, developed, and held the first workshop for 50 male and female high school students in 1970 (“Cramer Summer Workshop”, 1975). By 1975, 3,429 high school students had enrolled in the workshops (“Cramer Summer Workshop”, 1975). As more students entered the high school athletic training room to learn through personal instruction from athletic trainers and coaches, an increased burdensome workload was placed on the supervising athletic trainers. Cramer Products Company thus developed a self-study course, The Cramer Student Trainer (“Self-Study Course Helps Student Trainers Learn”, 1975), which consisted of lesson assignments, anatomy and instruction charts, final review questions, a completion certificate, and an award badge. The rapid growth of high school students attending workshops and completing self-study courses assisted in placing demands for the development of athletic training education programs at the collegiate level.

While the PEC was recognizing collegiate level education programs, the Certification Committee, concurrently, was developing the first certification examination to be administered in 1970 (Delforge & Behnke, 1999). As with other medical professions, holding professional certification credentials endorsed through national certification testing
assisted in gaining the respect needed by the profession. The certification examination benefited the profession by establishing standards for entry-level certified athletic trainers in providing quality healthcare and in understanding the duties and obligations imposed on the certified athletic trainer (BOC Certification, Retrieved July 27, 2006). It also helped the public understand what to expect from certified athletic trainers.

*Late 20th Century and Early 21st Century Athletic Training*

Today’s athletic training profession is much different from its origins. Evolution of healthcare has been a factor in the changing of Athletic Training education, accreditation, and the profession. The professional organization, the educational association, and the certification body are three separate entities. Each conducts its own business, but all three are interrelated to better the profession of Athletic Training. Names of the associations and agencies may have changed, but one goal has remained consistent for each, to promote the athletic training profession.

*Athletic training: The professional association.* Athletic trainers have now been officially recognized as having an important role in providing healthcare for almost 40 years. In 1967, the American Medical Association (AMA) recognized the professionally prepared athletic trainer as being an integral part of the athlete’s healthcare team (O’Shea, 1974). Unlike yesterday’s certified athletic trainers found only in the high school, college and professional sports realms, today’s professionals are found in clinics, hospitals, industrial, and corporate settings. Because of the changes in healthcare and the differing practice settings, the NATA has continued its ongoing assessment to better the quality of education and further assist with the recognition of athletic training by the public, AMA, and other allied healthcare providers.
In order to raise the image of athletic training through education and certification, the NATA has continuously advanced its education standards. Educational reforms are necessary to stay abreast with the changing demands of the profession. In the early 1980s, the PEC developed and submitted to the NATA Board of Directors the *Guidelines for Development and Implementation of NATA Approved Undergraduate Athletic Training Education Programs* (National Athletic Trainers’ Association, 1983) containing procedures for converting initial athletic training education programs to programs of comparable institutional academic status (Delforge & Behnke, 1999). In conjunction with these guidelines, the *Competencies in Athletic Training* (National Athletic Trainers’ Association, 1983) were developed and presented to the NATA Board of Directors (Delforge & Behnke, 1999; Prentice, 2006). These competencies were written to ensure graduates from accredited athletic training education programs were taught and mastered the knowledge and skills of current practicing certified athletic trainers. To be used jointly for the development and maintenance of an education program, the guidelines and competencies documents assisted with further credible promotion of the athletic training profession. Consequently, in June 1990, the AMA officially recognized Athletic Training as an allied health profession therefore, moving the profession to a status similar to other allied health professions (Delforge & Behnke, 1999).

Today’s NATA mission “is to enhance the quality of healthcare provided by certified athletic trainers and to advance the athletic training profession” (NATA Mission, Retrieved July 27, 2006). The NATA has continuously explored new avenues for employment opportunities and advancement of the profession in knowledge and research to enhance the quality of healthcare provided by the certified athletic trainer.
Athletic training: Education and certification. As in many professions, the issue of acceptability had to be addressed. Initially, in 1965 there was only one educational route to becoming a certified athletic trainer. This was through “grandfathering”, allowing those who had been practicing athletic trainers to be granted certification which ended a year after the administration of the initial certification examination (P. Grace, personal communication, July 6, 2006; O’Shea, 1965). Once this phase passed, the Committee on Certification developed five routes available to become a certified athletic trainer: 1) complete the faculty-athletic trainer route, 2) graduate from a physical therapy program, 3) be actively engaged as an athletic trainer for a minimum of five years titled the special consideration route, 4) complete an apprenticeship program, or 5) graduate from an NATA approved athletic training education program (Delforge & Behnke, 1999, P. Grace, personal communication, July 6, 2006).

The faculty-athletic trainer route was a hybrid program supported by the NATA and American Academy of Orthopaedic Surgeons (P. Grace, personal communication, July 6, 2006). This route was designed for high school teachers who would complete a three summer block of didactic study about athletic trainers. During the school year, these teachers would function as the school’s athletic trainers, and at the end of five years they could challenge the certification examination. Grace (personal communication, July 6, 2006) acknowledge that this program ended due to money issues, politics of these individuals outperforming the students from athletic training education programs on the certification examination, and that various NATA individuals in power had a hard time accepting these individuals as they were non-traditional athletic training students.
In 1984, two routes to certification, the physical therapy route and the special consideration route, were eliminated under NATA Board of Certification (BOC) executive director, Paul Grace (D. Fandel, personal communication, June 22, 2006). The elimination of the physical therapy route was due to various political reasons including the push for the BOC to become accredited by the National Commission for Certifying Agencies (NCCA), and the increased number of accredited athletic training education programs (BOC Our Mission, June 26, 2006; D. Fandel, personal communication, June 22, 2006; P. Grace, personal communication, July 6, 2006). The NCCA accrediting body questioned why another profession would receive the Athletic Training professional credential without having to go to school for it. Also, there was a push to increase the number of accredited Athletic Training education programs so removing this route to certification would decrease the number of individuals eligible to sit for the certification examination, thus creating a labor issues problem of not enough certified athletic trainers. The special consideration route, created specifically for those who were overlooked during the initial “grandfather” process of certification, was phased out because of the limited number of applicants and aforementioned questioning from the NCCA (D. Fandel, personal communication, June 22, 2006; P. Grace, personal communication, July 6, 2006; O’Shea, 1974).

Two educational routes for certification examination eligibility remained in existence for approximately 20 years. However, as expertise increased and the knowledge base became greater within the athletic training profession, the NATA reassessed the apprenticeship program certification route. In 1994, the NATA formed the Educational Preparation Task Force to evaluate how the entry-level certified athletic trainer was educationally and professionally prepared, and to make recommendations to standardize
education and assist with better preparation of the young professional (Starkey, 1997; Weidner & Henning, 2002). From the recommendations provided by the Task Force, the decision was made in 1997 to eliminate the apprenticeship educational route on December 31, 2003 (Weidner & Henning, 2002). Today, students pursuing a career in athletic training must graduate from an accredited athletic training education program and pass the BOC certification to hold the credentials of a certified athletic trainer. The move to one standard route for certification eligibility brought about greater acceptability from other allied health professions.

Current Athletic Training Education Programs

Accreditation of athletic training education programs (ATEP) has occurred for 37 years. Over the years, several changes have transpired involving the turnover of accreditation agencies, change in names of important guiding program documents, and educational requirements of athletic training students.

Accreditation Agencies

To become an accredited program today, a program must show compliance of standards set forth by an accreditation agency. Athletic training education programs were recommended for accreditation by the Professional Educator’s Committee to the NATA Board of Directors until early 1994 when the AMA Committee on Allied Health Education and Accreditation (CAHEA) replaced the NATA as the new accrediting body (Delforge & Behnke, 1999). To assist with the transition to CAHEA, the NATA formed the Joint Review Committee on Educational Programs in Athletic Training (JRC-AT) in 1990 to help develop new standards and guidelines for athletic training education programs. These standards and guidelines were used by CAHEA to accredit programs in early 1994 (Delforge & Behnke,
1999). In mid-1994, CAHEA disbanded and accreditation of ATEP was assumed by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) (Delforge & Behnke, 1999). This agency continued accrediting education programs until July 1, 2006 when the Commission on Accreditation of Athletic Training Education (CAATE) assumed the duties of both CAAHEP and the JRC-AT (JRC-AT January Update Newsletter, February, 2005). As of July 25, 2007, there were 342 CAATE accredited undergraduate athletic training education programs. (CAATE Accredited Undergraduate Athletic Training Education Programs, Retrieved July 25, 2007).

**Guiding Documents for Athletic Training Education Programs**

Historically, three documents have guided the professional practice, educational program accreditation, and educational curriculum development for athletic training education. Even though the names of the documents have slightly changed, these original documents, the *Role Delineation Study of the Entry-Level Athletic Trainer* (National Athletic Trainers’ Association Board of Certification, 1982), *Guidelines for Development and Implementation of NATA Approved Undergraduate Athletic Training Programs* (National Athletic Trainers’ Association, 1983), and *Competencies in Athletic Training* (National Athletic Trainers’ Association, 1983), have assisted with developing and maintaining standards of quality for education programs and professional practice.

**Professional practice guidelines.** In 1982, the BOC conducted a job analysis study of certified athletic trainers identifying the knowledge and skills used in the profession, and from this information the BOC developed the *Role Delineation Study of the Entry-Level Athletic Trainer* (National Athletic Trainers’ Association Board of Certification, 1982) (Weidner & Henning, 2002). The purpose of conducting the role delineation study was to
ensure the certification examination was testing what certified athletic trainers were actually performing professionally in the various practice settings nationwide (BOC Role Delineation Study, 2004). The role delineation study is the foundation of what practicing athletic trainers do professionally. The most recent study was completed, revised, and implemented in 2004.

*Educational program accreditation standards.* Athletic training education programs must meet criteria from published standards in order to obtain accreditation as an allied health education program. These standards are used to develop, evaluate, and maintain education programs. Some of the standards consist of general program requirements including clinical education requirements, personnel, and curriculum and instruction.

The *Guidelines for Development and Implementation of NATA Approved Undergraduate Athletic Training Programs* ((National Athletic Trainers’ Association, 1983) was initially developed in 1983 by the NATA Professional Education Committee as the review guide of accreditation standards for athletic training education programs (Delforge & Behnke, 1999). With the change from an internal accreditation agency to one sponsored by the AMA in 1991, there was also an update in accreditation standards and guidelines. The new document, *Essentials and Guidelines for an Accredited Educational Program for the Athletic Trainer*, (Committee on Allied Health Education and Accreditation, 1991) became effective in early 1994 (Delforge & Behnke, 1999). In a relatively short time period, significant education and certification revisions would occur to the profession. An update in the third accreditation standards edition, adopted in 2001, saw the addition of the Approved Clinical Instructor and accompanying training program to the clinical education portion of the program (Weidner & Henning, 2002). These standards remained active until July 1, 2006 when a new fourth edition entitled *Standards for the Accreditation of Entry-Level Athletic*
Training Education Programs would be adopted and went into effect with the newest accreditation agency, CAATE (CAATE Standards, 2005). All of these transformations have occurred because of the advancing expertise and ever changing nature healthcare and the athletic training profession.

**Educational curriculum development guidelines.** The Competencies in Athletic Training document was developed in 1983 by the NATA Professional Education Committee, and was to be used in conjunction with the document, Guidelines for Accreditation for an Athletic Training Education Program (Delforge & Behnke, 1999). This document, created by utilizing the Role Delineation Study, defines the knowledge and skills an athletic training student must be taught and become proficient in prior to entering the workforce (NATA Athletic Training Educational Competencies, 2006).

Defined as the knowledge and skills essential to performing a profession, competencies are the basis for the education program. The current Athletic Training Educational Competencies and Clinical Proficiencies document contains thirteen content areas including a new area, Foundational Behaviors of Professional Practice (NATA Athletic Training Educational Competencies, 2006). This new content area establishes the values professionals should be using while practicing athletic training. This category replaced the affective domains of the third edition competencies, and is the collective ethical and moral principles in which practicing athletic trainers are to apply to the profession.

As stated in the Foundational Behaviors content area, students are expected to understand and comply with the NATA Code of Ethics, advocate for the patient’s needs by demonstrating the appropriate skills and behaviors to provide the best healthcare, and utilize evidence-based practice for providing the best care, in other words - a professional ethics of
care (NATA Athletic Training Educational Competencies, 2006). Focusing on various principles and behaviors, students must learn to deliver the best patient care in a professional ethical manner.

**Athletic Training Education Program Personnel**

*Athletic training education program director: Past and present.* The athletic training education program director is the person or professional responsible for all aspects of the daily operational duties of the academic program for athletic training students including organizing and administering the educational program. This responsibility includes curricula planning and development; fiscal and budgetary management; distribution of educational opportunities for athletic training students in various settings; and coordinating, supervising, and evaluating all components of the program didactically and clinically (CAATE Standards, 2005).

As athletic training education standards have changed over the past two and one-half decades, so have the responsibilities of the program director. With each new standards revision and educational changes, the program director’s workload has increased. The standards for program directors identify the responsibilities as a “recognizable institutional responsibility or oversight for the day-to-day operation, coordination, supervision, and evaluation of all components (academic and clinical education) of the ATEP” (CAATE Standards, 2005, p. 4). The standard also states that the program director must be employed full time at the sponsoring institution, have full faculty status, and have the program responsibility recognized as a department assignment (CAATE Standards, 2005).

Historically, many of the original program directors were found to have held the positions of head athletic trainer. However, most individuals were given the director of sports
medicine title which included dual responsibilities for administering healthcare to student-athletes and administering the NATA education program (Sciera, 1981). Today, only a handful of the program directors hold the dual responsibilities due to the increased responsibilities of both positions.

In 1988, Perrin and Lephart examined the role of the program director as clinician and educator and found that 53 of the 59 program directors surveyed were clinically active including some who held dual roles as program director and head athletic trainer. This study examined the roles of the program director, including the constraints. It was found that the program director had to fulfill promotion and tenure requirements for faculty members, which would put a strain on daily activities, including the time spent interacting with students (Perrin & Lephart, 1988). Only 20% of the 59 program directors were tenured faculty members, 30% were within the tenure track, 15% were denied tenure, and 20% of the program directors were granted tenure made through special provisions (Perrin & Lephart, 1988). They concluded that the program director would possibly face challenges while acting as both the educator and clinician because of the combined responsibilities.

Besides directing the organizational aspects of the program, program directors must provide daily operation of the academic program that includes teaching curriculum content and coordinating the evaluation of athletic training students’ performance. A program director is one of several individuals who care for the students educationally and professionally by guiding, mentoring, and leading the student towards a career goal. The program director usually interacts with the student through academic advising and teaching in the classroom. Today, many program directors may not as often be involved with teaching, supervising, and interacting with students in the clinical setting on a daily or
weekly basis. As administrative responsibilities for the educational program increased, their faculty position descriptions requiring scholarship and service workload were expanded, and with the addition of the approved clinical instructors in the clinical settings, the program director’s time spent in the clinical setting with the student appears to be diminishing. This decreased contact time may hinder the program director’s ability in teaching and mentoring ethics of care to the athletic training student. Mangus (1998) stated, “Program directors and full-time faculty educators who are not involved in the daily operation of the athletic training room will miss the daily interaction with students, as well as the hands-on portion of the profession” (p. 308).

With elimination of the apprenticeship route to certification and with revisiting requirements for certification, new athletic training education program director’s positions have been created to oversee education of the athletic training student. The number of positions for CAATE accredited athletic training program directors leaped from 79 programs in 1999 to 198 in June 2003 to 334 in July 2006 (Arnheim & Prentice, 2000; L. Caruthers, personal communication, June 10, 2003; CAATE-Accredited Entry-level Athletic Training Education Programs, Retrieved July 22, 2006). Do these new program directors have the preparation it takes to teach and mentor students about ethics of care in the classroom and clinical settings?

