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DIVISION III ATHLETIC TRAINER'S ATTITUDES TOWARD ISSUES AND
CONCERNS OF THE ATHLETIC TRAINING PROFESSION

by
Kristin Sacerdote

A Thesis

Submitted in partial fulfillment of the requirements of the
Master of Arts Degree in Higher Education Administration
of
The Graduate School
at
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June 22, 2006

Approved by _____
Dr. Burton Sisco

Date Approved June 22, 2006

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ABSTRACT

Kristin Sacerdote

DIVISION III ATHLETIC TRAINER'S ATTITUDES TOWARD ISSUES AND CONCERNS OF THE ATHLETIC TRAINING PROFESSION

2005/2006

Dr. Burton R. Sisco

Master of Arts in Higher Education Administration

The purpose of this study was to determine the specific issues and concerns that athletic trainers face in the college and university setting. A secondary purpose was to solicit recommendations in addressing the issues and concerns that are present in the profession. Seventy-two certified athletic trainers in the Eastern Athletic Trainers Association (EATA) completed a survey to evaluate their attitudes on the issues and concerns facing athletic trainers in higher education institutions. Those surveyed were asked to identify what were the top issues and concerns facing athletic trainers and what recommendations that they had for addressing these issues. The findings of the study showed that the factors outlined in the research were consistent with those identified previously as issues and concerns that face athletic trainers in Division III institutions. Also, the findings revealed that there were several correlations between the demographics of the athletic trainers and their attitudes about the athletic training profession.

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I would like to take this opportunity to thank all the people that made this project possible and such a positive experience. First off, I would like to thank my family for all of their love and support through my years of schooling. They have believed in me when I didn't believe in myself and have helped me through the ups and downs of school. I would not have made it without them.

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CHAPTER ONE

INTRODUCTION

Participation in sports has increased substantially in recent years. With increased participation in sporting events has come an increase in injuries that are related to athletic competition. As the incidence of athletic related injuries increase so has the demand for medical professionals that work with athletes increased. These professionals are known as certified athletic trainers.

Certified athletic trainers (ATCs) are medical professionals who work with patients that participate in athletics. “Athletic trainers are medical experts in preventing, recognizing, managing and rehabilitating injuries that result from physical activity” (National Athletic Trainers Association, 2005, ¶2). These sports medicine professionals can help athletes to avoid injuries and they can aid in the recovery of those athletes that have been injured. Athletic trainers are recognized both regionally and nationally by the medical world. “Athletic training is recognized by the American Medical Association as an allied health care profession” (National Athletic Trainers Association, 2005, ¶ 3). ATCs work under the supervision of a team physician and also cooperate with other health care professionals, coaches, administrators and parents to give the best possible medical care to athletes.

Athletic trainers specialize in five domains: (a) prevention of athletic injuries, (b) recognition, evaluation and immediate care of athletic injuries, (c) rehabilitation and

reconditioning of athletic injuries, (d) health care administration, and (e) professional development. Some of the duties of an athletic trainer include, but are not limited to preparing athletes for practice, evaluating injuries, developing rehabilitation and conditioning programs, taping limbs and extremities, and providing treatment to athletes.

Athletic trainers work in many settings. One setting is in the secondary school system, which includes both public and private schools. Both parents and administrators are recognizing the benefits of having an athletic trainer (National Athletic Trainers Association, 2005). Another area that an athletic trainer can practice in is the college and university setting. A third option is to work in the professional sports setting. In this setting, certified athletic trainers work with only one sport and even though these sports only compete for a few months annually, athletic trainers work year round with rehabilitating and conditioning athletes (National Athletic Trainers Association, 2005). Other practice settings include sports medicine clinics, corporate health clubs, clinical and industrial health care programs, and athletic training education programs.

Individuals wishing to become athletic trainers must earn a bachelor's degree from an accredited institution. The accreditation is through the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Some areas of instruction include assessment and evaluation of athletic injuries, emergency care, therapeutic modalities, therapeutic exercise, administration, kinesiology, nutrition, psychology, and human anatomy and physiology (National Athletic Trainers Association, 2005). Clinical education enhances those skills that are learned in a classroom setting. Athletic training students work under the supervision of a certified athletic trainer to further develop skills that are learned in the classroom.

After earning a degree from an accredited institution, certification is required. Certification of athletic trainers is through the Board of Certification (BOC), which administers a certification test. The test is divided into three sections, which includes a written, practical, and simulation section. All three sections of the test must be passed in order to become a certified athletic trainer. The certification is retained as long as the athletic trainer meets the educational requirements set by the BOC, which include completing a minimum number of continuing education units (CEUs), adherence to the BOC Standards of Professional Practice, and payment of annual NATA dues (National Athletic Trainers Association, 2005). Also, athletic trainers are required to obtain a license. The requirements vary from state-to-state and there is no reciprocal agreement between states.

The National Athletic Trainers Association (NATA) governs athletic trainers across the United States. The NATA is a not-for-profit organization dedicated to advancing, improving, and encouraging the profession (National Athletic Trainers Association, 2005). There are also governing bodies for each region in the country. The Eastern Athletic Trainers Association (EATA) is the governing body for the east coast of the United States and is divided into two districts. District 1 includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont. District 2 includes Delaware, New Jersey, New York, and Pennsylvania.

Statement of the Problem

Athletic trainers face a wide array of issues and concerns as professionals. These issues include liability, medical coverage/staffing, budgeting concerns, employment opportunities, the growing size of athletics in colleges and universities, the “burnout” rate

of athletic trainers and operating the new and improving technology available to the athletic trainer. The first issue, liability, is an important concern for athletic trainers. “With the increasing economic benefits of playing sports, such as college scholarships and multi-million dollar professional contracts, has inspired athletes over the past years to seek compensation for sports related injuries resulting from negligent medical care” (Chen & Esposito, 2005, ¶1). It is important, therefore for athletic trainers to understand the basic legal concepts regarding liability and other legal issues. Another issue for athletic trainers is medical coverage/staffing. Medical coverage is a large issue as the number of athletic teams increase (including both men’s and women’s), more non-traditional seasons are added and more strength and conditioning sessions are scheduled throughout the year. “This means there are more practices, more events and more workouts in which injuries can occur” (National Athletic Trainers Association, 2003, p.3). Budgeting is always a concern in higher education institutions as a whole. The decrease in funding in recent years, especially in public institutions, has put a large strain on maintaining essential services and delivering a quality education.

Employment is a concern not only for the numbers of jobs that are available for athletic trainers, but also the barriers that minorities have in overcoming prejudice to obtain an athletic training position. The “burnout” rate for athletic trainers is quite high due to the long work hours associated with being an athletic trainer. This time commitment includes late nights, early mornings, weekends and holidays that an athletic trainer must be available to work. These are just some of the issues and concerns that face athletic trainers in colleges and universities.

Purpose of the Study

The purpose of this study was to determine the specific issues and concerns that athletic trainers face in the college and university setting. A secondary purpose was to solicit recommendations in addressing the issues and concerns that are present in the profession.

Relevance of the Study

This study sought to help determine what issues are arising in the profession of athletic training so that these issues can be addressed. It is also important to determine if these issues are consistent between institutions or if they are limited to a specific institution. The information in this study will be useful to administrators, coaches and other health care providers that work in conjunction with the athletic trainers in better understanding the issues that athletic trainers must deal. The information could also be important to the governing bodies of athletic training such as the National Athletic Trainers Association and the Eastern Athletic Trainers Association.

Assumptions and Limitations

It is assumed that there are issues and concerns of athletic trainers in college and university settings that are consistent between institutions. It is also assumed that there may be differences in issues between institutions.

There are possible limitations in this study. One limitation is that the study was not be conducted nationally, so the results have limited generalizability. Another limitation of this study is the lack of previous research on this topic. A literature review revealed an absence of studies dealing with issues and concerns of athletic trainers as a whole but cited a few studies dealing with specific issues. Third, the sample size is small

compared to the athletic training profession as a whole. Finally, there is the potential for researcher bias since the investigator has an athletic training degree and this could influence the results of the study.

Operational Definitions

Athletic Training Issues (ATI): Is a modified version of the Coaches Issues Survey (CIS). It is a 30-item survey that is modified from the CIS so that the questions are relevant to athletic training.

Athletic Training Student: Is defined as a student who is enrolled in the coursework to become an athletic trainer at an accredited university.

Board of Certification (BOC): Is responsible for the certification of athletic trainers by using a certification test after they have graduated from an accredited program.

CAAHEP: Is defined as the Commission on Accreditation of Allied Health Education Programs and is responsible for the accreditation of programs and renewing of the accreditation of programs that have already obtained an accreditation.

Certified Athletic Trainer: In this study it has been defined as a one who has passed the BOC test and is a licensed athletic trainer in the state where practice occurs.

Coaches Issue Survey (CIS): Is a 30-item survey that focuses on events occurring in the coaching profession.

Continuing Education Units (CEU's): Are units that a certified athletic trainer must obtain per year to retain certification.

EATA: Is the Eastern Athletic Trainers Association and is the governing body for the following states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, Delaware, New Jersey, New York, and Pennsylvania.

Hardiness Test: Is a 30-item test that measures personality construct that reflects control, commitment, and challenge.

Maslach Burnout Inventory (MBI): Is defined as a method in quantifying burnout in helping professions. It has three subscales: emotional exhaustion, depersonalization and personal accomplishment.

Medical Coverage: Is defined as the staffing at sports competition of medical personnel, which include athletic trainers.

NATA: Is defined as the National Athletic Trainers Association and is the governing body of athletic trainers across the United States.

Perceived Stress Scale (PSS): Is a 14-item test that assesses thoughts and feelings about stressful events, control, overload, coping and experienced stress, as well as how the individual felt or thought in a stressful manner.

Social Support Questionnaire (SSQ): Is a 6-item tool that assesses the number of perceived social support network members and the degree of satisfaction with that support system.

Student-Athlete: Is defined as a student who is enrolled at a college or university and participates in sports at that college or university.

Women's Athletic Training Committee (WATC): Was formed in 1973 and is committed to identifying the needs of women athletic trainers and to provide

recommendations to the NATA on how to help aid in the advancement of women athletic trainers.

Research Questions

The following research questions guided the study:

1. What are the attitudes of selected athletic trainers toward issues and concerns in the athletic training profession?
2. Are there any significant relationships between the attitude factors of liability, medical coverage/staffing, stress/burnout, employment, and budget of the athletic trainers and selected demographics of position at institution, gender, educational level, and years practicing?
3. How do selected athletic trainers feel about the profession of athletic training?
4. What do selected athletic trainers report as the top three issues and concerns facing athletic trainers in higher education?
5. What are recommendations for dealing with the issues and concerns that athletic trainers face?

Organization of Remaining Chapters

Chapter two is titled “Literature Review” and contains information and previous studies done on athletic training and issues and concerns of athletic trainers. The chapter discusses five main issues: liability, medical coverage/staffing, stress/burnout, employment, and budget. Chapter three is titled “Methodology” and discusses the instrument used to collect data in the study. The chapter discusses the context of the study, the population and sample size that was used, how the data were collected, and how the data were organized and analyzed. Chapter four is titled “Findings” and

presents the results of the study. The chapter includes the profile of the sample, and presents the findings based upon the data gathered. Chapter five is titled “Summary, Discussion, Conclusions, and Recommendations.” This chapter includes the summary of the study, the purpose of the study, methodology of the study, data analysis, findings of the study, discussion of the findings, conclusions, and recommendations for future research.

CHAPTER TWO

LITERATURE REVIEW

Athletic trainers face a wide variety of issues on a daily basis. While many of the issues have changed over the years regarding athletics and athletic training, the issues themselves have not changed. Some issues that athletic trainers face are liability and legal issues, medical coverage/staffing of athletic events, stress and burnout, employment opportunities, and budgeting concerns.

Liability

A central issue facing athletic trainers today is the increase in legal and liability judgments. As a result, it is important for athletic trainers to have a general understanding of legal principles so that personal and institutional protection is maintained. There are several areas of liability that athletic trainers face, which include: (a) informed consent and participation risks, (b) physician-patient relationships, (c) immunity issues, and (d) risk management (Chen & Esposito, 2005).

Informed consent must be obtained from an athlete before any medical treatment can be provided. "Informed consent is a legal doctrine that requires a sports physician to obtain consent for rendering treatment, performing an operation, or using many diagnostic procedures after their clients being furnished with all the known relevant facts" (Chen & Esposito, 2005, ¶2). The exception to the rule is that of implied consent. Implied consent is when consent is implied, as when an athlete is unconscious and needs immediate medical attention. In such cases, it is assumed that an athlete, if conscious and aware of his/her condition, would consent to the treatment (Chen & Esposito, 2005).

There are several key components to a consent form that must be disclosed to an athlete prior to signing the form. One component is the responsibility of athletic trainers to adhere to customary or accepted sports medicine practice in diagnosing athletes' injuries. Second, the athlete must understand the kind of treatment to which he/she is consenting. Third, an athletic trainer must disclose relevant information since failure to do so may subject the athletic trainer to liability for fraudulent concealment. Fourth, athletic trainers should propose possible alternative treatments. Fifth, clients have the "right of refusal." Lastly, athletic trainers should explain the cost of the proposed treatment (Chen & Esposito, 2005).

Athletes should be aware of the participation risks that are associated with the participating in sport. "Assumption of risk" is a legal defense that attempts to claim that an injured plaintiff understood the risk of an activity and freely chose to undertake the activity regardless of the hazards associated with it (Chen & Esposito, 2005). This is a very common defense that is used by educational institutions and those in the health and medical fields. There must be two conditions of assumption of risk. One criterion is that the athlete must fully understand the magnitude and type of risk associated with participating in the sport. Second, the athlete must knowingly and voluntarily choose to participate in the activity (Chen & Esposito, 2005).

Physician-patient relationships also fall under the liability umbrella. A major issue under this topic is that of patient confidentiality. Releasing an athlete's medical condition to a third party is an unethical practice (Chen & Esposito, 2005). For this reason, it is important to obtain consent from the athlete when it may seem appropriate to discuss the health status of an athlete with a third party. The *Health Insurance Portability and*

Accountability Act (HIPAA) deals with this liability issue. HIPAA regulates patient and employee confidentiality.

There are five main points of HIPPA: (a) gives patients more control over their health information, (b) sets boundaries on the use and release of health records, (c) establishes safeguards that health care providers and other must follow to protect the privacy of health information, (d) holds violators accountable if they violate a person's rights, and (e) creates a balance when public responsibility requires disclosure of some forms or data. (Jones, 2003, p. 18)

Patients also have rights under the HIPPA act. The rights are about how their personal information can be used or disclosed.

The rights of patients are that it enables the patient to find out how their information may be used, to limit release of information to the minimum reasonably needed for the purpose of the disclosure and to give patients the right to examine and obtain a copy of their own health records. (Jones, 2003, p.18)

Athletic trainers must adhere to the HIPAA privacy rule to avoid legal ramifications and have a moral obligation to protect a patient's personal health care information.

A third topic that falls under the liability issue is that of immunity. "In some cases, athletic trainers can be immune from legal liability for malpractice claims that are brought upon them by athletes" (Chen & Esposito, 2005, ¶ 6). This is basically an extension of the "Good Samaritan" law. The Good Samaritan laws protect from blame those who choose to help others who are injured or ill. They are intended to decrease a bystander's hesitation to assist, for fear of being prosecuted for unintentional injury or death.

The final topic under liability is that of risk management. Risk management is the key to preventing lawsuits in sports medicine. This is a process intended to prevent financial, physical, property, and time loss for an organization (Chen & Esposito, 2005).

It is important for athletic trainers to understand these topics of liability because there is the possibility of encountering them. To prevent liability lawsuits it is best for athletic trainers to provide medical care that is consistent with the standard of care.

Medical Coverage/Staffing

Medical coverage and staffing is an increasing concern especially among smaller higher education institutions. At smaller colleges and universities, adequate staffing is a major issue (Grams, 1997). There are more men's and women's sports teams, more non-traditional seasons, and more strength conditioning sessions than ever before. This means there are more workouts and practices that injuries can occur (National Athletic Trainers Association, 2003). Large sporting event management must focus on medical services to all who are involved, such as athletes, officials, families, and spectators (Success Series/Reiff, n.d.). Moreover, there is a higher demand for athletic trainers and other health care personnel even though this demand is not always met. "Colleges and universities sometimes add teams or enlarge programs without the same increase in the medical staff and this requires more covered practices and games and longer training room hours" (Grams, 1997, p.11).

In 1998, the NATA formed the Task Force to Establish Appropriate Medical Coverage for Intercollegiate Athletics (AMCIA) to address the issue of medical coverage at athletic events. The task force was to address the concerns regarding the increased exposure of student-athletes to injury from the expansion of traditional and non-

traditional seasons, practices and competitions (National Athletic Trainers Association, 2003). The task force developed recommendations and guidelines for medical coverage at athletic events. “The primary factors for determining coverage for games and practices and level of qualifications of the health care member providing the coverage are the overall injury rate and potential for catastrophic injuries that could occur” (National Athletic Trainers Association, 2003, p.12). This is determined by using two indexes, the Injury Rate Index and the Catastrophic Index. The Injury Rate Index (IR) classifies each sport on the potential rate of injury and then the relative risk is combined with the catastrophic injury risk (National Athletic Trainers Association, 2003). The Catastrophic Rate Index (CI), classifies a sport on the potential of life threatening injury, spinal cord injury, major head injury or permanent disability (National Athletic Trainers Association, 2003). Each index is graded on a four-point scale.

The task force issued eight recommendations and guidelines that provide guidance for medical coverage at athletic events. First, all personnel who are associated with medical coverage must be qualified in CPR, first aid, and prevention of disease transmission. Second, sports that are considered lower risk (example: baseball, crew, softball, and swimming) and sport-related activities that include strength and conditioning, individual skills session and voluntary summer workouts must have an individual present that meets the qualifications in the first recommendation. Third, sports that are of moderate risk (example: basketball, field hockey, soccer, and lacrosse) should have a certified athletic trainer or an individual with the minimal requirements mentioned in the first recommendation. If an athletic trainer is not present, an athletic trainer should be able to respond within four minutes. Fourth, sports with an increased risk (example:

football, ice hockey, and wrestling) should have a certified athletic trainer physically present for all practices. Fifth, any sport with a combined Catastrophic Index and Injury Rate Index of 3.0 or higher should have a certified athletic trainer present at all home game. Sixth, a certified athletic trainer must directly supervise all full-service athletic training facilities during declared hours of service. Seventh, visiting teams and athletes should be provided with access to comprehensive health care services. Eighth, each institution must have an emergency plan specific to that venue (National Athletic Trainers Association, 2003).

The health and safety of athletes is important to those who are involved with athletics at the collegiate level. Therefore, it is vital that athletic trainers follow these guidelines and recommendations in order to provide the proper and best medical coverage for the student-athletes at their institution. Medical services can play a vital role in the success of an event and will ensure timely assistance in needed circumstances (Success Series/Reiff, n.d.)

Stress/Burnout

Stress and burnout are issues that athletic trainers face. Health care professionals such as athletic trainers are prime candidates for stress related conditions and burnout in the workplace (Dolan, 1998a). There are many stresses that an athletic trainer faces. “These include, but are not limited to, lack of administrative support, poor relations with coaches, inadequate financial compensation, lack of advancement opportunities and family and social issues” (Dolan, 1998a, p.23). The long hours that athletic trainers put in, along with these stressors can lead to individual burnout. Also, stress can have a

negative impact on professional development and other aspects of the athletic trainers' life (Dolan, 1998a).