As athletic training program directors increase their role in managing the academic program, they must continue to lead, interact, and teach ethics of care to students. Combine this with the relationship of increased managerial duties, plus the need to serve faculty tenure and promotion requirements, perhaps many of their leadership responsibilities will diminish as well as their ethics of care teaching.
Approved clinical instructor and clinical instructor. With implementation of the 2001 CAAHEP Standards & Guidelines, accredited programs were obligated to implement clinical education requirements for utilizing approved clinical instructors (ACI) and clinical instructors (CI) to educate and supervise athletic training students in the clinical setting. Seminars were developed to educate athletic training education program personnel to train approved clinical instructors on how to instruct and evaluate clinical proficiencies of athletic training students (Weidner & Henning, 2002).

The approved clinical instructor (ACI) is a member of the athletic training education team who assists in educating and evaluating athletic training students in the clinical setting. This person is “a faculty, staff, or adjunct allied health or medical community member of the sponsoring institution or affiliates who provides formal instruction and/or evaluation of students in the clinical proficiencies of the athletic training educational program” (CAAHEP Standards & Guidelines, 2001, p. 2). The ACI is a certified athletic trainer for a minimum of one year or an individual qualified through professional preparation and experience respective to the academic teaching area and must have completed an approved clinical instructor training workshop (CAAHEP Standards & Guidelines, 2001).

Another member of the athletic training education team is the clinical instructor (CI) who is a certified athletic trainer or other qualified health care professional. The CI is also an educator, supervisor, role model and mentor to athletic training students during clinical experiences (CAAHEP Standards & Guidelines, 2001). It is during these experiences where clinical instructors assist athletic training students in utilizing their didactic knowledge and applying it to real life situations in a controlled setting. The CI does not formally evaluate
the students, but assists with the development of psychomotor skills and clinical proficiencies (NATA Education Council Clinical Education Definitions, Retrieved July 22, 2006).

Both the ACI and CI supervise and educate the athletic training students, but the difference between the two instructors is that the ACI “provides formal instruction and evaluation of clinical proficiencies in classroom, laboratory, and/or in clinical education experiences through direct supervision”, whereas the CI “is not charged with the final formal evaluation of the athletic training students’ integration of clinical proficiencies” (NATAEC Clinical Education Definitions, July 22, 2006). One factor these instructors do have in common is that the instructors provide the guiding and mentoring relationship necessary to help students develop the necessary proficiencies to work with patients.

Weidner and Henning (2004) developed standards and criteria for selecting, training, and evaluating the ACI to enhance quality clinical education for the athletic training student. Seven specific criteria were selected, one of which is Legal and Ethical Behavior. This criterion stated that the ACI should hold appropriate credentials as required by the state of employment, provide athletic training services within the scope of practice within the state of employment, provide services that comply with the governing state and federal laws, and demonstrate ethical behavior as defined by the NATA Code of Ethics. Another criterion, Interpersonal Relationships, expects the ACI to demonstrate appropriate relationships of being a positive role model and/or mentor for the athletic training student. These ACI criteria are important, as they lay the framework necessary to teach the student how to act when providing athletic training care to the patient. Due to the nature of the ACI and student relationship, it is important to have ethical role models and mentors for students as they apply
the knowledge and skills learned in the classroom into ethics of care practice in the clinical setting.

Part II – Understanding Ethics of Care Paradigm

To understand the importance of ethics of care in Athletic Training, a paradigm is offered to show how ethics of care relates to athletic training students. A good metaphor to the development of ethics of care in an athletic training student is analogous to the maturation of an onion. When a student is developing the appropriate tools to apply ethical principles to best care practice, it’s a growing onion: as the seed matures, layers are added until the onion is mature. In the metaphor, personal moral character is the innermost portion of the onion, what is synonymous to the athletic training student, the individual. Ethics education, which exposes the student to guidelines, laws and society, adds the next several layers of the onion. More layers are added by athletic training educators and clinical supervisors who continue to expose the student to ethical practice through role modeling, the environment, and education. Finally, using the various layers of necessary knowledge and skills, it is the mature student who must make the appropriate ethical decisions when caring for the patient (Figure 4).
Figure 4. Ethics of Care Paradigm for Athletic Training Student Development.

The Onion Metaphor

The Seed – Personal Moral Character

Figure 5. The onion metaphor: The seed: The athletic training student.
Moral character is composed of the properties of moral knowing, moral feeling, and moral action (Lickona, 1991). As children grow and experience life, they are exposed to social conflict situations that allow them to learn right from wrong. Lamb (1991) suggested that during the second year of life an emergence of a moral sense occurs. Toddlers become emotionally expressive allowing them to show actions about doing and not doing the right thing. She implies that the “seeds of our motivation to help…” and “…to care for others” may be planted during this time (Lamb, 1991, p. 187).

Through moral knowing, we develop reflective skills to become aware of what is right, understand what moral values are, and develop moral reasoning skills to make the correct ethical decision (Lickona, 1991). Moral feeling is the emotional side of moral character. Utilizing one’s conscience and empathy moves the individual to feel compelled to do the right moral action. Moral action is the combination of both moral knowing and moral feeling. Having the competence to know right from wrong, having the will to do the right thing, and through habit, an ethical person can accomplish moral action. The interaction of moral knowing, moral feeling, and moral action in resolving an ethical conflict assists with the development of moral character (Figure 6).
Figure 6. Lickona’s Components of Good Character. Lickona, 1991, p. 53.

Layer One – Role Modeling, Environment & Education

Figure 7. The onion metaphor: Layer one. Role modeling, environment, & education.
Role models of athletic trainers (clinical instructors and program directors), the environment (athletic training rooms, clinical settings as well as the gymnasiums, fields and arenas with all the sundry of people immediately enabling athletes, coaches, patients, administrators), and various aspects of education assist in teaching the athletic training student to sense right from wrong in an ethical decision. As previously stated, several studies have researched interactions between the clinical supervisors, clinical setting, and athletic training students. Much has been learned about how the clinical supervisors and their behaviors assist in teaching the athletic training student how to interact with the patient and provide the appropriate ethical care.

Numerous studies have examined the different roles of the clinical instructor (CI) and athletic training student in the clinical setting. For example, Lauber, Toth, Leary, Martin, and Killian (2003) utilized athletic training education program directors and clinical instructors to identify CI behavior categories and assess the importance of these behaviors in the delivery of clinical instruction to the student. Also, researchers have examined athletic training students’ perceptions of CI’s (Anderson, Larson, & Luebe, 1997), educational experiences (Weidner & Laurent, 2001), and preferred learning styles (Hansen, 1999; Brower, Stemmons, Ingersoll, & Langley, 2001). Little research, however, has examined the teaching of ethics and ethics of care to athletic training students in the classroom or clinical setting.

Research on ethics of care and mentoring between athletic training program directors and athletic training students is limited. At the present time, no research could be found that specifically addressed this subject, but one study has investigated differences of ethical-decision making and moral philosophy between athletic training students and instructors.
(Caswell, 2003). Caswell found that the instructors’ ethical decision making scores were higher than the student scores, thus concluding that athletic training education programs would benefit by selecting instructors who have the appropriate levels of ethical decision making to assist with facilitating growth in students’ ethical decision making.

Many supervising clinical instructors teach and mentor students in intercollegiate athletics, but because of the increasing workloads and stress that the demands of intercollegiate athletics have placed on the ACI and CI, these individuals may not have an adequate schedule to teach and mentor ethics of care. Platt Meyer (2002) explored the situational leadership models of athletic training clinical instructors and how it could be implemented into the clinical education setting. Clinical instructors are placed in leadership positions in the clinical setting, so it is important to provide a positive experience for students through building trust, giving support, and practicing ethical modeling (Platt Meyer, 2002). Interestingly, even though it is assumed that program directors and clinical instructors will mentor and teach ethics, job duties of the program director limit the opportunity and the clinical instructor may not have the skills and knowledge to offer a model of ethics of care.

Educational leaders, as mentors, need to assist students in learning to make the best choices. As one who guides and promotes the career development and personal growth of others, an athletic training mentor is involved in developing the whole student including helping them mature into ethical, caring healthcare providers. Caring adults can assist in developing the qualities a student needs to achieve professional success. A mentoring adult has been identified as being an important part of development (Bandura, 1977).

Stoll, Beller, Reall, and Hahm (1994) affirmed that moral education is taught through formal and informal approaches. Formal approaches to moral education are intended to
affect directly the development of moral reasoning, while role modeling and environmental influences are considered to be informal interactions. In athletic training, these informal interactions of moral education are assumed to be taught in the clinical setting, and it appears little formal education occurs.

Components of moral education as they pertain to the care perspective have been identified as modeling, dialogue, practice, and confirmation (Noddings, 2002). Noddings’ model of moral education is based on an ethic of care. Modeling relates to how one shows another what it means to care and be cared for. Through observation, students learn by means of a role modeling perspective. As the most fundamental part of the care model of moral education, dialogue allows the trusting relationship to develop. For this component to work, people must be able to speak their thoughts and to listen to other individual viewpoints. Students need to engage in activities of providing care to others. Through conversation and debate, students must continually practice caring for others under the guidance of a mentor. Lastly, students need to receive confirmation of good or bad actions in order to reassure them of proper moral action.

Kohlberg’s moral development theory identified six stages that children and adults progress through to assist with decision making during ethical conflict situations. In today’s research, the six stages are grouped into three levels identified as Pre-conventional, Conventional, and Post-Conventional (Kohlberg, 1984; Power, Higgins, & Kohlberg, 1989). The first level incorporates Stages One and Two in which children are learning that authorities make rules and that punishment may follow if the rules are not obeyed. Kohlberg suggests that elementary school aged children associate with these stages. In Stages Three and Four of the Conventional level, the good boy/good girl actions occur. Through societal
duties, children learn to do what is expected of them. Lastly, the third level of moral
development is usually reached at adulthood age. Stages Five and Six are based upon a
person’s values, personal commitment, respect for universal principles, and universal human
ethics.

Kohlberg’s original studies used male subjects aged 10, 13, and 16 (Kohlberg, 1984). Later he added younger children and boys and girls in cities other than Chicago. Because much of the original research only evaluated male subjects, there is some disagreement with Kohlberg’s theory. Gilligan (1982) stated that this theory emphasizes too heavily on moral justice instead of moral caring, and does not identify with a female’s perspective on moral development. Noddings (2002) and Held (2006) also suggested there is a greater need to deemphasize moral justice and incorporate moral caring. This is where athletic training educators should incorporate both moral justice and moral caring when teaching athletic training students how to provide best care practices to the patient.

Learning Ethics in Healthcare Professions. Many medical and nursing schools require students to enroll in specific medical ethics or bioethics courses that discuss ethical issues related to patient care. These courses attempt to teach the knowledge and skills needed for resolution of dilemmas that may arise during professional and student practice. However, few athletic training education programs, if any, have such educational courses. Teaching ethics of care may be embedded in many of the athletic training classes throughout the academic program, but is it really discussed or taught in a way to assist with the critical thinking needed for moral reasoning of ethical issues? Are there opportunities for students to reflect on ethical dilemmas through journaling or discussion?
Several times throughout their career, medical and nursing professionals encounter ethical dilemmas far greater than other healthcare professionals. These dilemmas may include decisions on the delivery of patient care, physician-assisted suicides, or end-of-life rights. Certified athletic trainers may not encounter these critical situations, but they do encounter situations such as whether patients can return to activity without further harm or what is the most appropriate choice for treatment of an injury. It is through these situations that certified athletic trainers utilize their ethical decision-making skills to make the appropriate decision when advocating for the best care of the patient.

Researchers argue that mentoring nurturing was beneficial to students in the athletic training clinical settings (Curtis, Helion, & Domsohn, 1998). Nurturing has been shown to improve confidence and create a safe environment. Explanations, demonstrations, and constructive feedback were identified as the most helpful behaviors in the mentoring of the student in the clinical setting.

One approach used to teach nursing ethics was through the Considerations, Actions, Reasons, and Experiences (CARE) model (Abma & Widdershoven, 2006). The CARE model is based on a conversational approach to medical ethical education. It uses individual and group methods to promote reflection and discussion of ethical issues faced in psychiatric nursing. In this model, an opening scenario and four questions were posed to the individual and group. Question one was based on an individual’s concern for core values and how they related to the dilemma presented. Question two was based on how the individual would act if they were placed in a similar situation as the dilemma presented. In question three, group discussion explored how others would react in similar situations and how cultural expectations (professional expectations and codes) were woven into the resolution of the
dilemmas. Lastly, question four examined how others reacted to the situation and how the individual agreed or disagreed with the others’ reactions. It was concluded that the CARE model provided a setting that could be useful tool for allowing reflection of ethical issues for those practicing psychiatric nursing.

Roff and Preece (2004) also developed a study module to assist medical students in understanding key principles and practices of medical ethics. Their module allowed students to learn the entry-level concepts of medical ethics, listen to multidisciplinary medical professionals on ethical dilemmas, research all sides of an ethical dilemma, and present the ethical dilemma to the class for group discussion. Roff and Preece proposed that the format of the model assisted students in developing ethical decision-making skills.

Learning Ethics in Athletic Training. Athletic Training education utilizes two educational settings to teach athletic training students: the classroom and the clinical setting. The program director and the clinical supervisors must provide opportunities for the students to develop professional behaviors to make appropriate ethical decisions, as stated in the National Athletic Trainers’ Association Athletic Training Educational Competencies. Educators need to guide students to recognize ethical dilemmas and assist them to use the appropriate knowledge and skills in order to resolve the dilemma. Craig (2006) stated that many behaviors and characteristics relating to professionalism are not easily taught in the classroom or clinic settings. Students must encounter the experiences or ethical dilemmas in order to learn how to make appropriate decisions, but how can this be done? Each time a student interacts with a peer, patient, teacher, or clinical supervisor, a professional ethical behavior is developed. Craig suggested that providing the student with opportunities to
communicate in different learning experiences, giving feedback, and allowing reflection and self-assessment time will allow for high levels of professional behavior development.

Athletic training educators can teach the cognitive aspects of moral and ethical responsibility to intervene in situations that conflict with providing competent care, but how do we teach the affective part in conflicting situations when providing competent care? If students are not receiving specific training or guidance for ethical decision making in the classroom setting, how are they developing these necessary skills needed to provide effective health care?
Layer Two – Ethics, Laws & Guidelines

The second layer of inculcating ethical practices and standards for athletic training students is through mandated professional laws and guidelines (Figure 8). The athletic training educators are to incorporate these standard competencies including foundational behaviors of professional practice from the NATA *Athletic Training Educational Competencies, 4th ed.* (NATA Educational Competencies, 2006). These behaviors are supposedly the values of the profession that are to be applied to professional practice. They guide certified athletic trainers to uphold ethical standards as they give medical care to their patients.

One such behavior is ethical practice. The foundational behaviors of professional practice reads that athletic training professionals are to “Understand and comply with NATA’s *Code of Ethics* and the BOC’s *Standards of [Professional] Practice*” (NATA
Educational Competencies, 2006, p. 5). If athletic trainers are to understand and comply with these rules, they must have the knowledge and understanding of ethics, and the skills to apply this knowledge to model an ethics of care when providing medical treatment. An ethics of care is greater than a code of ethics; one is about how we value humans and the other is about rules and responsibilities.

Ethics can be described many ways, but is often expressed as the moral principles of justice and caring (Fry, 1989; Gilligan, 1982; Noddings, 2003; Held 2006). Ethics of justice can be characterized as focusing on equality and fairness, whereas ethics of care is fostering social bonds and values of empathetic responsiveness, trust, and concern (Held, 2006). Justice is knowing right from wrong or what is good and what is right, while caring is associated with the mutual concern for another individual and choosing the appropriate course of action when helping others.

To understand ethics, one must understand what it means to be moral. Lumpkin, Stoll, and Beller (2003) described moral as knowing good, proper, and right. A moral person is one who applies personal virtues in making the appropriate decision in an ethical situation. As a moral person, the athletic trainer must utilize personal virtue to make an ethical decision that does no harm to the patient.