Hendrix, Acevedo, & Herbert (2000) examined the stress and burnout rates in athletic trainers. Those that participated in the study were given the Hardiness test, the SSQ, ATIS, PSS and MBI tests to complete. The Hardiness test is a 30-item test that measures personality constructs that reflect control, commitment, and challenge (Hendrix et al., 2000). The SSQ is a 6-item tool that measures the social support system of a person and the degree of satisfaction with that support (Hendrix et al., 2000). The ATIS was an adapted version of the CIS and has specific questions related to athletic training (Hendrix et al., 2000). The PSS is a 14-item scale that measures feelings about stress, stressful events, and other stressors in life (Hendrix et al., 2000). Lastly, the MBI is a tool that quantifies the burnout rate in helping professions. It has three subscales, emotional exhaustion, depersonalization, and personal accomplishment. There were 118 certified athletic trainers that participated in the study. The hypothesis was that reported low levels of hardiness and social support and high levels of athletic training issues, would have a higher level of perceived stress and those that reported higher levels perceived stress would also show high levels of emotional exhaustion and depersonalization and lower levels of personal accomplishment (Hendrix et al., 2000). The results of the study supported the hypothesis. Correlation analysis indicated significant relationships between the personal and situational variables and perceived stress (Hendrix et al., 2000). The study also tested perceived stress and that is found to be a significant predictor of emotional exhaustion, which is related to burnout. Athletic trainers scored higher on burnout than teachers, doctors, and nurses. This could be due to the number of hours

spent in the athletic training room, the quantity of athletes that are seen on a daily basis and the relationships involved in the occupation (Hendrix et al., 2000).

In order to deal with these issues, athletic trainers need to focus on managing the stressors that they experience in everyday life. It is also important to reduce the negative effects that stress can have on athletic trainers. Some examples of stress management for athletic trainers would be regular physical activity, good nutrition, adequate sleep, a healthy balance between work and personal life, and time management skills (Dolan, 1998a). Managing stress in an effective manner will lead to better productivity and a more positive overall attitude. It can also help to reduce the rate of burnout in athletic trainers.

Employment

Athletic trainers can be employed in a variety of settings. They can be employed at secondary schools (both public and private), colleges and universities, professional sports, sports medicine clinics, health clubs, clinical and industrial health care programs, and athletic training education programs (National Athletic Trainers Association, 2005). Secondary schools employment of athletic trainers has increased in recent years. Parents and administrators are discovering the benefits that an ATC can offer (National Athletic Trainers Association, 2005) A large number of athletic trainers are also employed in college and university settings. There are not as many employment opportunities at the professional setting. In this setting, athletic trainers will work only with one specific sport and fewer jobs are offered because of the limited number of teams (National Athletic Trainers Association, 2005). The competition to work in a college, university, and professional setting is very intense and usually requires a master's degree (National

Athletic Trainers Association, 2005). This poses an issue for athletic trainers because it is now, more than ever, important for athletic trainers to continue their education beyond the bachelor's degree.

Another issue with employment opportunities is that of women in athletic trainer positions. Issues of gender equity and barriers of advancement in athletic training parallel those in other professions and work settings (NATA, n.d.). Athletic training is a male dominated profession in both the workforce and positions of leadership. Even though women make up approximately 45% of the NATA, less than one percent has ever held key leadership positions in the NATA (NATA, n.d.). Even though there have been great improvements of the past three decades there is still much improvement to be made. To address the issues women in athletic training formed the Women's Athletic Training Committee (WATC). This WATC is committed to improving the conditions of women ATC's (NATA, n.d.).

Budgeting Issues

Budget is a large issue in a school system as a whole from elementary schools all the way up to higher education institutions. Colleges and universities obtain operating funds from a variety of sources and then develop their own process of allocating the funds throughout the institution (Ginsburg, 1997). There are many components of budgets. Some of these components are operational budgets, auxiliary budgets, capital budgets, and restricted budgets.

Athletic departments or intercollegiate athletics can fall into the category of auxiliary enterprises. These are units that generate all or part of their operating budgets from sales or services (Ginsburg, 1997). Auxiliary units are seen as basically self-

sustaining. But, they may obtain some state or student fee funds depending on the state and institutional policies and regulations (Ginsburg, 1997). The department can also be funded directly through an operating budget. Those that are funded through an operating budget, rather than income generated, face relatively tight budgets and budget control (Ginsburg, 1997).

Tight budgeting and under funding are issues that athletic trainers face. Having tight budgeting or under funding makes it difficult to have an adequate staff and to purchase equipment and supplies for the athletic training room (Ginsburg, 1997). The cost of medical supplies also leads to problems when the budget is tight. Ensuring a clinic has adequate supplies to meet the needs of clients while keeping costs under control is a difficult process, especially with the increased cost of medical supplies (Success Series/Gull n.d.). All of these budget and money issues pose a problem to athletic trainers who are trying to run a facility that can provide the most adequate treatment for the athletes they serve.

Summary of Literature Review

As the participation in athletics rises, as it has over the recent years, there is an increased need of professionals that are trained to care for the needs of athletes. Athletic trainers are the professionals that are trained to deal with the physically active population and are important to athletics at all levels. Training is not only reserved to the classroom setting but also includes the clinical setting where the classroom learning is put to use. After completing a bachelor's degree at an accredited institution, a certification test must be taken and licensure obtained in order to practice athletic training.

There is a wide array of issues and concerns that athletic trainers face. There is limited research on the topic as a whole, but there is information on specified issues of athletic trainers. Even though there have been many changes over the years with athletics and athletic training, the central issues that face athletic trainers have not been studied. These issues include, but are not limited to, legal/liability issues, medical coverage/staffing, stress and burnout, employment opportunities, and budgeting issues. This study sought to add to the knowledge base of the issues facing athletic trainers, especially those in the collegiate setting.

CHAPTER THREE

METHODOLOGY

Context of the Study

The purpose of this study was to determine the issues and concerns that athletic trainers face at the collegiate level. There are three levels of college athletics. Those levels are Division I, Division II and Division III. This study focused on Division III schools of the NCAA.

The National Collegiate Athletics Association (NCAA) is the governing body of intercollegiate athletics in the United States. The NCAA has many purposes. One is to govern competition in a fair, safe, equitable, and sportsmanlike manner. Another purpose is to integrate athletics into higher education so that the education of the student-athlete is paramount. The NCAA is divided into three competitive divisions: Division I, Division II, and Division III. Athletic trainers work at all three NCAA divisions.

Division III schools are looked upon as largely academic institutions and they do not offer athletic scholarships. Athletics in Division III is very competitive and there are over 136,000 athletes that compete at over 430 Division III institutions. The main purpose of Division III schools is to provide a solid education for the student-athlete in the field they desire to find a career in and also allowing them to compete in intercollegiate athletics.

The National Athletic Trainers Association (NATA) is the governing body of athletic trainers all across the country. The first meeting of the NATA took place in 1950 when a group of about 200 athletic trainers met to discuss the future of the athletic

training profession. The NATA has helped to unify athletic trainers across the country by setting a standard for professionalism, education, certification, research and practice settings. The headquarters of the NATA are now in Dallas, Texas and there are approximately 30, 000 members. There are 10 districts of the NATA. District 1 and 2 are part of the EATA, District 3 is the Mid Atlantic Athletic Trainers' Association, District 4 is the Great Lakes Athletic Trainers' Association, District 5 is the Mid America Athletic Trainers' Association, District 6 is the Southwest Athletic Trainers' Association, District 7 is the Rocky Mountain Athletic Trainers' Association, District 8 is the Far West Athletic Trainers' Association, District 9 is the Southeast Athletic Trainers' Association and District 10 is Northwestern Athletic Trainers' Association.

The Eastern Athletic Trainers Association (EATA) is the governing body of athletic trainers on the eastern coast of the United States. It was founded in 1949 and encompasses certified athletic trainers that reside in the two districts. The states included in these two districts are New Jersey, New York, Pennsylvania, Delaware, Connecticut, Maine, Rhode Island, Massachusetts, New Hampshire, and Vermont. The EATA is a non-profit organization and they provide scholarship and research opportunities for students and athletic trainers who are members of this association. Members of the EATA work at all the NCAA Divisions.

Population and Sample Selection

The sample that was used for this study were certified athletic trainers who are members of the EATA and are employed at Division III institutions. As of April 2006, there were 1383 athletic trainers that are employed at the college setting in the EATA. This includes Division I, II and III colleges and universities. This study sample was on

Division III athletic trainers that worked in the university or college setting. The subjects were both men and women of varying ages. The sample population was chosen at random and every person had an equal chance to be selected for the study. All subjects had an educational level of at least a bachelor's degree, but some may also have masters or doctoral degrees. Access to the coaches was made through the United States Postal Service. A total of 100 athletic trainers received the surveys (Appendix B), consent form (Appendix C) and cover letter (Appendix B). Subjects were asked to read the cover letter and to read and sign the consent form before completing the survey.

Instrumentation

A survey titled "Attitudes Towards the Athletic Training Profession" (Appendix D) was designed by the researcher. The survey covered issues facing athletic trainers including liability, medical coverage/staffing, stress/burnout, employment and budget. The survey was developed to determine selected athletic trainer's attitudes towards these issues. After receiving IRB approval the survey was sent to 100 athletic trainers in the EATA. The survey consists of four sections. The first section had questions about background information and includes questions about the location of the institution, the number of athletes that care is provided for, the number of certified athletic trainers at the institution, the number of years that the certified athletic trainer has been practicing, gender, degree of education, and the number of men's and women's teams at the institution. These questions are used exclusively to establish the location of the institution and to see who responds to the surveys in order to better compare the results. This information was not be disclosed in the results in a fashion of being able to link the answers to the subjects of the study.

The second section contained a Semantic Differential scale. The scale consisted of a list of words with opposites and the subject was asked to place a checkmark in the appropriate place to indicate feelings toward athletic training.

The third section contained closed-ended statements organized on a Likert scale. The statements on this part of the survey focused on the attitudes about issues and concerns facing athletic trainers. There are 30 statements arranged on a scale of strongly agree to strongly disagree. The subjects were asked to circle the corresponding letter to the degree to which they agreed with each statement. The letters "SA" represented strongly agree, "A" represented agree, "N" represented neutral or undecided, "D" represented disagree, and "SD" represented strongly disagree.

The fourth section consisted of two questions. The first question asked the subjects what they felt are the top three issues or concerns that athletic trainers face. The second question asked if the subjects had any recommendations on how to improve the athletic training profession.

In order to confirm that the instrument is both valid and reliable, a pilot study was completed. Four subjects at Rowan University were used in a pilot study. The results of the pilot study indicated face and content validity. The reliability of the instrument was calculated through a split-half internal consistency method. The reliability coefficient of the instrument was a .90 which suggests that the instrument yielded reliable results.

Data Collection

The researcher first completed the Human Participants Protection for Research Teams online course, which was sponsored by the National Institutes of Health (NIH) on October 19, 2005. An Institutional Review Board (IRB) application was completed and

submitted on February 1, 2006 (Appendix A). Along with the IRB form was the cover letter, consent form, and a copy of the instrument used. After IRB approval, the cover letter, consent form and survey was mailed to the selected athletic trainers. The cover letter gave a brief description of the researcher, the instrument that was used in the study and the rationale behind the study. The letter also stated that the answers to the survey were confidential and the privacy of the subjects would be respected. A follow-up email was sent by the researcher to increase the response rate to the survey. This allowed the researcher to obtain a response rate of 72%.

Procedure of Gathering Data

On March 8 2006, 100 survey packets were mailed out to the selected athletic trainers in the EATA. Subjects chosen were given a packet that contained the cover letter (Appendix B), consent form (Appendix C), the survey (Appendix D), and a self addressed stamped envelope. When the subject opened the packet, there was a letter stating that the researcher was a graduate student who was doing a study on the issues and concerns facing athletic trainers in the EATA.

In order to ensure participation, a follow up email was sent to the subjects three weeks after the packets were mailed out. This was to make sure that the subjects received the packet and to encourage them to participate in the study.

Confidentiality was stressed in the letter and the consent form and the subjects were told that the responses to the survey would not reveal their name or school that they are employed in and that the research was being done for a master's thesis project.

The response date was April 1, 2006. All the surveys were collected on April 6, 2006. Seventy-two percent of the 100 subjects returned the survey information.

Data Analysis for Quantitative Data

The researcher used quantitative data analysis to determine the attitudes of athletic trainers on the issues and concerns that were addressed in the survey. The data were analyzed using the Statistical Package for Social Sciences Program (SPSS). Using this analysis, the researcher was able to calculate the frequency counts, percentages, means, medians, and standard deviations. Research question three was analyzed using the Pearson product moment correlation coefficient to determine if there was a significant relationship ($p < .05$) between the attitudes of athletic trainers toward the athletic training profession and the demographic variables of position at institution, gender, education level, and number of years practicing athletic training.

Data Analysis for Qualitative Data

The data obtained from research question four and five were analyzed through a content analysis procedure. The researcher looked for common themes in the data for both research questions. Then, the corresponding frequencies and percentages of the themes were analyzed in Microsoft Excel and presented in table form.

CHAPTER FOUR

FINDINGS

Profile of the Sample

The subjects in this study consisted of 72 certified athletic trainers who are members of the Eastern Athletic Trainer's Association (EATA). In this study a random sample of athletic trainers was used. The surveys were sent to both male and female athletic trainers. For this study, 100 surveys were sent out to certified athletic trainers in the EATA and 72 of these surveys were returned, which gave a response rate of 72%.

Table 4.1 shows the positions that the certified athletic trainers who were surveyed held. Head athletic trainers made up the largest number of respondents with 73.6%, followed up by assistant athletic trainers with 17%. Also, 2.8% of the respondents fell into the "other" category.

Table 4.1

Position of Certified Athletic Trainer

Position	Frequency	%
Head Athletic Trainer	53	73.6
Assistant Athletic Trainer	17	23.6
Other	<u>2</u>	<u>2.8</u>
	72	100

Table 4.2 describes the gender distribution among the respondents of the survey. Of the seventy-two athletic trainers who responded, males made up 61.1% and women made up 38.9% of the total population.

Table 4.2

<i>Gender</i>		
N=72, M=1.39, SD=.491		
Gender	Frequency	%
Male	44	61.1
Female	28	38.9
	72	100

Table 4.3 shows the number of certified athletic trainers that are at each institution. The highest percentage (33.3%) was for institutions that had two certified athletic trainers working. Institutions with three certified athletic trainers was the second highest percentage (30.6%) and the third highest percentage (16.7%) was from institutions with one certified athletic trainer.

Table 4.3

<i>Number of Certified Athletic Trainers at Institution</i>		
N=71, M=2.59, SD=1.154		
Certified Athletic Trainers	Frequency	%
1	12	16.7
2	24	33.3
3	22	30.6
4	8	11.1
5	4	5.6
6	1	1.4
	71	98.6

Table 4.4 shows the number of athletes that the athletic trainers served. The number ranges from 100 to 800 athletes. The highest percentage (58.3%) was in the 250-499 athletes, second (23.6%) was the 100-249 range and the third highest (11.1%) was the 500-749 range.

Table 4.4

Number of Athletes at Institution

N=72, M=1.93, SD=.693

Number of Athletes	Frequency	%
100-249	17	23.6
250-499	42	58.3
500-749	8	11.1
750-up	<u>2</u>	<u>2.8</u>
	72	100

Table 4.5 and 4.6 shows the number of men and women's teams that were at the institutions. The number of men's teams ranged from 0 to 18 and the number of women's teams ranged from 5 to 18. The mean of men's teams was 7.76 and the women's was 9.06.

Table 4.5

Number of Men's Teams

N=70, M=7.76, SD=3.048

Number of Teams	Frequency	%
0	3	4.2
5	6	8.3
6	13	18.1
7	16	22.2
8	9	12.5
9	9	12.5
10	4	5.6
11	4	5.6
12	2	2.8
13	1	1.4
15	1	1.4
16	1	1.4
18	<u>1</u>	<u>1.4</u>
	70	97.2

Table 4.6

Number of Women's Teams

N=70, M=9.06, SD=2.675

Number of Teams	Frequency	%
5	3	4.2
6	9	12.5
7	6	8.3
8	14	19.4
9	16	22.2
10	6	8.3
11	4	5.6
12	6	8.3
13	2	2.8
14	1	1.4
16	1	1.4
17	1	1.4
18	<u>1</u>	<u>1.4</u>
	70	97.2

Table 4.7 describes the education level of the athletic trainers who were surveyed. The highest percentage (73.6%) was with athletic trainers who had a master's degree, second highest (19.4) was those with a bachelors and a small amount (5.6%) had their doctoral degree.

Table 4.7

Education Level

N=71, M=1.86, SD=. 487

Degree Completed	Frequency	%
Bachelor's	14	19.4
Master's	53	73.6
Doctoral	<u>4</u>	<u>5.6</u>
	71	98.6

Finally, Table 4.8 shows the number of years that the subject has been practicing as a certified athletic trainer. The numbers ranged from one year to 36 years. The highest

percentage (34.7%) was in the 1-6 years, followed by the 7-12 category (23.6%) and third was the 13-18 category (18.1%).

Table 4.8

Years Practicing as Athletic Trainer

N=71, M=2.46, SD=1.501

Number of Years	Frequency	%
1-6	25	34.7
7-12	17	23.6
13-18	13	18.1
19-24	6	8.3
25-30	7	9.7
31-36	<u>3</u>	<u>4.2</u>
	71	98.6

Research Questions

Research Question 1: What are the attitudes of selected athletic trainers toward issues and concerns in the athletic training profession?

Tables 4.9 thru 4.13 provide information in regards to research question 1. There were five factors that were analyzed in the research. Each factor has its own table with the frequencies, percentages, means and standard deviations that apply to that particular factor.

Table 4.9 provides information on the attitudes of athletic trainers on the factor of liability. The athletic trainers surveyed all felt that it is important for athletic trainers to understand liability issues and 87% felt that risk management was also important for athletic trainers to understand. In addition, 85% felt that it was important to describe informed consent components to the athletes.

Table 4.9

Attitudes about Liability

	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
It is important for athletic trainers to understand liability issues. N=72, M=1.24, SD=.428	55	76.4	17	23.6	0	0.0	0	0.0	0	0.0
Patient confidentiality is strongly practiced among athletic trainers. N=72, M=2.22, SD=.953	16	22.2	34	47.2	12	16.7	10	13.9	0	0.0
It is important that athletic trainers explain "Assumption of Risk" to athletes. N=72, M=2.04, SD=.701	13	18.1	46	63.9	10	13.9	3	4.2	0	0.0
Athletic trainers can use the "Good Samaritan" law as a defense against malpractice. N=71, M=3.61, SD=1.007	1	1.4	9	12.5	22	30.6	24	33.3	15	20.8
Athletic trainers should describe informed consent components to an athlete. N=72, M=2.01, SD=.760	15	20.8	46	63.9	6	8.3	5	6.9	0	0.0
Athletic trainers have an understanding of risk management. N=72, M=1.92, SD=.666	17	23.6	46	63.9	7	9.7	2	2.8	0	0.0

Table 4.10 shows the attitudes about statements in regards to medical coverage and staffing of athletic trainers at higher education institutions. Overall, 81% of athletic trainers surveyed either agreed or strongly agreed that institutions do not have adequate medical staffing for their athletic teams.