In The Nicomachean Ethics, Aristotle defined a virtue as being either intellectual or moral (Aristotle, 350 B.C./1934). Aristotle described an intellectual virtue as requiring experience and time whereas a moral virtue is a ‘product of habit’ (p. 71). He also defined a moral virtue as ‘a settled disposition of the mind determining the choice of actions and emotions, consisting essentially in the observance of the mean relative to us, this being determined by principle, that is, as the prudent man would determine it’ (p. 95). Virtues
have been identified as caring, empathy and compassion, justice, respect, honesty, faith, loyalty, courage, and responsibility (Aristotle, 350 B.C./1934; Lickona, 1991; Kohlberg, 1981; Noddings, 2002). These virtues help guide our ethical principle decision making.

People are exposed to various ethical situations throughout life. It is in these situations we develop the sense to make decisions when choosing a course of action to be followed. If we are moral individuals, who know right from wrong and who sense right from wrong, we will act in a moral manner and choose the appropriate course of action, therefore, enhancing our moral character.

An assumption is that if we follow ethical guidelines we will have an ethical perspective, and thus develop ethics of care. It is also assumed that the educational leaders of athletic training education programs, the program director and clinical instructors, have developed ethics of care or an ethical viewpoint because of the mandated code of ethics of certified athletic trainers.
A hope throughout the maturation of the onion, the maturing student, is that the interlacing link of moral caring and empathy are nurtured throughout all the developmental layers to provide best care practices. Caring is characterized as showing compassion, competence, confidence, conscience, and commitment to another individual’s well-being (Cronqvist, Theorell, Burns, & Lutzen, 2004; Hoffman, 2006). Caring can also be described as when an individual caring for another utilizes reasoning when deciding which appropriate course of healing action to provide and how to best do it (Noddings, 2002). Responding and showing attentive concern to one’s needs allows a cultivating environment for relationships between the caregiver and the recipient of care. This may lead to greater interest between the caregiver and the receiver, and thus, to a trusting relationship.
The act of caring consists of values of trust, mutual concern, and empathetic responsiveness (Held, 2006). It is concern for human life, for those we are responsible for that allows us to build trusting relationships through the caring process. As an educator, a teacher must facilitate the caring learning process of the student. How is it that we, as educators, facilitate the ethical care learning process?

Researchers discuss the difference between caring about and caring for an individual (Cronqvist et al., 2004; Held, 2006; Fry, 1989; Noddings, 2003). As defined by Cronqvist et al., (2004) caring for someone is identified as the task-oriented application of caring, whereas to care about someone is to acknowledge that individual’s welfare. A genuine concern is implied if someone cares about another. When applying care to athletic training, the ultimate goal is to hope an athletic training student learns to care about and care for the patients.

We can care about others when disaster hits, but rarely do we go to that place to provide care for those individuals. On the other hand, we can care for someone who becomes ill or injured near us. As an infant, a child, someone in need, or someone who is ill or injured, we learn what it means to be cared for when others take care of us. We may not be able to provide food, warmth or comfort for ourselves, but someone is usually there to care for us, to protect us. Certified athletic trainers are healthcare providers who must use reasonable care to protect the patient against dangers that may further present harm to that individual. It is through the action of “caring for” that athletic trainers learn to make the medical ethical decisions to be able to provide appropriate reasonable care.

Limitations may occur when providing care for another, as it can depend on an organization’s guidelines or possibly the caregiver’s views towards the patient. It is the ethical and moral judgment of the caregiver that is often the limitation in this case.
The nursing profession provides much research on medical ethics, ethics of care, and decision-making dilemmas encountered (Abma & Widdershoven, 2006; Armstrong, 2006; Benner, 1984, 1991; Fry, 1989). Fry (1989) investigated the role of caring in nursing ethics researching three models of caring that were relevant to nursing ethics and how the role of caring in nursing occurs. Historically, nursing ethics has been viewed as a subset of medical ethics, mainly using the approaches of justice-based theories of moral reasoning. But, “a strict ethic of rights and justice, with the overriding principle being autonomy, cannot be the primary ethic for nurses or for any healthcare professional” (Benner, 1984, p. 44). However, nursing also utilizes a feministic theory approach based on Gilligan’s (1982) model to providing healthcare to the patient. Fry identified moral value foundations of nursing ethics that are connected with the natural human caring nature, and suggests that caring is strongly linked to the social and moral ideals of nursing because of the nurse-patient relationship. Armstrong (2006) also suggested that the nurse-patient relationship is one of the central concepts of nursing practice. He advocated that having outstanding communication skills and possessing qualities of kindness, honesty, and patience allows nurses to develop the trusting relationship between the nurse and the patient. Because nurses are an advocate for patients, the care provided to each patient must depend on a trusting relationship (Benner, 1994).

Nurses engage in serious ethical situations, including end-of-life decisions, and are expected to rely on their personal and professional fundamental values and job responsibilities to assist with making decisions that are in the best interest of the patient. Fundamental values, as written in the American Nurses Association Code of Ethics, include

1) nurses’ respect for human dignity, 2) nurses’ primary commitment to the patient, and 3)
nurses’ protection of patient privacy (American Nurses Association Code of Ethics, Retrieved September 24, 2006). Knowing and understanding the professional fundamental values and developing the skills, in conjunction with personal moral values, assist nurses when making ethical decisions. Certified athletic trainers may not encounter such serious ethical dilemmas, but they must possess personal moral values, and understand professional values to assist with decisions encountered in the workplace.

Certified athletic trainers need to possess ethical and caring behaviors for providing the best quality of healthcare. In the athletic training education program, students must learn to exhibit compassion and empathy, demonstrate honesty and integrity, and utilize interpersonal communication skills when expressing professional behavior (NATA Educational Competencies, 2006, p. 6). An athletic training student must learn the base knowledge and important skills, and apply them as a professional. To mature into a professional healthcare giver, it is through the knowing and understanding of a code of ethics, role modeling provided by mentors, and through practice of caring for others that allows the student to grow. Acting in a professional manner, the student thus must possess the core factor of professionalism, caring (Hannam, 2000).

As previously stated, one of the many personal characteristics of a caring athletic trainer is to possess or exhibit compassion (Klafs & Arnheim, 1973). Athletic trainers must be able to feel empathy and have the desire to ease the pain for the injured individual. However, how does one learn to feel empathy and compassion to ease this pain? Bilik (1956) stated:

Conscientious, intelligent care of the athlete is, admittedly, a vital responsibility of those connected in an official capacity with the conduct of
competitive sports. The youngsters are entrusted to our care by parents who have faith in our ethics, our sincerity, our fitness. (p. 6)

Even though today’s certified athletic trainers provide care to a greater variety of patients, this statement can be adapted to any practicing certified athletic trainer.

Actually, most of us are born with empathy (Lamb, 1991). The primate has a sense of empathy for their young and young of others. Empathy is the “cognitive awareness of another person’s internal states”, one person feeling what another person is feeling (Hoffman, 2000, p. 29). Lickona (1991) defined empathy as identifying with the experience of another individual’s emotional state. While we are born with empathy, only the species homo sapiens actually teaches their young to be less empathetic (Lamb, 1991). Also, it is true that in studies of children and sport, children actually become less empathetic (Kalliopuska, 1987). Little is known of the empathy level of athletic trainers, but one would assume that individuals who choose athletic training or a similar profession would have a degree of empathy. Does our education format support this empathy of care?

Empathy is discussed in occupational and physical therapy as “a capacity that disposes individuals towards effective communication and helping” (Purtilo, Jensen, & Brasic Royeen, 2005, p. 11). Because occupational and physical therapists work one-on-one with their patients, it is imperative they have good communication skills to assist with the restoration of the patient’s health. Athletic trainers must also focus on understanding the patient’s needs through verbal and non-verbal communication techniques, including appropriate listening skills. This shows the patient that the athletic trainer cares. Purtilo, Jensen, and Brasic Royeen (2005) declared “Empathy cast as a rule is, thus, a mandate for
ethical behavior in its call for the upholding of an overarching beneficence as seen from the other’s perspective” which should influence one’s action towards ethical actions (p. 15).

*The Mature Student – Application of Ethical Care*

![Figure 10. The onion metaphor: The mature student: Application of ethical care.](image)

So what is Ethics of Care? The description of ethics of care can be divided into “ethics” and “caring”. To behave ethically is “…to behave under the guidance of an acceptable and justifiable account of what it means to be moral” (Noddings, 2002, p. 27). Ethics per se is often about the guidelines of a professional organization, but individuals often have trouble placing ethical guidelines into practice. A caring ethic denotes the right action of an individual in being directly concerned with another individual’s welfare (Slote, 1999). If one compares the onion metaphor of an ethics of care paradigm for athletic training
student development to the definition of ethics and caring, ethics of care should be portrayed in athletic training education.

Ethics of care is defined as taking the responsibility when attending to and meeting the needs of others (Held, 2006). Ethics of care focuses on employing one’s core virtues and moral standards to make principled decisions on what to do. Certified athletic trainers are forced to make ethical care decisions regarding a patient’s healthcare and must possess the sensitivity not to endanger or hurt others, but to assist them. These decisions may include whether a patient can participate in a practice or game or be held from an activity due to an injury. Other decisions may include discussing medical treatment with the patient, physician, and possibly the parents or guardians. To address these concerns, a certified athletic trainer must proceed with the answer from principles that are often abstract rather than concrete.

Is not ethics of care an actual virtue in which one feels driven to “care for and care about” another? A virtuous athletic trainer seen in the onion metaphor would be one who understands that ethical principles are to be followed, but would also believe and value the importance of care in relation to another. Ethics of care is knowing the rule, valuing the rule, and executing the rule. Teaching ethics of care cannot be left only to the clinical instructors to model in the clinical setting, but it is up to all athletic training educators to teach ethics of care to athletic training students in all settings.

When and how do certified athletic trainers and athletic training students develop the values and professional behaviors to make the right ethical decisions and practice ethics of care? It is assumed that embedded ethics of care exists in the athletic training curriculum, and that it has a positive impact on ethical decisions made by students. This may be wholly untrue leading to ethical and legal ramifications.
So why is ethics of care in athletic training vital? Do athletic trainers understand why ethics of care is so important? Are athletic trainers properly prepared to provide ethical caring? For ethical caring education to be successful, it appears that it must include the development of a base knowledge of ethics, recognition of ethical dilemmas, critical reflection, and exposure both in controlled and uncontrolled settings. Some researchers suggest including self-understanding and reflection in an educational model. For ethical caring to work, it may require reflection and self-understanding (Noddings, 2002). Through self-understanding of personal values, reflection, and communication, an athletic trainer can begin to provide quality ethics of care.

As children grow, they need to be exposed to several opportunities in order to assist with the development of making the right choice and building good character (Lickona, 1991). If the children are allowed to practice good moral action through a product of habit, this will assist in developing a good character for a lifetime. It is the same for athletic training students preparing to be professionals. As our students develop into mature adults, the mature onion, they must be exposed to ethical dilemmas that will allow them the opportunity to communicate and practice good moral action which will assist them in learning to provide the best care.

In summary, we know that there are several rules and codes that athletic trainers should follow. We also know that athletic training students must be taught specific knowledge and skills in the classroom and clinical settings. Furthermore, infusion of the Foundational Behaviors of Professional Practice from the NATA Athletic Training Educational Competencies must be filtered throughout the educational process (NATA Athletic Training Educational Competencies, 2006). But, if there are no specific ways of
threading the common values throughout the curriculum, how do we know if we are teaching ethics of care in the appropriate manner? At the present, we do not have the answer to this question, thus the purpose of the present study is to address this question.
CHAPTER THREE

Methodology

Introduction

The purposes of this survey-based study was to describe selected variables of professional preparation in ethics education of program directors and certified athletic trainer clinical instructors, and evaluate selected teaching methods of ethics in CAATE-approved athletic training education programs. A further objective was also to examine cognitive ability in principled reasoning of the athletic training education program directors, faculty, and clinical instructors in applying the ethical principles of the National Athletic Trainers’ Association Code of Ethics.

This study incorporated a mixed method design that involved collecting quantitative and qualitative data concurrently, and involved combining the data throughout the research. (Creswell, 2003). This method was used to enhance the quantitative aspect of this study, incorporating open-ended philosophic questions to enhance the descriptive data.

Methods of data generation included primarily survey information, but also used personal communication through electronic mail and informal personal conversation. This study generated data from mail surveys for pilot studies one and two, but utilized an online survey tool for the final study in hopes to increase return rate. The time frame of data collection occurred from February 2006 for Pilot Study One, March 2006 for Pilot Study Two, and June 2006 through December 2006 for the final study.
**Study Development**

Development of this study began two years ago when two questions were posed: “Why does it appear that newly certified athletic trainers lack caring skills when providing medical care to the student-athletes?” and “What is happening within athletic training education, including its curriculum and personnel, that might cause this lack of care?” From these initial questions, investigation began in order to understand the role of ethics of care in athletic training education, and interactions between athletic training students and their supervisors in the classroom and clinical settings as related to ethics of care.

Review of literature of the athletic training education curriculum and personnel helped develop the research questions to understand why newly certified athletic trainers seemed to be lacking ethical caring skills when working with a patient. Insufficient research in ethics of care preparation for athletic training education personnel and students additionally sparked development of the study.

Because of the lack of information about how ethics of care was being taught in the athletic training classroom setting, and since subject matter must formally be introduced in this setting, further investigation into teacher preparation of ethics of care was also examined. For one to be prepared to formally teach a subject matter, a formal education process must occur. It is known that through this process one must: 1) complete formal education in the subject matter; 2) complete formal training in the subject matter; 3) identify what will be taught; and 4) identify methods to be used for teaching the subject matter (Tozer, Violas, & Senese, 1998).

Flexner (1932) stated differences exist between education and training. He explains that formal education is an intellectual process that allows individuals to understand the
subject matter, and believes it to be learning how to think logically and creatively about a subject matter. Flexner defined training as the process of improving and discovering how to use the knowledge learned from formal education in a skillful manner. In the case of this study, formal education consists of learning the theory of ethics, while formal training is the teaching of ethics.

Certified athletic trainers, by rule, are supposed to act ethically and provide the best medical care to patients, but what knowledge and experience do they have in ethics of care (NATA Code of Ethics, Retrieved June 5, 2006)? Instructors in athletic training education programs, by rule of accreditation, are to teach ethics, so how are ethics being taught in the curriculum (NATAEC Competencies, July 7, 2006)? An instrument needed to be developed to discover the level of knowledge and experience of ethics of care for certified athletic trainers, and to describe how ethics of care was being taught in the classroom setting.

**Instrument Development**

A measurement tool of six parts, the Williams Assessment on Ethics of Care in Athletic Training instrument, was developed to describe and analyze: 1) the demographics of the certified athletic trainer participants, 2) the formal education of ethics of care of athletic training program directors, faculty, and clinical supervisors, 3) how these certified athletic trainers were taught ethics of care, 4) how they teach ethics of care, and 5) how well certified athletic trainers can apply principled reasoning to the NATA Code of Ethics principles. See Appendix B for the evaluation tool.

**Demographics**

Demographic data collected included the participant’s current employment title (athletic training program director, head athletic trainer, assistant athletic trainer, athletic
training faculty, intern athletic trainer, graduate assistant athletic trainer, other) and current instructional position (approved clinical instructor, clinical instructor, or clinical instructor educator). Participants were also to select gender (male, female) and report years of experience as a certified athletic trainer.

*Certified Athletic Trainer’s Formal Education and How They Were Taught*

Because this study was conducted prior to the transition of athletic training education program accreditation agencies from CAAHEP to CAATE, it was necessary to use the 2001 CAAHEP Standards and Guidelines. The personal training and student training questions centered on the CAAHEP Standard Section II A1c(9), “Students shall receive formal instruction in the following expanded subject matter areas in conjunction with the ‘NATA Athletic Training Educational Competencies’ ‘medical ethics and legal issues’” (CAAHEP Standards & Guidelines, 2001, p. 2).

Participants were asked questions on both personal ethics of care education and how they were formally instructed. Participants reported if their education was formally learned through a stand-alone course or enmeshed in courses or other experiences. If ethics education occurred in an enmeshed course, then participants were asked to report in which course or courses ethics education was taught.