Table 4.10

Attitudes about Medical Coverage/Staffing

	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
There are enough athletic trainers at higher education institutions to meet the needs of the athletes. N=72, M=4.11, SD=.662	1	1.4	0	0.0	6	8.3	48	66.7	17	23.6
The "Appropriate Medical Coverage for Intercollegiate Athletics" policy is an appropriate formula for athletic practice and game coverage. N=71, M=2.34, SD=.861	10	13.9	34	47.2	21	29.2	5	6.9	1	1.4
The increasing number of athletic teams and athletes make it difficult to properly staff athletic events. N=72, M=1.74, SD=.750	27	37.5	41	56.9	1	1.4	2	2.8	1	1.4
A certified athletic trainer should be present at all NCAA sanctioned events. N=72, M=1.54, SD=.871	45	62.5	20	27.8	3	4.2	3	4.2	1	1.4
Most colleges or universities do not have adequate medical staffing for their athletic teams. N=72, M=1.93, SD=.657	18	25	41	56.9	13	18.1	0	0.0	0	0.0
Requiring coaches of athletic teams to be CPR and First Aid certified would help to aid in the coverage of athletic events. N=72, M=2.29, SD=1.119	20	27.8	26	36.1	13	18.1	11	15.3	2	2.8

Table 4.11 discusses the attitudes about stress and burnout for athletic trainers.

Overall 80% of those surveyed felt that athletic trainers face stress and burnout at a much higher rate than other professions. Also, 97% of those surveyed felt that this could be

contributed to the long hours that athletic trainers put in and 93% felt that another factor was the irregular hours (nights, weekends, holidays) that athletic trainers work.

Table 4.11

Attitudes about Stress/Burnout

	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Athletic trainers face burnout at a much higher rate than other professionals. N=72, M=1.85, SD=.799	27	37.5	31	43.1	12	16.7	2	2.8	0	0.0
Having more certified athletic trainers at an institution would decrease the stress and burnout of an athletic trainer. N=72, M=1.44, SD=.690	48	66.7	16	22.2	8	11.1	0	0.0	0	0.0
Stress from athletic training has a negative impact on the athletic trainers personal life. N=72, M=1.97, SD=.691	18	25	38	52.8	16	22.2	0	0.0	0	0.0
Balance between work and personal life leads to a higher productivity of athletic trainers. N=72, M=2.11, SD=.943	17	23.6	40	55.6	6	8.3	8	11.1	1	1.4
Long hours lead to high burnout rates among athletic trainers. N=72, M=1.43, SD=.552	43	59.7	27	37.5	2	2.8	0	0.0	0	0.0
Irregular hours (nights, weekends, holidays) lead to a high burnout rate among athletic trainers. N=72, M=1.54, SD=.670	39	54.2	28	38.9	4	5.6	1	1.4	0	0.0

Table 4.12 presents the results of the statements focusing on the attitudes about employment. On five out of the six statements in this area, most of those surveyed were neutral on the statements, neither agreeing nor disagreeing.

Table 4.12

Attitudes about Employment

	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Women athletic trainers have equal opportunities as men in obtaining jobs. N=72, M=2.76, SD=1.094	7	9.7	28	38.9	16	22.2	17	23.6	4	5.6
Memberships on Athletic Training Committees are greater for men than women. N=72, M=3.00, SD=.557	1	1.4	8	11.1	53	73.6	10	13.9	0	0.0
Women obtain leadership roles as often as men do on athletic training committees. N=72, M=3.00, SD=1.175	2	2.8	15	20.8	43	59.7	11	15.3	1	1.4
Women athletic trainers receive equal opportunities for rewards and recognition as men. N=72, M=2.82, SD=.757	2	2.8	22	30.6	35	48.6	13	18.1	0	0.0
Equal opportunities exist for minorities in athletic training. N=72, M=2.39, SD=.779	9	12.5	30	41.7	29	40.3	4	5.6	0	0.0
Leadership roles are equally available for men and women on athletic training committees. N=72, M=2.60, SD=.725	3	4.2	30	41.7	32	44.4	7	9.7	0	0.0

The final factor was budget. This information is shown in table 4.13. Overall, 86% felt that budget and resource allocation are a problem facing athletic trainers at

higher education institutions. Also, 91% felt that budget restrictions make it difficult to properly staff an athletic training facility.

Table 4.13

Attitudes about Budget

	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Budgets and resource allocation are a problem facing athletic trainers in higher education. N=72, M=1.92, SD=.645	17	23.6	45	62.5	9	12.5	1	1.4	0	0.0
The cost of medical supplies makes it difficult to adequately supply an athletic training facility. N=72, M=2.88, SD=1.034	6	8.3	24	33.3	16	22.2	25	34.7	1	1.4
Budget restrictions make it difficult to properly staff an athletic training facility. N=72, M=1.71, SD=.777	31	43.1	35	48.6	2	2.8	4	5.6	0	0.0
Increased funding would help athletic training facilities stay more current with new technology and equipment. N=72, M=1.51, SD=.581	37	51.4	34	47.2	0	0.0	1	1.4	0	0.0
Low funding at higher education institutions contributes to the imbalance between the number of athletic teams and events and the number of athletic trainers who are employed. N=72, M=1.67, SD=.581	27	37.5	43	59.7	1	1.4	1	1.4	0	0.0
It is important to do a budget analysis at the end of every year. N=72, M=1.90, SD=.735	22	30.6	36	50	13	18.1	1	1.4	0	0.0

Research Question 2: Are there any significant relationships between the attitude factors of liability, medical coverage/staffing, stress/burnout, employment, and budget of the athletic trainers and selected demographics of position at institution, gender, educational level, and years practicing?

In order to determine the significance between selected demographics of position at institution, gender, education level, and years practicing a Pearson product moment correlation was calculated according to the five factors addressed in the study. The factors were liability, medical coverage/staffing, stress/burnout, employment, and budget. The four demographics were position at institution, gender, education level, and years practicing.

Table 4.14 shows the correlations for liability. There were four significant correlations with this factor. There was a negative, weak correlation between education level and importance of athletic trainers understanding liability issues ($r = -.246, p < .05$). Also there was a negative, weak correlation between education level and importance of athletic trainers to explain "Assumption of Risk" to athletes ($r = -.272, p < .05$). There was a negative, weak correlation between years practicing and athletic trainers understanding liability issues ($r = -.286, p < .05$). The final correlation was years practicing and athletic trainers using the "Good Samaritan" law as a defense against malpractice ($r = .345, p < .01$). This was a positive, moderate correlation.

Table 4.14

Relationship between Selected Demographics and Liability

Item	<i>r coefficient</i>	<i>p level</i>
Education- Importance of athletic trainers understanding liability	-.246*	.05
Education- Important for athletic trainers to explain “Assumption of Risk” to athletes	-.272*	.05
Years practicing- Importance of athletic trainers understanding liability	-.286*	.05
Years practicing- Using the “Good Samaritan” law as a defense against malpractice	.345**	.01

*Statistically significant at $p < .05$

**Statistically significant at $p < .01$

The second factor analyzed was medical coverage/staffing. Table 4.15 shows the relationship between selected demographics and medical coverage/staffing. There was one statistically significant correlation between gender and the “Appropriate Medical Coverage for Intercollegiate Athletics” policy being an appropriate formula for athletic practice and game coverage. This was a positive, weak correlation ($r = .288, p < .05$)

Table 4.15

Relationship between Selected Demographics and Medical Coverage/ Staffing

Item	<i>r coefficient</i>	<i>p level</i>
Staffing- “Appropriate Medical Coverage for Intercollegiate Athletics” policy is an appropriate formula for athletic practice and game coverage	.288*	.05

*Statistically significant at $p < .05$

Table 4.16 shows the correlation between stress/burnout and the selected demographics. There were four statistically significant correlations with this factor. There was a negative, weak correlation between gender and athletic trainers facing burnout at a much higher rate than other professionals ($r = -.277, p < .05$). There was a positive, weak correlation between years practicing and athletic trainers facing burnout at a much higher rate than other professionals ($r = .247, p < .05$). A third correlation was between years practicing and irregular hours (nights, weekends, holidays) leading to high burnout rate among athletic trainers ($r = .319, p < .05$). This was a positive, moderate correlation. The final correlation was a positive, weak correlation between education level and irregular hours (nights, weekends, holidays) leading to high burnout rate among athletic trainers ($r = .240, p < .05$).

Table 4.16

<i>Relationship between Selected Demographics and Stress/Burnout</i>		
<i>Item</i>	<i>r coefficient</i>	<i>p level</i>
Gender- Athletic trainers face burnout at a much higher rate than other professionals	-.277*	< .05
Years Practicing- Athletic trainers face burnout at a much higher rate than other professionals	.247*	< .05
Years Practicing- Irregular hours leads to burnout among athletic trainers.	.319*	< .05
Educational level- Irregular hours leads to burnout among athletic trainers.	.240*	< .05

*Statistically significant at $p < .05$

Research Question 3: How do selected athletic trainers feel about the profession of athletic training?

The athletic trainers that were surveyed were asked their thoughts on the athletic training profession on a semantic differential scale. Tables 4.17 and 4.18 provide information regarding this research question. Table 4.17 shows the 6 semantic differential pairs scored “1” through “7” with “4” being the midpoint between the pairs. Each pair name was given a “Pair Name” to represent them in table 4.17. A mean value of 1 and 2 or 6 and 7 indicates that there was a strong lean towards one of the adjectives. The means and standard deviations are as follows: EXCIT had a mean of 2.00 (SD=.805), KNOWN has a mean of 3.24 (SD=1.325), CONFI had a mean of 1.87 (SD=.970), SATISFY had a mean of 1.92 (SD=.835), STRONG had a mean of 2.11 (SD=.971), and REWARD had a mean of 1.92 (SD=.811). These results of these mean scores show that athletic trainers think highly of their profession and see it as more exciting than dull, known more than unknown, confident more than uncertain, satisfying more than disappointing, strong more than weak, and rewarding more than worthless.

Table 4.17

Semantic Differential Dataset Scored 1 through 7

Scored “1”	Scored “7”	Pair Name
Exciting	Dull	EXCIT
Known	Unknown	KNOWN
Confident	Uncertain	CONFI
Satisfying	Disappointing	SATSIFY
Strong	Weak	STRONG
Rewarding	Worthless	REWARD

Table 4.18

Thoughts on Athletic Training

Pair Name	Mean	Standard Deviation
EXCIT (n=72)	2.00	.805
KNOWN (n=66)	3.24	1.325
CONFI (n=72)	1.87	.970
SATSIFY (n=72)	1.92	.835
STRONG (n=70)	2.11	.971
REWARD (n=72)	1.92	.811

According to the athletic trainers surveyed the athletic training profession was viewed (by rank order) as confident (40.3%), satisfying (30.6%), rewarding (29.2%), exciting (26.4%), strong (25%), and known (5.6%).

Research Question 4: What do selected athletic trainers report as the top issues facing athletic trainers in higher education?

The athletic trainers who were surveyed were asked to list what they reported as being the top three issues facing athletic trainers in higher education institutions. There were 153 responses. The issue with the highest percentage (60%) was staffing/coverage, followed by hours (32%), and salary (30%) was listed as the third highest. The results are presented in table 4.19.

Table 4.19

Top Issues and Concerns of Athletic Trainers in Higher Education Institutions

Issues and Concerns	Frequency	%
Staffing/Coverage	43	60
Hours	23	32
Salary	21	30
Budget	19	26
Respect from administration	15	21
Burnout	11	15
Liability	6	8
Education	5	7
Billing (3 rd party reimbursement)	3	4
Facilities	3	4
Travel	2	3
Level playing field for women and minorities	2	3

Research Question 5: What are recommendations for dealing with the issues and concerns that athletic trainers face?

Table 4.20 relates to research question 5 and shows the recommendations of the selected athletic trainers in regards to dealing with the issues and concerns that athletic trainers face. There were 64 responses to this question. Of those responses, 34% felt that education of administration, coaching staff and the public was the top recommendation. Other recommendations were increased staffing, increased salary, increased funding of

athletic training programs, regulation of hours an athletic trainer works, and 3rd party reimbursement.

Table 4.20

Recommendations for Athletic Training

Theme	Frequency	%
Education of Administration, Coaches and Public on Athletic Training.	22	34
Increased Staffing	13	20
Increased Salary	10	16
Increased Funding of Athletic Training Programs	8	13
Regulation of Hours an Athletic Trainer works	7	11
3 rd Party Reimbursement	4	6

CHAPTER FIVE

SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Summary of the Study

Athletic trainers are medical professionals who work specifically with patients that participate in athletics and are very important to the success of athletic programs at the collegiate level. There is a wide array of issues and concerns that athletic trainers face in their profession. These issues and concerns include liability and legal issues, medical coverage/staffing of athletic events, stress and burnout, employment opportunities and budget concerns. In this study, Division III, Eastern Athletic Trainers Association (EATA) athletic trainers were surveyed in order to determine their attitudes towards the profession of athletic training. Also, the study sought to determine what the athletic trainers thought the top issues and concerns were facing the athletic training profession.

Purpose of the Study

The purpose of this study was to determine the attitudes of selected athletic trainers towards the issues and concerns that face the profession of athletic training. A secondary purpose was to determine if there was a relationship between the demographics of the selected athletic trainers to the attitudes toward the profession. Another purpose was to determine how athletic trainers felt toward the profession. A fourth area of interest was what the athletic trainers thought are the top three issues and concerns facing athletic trainers in higher education institutions. A final purpose was to solicit recommendations in addressing the issues and concerns that are present in the profession.

Methodology

The samples used for this study were randomly selected certified athletic trainers who are members of the EATA and are employed at Division III institutions. The subjects surveyed were both male and female and with varying ages. All subjects had an educational level of at least a bachelor's degree, but some may also have masters or doctoral degrees. Access to the coaches was made through the United States Postal Service. A total of 100 people received the surveys (Appendix B), consent form (Appendix C) and cover letter (Appendix B). Subjects were asked to read the cover letter and to read and sign the consent form before completing the survey.

A survey titled "Attitudes Towards the Athletic Training Profession" (Appendix D) was designed by the researcher. After receiving IRB approval the survey was sent to 100 athletic trainers in the EATA. The survey consists of four sections. The first section had questions about background information and included questions about the location of the institution, the number of athletes that care is provided for, the number of certified athletic trainers at the institution, the number of years that the certified athletic trainer has been practicing, gender, degree of education, and the number of men's and women's teams at the institution. The second section contained a Semantic Differential scale. A list of words was provided with opposites and the subject is asked to place a checkmark in the appropriate place as an indication of his/her feelings toward athletic training. The third section of the survey was based on a 5-point Likert scale. The subjects are asked to circle the corresponding letter to the degree to which they agreed with the statements. The letters "SA" represented strongly agree, "A" represented agree, "N" represented neutral or undecided, "D" represented disagree, and "SD" represented strongly disagree.

The fourth section had two open-ended questions. The first question asked the subjects what they feel are the top three issues or concerns that athletic trainers face. The second question asked if the subjects had any recommendations on how to improve the athletic training profession.

On March 8 2006, 100 survey packets were mailed out to the selected athletic trainers in the EATA. Subjects chosen were given a packet that contained the cover letter (Appendix B), consent form (Appendix C), the survey (Appendix D), and a self addressed stamped envelope. When the subject opened the packet, there was a letter stating that the researcher was a graduate student who was doing a study on the issues and concerns facing athletic trainers in the EATA. In order to ensure participation, a follow up email was sent to the subjects three weeks after the packets were mailed out. This was to make sure that the subjects received the packet and to encourage them to participate in the study. This allowed the researcher to obtain a response rate of 72%.

Data Analysis

The data obtained on the surveys from sections 1, 2 and 3 were coded and analyzed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics were used to analyze the first three parts of the survey and included frequencies, means, percentages, and standard deviations. The data for research question three were analyzed using a Pearson product moment correlation coefficient looking for statistical significance. The data that were obtained for research question four were analyzed looking for common themes and then placed in rank order of most to least. The frequencies and percentages were also included in the analysis of this section. The data for research question five were analyzed using a content analysis procedure. First, the

data were analyzed looking for common themes and then placed in rank order from most to least and the frequencies and percentages were also displayed.

Discussion of the Findings

Research Question 1: What are the attitudes of selected athletic trainers toward issues and concerns in the athletic training profession?

Five factors compromised the issues and concerns about the athletic training profession that the selected athletic trainers were surveyed, which included liability, medical coverage/staffing, stress/burnout, employment, and budget. The first factor focused on liability. All the subjects surveyed felt that it was important that athletic trainers understand liability issues. A second finding was that 69% surveyed felt that patient confidentiality is strongly practiced among athletic trainers. Understanding risk management was something that 87% of those surveyed felt that athletic trainers should have an understanding. There were also issues that the subjects felt important to explain to their athletes about legal issues. The two issues were "Assumption of Risk" (81%) and informed consent (84%).

These findings support the work of Chen & Esposito (2005), who noted several areas of liability that athletic trainers face, which include: (a) informed consent and participation risks, (b) physician-patient relationships, (c) immunity issues, and (d) risk management (Chen & Esposito, 2005).

The second factor focused on medical coverage/staffing. Of those surveyed, 86% disagreed or strongly disagreed that there are enough athletic trainers at higher education institutions to meet the needs of the athletes and 81% felt that most colleges or universities do not have adequate medical staffing. Also, 90% felt that it was important

for athletic trainers to be at all NCAA sanctioned athletic events. In conjunction with these findings, the study showed that 94% of the subjects felt that a reason for this shortage of athletic trainers is due to the increasing number of athletic teams and athletes.

The research suggests that at smaller institutions and colleges, adequate staffing is a major issue (Grams, 1997). The literature also has demonstrated that the increase in the number of teams and athletes make it difficult to properly staff higher education institutions with athletic trainers. "Colleges and universities sometimes add teams or enlarge programs without the same increase in the medical staff and this requires more covered practices and games and longer training room hours" (Grams, 1997, p.11).

Stress/burnout was the third factor covered. Of the 72 athletic trainers surveyed, 80% felt that athletic trainers face burnout at a much higher rate than other professions. This supports the research of Dolan (1998b), who noted that health care professionals such as athletic trainers are prime candidates for stress related conditions and burnout in the workplace. The main reason for burnout and stress was linked to the hours that athletic trainers expend. The study found that 97% felt that long hours lead to high burnout rates and 93% felt that irregular hours (nights, weekends, holidays) lead to high burnout. The subjects also felt that having more certified athletic trainers would decrease the stress and burnout of athletic trainers (88%). This was concluded in a study by Hendrix, Acevedo, & Herbert (2000). Athletic trainers scored higher on burnout than teachers, doctors, and nurses. This could be due to the number of hours spent in the athletic training room, the number of athletes seen on a daily basis, and relationships involved in the occupation (Hendrix et al., 2000).