*How Certified Athletic Trainers Teach Ethics*

Questions regarding certified athletic trainers’ current teaching methods in ethics education were asked. Participants reported the amount of time dedicated to teaching ethics of care (hours per semester) and current teaching methods (scenarios, case studies, role modeling, role playing, principled approaches, code of ethics, other) for ethics education.
Participants were asked to select all teaching methods they used, and were to asterisk the predominant teaching method.

In open-ended responses, participants were also asked to define “Ethics of Care” and how they incorporated ethics of care into their education program. Lastly, participants identified the type of journaling their athletic training students used on ethical issues (none, 2-3 papers on ethics, self-reflection, other).

*Application of Principled Reasoning of NATA Code of Ethics*

The last section of the evaluation instrument consisted of a 5-point (strongly agree, agree, neutral, disagree, and strongly disagree) Likert scale that assessed principled reasoning of the participants. Utilizing the five principles of the NATA Code of Ethics, five questions were developed posing a moral value against a lesser moral value or social value for each of the principles (Nucci, 1991; Simon, 2001). This portion of the instrument was developed two years previous to the present study for a master’s thesis which assessed and compared principled reasoning of athletic training students and certified athletic trainers. The five questions were based on a one to one ratio application to the five principles of the NATA Code of Ethics.

*Trustworthiness*

Trustworthiness, as described by Shank (2001), is the “degree to which we can depend on and trust given research findings” (p. 115). To gain trustworthiness, dependability, credibility, transferability, and confirmability must be addressed (Guba & Lincoln, 1994). Through external auditors of the instrument, a detailed description of data collection, multiple data sources revealing the same information, and data analysis, trustworthiness can be obtained (Shank, 2001).
In order to achieve trustworthiness of the instrument, a group of certified athletic trainer experts, external to this study, examined the truth of the instrument prior to conducting the initial pilot study. Changes to the instrument were made accordingly with the requests of the experts to enhance format and improve clarity of the questions. The original emphasis of the instrument was directed specifically to effective mentoring and ethics of care attributes of athletic training education program directors. Suggestions of the experts included surveying not just program directors, but other certified athletic trainers associated with teaching and supervising athletic training students. Other suggestions included removing questions regarding specific patient care of the program directors, extending the questioning to include both classroom and clinical setting interactions, reducing the amount of open-ended questions, and focusing on one aspect of the original instrument. Also, the original Likert scale section of ethics of care attributes was removed due to the length of the instrument.

Two pilot studies of the Williams Assessment on Ethics of Care in Athletic Training instrument were completed prior to the final study. See Appendix B for this instrument. The outlay of pilot study one consisted of four open-ended questions, regarding the participant’s current athletic training students’ formal ethics education coursework, the participant’s formal ethics education training, their definition of empathy of care, and how empathy of care was currently being incorporated into the athletic training education program, and the principled reasoning Likert scale. After pilot study one was administered and returned, the outlay of questions was changed due to the vagueness of certain answers received from the questions. The open-ended questions from pilot study one, questions one through four, were expanded and changed to partially closed-ended with unordered response category questions.
allowing for selection of answers from specific course categories or an open-ended “Other”
selection. Pilot study two helped to reevaluate the changed questions from the first study.
No changes were made after the administration of pilot study two, thus allowing for the final
study to be administered. Trustworthiness appeared to be good for parts one through four of
this instrument.

Reliability

Reliability of a measurement is defined as the stability of an instrument to measure
the same item repeatedly, whereas validity of an instrument describes its accuracy to
represent what it claims to measure (Creswell, 2003; Vogt, 1999). It is important for an
instrument to establish reliability in order to demonstrate that it can provide the same
information if used at different times and by different people, and also assist in gaining
assurance that the instrument is credible (Creswell, 2003).

For Part F of the instrument, reliability of the principled reasoning scale has been
demonstrated consistently. Reliability for pilot study one (.69), pilot study two (.62), and the
final study (.84) was established through a Cronbach’s alpha coefficient. Because of the
small sample size in pilot studies one and two, a smaller coefficient occurred. Reliability is
tied to the data, not the instrument, and in general, as a data set increases in size, the
Cronbach’s alpha coefficient will improve allowing the data to be more reflective of the
normal distribution (J. Beller, personal communication, June 11, 2007). Because the sample
sizes of the pilot studies were small, and because the Cronbach’s alpha coefficients for the
pilot studies were approaching a .70, the final study was conducted. In social science, a
Cronbach’s alpha coefficient of above .70 suggests that the items from the instrument are
measuring the same entity and are highly reliable (Vogt, 1999). According to Beller, this
study showed great improvement in the reliability allowing for better judgment of the data from the instrument.

Participants

Three studies were conducted for this research, two pilot studies and the final study. Participants chosen for this study were employed at colleges and universities from all athletic affiliations with a CAAHEP-approved undergraduate athletic training education program. The participants consisted of certified athletic trainers (athletic training education program directors, athletic training faculty, and approved clinical instructors). The approved clinical instructors selected were employed in the primary athletic training clinical setting from the selected institution.

For Pilot Study One, two CAAHEP-approved undergraduate athletic training education programs from District 10 of the NATA were used. District 10 of the NATA consists of Alaska, Idaho, Montana, Oregon, and Washington from the United States, and British Columbia and Alberta from Canada. Each program had a National Collegiate Athletic Association (NCAA) Division I athletic affiliation. Pilot Study Two used the remaining seven CAAHEP-approved undergraduate athletic training education programs from District 10. Four programs were affiliated with NCAA Division I athletic programs, while three programs were affiliated with NCAA Division III athletic programs. The programs used in pilot studies one and two were removed from the complete list of programs used in the final study.

For the final study, a list of all CAAHEP-approved undergraduate athletic training education programs was obtained from the Joint Review Committee of Athletic Training Education Programs internet website on May 17, 2006 (JRC-AT Accredited Programs,
Retrieved May 17, 2006). The complete list of academic programs (n=327), all located in the United States, was divided into athletic affiliation levels of the NCAA and National Association of Intercollegiate Athletics (NAIA). The breakdown between the athletic affiliation levels was NCAA Division I (n=130), NCAA Division II (n=84), NCAA Division III (n=86), NAIA Division I (n=20), and NAIA Division II (n=7). Dividing the athletic training education programs into athletic affiliation levels was done to obtain equal representation from the various sized institutions. A stratified systematic sample of 100 programs of the 327 CAAHEP-approved undergraduate athletic training education programs was used (NCAA Division I: n=31; NCAA Division II: n=20; NCAA Division III: n=22; NAIA Division I: n=20; NAIA Division II: n=7). From the 100 education programs, an e-mail distribution list of four hundred twenty-six certified athletic trainers was created.

The protection of human participants was considered throughout this study. Permission from the Human Assurances Committee of the University of Idaho was granted prior to the initiation of this study on January 26, 2006 (Project 05-237, Appendix A). A clear statement was made in the introduction of the study so no participant would be coerced into participating in this study. Each participant signed an informed consent form for Pilot Studies One and Two, which was returned in a separate envelope allowing for anonymity. For the final study, participants agreed to participate by selecting ‘yes’ for Question 1 of the on-line survey. This statement and question informed them of their rights and their option to not continue at any time.

Pilot Study One

The first pilot study utilized participants from two CAAHEP-approved undergraduate athletic training education programs from District 10 of the NATA, each with the athletic
affiliation as an NCAA Division I school. The list of participants was obtained from the program director at each school. Nineteen participants (7 male, 4 female) were mailed the Williams Assessment on Ethics of Care in Athletic Training instrument and consent forms, with 11 of 19 (58%) returning the completed instrument from both of the accredited programs surveyed.

Pilot Study Two

Participants for the second pilot study were affiliated with the remaining seven CAAHEP-approved undergraduate athletic training education programs in District 10. The affiliated athletic level breakdown for these programs consisted of four NCAA Division I programs and three NCAA Division III programs. A list of participants was obtained from the program director or specific athletic training education website. Fifty Williams Assessment on Ethics of Care in Athletic Training instruments and consent forms were mailed, with 16 (12 male, 4 female) completed instruments being returned from five of the seven (71%) accredited programs surveyed.

Final Study

Once divided into the athletic affiliation levels (NCAA Division I, II, III, NAIA Division I and II), a stratified systematic sampling of 100 programs of the 318 CAAHEP-approved undergraduate athletic training education programs was chosen to participate in an on-line survey. Every fourth program was selected for participation in the study for each level (NCAA Division I: n=31; NCAA Division II: n=20; NCAA Division III: n=22; NAIA Division I: n=20; NAIA Division II: n=7). The samples were proportional to the number of programs in each athletic affiliation.
After the athletic training education programs were selected, the e-mail addresses of the program director and approved clinical instructors were identified by reviewing each program’s internet website. An e-mail distribution list of the 100 programs was developed when all the participants were recognized, and an e-mail was sent to 426 (234 male, 192 female) certified athletic trainers asking for volunteer participation in this study. One-hundred six (25%) certified athletic trainers (54 male; 52 female) completed the survey. Through IP address identification; these individuals represented 86 of the 100 programs selected, for an 86% return rate. A power analysis was conducted prior to data collection. Murphy and Myors (2004) suggest that using power analysis to determine a sample size allows researchers to make reasonable decisions about the number of participants needed. Based on p<.05, a large effect size of .8 and power equals 1.0, a sample size larger than 50 programs was deemed acceptable (Cohen, 2003; Murphy & Myors, 2004).

Measurement Procedures

Data Collection Procedures

Pilot Study One: After securing approval from the University of Idaho Human Assurance Committee, a cover letter, consent form approved by the Human Assurances Committee, survey, and two business reply envelopes, one for the consent form and one for the instrument, were sent to the athletic training education program director and approved clinical instructors of two CAAHEP-approved athletic training education programs from NATA District 10. Once the returned envelopes were received from the participants, the consent form envelope was separated from the survey envelope, and checked for content. The survey envelope was assigned a number with no name attached to the unopened envelope. Follow-up postcards were sent to the participants approximately fourteen days
after the initial mailing as a thank you to those who participated, and as a reminder to those who had not returned the survey.

Pilot Study Two: Upon readdressing the initial instrument, a second instrument, cover letter, consent form, and business reply envelope were sent to the athletic training education program director and approved clinical instructors at the remaining seven CAAHEP-accredited athletic training education programs from the NATA District 10. The same procedures were followed for the second pilot study as were used during Pilot One, except with the addition of a follow-up e-mail thanking those who participated, and reminding those who had not returned the survey to do so.

Final Study: For the final study, the instrument from the second pilot study was converted into a web-based instrument using the web package, SurveyMonkey™. From the e-mail distribution list created, an e-mail was sent to each of the participants asking for volunteer participation in the study. A webpage link (http://www.surveymonkey.com/s.asp?u=508382223667) was assigned to this survey and given to the participants, along with an alternative website link if the initial link did not work. Because of the possibility that the direct instrument link would not work with some participants’ computers, an alternative webpage was developed explaining the instrument (http://www.educ.uidaho.edu/jwilliamsethics). Four follow-up e-mails were sent to each participant, at two weeks, four weeks, eight weeks, and twelve weeks following the initial e-mail for a better response rate.

Data Generation

The Williams Assessment on Ethics of Care in Athletic Training instrument, divided into six parts, employed a survey research method to obtain descriptive and philosophic
information utilizing open-ended questions (Part E of the instrument), partially closed-ended with unordered response category questions (Part A, B, C, D), closed-ended unordered response category questions (Part A, B, C, D), and closed-ended ordered response category questions (Part F) (Dillman, 2000). Dillman described an open-ended question as one with no answer choice provided, whereas a partially closed-ended with unordered response category question is one with a list of categories, including ‘other’ which allows participants to enter a response if it is not listed. He also explains that a closed-ended unordered response category question contains a list of categories that are in no particular order. A Likert Scale, as in the last part of the instrument, is considered to be a form of closed-ended ordered response category question (Dillman, 2000).

In this instrument, Part A captures Participant Demographic Information, Part B captures the participant’s current students’ formal ethics education, Part C captures the participant’s formal ethics education, Part D captures the participant’s ethics teaching methods, Part E captures the participant’s perspective of ethics of care, and Part F captures the moral reasoning as related to the NATA Code of Ethics.

Part A of the survey instrument identified current employment title, current instructional position, gender, and years of experience as a certified athletic trainer. The purpose for collecting demographic information was to provide descriptive and categorical data for analysis.

In Parts B, C, D, and E, information was collected regarding ethics of care education. Descriptive statistics were used to evaluate the certified athletic trainer’s current students formal education training in ethics of care, the certified athletic trainer’s formal education
training in ethics of care, how the certified athletic trainer teaches ethics of care, and the certified athletic trainer’s perspective of ethics of care, respectively.

Part F contained a request for the certified athletic trainers to rate their principled reasoning with a 5-point Likert Scale ranging from Strongly Agree to Strongly Disagree. A “Disagree” or “Strongly Disagree” reflected principled reasoning. An independent samples t-test was used to analyze the different between genders for each of the five questions. For the final study, percentages were calculated for each of the possible ratings.

Data was analyzed in the six different sections separately. See Table 1 for statistical analyses procedures.

Table 1

<table>
<thead>
<tr>
<th>Section</th>
<th>Statistics Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part A</td>
<td>Participant Demographic Information</td>
</tr>
<tr>
<td>Part B</td>
<td>Certified Athletic Trainer's Current Students’ Ethics Education Training</td>
</tr>
<tr>
<td>Part C</td>
<td>Certified Athletic Trainer's Formal Ethics Education Training</td>
</tr>
<tr>
<td>Part D</td>
<td>Certified Athletic Trainer's Ethics Teaching Methods</td>
</tr>
<tr>
<td>Part E</td>
<td>Certified Athletic Trainer's Ethics of Care Perspective</td>
</tr>
<tr>
<td>Part F</td>
<td>Moral Reasoning</td>
</tr>
</tbody>
</table>
Researcher as Instrument

This research process has been a true learning experience. My topic has allowed me to expand knowledge and skills in a subject matter I was unfamiliar with. This experience has allowed me to challenge myself in seeking information outside the box. I was unable to identify the many ways one could look at the total picture prior to my graduate education. Through this educational process, I have tested myself to go above and beyond my limits. This experience truly has allowed me to do this.

I have been practicing as a certified athletic trainer for over 15 years in the clinical and educational settings, and have observed many positive changes in the athletic training profession. The change in my professional track from the clinical side to the educational side has allowed me to observe athletic training student growth from the time they enter the athletic training education program to employment as an entry-level certified athletic trainer. I have also had many opportunities to interact with certified athletic trainers participating in a graduate assistantship which has increased my experience in teaching, mentoring, and observing students throughout their initial educational process in the athletic training profession.

Through observed practice, I have found that the base of current student knowledge is well above what my entry level knowledge was. Unfortunately, even with the increase in knowledge and skills I have sensed a change in appropriate patient care by newly certified athletic trainers. Prior to the initiation of my study, many conversations occurred with colleagues across the United States. They also concurred that there appeared to be a difference with patient care in the young professionals. With this in mind, I wanted to investigate what was different about current athletic training student education and how they
were taught to provide appropriate care to patients. Due to conversations with a fellow faculty member I was guided to initiate investigation into the ethical decision-making and caring aspects of patient healthcare.

My experiences as a certified athletic trainer in the classroom and clinical settings have allowed me to learn to provide appropriate ethical care to patients. With the results of my research I wish to enhance the ethical and caring aspect of patient healthcare. I know that with a trusting relationship with a patient I am able to provide better healthcare. Providing the best healthcare to patients is important for all members of the athletic training profession.

In chapters four and five, the results and discussion of the information reported by the participants completing the Williams Assessment on Ethics of Care in Athletic Training instrument is described.
CHAPTER FOUR

Overview of Analysis and Findings

Introduction

The purposes of this survey based study were to describe selected variables of professional preparation in ethics education by program directors and certified athletic trainer clinical instructors, and evaluate selected teaching methods of ethics in CAAHEP-approved athletic training education programs. Another objective was to evaluate the athletic training education program director’s and certified athletic trainer clinical instructor’s cognitive ability in principled reasoning to apply the ethical principles of the National Athletic Trainers’ Association Code of Ethics.