The fourth factor focused on attitudes about employment. On four of the five statements on the survey relating to employment, most of the subjects' answers fell into two categories: agree and neutral. Those topics were: women obtaining leadership roles as often as men do on athletic training committees (80%), women receiving equal opportunities for recognition and rewards as men (79%), equal opportunities exist for minorities in athletic training (81%), and leadership roles are equally available for men and women on athletic training committees (86%). This supports the literature about employment opportunities for women and minorities. Issues of gender equity and barriers of advancement in athletic parallel those in other professions and work settings and even though women make up almost half of the NATA, very few have ever held leadership positions (NATA, n.d.).

The final factor focused on budget concerns. Of the 72 athletic trainers surveyed, 86% felt that budget and resource allocation are a problem facing athletic trainers at higher education institutions. Athletic departments and athletics can be funded through operating budgets and therefore face relatively tight budgets and budget control (Ginsburg, 1997). The subjects also felt that staffing was an issue caused by budget issues (91%) and that budget also led to the imbalance between the athletes and number of athletic trainers employed at the institution (97%). This supports the findings of Ginsburg (1997) who indicated tight budget makes it difficult to have an adequate athletic training staff. The research also showed that ensuring a clinic has adequate medical supplies to meet the needs of clients while keeping costs under control is a difficult process, especially with the increased cost of medical supplies (Success Series/Gull, n.d.). In the study, there was a statement about the cost of medical supplies making it difficult to

adequately supply an athletic training room. The results are as follows; 33.3% agreed, 22.2% were neutral and 34.7% disagreed. The results of this question do not tend to support the statements from the literature. But, there was another survey item that focused on increased funding would help athletic training rooms stay more current with new technology and equipment. The results indicated that 98% of the subjects agreed or strongly agreed with this statement. The results of this question do support the literature on the high cost of supplies and resulting budgeting problems.

Research Question 2: Are there any significant relationships between the attitude factors of liability, medical coverage/staffing, stress/burnout, employment, and budget of the athletic trainers and selected demographics of position at institution, gender, educational level, and years practicing?

The first factor analyzed was liability. There were four significant correlations between liability statements and the selected demographics. There was a negative, weak correlation between education level and importance of athletic trainers to understand liability ($r = -.246, p < .05$). This suggests that those athletic trainers that have more education feel that it is important for athletic trainers to understand liability issues. A second correlation was between education level and the importance of athletic trainers to explain "Assumption of Risk" to athletes and this was negative, weak correlation ($r = -.272, p < .05$). This correlation suggests that the athletic trainers with the higher education levels feel that it is important to explain this to their athletes. There was also a negative, weak correlation between years practicing and importance of athletic trainers understanding liability issues ($r = -.286, p < .05$). This suggests that athletic trainers that have been practicing athletic training for a longer time felt that liability was an issue for

athletic trainers to understand. A final correlation was between years practicing and athletic trainers being able to use the “Good Samaritan” law as a defense against malpractice and the data suggested a positive, moderate correlation ($r = .345, p < .01$). These findings suggest that those athletic trainers who have been practicing for fewer years feel that they can use the “Good Samaritan” law as a defense against malpractice.

The second factor was medical coverage/staffing. There was one correlation that had a statistically significant correlation. There was a positive, weak correlation ($r = .288, p < .05$). This suggests that gender had an impact on if the athletic trainers surveyed felt that the “Appropriate Medical Coverage for Intercollegiate Athletics” policy is an appropriate formula for athletic practice and game coverage.

The third factor was stress/burnout. There were four statistically significant correlations with the demographics and stress/burnout. There was a negative, weak correlation between gender and athletic trainers facing burnout at a much higher rate than other professionals ($r = -.277, p < .05$). These data suggest that the gender of the athletic trainer surveyed had an impact on the attitude about athletic trainers facing burnout at a much higher rate than other professionals. There was also a positive, weak correlation between years practicing and athletic trainers facing burnout at a much higher rate than other professionals ($r = .247, p < .05$). These data suggest that the more years that the athletic trainer surveyed was practicing, the more they thought that athletic trainers face burnout at a higher rate than other professionals. The third correlation was between years practicing and irregular hours leading to high burnout rates among athletic trainers ($r = .319, p < .05$). This was a positive, moderate correlation. These data suggest that the number of years an athletic trainer was practicing impacted attitude about irregular hours

having an impact on the stress and burnout of athletic trainers. The final correlation was a weak, positive correlation between education level and the irregular hours having an impact on the stress and burnout of athletic trainers ($r = .240, p < .05$). This suggests that the higher education level that the athletic trainer received is related to the higher stress and burnout from the irregular hours that are worked.

Research Question 3: How do selected athletic trainers feel about the profession of athletic training?

The results of this part of the survey probed what athletic trainers felt about the profession of athletic training. There were 6 pairs of adjectives for the semantic differential. These pairs were scored “1” through “7” with “4” being neutral. All of the pairs mean scores were between 1.87 and 3.24, which shows that they all had a strong lean to one side of the scale. These results show that athletic trainers think highly of their profession. They feel that it is exciting more than dull, known more than unknown, confident more than uncertain, satisfying more than disappointing, strong more than weak, and rewarding more than worthless. These descriptors support the literature of what an athletic trainer is and does. The duties that athletic trainers perform require extensive knowledge and strong decision making skills that is obtained through knowledge learned in the classroom and in the clinical setting (National Athletic Trainers Association, 2005). It is important that an athletic trainer encompass many, if not all of these characteristics.

Research Question 4: What do selected athletic trainers report as the top issues facing athletic trainers in higher education?

There were many issues that the subjects of the study suggested as their own personal top three issues. The top three issues overall were: staffing/coverage (60%), hours (32%), and salary (30%). The literature supports that staffing/coverage are major concerns of athletic trainers. Colleges and universities have not kept up with the changing trends of college athletics-more teams and athletes-and may be failing to provide appropriate medical care to their student athletes (National Athletic Trainers Association, 2003). Hours of work are also a large issue for athletic trainers. The long hours of practices, games and travel with the teams can have an impact on family commitments and other interests of the athletic trainer (Grams, 1997). The financial compensation for athletic trainers is often inadequate for the time commitment (Dolan, 1998a).

Research Question 5: What are recommendations for dealing with the issues and concerns that athletic trainers face?

The study showed that the top three recommendations for dealing with the issues and concerns facing the athletic training profession were similar to what the subjects identified as the top issues. The most frequent recommendation was to educate administration, the public and coaches about athletic trainers as professionals and what they do. This also includes gaining respect from administration, coaches and the public. Public relations, or telling the world about the profession, is a critical aspect for the continued growth of any professional, especially athletic training (Dolan, 1998b). The second recommendation was to increasing staffing. Colleges and universities enlarge their athletic programs without a comparative increase in their athletic training staff (Grams, 1997). The third top recommendation was to increase the salary of athletic

trainers. The financial compensation is not equal to the time commitment of athletic trainers (Dolan, 1998a).

Conclusions

The findings from this study suggest that the factors outlined in the research were consistent with those identified previously as issues and concerns that face athletic trainers in Division III institutions. The findings also showed that the issues and concerns and the recommendations to resolve the issues are very similar since most athletic trainers surveyed agreed to what the issues, concerns and recommendations should be. The biggest concern overall was staffing and coverage issues and that educating the administration, coaches and public about what an athletic trainers is and does needs to be aggressively promoted in much greater detail.

Also, the findings revealed that there were several correlations between the demographics of the athletic trainers and their attitudes about the athletic training profession. Athletic training is a highly time consuming and demanding profession and this leads to high burnout rates and increased stress on athletic trainers. This finding was also supported through the current study. Also, the study suggests that increasing the number of athletic trainers at an institution would help to decrease the stress and burnout of athletic trainers because the workload per-person is lessened. A final finding revealed that budget and liability issues are important to maintaining an athletic training facility and the athletic services running smoothly.

Recommendations for Future Research

The following recommendations are made for future research:

1. A larger study involving a larger number of athletic trainers in the Eastern Athletic Trainers Association (EATA), a study involving athletic trainers outside the EATA, or a study involving Divisions I and II is recommended. The researcher only examined those athletic trainers who were employed at Division III institutions and are members of the EATA. A follow-up study would allow for comparisons to the issues and concerns of athletic trainers.
2. The time that the study was conducted may have caused the responses to be altered. The athletic trainers may have been involved in spring break sports and could have been away on travel with the athletic teams at the time the surveys were distributed.
3. A follow up study to determine if the issues and concerns identified by the athletic trainers are similar to those faced by athletic directors. Such a study would provide comparative data and help further isolate key issues and concerns needing to be addressed by the athletic training profession.

REFERENCES

- Chen, S., & Esposito, E. (2005). Practical and critical legal concerns for sports physicians and athletic trainers. *The Sport Journal*, 4, 25-36.
- Dolan, M.G. (1998a). Managing stress and burnout in athletic therapy. *Athletic Therapy Today*, 3, 23.
- Dolan, M.G. (1998b). Public relations: Telling the world what we do. *Athletic Therapy Today*, 4, 52.
- Ginsburg, M. (1997). Organization, budgeting, and staffing. In L.H. Dietz & V.L. Triponey (Eds.), *Serving students at metropolitan universities: The unique opportunities and challenges. New Directions for Student Services*, (no. 79, pp. 27-37). San Francisco: Jossey-Bass.
- Grams, B. (1997). Athletic therapy at a small college. *Athletic Therapy Today*, 2, 7-12.
- Hendrix, A. E., Acevedo, E., & Herbert, E. (2000). An examination of stress and burnout in certified athletic trainers at division I-A universities. *Journal of Athletic Training*, 35, 139-144.
- Jones, D. (2003). HIPPA: Friend or foe to athletic trainers. *Athletic Therapy Today*, 8, 17-20.
- National Athletic Trainers Association. (May 2003). *Recommendations and Guidelines for Appropriate Medical Coverage of Intercollegiate Athletics*. Dallas, TX.
- National Athletic Trainers Association. (2005). *What Does a Certified Athletic Trainer Do?* Retrieved November 7, 2005, from <http://www.nata.org>

National Athletic Trainers Association. (n.d.). *Women in Athletic Training: Striving for Equity*. Retrieved November 2, 2005, from <http://www.nata.org>

Success Series from the NATA CIC Committee. (n.d.). *Medical Management of Sporting Events by Ralph Reiff, ATC/L, MEd*. Retrieved November 2, 2005, from <http://www.nata.org>

Success Series from the NATA CIC Committee. (n.d.). *Attention to Detail Helps in Procurement by Scott Gull, MA, ATC*. Retrieved November 2, 2005, from <http://www.nata.org>

APPENDIX A

Institutional Review Board Application
Rowan University Approval

Rowan University
INSTITUTIONAL REVIEW BOARD
HUMAN RESEARCH REVIEW APPLICATION

RECEIVED FEB 01 2006

INSTRUCTIONS: Check all appropriate boxes, answer all questions completely, include attachments, and obtain appropriate signatures. Submit an **original and two copies** of the completed application to the Office of the Associate Provost.