The findings of this study are presented in six sections. In Part A of the Williams Assessment on Ethics of Care in Athletic Training instrument, the participant’s demographic information are presented through descriptive statistics. Part B presents the certified athletic trainer’s current students formal ethics education training, while Part C introduces the certified athletic trainer’s formal ethics education training. Parts D and E describe the certified athletic trainer’s ethics teaching methods and their perspective of ethics of care, respectively. Lastly, Part F evaluates the moral reasoning of the certified athletic trainer as related to the NATA Code of Ethics.

Descriptive Data

Part A - Participant Demographic Information

Results for the final study are based on 106 certified athletic trainers (54 male; 52 female) who represented 86 of the 100 programs sampled, and who served in a variety of
roles. Participants selected current employment title as a certified athletic trainer. Each participant was allowed to select all factors that applied.

Seventeen certified athletic trainers selected Athletic Training Program Director (PD) (16%) (8 male; 9 female); 11 selected only PD (5 male; 6 female), three selected both PD and Athletic Training Faculty (AT Faculty) (2 male; 1 female), one selected PD and Assistant Athletic Trainer (AAT), (0 male; 1 female), and two selected PD, AT Faculty, and AAT (1 male; 1 female). A total of 43 certified athletic trainers selected the choice of AT Faculty (40.6%) (23 male; 20 female), 14 selected only AT Faculty (8 male; 6 female), three selected AT Faculty and PD (2 male; 1 female), five selected AT Faculty and Head Athletic Trainer (HAT) (4 male; 1 female), 15 selected AT Faculty and AAT (6 male; 9 female), one selected AT Faculty and Graduate Assistant (GA) (0 male; 1 female), three selected AT Faculty, AAT (2 male; 1 female), and two selected AT Faculty, PD, and AAT (1 male; 1 female). Of the 18 certified athletic trainers selecting Head Athletic Trainer (HAT) (17%), 13 selected only HAT (9 male; 4 female) and five selected HAT and AT Faculty (4 male; 1 female). Fifty-two certified athletic trainers selected Assistant Athletic Trainer (AAT) (49.1%) (25 male; 27 female), 29 selected only AAT (16 male; 13 female), 15 selected AAT and AT Faculty (6 male; 9 female), one selected AAT and PD (0 male; 1 female), two selected AAT, AT Faculty, and PD (1 male; 1 female), three selected AAT, AT Faculty, and Other (2 male; 1 female), and two selected AAT and Other (0 male; 2 female). One certified athletic trainer chose Intern Athletic Trainer (Intern) (0.9%) (0 male; 1 female); 4 selected Graduate Assistant Athletic Trainer (GA) (3.8%) with three selecting GA only (1 male; 2 female), and one selecting GA and AT Faculty (0 male; 1 female). Lastly, 8 certified athletic trainers selected Other (7.5%) (2 male; 6 female). For the participants who chose Other, the current
employment title included Recently Retired (1), Clinical Coordinator (4), Physical Therapist (1), Instructor (1), and a recent Graduate Student looking for employment (1). See Figure 11 for current employment title.

![Certified Athletic Trainer's Current Employment Title](image)

*Figure 11.* Certified Athletic Trainer’s Current Employment Title. *Note.* Percentages may be greater than 100% because respondents were asked to select all appropriate choices.

Participants selected the current instructional faculty or staff position. Seventy-one of the 106 participants chose Approved Clinical Instructors (ACI) (67%) (41 male, 30 female), 29 chose Clinical Instructor Educator (CIE) (28.3%) (12 male, 17 female), two chose Clinical Instructor (CI) (1.9%) (1 male, 1 female), three chose Other (2.8%) (0 male, 3 female), and one participant did not select an instructional position (1.0%) (0 male, 1 female). For the participants who chose Other, they identified themselves as periodic clinical instructor, assistant clinical coordinator, and former approved clinical instructor. See Table 2 for the current instructional faculty or staff position.
Lastly, participants identified their years of experience as a certified athletic trainer. Years of experience ranged from 1 to 32 years, with a mean of 11.7 years, median of 9 years, mode of 8 years, standard deviation of 8.1849, and standard error of 0.7988. See Table 3 for the certified athletic trainers’ years of experience.

Table 3
Certified Athletic Trainer’s Current Years of Experience

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Total</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>26</td>
<td>24.5%</td>
</tr>
<tr>
<td>6-10</td>
<td>35</td>
<td>33.0%</td>
</tr>
<tr>
<td>11-15</td>
<td>17</td>
<td>16.0%</td>
</tr>
<tr>
<td>16-20</td>
<td>10</td>
<td>9.4%</td>
</tr>
<tr>
<td>21-25</td>
<td>7</td>
<td>6.6%</td>
</tr>
<tr>
<td>26-30</td>
<td>8</td>
<td>7.5%</td>
</tr>
<tr>
<td>31-35</td>
<td>3</td>
<td>3.0%</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100%</td>
</tr>
</tbody>
</table>
Ethics of Care Education

Parts B, C, D, and E of the Williams Assessment on Ethics of Care in Athletic Training instrument answer the research questions regarding the general knowledge of the certified athletic trainers as it relates to ethics and ethics of care, preparation to teach ethics of care, and their formal educational training in ethical theory as related to ethics of care.

Part B – Certified Athletic Trainer’s Current Students’ Ethics Education

Descriptive statistics were used to describe the certified athletic trainer’s current students’ formal education in ethics of care. Participants were asked to identify if the CAAHEP standard was met through an ethics stand-alone course. Twelve participants selected ‘yes’, 84 selected ‘no’, and 10 participants skipped the question.

If the participant selected ‘yes’, they were asked to select which ethics stand-alone course or experiences did the students receive formal instruction (General Ethics, Professional Ethics, Sport Ethics, Legal Ethics, or Other). They were allowed to choose all applicable answers. For the participants who chose other, the responses for other courses or experiences included: principles, medical ethics, interdisciplinary aspects, and biomedical ethics. See Table 4 for information regarding the form of ethics education training of the certified athletic trainer’s current students.
Table 4
Certified Athletic Trainer’s Current Students Ethics Education Training

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes (General Ethics)</td>
<td>20.0%</td>
</tr>
<tr>
<td>Yes (Professional Ethics)</td>
<td>20.0%</td>
</tr>
<tr>
<td>Yes (Sport Ethics)</td>
<td>13.3%</td>
</tr>
<tr>
<td>Yes (Legal Ethics)</td>
<td>26.7%</td>
</tr>
<tr>
<td>Yes (Other)</td>
<td>40.0%</td>
</tr>
<tr>
<td>No</td>
<td>84</td>
</tr>
<tr>
<td>Skipped Question</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
</tr>
</tbody>
</table>

Note. Percentages may be greater than 100% because respondents were asked to select all appropriate choices.

Next, participants were asked if their students’ ethics education was enmeshed. If so, in what courses or experiences did their students received formal ethics education instruction? The certified athletic trainers were allowed to select all that applied. The certified athletic trainers were asked to select from General Ethics, Professional Ethics, Sport Ethics, Legal Ethics, and Other. Out of the 96 participants who responded, 30 (31.3%) selected General Ethics, 43 (44.8%) selected Professional Ethics, 26 (27.1%) selected Sport Ethics, 36 (37.5%) selected Legal Ethics, and 40 (41.7%) selected Other. For the certified athletic trainers who selected Other, they reported that students received formal ethics education in the following courses: 1) Health Care Administration, 2) Organization and Administration, 3) Medical Ethics, 4) General Medical, 5) Care and Prevention, 6) Research Methods, 7) Introduction to Bioethics, 8) Management Strategies in Athletic Training, 9)
Clinical Experiences, 10) Emergency Response or First Aid for the Professional Rescuer, and 11) Interdisciplinary Aspects. Five of the participants reported None, Not Applicable or Unsure in which courses the students received formal ethics education. Ten participants skipped this question. See Table 5 for the enmeshed ethics courses breakdown.

Table 5

Certified Athletic Trainer’s Current Students’ Enmeshed Ethics Education Courses

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>96</td>
</tr>
<tr>
<td>General Ethics</td>
<td>31.3%</td>
</tr>
<tr>
<td>Professional Ethics</td>
<td>44.8%</td>
</tr>
<tr>
<td>Sport Ethics</td>
<td>27.1%</td>
</tr>
<tr>
<td>Legal Ethics</td>
<td>37.5%</td>
</tr>
<tr>
<td>Other</td>
<td>41.7%</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
</tr>
<tr>
<td>Skipped Question</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
</tr>
</tbody>
</table>

Note. Percentages may be greater than 100% because respondents were asked to select all appropriate choices.

Part C – Certified Athletic Trainer’s Formal Ethics Education Training

The participants were asked about their own professional formal education in ethics of care. Certified athletic trainers were asked to identify if they studied ethics through a stand-alone course. Nineteen participants selected ‘yes’, 76 selected ‘no’, and 11 participants skipped the question. If the participant selected ‘yes’, they were asked in what courses or experiences they received formal ethics education instruction. Participants were asked to select all that applied from General Ethics, Professional Ethics, Sport Ethics, Legal Ethics, and Other. Five participants selected General Ethics, six selected Sport Ethics, two selected
Legal Ethics, and 12 selected Other. For the Other category, it was reported that a majority were formally educated through a Medical Ethics course, while others reported ethics education enmeshed throughout courses, in a philosophy course and high school ethics course, and business ethics. See Table 6 for information regarding the certified athletic trainer’s formal ethics education training.

Table 6
Certified Athletic Trainer’s Formal Ethics Education Training

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>General Ethics</td>
</tr>
<tr>
<td></td>
<td>Professional Ethics</td>
</tr>
<tr>
<td></td>
<td>Sport Ethics</td>
</tr>
<tr>
<td></td>
<td>Legal Ethics</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
<tr>
<td>No</td>
<td>76</td>
</tr>
<tr>
<td>Skipped Question</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
</tr>
</tbody>
</table>

*Note.* Percentages may be greater than 100% because respondents were asked to select all appropriate choices.

Participants were then asked if their ethics education was enmeshed in other courses. If enmeshed, participants were asked which courses or experiences they received formal ethics education instruction. Participants selected all the choices that applied from General Ethics, Professional Ethics, Sport Ethics, Legal Ethics, and Other. Out of the 95 respondents, 33 (34.7%) selected General Ethics, 40 (42.1%) selected Professional Ethics, 25 (26.3%) selected Sport Ethics, 32 (33.7%) selected Legal Ethics, and 36 (37.9%) selected Other. For those who selected Other, the responses included 1) Medical courses, 2) Administration
courses including Organization and Administration in Athletic Training, Business Law, and Sports Administration courses, 3) Care and Prevention of Injuries, 4) Seminar in Athletic Training, 5) Ethics and Logic, and 6) Clinical Experiences. Of the 36 respondents, 10 reported no formal training either due to lack of formal coursework or not being offered in the previous internship programs. Eleven participants skipped this question. Seventeen of the 19 respondents who reported studying ethics in a stand-alone course also reported receiving ethics education in enmeshed courses. See Table 7 for the certified athletic trainer’s enmeshed ethics education courses.

Table 7

<table>
<thead>
<tr>
<th>Certified Athletic Trainer’s Enmeshed Ethics Education Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responses</td>
</tr>
<tr>
<td>95</td>
</tr>
<tr>
<td>General Ethics</td>
</tr>
<tr>
<td>Professional Ethics</td>
</tr>
<tr>
<td>Sport Ethics</td>
</tr>
<tr>
<td>Legal Ethics</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Skipped Question</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

*Note.* Percentages may be greater than 100% because respondents were asked to select all appropriate choices.

From the 95 respondents, nine reported no specific ethics education training. One program director, four athletic training faculty, two head athletic trainers, and two assistant athletic trainers reported no specific ethics education training.
Part D – Certified Athletic Trainer’s Ethics Teaching Methods

Participants were asked to estimate how many hours per semester in any course they spent teaching ethics. Choices in which they reported hours included 1) in the classroom setting, 2) in the clinical experience setting, 3) in a professional course, 4) do not teach ethics, and 5) Other. Eighteen participants skipped this question, while three indicated ‘0’ for each method. See Table 8 for certified athletic trainer’s hours per semester for teaching ethics in the classroom and clinical settings.
Table 8
Certified Athletic Trainer’s Hours per Semester for Teaching Ethics

<table>
<thead>
<tr>
<th>Ethics Teaching Setting</th>
<th>Hours Spent Teaching (hours)</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Setting</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>1-5</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>6-10</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>11-15</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>16-20</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>21+</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Clinical Experience Setting</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>1-9</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>10-19</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>30-39</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>50-59</td>
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<tr>
<td>60-100</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>100-250</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Constantly</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Professional Course</td>
<td>1-5</td>
<td>10</td>
</tr>
<tr>
<td>Do Not Teach Ethics</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Every day in every setting (1)
In CI and ACI setting (1)
As it relates to the topic (1)

Teaching methods including Scenarios, Case Studies, Role Modeling, Role Playing, Principled Approaches, Code of Ethics, and Other were choices the participants were offered to select for their current ethics teaching methods. Eighty-eight certified athletic trainers
answered the question while 18 skipped this question. Seventy-three participants selected Scenarios (83%), 35 selected Case Studies (39.8%), 30 selected Role Modeling (34.1%), 24 selected Role Playing (27.3%), 32 selected Principled Approaches (36.4%), 49 selected Code of Ethics (55.7%), and 14 selected Other (15.9%). The participants who selected Other reported teaching ethics through the following methods: lecture including debates, discussion, reviewing or during certain clinical rotation situations, past experiences with guest speakers, using a textbook, not applicable, and do not teach ethics. The certified athletic trainers were allowed to select all the teaching methods that applied. See Table 9 for current ethics education teaching methods selected.
Table 9

Certified Athletic Trainer’s Current Ethics Education Teaching Methods

<table>
<thead>
<tr>
<th>Teaching Method</th>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenarios</td>
<td>73</td>
<td>83%</td>
</tr>
<tr>
<td>Case Studies</td>
<td>35</td>
<td>39.8%</td>
</tr>
<tr>
<td>Role Modeling</td>
<td>30</td>
<td>34.1%</td>
</tr>
<tr>
<td>Role Playing</td>
<td>24</td>
<td>27.3%</td>
</tr>
<tr>
<td>Principled Approaches</td>
<td>32</td>
<td>36.4%</td>
</tr>
<tr>
<td>Code of Ethics</td>
<td>49</td>
<td>55.7%</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>15.9%</td>
</tr>
</tbody>
</table>
  - Lecture with debates (3)
  - Discussion (3)
  - Reviewing or during clinical rotation situations (4)
  - Past experiences with guest speakers (1)
  - Textbook (1)
  - Not applicable (1)
  - Do not teach ethics (1)

*Note.* Percentages may be greater than 100% because respondents were asked to select all appropriate choices.

One certified athletic trainer utilized all seven teaching methods to educate students in ethics, whereas two people used six methods, seven used five of the methods, 17 used four methods, 26 used three teaching methods, 21 used two teaching methods, 12 reported only using one teaching method, and 20 reported using no teaching methods or skipped the question. See Figure 12 for the breakdown of the number of teaching methods used by the certified athletic trainers.
Lastly, participants were asked to select their predominant teaching methods from the aforementioned choices. Thirty-one participants selected Scenarios (35.2%), 10 selected Case Studies (11.4%), 14 selected Role Modeling (15.9%), 2 selected Role Playing (2.3%), 12 selected Principled Approaches (13.6%), 11 selected Code of Ethics (12.5%), and 8 selected Other (9.1%). The participants who selected Other reported their most predominant method of teaching ethics were through debates and lecture (1), textbook (1), clinical rotations (2), discussion and example (2), and not applicable or do not teach ethics (2). See Figure 13 for predominant ethics education teaching methods.
Part E – Certified Athletic Trainer’s Ethics of Care Perspective

Part E of the instrument contained questions about the general knowledge of the participant’s perspective of ethics of care. The first question allowed participants to define “Ethics of Care”. Seventy participants defined ethics of care while 36 participants chose to skip this question.

Participants were asked to define how they incorporated Ethics of Care into their education program. Seventy participants responded with 36 participants skipping this question. Six themes emerged from descriptive analysis. These themes consisted of: 1) providing best care practice, 2) treating patients equally but within the scope of practice, 3) treating patients the same as someone with your similar qualifications, 4) following and abiding by the rules set forth by the profession, society, and the law, 5) performing a duty,
and 6) unfamiliar answers. From the responses, 47% reported definitions concerning providing the best care of practice; 16% reported definitions about treating patients equally but within the scope of practice; 3% defined ethics of care as treating patients in a similar fashion as if someone with your same qualifications would treat the patient; 20% reported definitions about following and abiding by the rules set forth by the profession, society, and the law; 8% defined ethics of care as performing a duty; and 6% reported definitions that were unfamiliar to ethics of care.

The second question in Part E asked participants to describe how they incorporated ethics of care into their education program. Seventy participants responded while 36 participants skipped this question. One common theme throughout the responses was that ethics of care was incorporated into the education program through role modeling and leading by example in the classroom and clinical settings. A few responses reported that if a situation arose, the certified athletic trainer would discuss the facts and emotions involved with the student. Other responses reported that students were taught the information from the NATA Code of Ethics and BOC Standards of Professional Practice in the classroom setting, but were to follow the examples of the certified athletic trainers in the clinical settings. Ethics of care was also reported to be taught through scenarios, case studies, discussion, and other pedagogical tools. Several certified athletic trainers reported that the topic was covered in the organization and administration course in the curriculum. One certified athletic trainer reported that they taught ethics of care “Through a value and Christ centered approach to ethical decision making and care giving.”

The last question of Part E asked participants to identify what type of journaling their current athletic training students wrote on ethical issues. Choices include 1) None, 2) 2-3
papers on ethics, 3) Self-reflection, and 4) Other. They could check all of the choices that applied. Seventy of the 106 participants responded to this question. Of the seventy certified athletic trainers who responded 31 selected None (44.3%), two selected 2-3 papers on ethics (2.9%), 30 selected Self-reflection (42.9%), and 10 selected Other (14.3%). For the ten certified athletic trainers who chose Other, five reported unsure, one stated the students wrote in weekly clinical logs, one stated 1-2 papers on ethics; one stated that the students wrote journal entries three times per semester but nothing specifically addressing ethics unless it needed to be mentioned; another reported that the students wrote one scenario based essay; and one reported that a case study and presentations occurred within an administration class.

Certified Athletic Trainer Principled Reasoning

Part F –Moral Reasoning

Part F asked participants to rate their principled reasoning with a 5-point Likert Scale utilizing Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. For statistical calculations, each of the choices was given an ordinal rating ranging from 1 (Strongly Agree) to 5 (Strongly Disagree). A “Disagree” or “Strongly Disagree” reflected principled reasoning. Only 69 of 106 (65%) participants completed this portion of the survey.

An independent samples t-test was used to analyze the different between genders for each of the five questions for pilot study one, pilot study two, and the final study. For the final study, percentages were calculated for each of the possible ratings.

Question one pitted Amy against choosing to tell Player A’s condition to Player B’s father, a general surgeon. It reflected choosing right from wrong according to the law. For Question one, 65% (45) of the participants selected Strongly Disagree, while 35% (24)
selected Disagree. See Figure 14 for response distribution for principled reasoning question one.

![Question One](image)

*Figure 14. Principled Reasoning Question One.*

Question two discussed the situation of Ben dispensing over the counter medications to an underage player. This question also reflected on choosing right from wrong according to the law. Of the 69 participants responding, 64% (44) selected Strongly Disagree, 25% (17) selected Disagree, 9% (6) selected Neutral, and 3% (2) selected Agree. A total of 36% selected something other than Strongly Disagree. See Figure 15 for response distribution for principled reasoning question two.
In Question 3, Julie’s value system was set in opposition. Julie, a certified athletic trainer with a tight budget, had to make an ethical choice from accepting money from a local physician to boost her budget versus sending athletes to this physician who had a reputation for ordering unnecessary tests and over charging patients. For Question three, 61% (42) of the participants selected Strongly Disagree, 30% (21) selected Disagree, and 9% (6) selected Neutral. A total of 39% selected something other than Strongly Disagree. See Figure 16 for response distribution for principled reasoning question three.
Question Four rivaled two friends. Troy, a supervisor at Clinic ABC hired his friend Sam, who supported a family and needed the job. Sam, who supported Troy throughout college, began calling in sick, arriving late, leaving early and avoiding tasks he did not like. Mid-year reviews were approaching and Troy had to decide how to evaluate his friend. For Question four, 75% (52) of the participants chose Strongly Disagree, whereas 20% (14) chose Disagree and 4% (3) chose Neutral. A total of 24% selected something other Strongly Disagree. See Figure 17 for response distribution for principled reasoning question four.
Figure 17. Principled Reasoning Question Four.

In Question 5, Jenny, married to Bill, the head basketball coach at Big Time University, must decide whether the healthcare of an athlete is more important than the basketball team winning which could negatively affect her husband’s employment status. Question five showed that 81% (56) of the participants selected Strongly Disagree, 13% (9) selected Disagree, 4% (3) selected Neutral, and 1% (1) selected Agree. Only 18% chose something other than Strongly Disagree. See Figure 18 for response distribution for principled reasoning question five.
Chapter five will discuss the implications of the results reported in chapter four according to the research questions. If the data collected supports the research questions stated, this study should help athletic training educators develop ethics of care teaching guidelines to use in the classroom setting.
CHAPTER FIVE

Discussion

The intention of this chapter is to discuss the analysis reported in Chapter Four. The purposes of this study were: 1) to describe selected variables of professional preparation in ethics education by program directors and certified athletic trainer clinical instructors; 2) to evaluate selected teaching methods of ethics in the CAATE-approved athletic training education programs; 3) to evaluate the athletic training education program director’s and certified athletic trainer clinical instructor’s cognitive ability in principled reasoning to apply the four ethical principles of the National Athletic Trainers’ Association Code of Ethics; and 4) to offer guidelines for education in ethics of care for athletic training education program directors and certified athletic trainer clinical instructors. Discussions of the results are presented according to the sections of the Williams Assessment on Ethics of Care in Athletic Training instrument.

As demonstrated in the onion metaphor, the model begins with the student, the innermost aspect of the onion. A student’s character should be established through moral knowing, moral feeling, and moral action (Lickona, 1991). The second layer, role modeling, the environment, and education assist in developing a greater understanding of moral reasoning. The next layer is identified as ethics, laws, and guidelines. Parts B, C, D, and E of the Williams Assessment on Ethics of Care in Athletic Training instrument examined and are associated with layers of the maturing onion, the maturing athletic training student. Part F, the certified athletic trainer’s moral reasoning, is coupled with the final stages of the onion metaphor allowing the maturing athletic trainer to utilize the knowledge and skills acquired through the other layers.
Part A - Participant Demographic Information

In this study, certified athletic trainers were sampled from CAAHEP accredited athletic training education programs to identify their knowledge and perception of ethics of care. Of the population that had been sampled, 57.5% had been practicing as certified athletic trainers for 10 years or less. From the 106 participants, 52 certified athletic trainers (49.1%) selected assistant athletic trainer (AAT). Thirty-one individuals selected AAT only, 20 selected AAT and athletic training faculty, and one selected AAT and athletic training program director. The primary responsibility of an assistant athletic trainer is usually to provide medical care to the student athlete and not to formally educate the athletic training student. The lack of years of experience as a practicing certified athletic trainer coupled with the responsibilities of an assistant athletic trainer may suggest that certified athletic trainers may not have appropriate experience to teach ethics education.

Part B – Certified Athletic Trainer’s Current Students’ Ethics Education

Certified athletic trainers were asked to evaluate their current students’ formal education in ethics of care. Results reveal that 87.5% of the athletic training programs do not meet the NATA Athletic Training Educational Competencies Foundational Behaviors through formal instruction in the expanded subject matter for ethics education through a stand-alone course (CAATE Accreditation Standards, Section I.I3, Retrieved June 11, 2007). Only 12.5% responded that their students were educated in a stand-alone ethics course. The current lack of ethics stand alone courses in athletic training education programs may limit the student’s ability to learn the skills necessary to make appropriate ethical decisions in providing the best patient healthcare. Why would Athletic Training education programs not offer a stand-alone ethics course that teaches the athletic training students the process of how
to make appropriate ethical decisions regarding patient healthcare? The answer to this question may be: (1) they are not prepared to teach a stand-alone course; (2) they do not have the time to teach a course; and/or (3) they do not see the need, or (4) they may have other methods or places where it is taught.

A total of 96 responses were recorded when the certified athletic trainers were asked if their students’ ethics education was embedded in courses or other experiences. It appears that 44.8% surveyed embedded ethics education in a Professional Ethics course in athletic training. A professional ethics course is one that prepares students to build and support decisions relating to moral issues (Lickona, 2004; Piper, Gentile, & Parks, 1993). This course prepares students to critically think about the dilemma using various teaching methods. In reference to the NATA Athletic Training Educational Competencies and accreditation standards, athletic training education programs are to initially educate the athletic training students in a formal setting to the Foundational Behaviors of Professional Practice (NATAEC Athletic Training Educational Competencies, 2006). If the Professional Ethics course is not specific to the athletic training education program, the correct information on making appropriate ethical decisions in a healthcare setting is probably not being taught.

According to Piper, Gentile and Parks (1993), students, through ethical mentoring alone, cannot enter the workforce and be expected to make the appropriate ethical decisions due to the ever-changing challenges in the workplace. Students must interact with a curriculum that fosters ongoing ethical development, obtain critical thinking skills, integrate diverse points of view for various ethical dilemmas, and interact with a mentoring community. If the Professional Ethics course is not specific to athletic training, it probably
does not allow enough time for students to learn to facilitate the cognitive process of moral
development. Noddings (2002) claimed that moral thinkers must be able to argue logically
in order to investigate to its fullest potential all sides of an ethical dilemma. Again, the lack
of a course pertaining to healthcare ethical dilemmas in the athletic training curriculum may
not allow athletic training students to reach their potential as moral critical thinkers.

*Part C – Certified Athletic Trainer’s Formal Ethics Education Training*

Two questions were asked of the certified athletic trainers about their own
professional formal education in ethics of care. Only 20% of the certified athletic trainers
reported receiving ethics education through a stand-alone course, whereas 95 certified
athletic trainers reported receiving enmeshed ethics training, including 17 of the 19 certified
athletic trainers who reported receiving a stand-alone course education. An important note to
consider is that nine certified athletic trainers, including one program director and four
athletic training faculty, reported no specific ethics education.

An assumption made is that educators are properly prepared to teach the educational
competencies and foundational professional behaviors, but if only 19 certified athletic
trainers received ethics education in a stand-alone course, 66 reporting ethics education
through an enmeshed course, and nine certified athletic trainers reporting no specific ethics
education, these individuals are probably not prepared to teach and mentor ethics education if
they have received little training in ethics education. As Fox and DeMarco (1990), Noddings
(2002), Piper, Gentile, and Parks (1993), and Reimer, Paolitto, and Hersch (1983) suggest,
teaching ethics demands having a knowledge base of ethics and understanding how to teach
ethics. No certified athletic trainers reported taking pedagogy classes in ethics. Therefore,
athletic training students appear to not be receiving ethics education training in the most appropriate way, through the principled approach.

Certified athletic trainers must have the knowledge and understanding of ethics coupled with the skills to apply this knowledge towards modeling an ethics of care for patient healthcare. If the certified athletic trainers are not prepared from their formal education and are teaching students in classroom and clinical settings, we can speculate they may not be properly teaching and modeling appropriate ethics of care to their students. This lack of preparation on the certified athletic trainers’ behalf may lead students to not understand why certain ethical decisions are being made in the classroom or clinical environment. Building a positive social environment within the classroom setting is one factor that allows students to gain the ability and confidence to make appropriate ethical decisions (Lickona, 1991, 2004).

*Part D – Participant’s Ethics Teaching Methods*

In this study, certified athletic trainers were asked to estimate how many hours per semester they spent teaching ethics whether it be in the classroom setting, in the clinical experience setting, in a professional course, if they taught ethics through any other methods, or if they did not teach ethics. A majority of the responses (95% classroom setting, 62% clinical setting) reported they taught ethics for less than 10 hours per semester in the particular settings. Interestingly, 18 participants skipped this question, while three indicated ‘0’ for each method.

Moral reasoning, as a subset of moral development, is a cognitive process. Fox and DeMarco (1990) and Piper, Gentile and Parks (1993) reported that it is an intellectual way of discovering the truth about moral issues. If a majority of certified athletic trainers teach ethics in the classroom and clinical settings for less than 10 hours per semester, students
probably do not have enough time to develop the appropriate skills to argue the various viewpoints of a moral issue. The current lack of time teaching ethics of care to athletic training students probably does not support appropriate patient healthcare and the athletic training profession.

The second question of Part D asked certified athletic trainers how they taught ethics of care. Certified athletic trainers reported that ethics of care was taught through scenarios, case studies, discussion, and other pedagogical tools. The highest selected choice of teaching method was scenarios (35.2%). Many types of ethics teaching methods have been used throughout history, but according to Lickona (1991, 2004), Noddings (2002), and Piper, Gentile, and Parks (1993) the best way to assist students in learning how to develop moral reasoning skills is to utilize the principled approach. Over time and through various opportunities, humans can learn to develop the proper moral reasoning skills. A known fact is that ethics education needs to be continuous and often (Lickona, 1991; Piper, Gentile & Parks, 1993; Tancredi, 2005). The athletic training education accreditation body requires that in Athletic Training education, a “learning over time” approach is utilized (CAATE Accreditation Standards, Retrieved June 11, 2007).

Piper, Gentile, and Parks (1993) suggested that to develop good moral reasoning, ethics education must occur not only through mentoring, but through a curriculum that enhances critical thinking. These authors advocate that reflecting upon behavior and being proactive rather than reactive to various situations needs to occur. Piper, Gentile, and Parks also suggested that student leadership be cultivated encouraging critical thinking to occur. Also, the faculty, as mentors, need to recognize and value student experiences while giving a sense of direction to the emerging young professionals. Lickona (2004) stated that
introducing problems to the students, developing compelling points of view in contrast, and fostering a diverse classroom allows for positive moral development. Our actions, as educators, will be watched by students, and we must be found credible to assist in nurturing the moral development of students.

Noddings (2002), using a care theory approach to moral education, has identified modeling, dialogue, practice, and confirmation as ways to teach moral education in the classroom setting. Observing students’ dialogue of debate with the guidance of a mentor in a classroom setting teaches the students to build trusting relationships, allows for the practice of caring for others to occur, and gives the students an opportunity to receive confirmation on good and bad actions encouraging them of proper moral action. A key reason for conversation to be incorporated into the classroom setting is that it builds trust (Held, 2006; Noddings, 2002). And, without trust, caring for others could be detrimental to the patient’s healthcare. A lack of trust could cause harm to the patient. For example, the patient may not believe what the certified athletic trainer says and performs inappropriate exercises causing further harm to the injury.

The third question of Part D asked certified athletic trainers how they incorporated ethics of care into their education program. Several certified athletic trainers reported that the topic was covered in the organization and administration course in the curriculum. One certified athletic trainer reported that they taught ethics of care “through a value and Christ centered approach to ethical decision making and care giving.” The educators appear to have little knowledge of the pedagogy of teaching ethics and little knowledge of the limits of modeling in teaching ethics of care. If ethics of care is taught in the organization and administration course, there may not be enough time spent on the topic because of the sizable
amount of competencies required administrative information covered in the course (NATA Athletic Training Educational Competencies, 2006). Ethics of care probably is not being covered in the in-depth manner that it needs to be covered. Organization and administration courses typically cover the policies and procedures of an organization. According to the current NATA Athletic Training Education Competencies, the competencies for the health care administration section should allow the student to develop and possess the knowledge and skills to “develop, administer, and manage a health care facility and associated venues that provide health care…” (NATA Athletic Training Education Competencies, 2006, p. 41). These competencies include describing the organization and administration of pre-participation physical examinations, personnel recruitment and retention, facility design, third party reimbursement, and all aspects of managing an organization. These competencies also identify various policies and laws associated with medical records, human resources, infection control regulations and guidelines, first aid and emergency care management, and basic legal concepts as applied to the allied health care practitioner. It would appear that little time is given to assist students with developing moral reasoning skills.

The last question in Part D of the Williams Assessment on Ethics of Care in Athletic Training Instrument asked the participants to record their predominant teaching method for ethics education. The predominant teaching method currently being used by certified athletic trainers surveyed is through Scenarios followed by Role Modeling and Principled Approaches. Fox and DeMarco (1990) and Stoll (personal communication, May 30, 2007) identify a scenario approach as the least effective method for teaching moral reasoning. To teach ethics one must have: (1) a knowledge of ethics, (2) the skill of pedagogy of teaching ethics, (3) knowledge and expertise in the profession; (4) an understanding of the classroom
environment for successful dialogue, and (5) knowledge of how morality and thought are
learned, the psychology of moral development. Fox and DeMarco state that when an
instructor is in trouble with teaching moral reasoning, the instructor reverts to scenario based
teaching. In order to teach moral reasoning, one has to have a clear vision. If 51.1% of the
certified athletic trainers use Scenarios and Role Modeling as the predominant teaching
methods, then it is doubtful that athletic training students are receiving ethics education in the
most meaningful way. Piper, Gentile & Parks (1993) argue for critical reflection upon self
and the professional practices which then assists in moral development.

Fox and DeMarco (1990), Piper, Gentile, and Parks (1991), and Stoll et al. (1994)
report that teaching through principled approaches is the most effective method for teaching
moral reasoning. Fox and DeMarco expanded Kohlberg’s moral reasoning education of
asking what is the right thing to do, why is it the right thing to do, and what social-moral
perspectives [of Western tradition] supports making the decision into a questioned, principled
approach asking specific questions. Questions are answered in the principled approach of
moral reasoning education identifying morality and one’s primary moral values. Selecting
no more than three primary moral values, one must place them in order of most to least
important. These values are then placed in a principled negative format as in “I will not lie”.
Principles are then placed in descending order and are not to be compromised. The
principles are reviewed when making an ethical choice, and it is decided which principle
supports the decision. If any of the principles are violated, the process must be reviewed, and
if after reflection, the action supersedes the principle, then the process must be revisited.

In athletic training, role modeling is assumed to be occurring in the clinical setting,
but it appears that little principled approach teaching occurs in the classroom setting. In the
present study, it was hypothesized that there was a lack of formal ethics education for the athletic training students and the certified athletic trainers; this appears to be true for the population surveyed.

*Part E – Certified Athletic Trainer’s Ethics of Care Perspective*

Part E of the instrument asked for the general knowledge of the participant’s perspective of ethics of care. The first question allowed participants to define “Ethics of Care”. Seventy participants defined ethics of care while 36 participants chose to skip this question. Because so many chose to skip this question, certain questions arise: (1) Was this question thought to be a silly question?, (2) Did the certified athletic trainers think it was not an important question?, and/or (3) Did they not know what ethics of care is?

In Chapter four, Part E of the Williams Assessment on Ethics of Care in Athletic Training instrument, results indicate that some of the sampled population probably did not understand what ethics of care was. Of the total population, 49.1% were assistant athletic trainers at the college/university level. Their primary responsibility usually is to provide medical care to the student athlete and not to formally educate the athletic training student, which may result in less knowledge about specific curriculum issues regarding teaching ethics of care in the classroom setting. If only 47% appear to define ethics of care according to Noddings (2002), Gilligan (1982), Held (2006), Cronqvist, Theorell, Burns, and Lutzen (2004), Hoffman 2006, and Slote (1999), while 20% define ethics of care as following and abiding by rules, is the certified athletic trainer prepared to teach ethics of care to athletic training students?

Furthermore, with a majority of the certified athletic trainers indicating that their current instructional position was that of an approved clinical instructor (67%), it may
indicate that their only interaction with athletic training students is in the clinical setting, they probably do not educate students in a formal classroom. These individuals have a responsibility to model ethics and provide an ethical environment, which demands applied knowledge of ethics of care.

The second question in Part E asked participants to describe how they incorporated ethics of care into their education program. Seventy participants responded while 36 participants skipped this question. One common theme throughout the responses was that ethics of care was incorporated into the education program through role modeling and leading by example in the classroom and clinical settings. A few responses reported that if a situation arose, the certified athletic trainer would discuss the facts and emotions involved with the student. If one truly understood what ethics are, they would know that emotions are psychological and not ethical practice. These individuals may not understand the literature on ethics education. Emotivism has long been argued as not a valid form of ethical reasoning (Frankena, 1973). Certified athletic trainers also reported that students were taught the information from the NATA Code of Ethics and BOC Standards of Professional Practice in the classroom setting, but were to use the certified athletic trainers in the clinical settings as role models.

For the third question, Part E, participants were asked to identify what type of journaling their current athletic training students did on ethical issues. Of the seventy certified athletic trainers who responded, 44.3% indicated that no type of journaling was done by their athletic training students. Allowing a student time for reflection and self-assessment develops the highest level of professional behavior development (Craig, 2006). Athletic training students are in a period of inquiry and reflection, which coupled with self-
reflective journaling, will strengthen their understanding of moral development (Lickona, 2004; Piper, Gentile, & Parks, 1993).

Athletic training students need to receive ethics education in a variety of settings. Students should gain the base knowledge and skills to make appropriate ethical decisions in the classroom and be able to apply, under supervision of the clinical instructors, the ethical skills of moral reasoning and empathy of care. Some form of reflection including journaling is necessary to assist students in self-reflection and would allow them to further develop moral reasoning skills.

*Part F – Moral Reasoning*

As previously stated, it is the hope that the maturing student, the maturing onion, (Figure 10, p. 55) will interlace moral caring and empathy throughout all the developmental layers to provide best care practices. To morally care and have empathy, students must learn to deliver best care practices through moral knowing, moral feeling, and moral action (Lickona, 1991). The student also should learn to deliver best care practices by focusing on various principles and behaviors learned through education, the environment, laws, and guidelines (Fox & DeMarco, 1990; Noddings, 2002; Piper, Gentile, & Parks, 1993). Utilizing classroom and clinical settings in athletic training, students should learn to make correct ethical decisions to provide the best patient care.

In the last part of the instrument, certified athletic trainers were asked to put their own moral reasoning skills to the test. Only 69 of 106 (65%) participants completed this portion of the survey. Why? Perhaps time was a factor or perhaps the participants were insulted being asked to apply ethics, or perhaps they did not know how to answer, or perhaps it was a matter of time. The majority of participants reported teaching ethics using the same
scenario-based method, therefore this part of the instrument should have been very easy to answer. Also, if the certified athletic trainers have the knowledge of laws and rules and moral reasoning skills to follow the correct steps in making a morally correct decision, there should be no doubt in choosing “Strongly Disagree” for each of the five questions.

Each of the questions was developed using the five principles of the NATA Code of Ethics. See Appendix B for a listing of the questions. Questions one and two reflected choosing right from wrong according to U.S. law. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) states that an individual’s medical records and other personal health information are protected by setting restrictions on the use and release of health records by health care providers, health plans, and health care clearinghouses (United States Department of Health & Human Services, Office for Civil Rights – Privacy of Health Records, Retrieved June 19, 2007). If an individual does not respond Strongly Disagree to this question, then it may be thought that one disrespects the law. The individual also does not honor the NATA Code of Ethics.

In question two, a rule is violated. In general, no medications are to be dispensed to K-12 students by any staff unless it is authorized in writing by a parent or guardian (National Federation of State High School Associations Laws & Policies, Retrieved June 20, 2007; Ray & Perrin, 2005). Because of the diverse State Board of Medicine laws in the U.S. regarding the practice of athletic training, this rule may be a law in some states, and a certified athletic trainer should act accordingly with no medication being dispensed to minors. To respond to this question in any other way than “Strongly Disagree” would violate either a state law or a rule governing athletic training practice.
For question three, the individual’s value system was set in opposition to a rule. Board of medicine laws may vary from state to state, but in general, if a physician engages in any conduct, including overcharging for services, this is grounds for suspension, revocation or disciplinary sanctions by the governing board of medicine (Idaho Board of Medicine Administrative Code, Retrieved June 20, 2007). There is only one answer: Strongly Disagree.

Human resource management rules were pitted against a supervisor’s friendship in question four. When an individual is hired, it should be clear about the performance evaluation that will occur for retention and promotion of the employee (Rankin & Ingersoll, 2005; Ray & Perrin, 2005). If the supervisor in this situation followed his workplace’s performance evaluation format, and adhered to the NATA Code of Ethics and BOC Standards of Professional Practice, then there would be no hesitation when completing the evaluation form. When answering this question, if the certified athletic trainer did not choose “Strongly Disagree”, they may not know the human resource management rules for performance evaluation or may not know the NATA Code of Ethics and BOC Standards of Professional Practice.

In Question five, an issue regarding the welfare of a patient versus employment status was argued. According to the NATA Code of Ethics first principle and the BOC Standards of Professional Practice, athletic trainers provide and guarantee the highest quality of care is given to the patient (NATA Code of Ethics, Retrieved July 5, 2006; BOC Standards of Professional Practice, Retrieved July 28, 2006). The athletic trainer shall provide competent care. Competent care includes reducing the risk of further injury to the patient. If the patient in question five is allowed to return to play, further damage could occur to the injured area.
Fox and DeMarco (1990) identify basic steps of moral reasoning that may be included when making appropriate decisions. These include: 1) are any moral principles violated?, 2) are any moral rules violated?, 3) is this case an exception?, 4) are the rules justified?, and 5) how can the rules be changed? For question one, 65% of the participants selected Strongly Disagree while 35% selected Disagree. In question one, the privacy of an athlete is violated; the 35% who wavered on this question are either not clear of the rules of law or are somehow affected by relativism. Considering what we have learned about the education and preparation of certified athletic trainer, the argument appears to hold that athletic trainers need better training in ethics education (Fox & DeMarco, 1990; Lickona, 1991; Noddings, 2002; Piper, Gentile, & Parks, 1993).

In question two, 64% selected Strongly Disagree, whereas only 25% selected Disagree, 9% selected Neutral, and 3% selected Agree. This too was a question about a rule and various state boards of medicine laws. No athletic trainer is to dispense medicine without oversight by a physician. Thirty-seven percent of the certified athletic trainers vacillated on this scenario. Either they are unclear on the rule of law or perhaps they commonly practice these same procedures or they have not thought through the ramifications of violating this law. Again, education in moral reasoning would be helpful for these certified athletic trainers. Using the basic steps of moral reasoning, this question should only be scored as Strongly Disagree.

For Question three, a total of 39% selected something other than Strongly Disagree. Again, if one reflected on their moral principles and what the NATA Code of Ethics and the BOC Standards of Professional Practice state, the choice of Strongly Disagree would occur.
Questions four and five reported 24% and 18% selecting something other Strongly Disagree. These two questions may be more affiliated with relativism in the decision making process, which shows that certified athletic trainers are concerned about making the right decision for a patient’s healthcare (Fox & DeMarco, 1990). Because a primary responsibility of the athletic trainer is to provide competent healthcare including reducing the risk of reinjury, there is no doubt that questions four and five should be scored as Strongly Disagree. The certified athletic trainers wavered less on these two questions because in the end, the result was to provide the best care to the patient.

For each of the questions, if proper education occurred and the certified athletic trainers used principled reasoning and were educated in the preferred pedagogical form of teaching ethics, they would have easily and absolutely answered a Strongly Disagree (Fox & DeMarco, 1990; Lickona, 1991; Piper, Gentile & Parks, 1993). If certified athletic trainers have the appropriate knowledge and skills of moral reasoning, there should be no thoughts otherwise. Developing a self-understanding of personal values through reflection, practice, and communication, a certified athletic trainer can begin to provide quality ethics of care education.

**Summary**

In summary, we know that several rules and codes must be followed by certified athletic trainers and athletic training students. We also know that athletic training students must be taught specific knowledge and skills, including foundational behaviors of professional practice, in the classroom and clinical settings. We understand that moral reasoning development must occur using various teaching methods, including principled approaches, and critical reflection. As identified throughout this study, there is an
appearance that there is no common thread of ethics education either as trained professionals or as teaching and mentoring educationalists, as identified by the certified athletic trainers from 86 of the 100 surveyed CAAHEP athletic training education programs.
CHAPTER SIX

Implications

*Introduction*

The purpose of this chapter is to propose recommendations for future research resulting from the findings reported in Chapters Four and Five, and to offer guidelines for ethics of care education for athletic training education program directors and certified athletic trainer clinical instructors. Possible improvements are also offered for some of the limitations that may have occurred during this research.

Prior to the outset of this project, questions were posed about why it appeared that newly certified athletic trainers lacked caring skills when providing medical care to the student-athletes, and what was happening within athletic training education that might cause a lack of this kind of care. This disconcerting impression of today’s athletic training profession led to the development of the current study.

*Recommendations for Future Research*

Several questions arise when considering ethics education research in the profession of Athletic Training.

1) Initially, the question must be asked, “Why are the athletic training education programs not offering specific classes in ethics education, moral reasoning and ethics of care?” Several participants in this study stated that ethics education was enmeshed in courses throughout the curriculum, but how much is enmeshed? Is the appropriate amount of time being given to the students towards moral development? Are the suitable tools being taught to students in order to make the correct decisions?
2) If educators are serious about developing ethical, caring students who are going to be the next leaders of our profession, they need to be trained in the pedagogy and content of moral development. A future study should examine certified athletic trainers about their pedagogical preparation in ethics.

3) Is it time for an emphasis to be placed on a common ethics education program for all athletic training education programs? If athletic training education programs are to incorporate the *Foundational Behaviors of Professional Practice*, as indicated in the NATA Athletic Training Educational Competencies, how best can this information be presented to the athletic training students? The underlying characteristic of each of the behaviors is of ethical nature. If the common behavioral values in the Athletic Training profession are not clearly incorporated into the curriculum, how can the athletic training students be expected to make the correct ethical decisions regarding patient healthcare?

4) Further research might involve understanding the athletic training student’s perspective on ethics of care. What are the student’s thoughts about ethics of care? Do the students feel appropriately prepared to make ethical decisions according to a patient’s healthcare? Do the students feel they have the appropriate background to make sound, ethical decisions? Because 57.5% of the respondents have been practicing as certified athletic trainers for 10 years or less and are assisting with the education of undergraduate athletic training students, this may be enough basis for future investigation in examining the pre-professional’s perspective on ethics of care.
Results from this study can assist athletic training educators in examining the need for greater ethics education in the classroom setting. Certified athletic trainers should not only teach and mentor students in the classroom setting, but there needs to be a strong classroom ethical component. Receiving ethics education through an enmeshed approach may not allow students the time to develop the appropriate skills to make good ethical decisions.

From this study, it appears that there needs to be greater ethical interaction between the certified athletic trainer and athletic training students, both in the classroom and clinical settings. According to Aristotle, a good leader must portray ethos, logos, and pathos (Crisp, 2000). Ethos is the credibility of one’s subject. Certified athletic trainers must be prepared to teach ethics. They must have sound pedagogical preparation to teach; otherwise they may not capture the athletic training students’ attention. Logos, the judgment to support an argument, and Pathos, the emotional sense to represent one’s character, allows the certified athletic trainer to ably teach the athletic training students as well as inspire them to truly believe in what is being taught. As a result of having appropriately prepared individuals teaching ethics, the athletic training students could potentially capture the knowledge and skills to make the appropriate ethical decision. What is appropriate education in ethics? Piper, Gentile, and Parks (1993), as well as Reimer, Paolitto, and Hersh (1983) argued that to teach in ethics, one must have classes in ethics, moral education, moral reasoning, and moral development. The authors also argued that one should have mentored guidance in the practice of teaching moral reasoning or the pedagogy of ethics education.

Athletic training educators need to be proactive in the development of ethics of care in athletic training students, whatever the setting may be. As a leader and mentor, one must be able to teach and guide others to make appropriate decisions. If we do not take charge in
assisting with the moral development of today’s athletic training students, a detriment to the medical healthcare could occur. A formal moral education curriculum needs to be implemented by trained and educated ethics pedagogists in athletic training. Noddings (2002) stated, through a care theory, that modeling, dialogue, practice, and confirmation are ways that students can develop their knowledge and skills in moral education. Piper, Gentile, and Parks (1993) suggested that to allow students time to learn to critically think and argue logically, a diverse environment, including a mentoring community, will best enhance a student’s ability to make the correct ethical decision. Even though several certified athletic trainers reported enmeshing ethics education throughout the curriculum assisting in the learning over time method, where do the students initially learn how to make the appropriate decisions if coursework in taking the right steps is not available?

Improvements

The overall impression from this research is that most certified athletic trainers lack the appropriate training in ethics education, which may limit their ability to communicate the necessary knowledge and skills for ethical decision making to the students. To further enhance education for athletic training students, several suggestions are appropriate. It would be interesting to examine ethics education at the various higher education institution athletic levels. This may be of some interest because of the challenges to supervising clinical instructors, their work schedules, and the time needed to teach and mentor athletic training students. Another suggestion would be to evaluate, critique, and identify the pedagogical preparation of those teaching, leading, and mentoring athletic training students, and specific curriculum tactics in ethics education. This may allow for greater insight into the possible limitations athletic training students may have in making appropriate ethical decisions.
In Parts E and F of the instrument, 34% of the participants did not answer the questions defining ethics of care. Why did they not answer the questions? Were the questions impractical? Should not certified athletic trainers see the need to complete questions defining ethics of care and utilizing moral reasoning skills to make correct decisions - ethical decisions? If this topic is not of great interest to the athletic training profession’s current and future leaders, is this a detriment to the patients with whom they work with? Maybe this study needs to be replicated at the organizational level of CAATE where certified athletic trainers are forced to answer the questions.

Today, athletic training students need to have a much greater base of knowledge and skills to provide healthcare than ever before. Today’s curriculum of accredited athletic training education programs is regulated by an accreditation agency, along with the Board of Certification Standards of Professional Practice and NATA Code of Ethics, what all allow for the safety of the patients and the credibility of the profession. But, if today’s athletic training students are not engaged in developing ethical ways to provide the appropriate medical coverage, what good is the increased amount of knowledge and skills going to do if these students cannot relate to the patient?

Future Implications

Something appears to be lacking in the preparation in teaching ethics of care. Further implications for this study include: 1) replicate research throughout the profession, 2) institute a national committee to examine the current practices, 3) establish guidelines for instructor preparation in ethics education, moral reasoning, and moral development, 4) establish guidelines for pedagogical practice in ethics education, 5) implement a timeline to bring forth the change. Fox and DeMarco (1990), Noddings (1992, 2002, 2003), and Piper,
Gentile, and Parks (1993), suggest ways to prepare the educators how to teach ethics education. The authors also offer ideas on educating and assessing student ethics education.

Summary

According to the NATA’s Athletic Training Educational Competencies (2006), athletic training education programs are required to integrate the common values of the athletic training profession through the foundational behaviors of professional practice. A proposal for the development of an additional curriculum item in moral development for correct ethical decision making purposes would allow ethics to be the center of all foundational behaviors surrounded by the rest of the behaviors in an interlocking manner. Figure 14 represents the interaction of each of the NATA’s Athletic Training Educational Competencies’ foundational behaviors with Ethical Practice, the center of what a certified athletic trainer should achieve when providing appropriate patient healthcare. This interlaced model was developed because ethical practice is the foundation for all decisions made by certified athletic trainers. Each of the foundational behaviors is somehow affected by choosing the appropriate decision.
Foundational Behaviors of Professional Practice in Athletic Training

Figure 19. Foundational Behaviors of Professional Practice in Athletic Training

We, as certified athletic trainers, should advocate that the new professional, the athletic training student, the maturing onion, begin with the components of moral character. The athletic training profession should hope that this student would be introduced through education, role modeling, and the environment to various aspects of ethical decision making in an athletic training environment. The athletic training profession also should advocate that through the law, association guidelines, and society that the athletic training student would further build their knowledge and skills capacity in learning to make correct ethical decisions. All of these decisions would be supported by a caring and empathetic disposition when providing healthcare to the patient. The ethics of care paradigm for athletic training student development can be found in Figure 20.
Figure 20. Ethics of Care Paradigm for Athletic Training Student Development

A list of guidelines for education in ethics of care for athletic training education program directors and certified athletic trainer clinical instructors is offered in Table 10. These guidelines follow the onion metaphor, thus allowing for moral character development and growth of the student into the new practicing athletic trainer. Utilizing the approached presented in Figure 14 may allow for further growth of the athletic training student in developing foundational behaviors for professional practice. Furthermore, this approach may allow for greater ethical care of the patient.
Table 11

Guidelines for Education in Ethics of Care for Athletic Training Education Program Directors and Certified Athletic Trainer Clinical Instructors

<table>
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<th>Component</th>
<th>Educational Guidelines</th>
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| Moral Development and Ethics Education | • The Student: Identify moral characteristics of students entering into the athletic training education program through clinical observations and interactions with others  
• Build a foundation during one of the initial athletic training courses to understand moral development and ethics of care in order to make appropriate ethical decisions throughout the student’s undergraduate  
• Teach moral development primarily through a principled approach, but use other various teaching techniques including scenarios, case studies, and discussion to teach moral development  
• Utilize instructors who have had formal education in moral development and ethics, or further the education of individuals teaching moral development and ethics in the athletic training settings |
| Role Modeling                    | • Educate certified athletic trainer clinical instructors about moral development and the ethical decision making process  
• Educate individuals (program directors, clinical instructors, physicians, allied healthcare professionals) interacting with athletic training students on the importance of positive role modeling and how it relates to providing good healthcare to patients |
| Environment                      | • Understand and comply with the laws, NATA Code of Ethics, and BOC Standards of Practice that govern certified athletic trainers and apply the ethical decision making process in both the classroom and clinical settings  
• Understand the consequences of violating the laws, NATA Code of Ethics, BOC Standards of Practice, and other allied healthcare provider codes of ethics  
• Utilize diverse classroom settings  
• Identify attributes from the various clinical settings that can provide a positive clinical experience for the students in order to develop good ethics of care qualities |
| Caring, Empathetic Disposition    | • Emphasize the importance of a caring and empathetic disposition when providing healthcare to the patient                                                                                                           |

As Piper, Gentile and Parks (1993) avowed “A capacity for empathy…is the ground of compassion – the ability to suffer with – and the driving energy in the formation of the
ethical imagination…The capacity for empathy is a primary element in the formation of effective, ethical managerial behavior” (p. 53). We would hope that a caring and empathetic behavior would allow the maturing athletic training student and the athletic training profession to embrace the necessary foundational behaviors of professional practice when providing healthcare to the patient.
REFERENCES


Board of Certification (2004). *Role delineation study* (5th ed.). Omaha, NE: Board of Certification.


Caruthers, L. (June 18, 2003). Personal communication.


Grace, P. (July 6, 2006). Personal communication.


Litt, D. W. (2001). *The relationship of changes in moral and ethical judgment in athletic training students to selected institutional, instructional, and student characteristics in*


APPENDIX A

Human Assurances Approval Form

MEMORANDUM

TO: Jacqueline M. Williams
HPERD - 2401

FROM: Steve Meier, Chair
Human Assurances Committee

DATE: January 26, 2006

SUBJECT: Approval of “How are Ethics Taught to Athletic Training Students from Undergraduate CAAHEP Accredited Athletic Training Education Programs”

On behalf of the Human Assurances Committee at the University of Idaho, I am pleased to inform you that the above-named proposal is approved as offering no significant risk to human subjects. This approval is valid for one year from the date of this memo. Should there be a significant change in your proposal, it will be necessary for you to resubmit it for review. Thank you for submitting your proposal to the Human Assurances Committee.

Steve E. Meier
SEM/ed
APPENDIX B

WILLIAMS ASSESSMENT ON ETHICS OF CARE IN ATHLETIC TRAINING

TEACHING ETHICS TO ATHLETIC TRAINING STUDENTS OF CAAHEP ACCREDITED ATHLETIC TRAINING EDUCATION PROGRAMS SURVEY

As a certified athletic trainer employed at an institution with a CAAHEP accredited undergraduate athletic training education program, you are invited to participate in a survey research study titled, “Teaching Ethics to Athletic Training Students of Commission on Accreditation of Allied Health Education Programs (CAAHEP) Accredited Athletic Training Education Programs”. The purpose of the study is to better describe and understand current teaching practices of ethics to Athletic Training Students. This study is being undertaken as partial requirement for the completion of doctoral study at the University of Idaho, and has been approved by the Human Assurances Committee at the University of Idaho.

Please complete the following survey. This descriptive research will identify specific components of teaching ethics to athletic training students from undergraduate CAAHEP accredited athletic training education programs. These components include: 1) Method of delivery, 2) Time spent on delivery, 3) Ethics training of the instructor, 4) Instructor definition of ethics terms, and 5) Completion of a 5-question Likert scale instrument on moral reasoning to athletic training, based on certified athletic trainer published ethical principles.

Your responses will be anonymous, confidential, and secured at all times. You have the right to withdraw from participation at any time by not submitting your responses. Two envelopes will be provided to you, one marked “survey” and one marked “consent form”. Please place the completed documents in the appropriate envelopes. Place the sealed “survey” envelope inside the “consent form” envelope and return on or before April 15, 2006 in order to facilitate timely reporting of the results and conclusion of this study. Once received, the consent form envelope will be separated from the unopened survey envelope, checked for content, and placed in a consent form folder. A number will not be assigned to the consent form. The unopened survey envelope will be assigned a number and placed in a separate survey folder. Identity by name from the larger consent form envelope will be removed from the unopened survey envelope. Completed surveys will not be opened for data analysis until the deadline for submission of the survey or if all surveys are received prior to the deadline listed.

If you wish to receive results from this study, please e-mail me at Jackie.williams@sru.edu or call 724.738.2152.

Thank you for your time and attention toward this survey. If you require additional information, please contact me, Jackie Williams, (Jackie.williams@sru.edu, 724.738.2152) or my doctoral committee member, Dr. Sharon Stoll, (sstoll@uidaho.edu, 208.885.2103).
WILLIAMS ASSESSMENT ON ETHICS OF CARE IN ATHLETIC TRAINING

TEACHING ETHICS TO ATHLETIC TRAINING STUDENTS OF CAAHEP ACCREDITED ATHLETIC TRAINING EDUCATION PROGRAMS SURVEY

1) Please mark your current employment position as a certified athletic trainer.
   _____ Athletic Training Program Director  _____ Athletic Training Faculty
   _____ Head Athletic Trainer  _____ Intern Athletic Trainer
   _____ Assistant Athletic Trainer  _____ Graduate Assistant Athletic Trainer
   _____ Other (please explain: __________________________)

2) Please mark your current instructional faculty/staff position.
   _____ Approved Clinical Instructor  _____ Clinical Instructor
   _____ Clinical Instructor Educator

3) Gender  _____ Female  _____ Male

4) Years of experience as a certified athletic trainer  _______________

Thinking of the CAAHEP Standards and Guidelines Section II A1c(9), “Students shall receive formal instruction in the following expanded subject matter areas in conjunction with the “NATA Athletic Training Educational Competencies” “medical ethics and legal issues”:

For Your Students:

1. In your program, is the CAAHEP standard met through an Ethics stand-alone course?
   _____ Yes  _____ No

   If YES, what is the course? Check all that apply.
   A. General Ethics
   B. Professional Ethics
   C. Sport Ethics
   D. Legal Ethics
   E. Other __________________________

2. If ethics education is enmeshed, in what courses or experiences do the students receive formal instruction? Check all that apply.
   A. General Ethics
   B. Professional Ethics
   C. Sport Ethics
   D. Legal Ethics
   E. Other __________________________
For Your Training:

3. Did you study Ethics through a stand-alone course? _____ Yes _____ No

   If YES, what was the course? Check all that apply.
   A. General Ethics
   B. Professional Ethics
   C. Sport Ethics
   D. Legal Ethics
   E. Other

4. If you studied ethics through an enmeshed course, in what courses or experiences did you receive formal instruction? Check all that apply.
   A. General Ethics
   B. Professional Ethics
   C. Sport Ethics
   D. Legal Ethics
   E. Other

In Your Teaching:

5. Estimate how many hours per semester in any course you spend teaching ethics:
   1) In the classroom setting
   2) In the clinical experience setting
   3) In a professional course
   4) Do not teach ethics
   5) Other

6. I teach Ethics using: Check all that apply. *Asterisk your predominant teaching method.
   1) Scenarios
   2) Case Studies
   3) Role Modeling
   4) Role Playing
   5) Principled Approaches
   6) Code of Ethics
   7) Other

From Your Perspective:

7. What is “Ethics of Care”?

8. How do you incorporate Ethics of Care into your education program?
9. What type of journaling do your athletic training students do on ethical issues? Check all that apply.

1) None
2) 2-3 papers on ethics
3) Self-reflection
4) Other

```
1) None
2) 2-3 papers on ethics
3) Self-reflection
4) Other
```
The following scenarios involve dilemmas with high school and college athletic trainers. Carefully read the scenarios and respond in one of five ways: **SA = Strongly Agree, A = Agree, N = Neutral, D = Disagree, and SD = Strongly Disagree.** There are no right or wrong answers.

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<tr>
<th>Scenario</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
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<tr>
<td>Amy is an athletic trainer for a women’s soccer team. Player A gets injured and is removed from competition. After the game, many parents are speculating as to the nature of the injury. Player B’s father, who is a general surgeon, asks what happened to Player A. Since Player B’s father is a surgeon it is permissible for Amy to explain Player A’s injury.</td>
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<td>Ben practices in a state that does not allow ATC’s to dispense over the counter medications. Before a match Player C states she has a severe headache and really wants some aspirin, however, she forgot to pack aspirin. Ben has a bottle of aspirin he keeps for personal use. Player C asks Ben for some aspirin, just this one time. Since it is only once and no one else will find out, Ben leaves the aspirin on the team bench unattended.</td>
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<td>Julie is an ATC at a local high school. Julie’s budget is very tight and she is struggling to make ends meet. A local physician states for every athlete Julie refers to his office he will give her a set amount of money. The physician has a reputation for over charging patients and ordering unnecessary tests. However, since the money is needed and will help her better supply her athletic training room, Julie should accept his offer.</td>
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<td>Troy is the supervisor of ATC’s at Clinic ABC. When a new position opens Troy hires Sam. Sam is a close friend who supported Troy throughout college. Without Sam, Troy would no be in his current position. Sam is now the one who is supporting a family and needs this job to make ends meet. Soon after the hire, Sam calls in sick, arrives late or leaves early, and avoids duties he does not like. The staff complains about Sam often, however, Troy defends the man who started his career. Next week is mid-year reviews. Because Sam is his friend and lifelong supporter, Troy should give Sam high marks on his review.</td>
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<td>Jenny, an ATC, is married to Bill, the head basketball coach at Big Time University. The current basketball ATC has accepted another position and Bill suggests his wife as a temporary replacement. She is hired right before conference playoffs. Bill informs Jenny that due to his performance he must make the playoffs to keep his job. Jenny invests much time into the team to get them as healthy as possible, however the night before the game the star player goes down with a knee injury. Bill tells Jenny the girl must play or they will not win the game and they will both lose their jobs. Jenny knows if the girl plays she could cause further damage to her knee. However, their jobs are on the line. Jenny should let the girl play to keep her and Bill’s jobs.</td>
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