NOTE: **Applications must be typed.**
Be sure to make a copy for your files.

FOR IRB USE ONLY:

Protocol Number: IRB- 2006-032

Received: _____ Reviewed: _____

Exemption: Yes No

Category(ies): _____

Approved O. Guate (date) 2/17/06

Step 1: Is the proposed research subject to IRB review?

All research involving human participants conducted by Rowan University faculty and staff is subject to IRB review. Some, but not all, student-conducted studies that involve human participants are considered research and are subject to IRB review. Check the accompanying instructions for more information. Then check with your class instructor for guidance as to whether you must submit your research protocol for IRB review. If you determine that your research meets the above criteria and is not subject to IRB review, **STOP**. You do not need to apply. If you or your instructor have any doubts, apply for an IRB review.

Step 2: If you have determined that the proposed research is subject to IRB review, complete the identifying information below.

Project Title:

Issues and Concerns of Athletic Trainers at Division III Institutions

Researcher: Kristin Sacerdote	
Department: Educational Leadership	Location : Rowan University
Mailing Address: 201 Mullica Hill Rd. Glassboro, NJ 08028	(Street) (Town/State/Zip)
E-Mail: kristinsacerdote4@hotmail.com	Telephone: (856)848-6187
Co-Investigator/s: n/a	
Faculty Sponsor (if student)* Dr. Burton Sisco Department: Educational Leadership Location: Rowan University E-Mail: sisco@rowan.edu Telephone: (856) 256-4500 ext. 3717	

Approved For Use by Rowan IRB: 7/04

Approved For Use by Rowan IRB: 7/04

Step 3: Determine whether the proposed research eligible for an *exemption* from a full IRB review.

Federal regulations (45 CFR 46) permit the exemption of some types of research from a full IRB review. If your research can be described by one or more of the categories listed below, check the appropriate category(ies), complete questions 1-5, and complete the Assurances on the last page of the application. *If your research cannot be described by any of these categories, your research is not exempt, and you must complete the entire "Human Research Review Application."*

_____ **Category 1** - Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as: (a) research on regular and special education instructional strategies; or (b) research on the effectiveness of, or the comparison among, instructional techniques, curricula, or classroom management methods.

X **Category 2** - Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior, unless: (a) information obtained is recorded in such a manner that the human participants can be identified, directly or through identifiers linked to the participants; and (b) any disclosure of the human participants' responses outside the research could reasonably place the participants at risk of criminal or civil liability or be damaging to the participant financial standing, employability, or reputation. (*Note: Exemption for survey and interview procedures does not apply to research involving children. Exemption for observation of public behavior does not apply to research involving children except when the investigator does not participate in the activities being observed.*)

_____ **Category 3** - Research involving the use of educational tests (cognitive, diagnostic, aptitude achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under Category 2 above if: (a) the human participants are elected or appointed public officials or candidates for public office; or (b) federal statute requires without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.

_____ **Category 4** - Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that participants cannot be identified, directly or through identifiers linked to the participants.

_____ **Category 5** - Research and demonstration projects which are conducted by or subject to the approval of department or agency heads, and which are designed to study, evaluate, or otherwise examine: (a) public benefit or service programs; (b) procedures for obtaining benefits or services under those programs; (c) possible changes in or alternatives to these programs or procedures; or (d) possible changes in methods or levels of payment for benefits or services under

those programs.

Category 6 - Taste and food quality evaluation and consumer acceptance studies:

(a) if wholesome foods without additives are consumed; or (b) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture. (*Note: Exemption categories cannot be applied to research involving fetuses, pregnant women, human in vitro fertilization, or prisoners.*)

Please answer Questions 1-5 below

1. WHAT IS THE OBJECTIVE OF THE RESEARCH?

The objective of the research is to determine the issues and concerns that athletic trainers face at the collegiate level. Also, to determine what athletic trainers perceive as the top three issues and concerns of athletic trainers at the collegiate level. A final objective would be to determine if there are any recommendations to improve the athletic training profession.

2. DESCRIBE THE DESIGN OF THE RESEARCH INCLUDING WHAT WILL BE REQUIRED OF SUBJECTS (ATTACH ADDITIONAL SHEET IF NECESSARY):

Subject in the study will be required to complete a survey that will be sent to them. Upon completion of the survey they will be asked to return it to the researcher. Subjects will also be required to fill out an informed consent form.

3. DESCRIBE THE SUBJECTS WHO WILL BE PARTICIPATING (NUMBER, AGE, GENDER, ETC):

The subjects in the study will be certified athletic trainers who practice the profession at the collegiate level in a Division III institution.

4. DESCRIBE HOW SUBJECTS WILL BE RECRUITED (e.g. ADVERTISEMENTS, ANNOUNCEMENTS IN CLASS, E-MAIL, INTERNET)

Subjects will be recruited through the mail. They will be sent the survey to complete, along with a return envelope to send it back to the researcher.

5. WHERE WILL THE RESEARCH BE CONDUCTED:

The research will be conducted throughout certified athletic trainers who are a part of the Eastern Athletic Trainers Association. The EATA includes New Jersey, Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, Delaware, New York and Pennsylvania.

NOTE: IF THE RESEARCH IS TO BE CONDUCTED IN ANOTHER INSTITUTION (e.g. A SCHOOL, HOSPITAL, AGENCY, etc.) A PERMISSION LETTER FROM AN ADMINISTRATOR ON THE LETTERHEAD OF THAT INSTITUTION MUST BE ATTACHED.

IF THE RESEARCH IS TO BE CONDUCTED AT ANOTHER UNIVERSITY, A SIGNED COPY OF THE IRB APPROVAL FORM FROM THAT UNIVERSITY MUST BE ATTACHED.

ATTACH THE CONSENT FORM TO THIS APPLICATION. The Consent Form must address all of the elements required for informed consent (SEE INSTRUCTIONS).

NOTE: IF THE ONLY RECORD LINKING THE SUBJECT AND THE RESEARCH WOULD BE THE CONSENT DOCUMENT, AND THE RESEARCH PRESENTS NO MORE THAN MINIMAL RISK OF HARM TO SUBJECTS, YOU MAY USE AN ALTERNATIVE PROCEDURE FOR CONSENT. IF YOU WISH TO REQUEST PERMISSION FROM THE IRB TO USE AN ALTERNATIVE PROCEDURE, ATTACH A COPY OF THE FIRST PAGE OF YOUR RESEARCH INSTRUMENT OR A LETTER WITH THE REQUIRED INFORMATION (see Instructions).

If you are requesting an exemption from a full IRB review, STOP. Complete the last page of this application (“Certifications”), and forward the completed (typed) application to the Office of the Associate Provost for Research, The Graduate School, Memorial Hall.

IF YOU CANNOT CLAIM ONE OF THE EXEMPTIONS LISTED ABOVE, COMPLETE ALL OF THE ABOVE AS WELL AS THE FOLLOWING ADDITIONAL QUESTIONS FOR A FULL IRB REVIEW.

Does your research involve a special population?

- Socioeconomically, educationally, or linguistically disadvantaged racial/ethnic group
- Pregnancy/fetus
- Cognitively impaired
- Elderly
- Terminally ill
- Incarcerated
- No special population

At what level of risk will the participants in the proposed research be placed?
(Note: "Minimal risk" means that the risks of harm anticipated in the proposed research are not greater, considering probability and magnitude, than those ordinarily encountered in daily life or during performance of routine physical or psychological examinations or tests. The concept of risk goes beyond physical risk and includes risks to the participant's dignity and self-respect as well as psychological, emotional, or behavioral risk.)

_____ Minimal Risk _____ More than Minimal Risk _____ Uncertain

1. HOW WILL SUBJECTS BE RECRUITED? IF STUDENTS, WILL THEY BE SOLICITED FROM CLASS?

2. WHAT RISKS TO SUBJECTS (PHYSIOLOGICAL AND/OR PSYCHOLOGICAL) ARE INVOLVED IN THE RESEARCH?

3. IS DECEPTION INVOLVED IN THE RESEARCH? IF SO, WHAT IS IT AND WHY WILL IT BE USED?

4. WHAT INFORMATION WILL BE GIVEN TO THE SUBJECTS AFTER THEIR PARTICIPATION? IF DECEPTION IS USED, IT MUST BE DISCLOSED AFTER PARTICIPATION.

5. HOW WILL CONFIDENTIALITY BE MAINTAINED? WHO WILL KNOW THE IDENTITY OF THE SUBJECTS? IF A PRE-AND POSTTEST DESIGN IS USED, HOW WILL THE SUBJECTS BE IDENTIFIED?

6. HOW WILL THE DATA BE RECORDED AND STORED? WHO WILL HAVE ACCESS TO THE DATA? ALL DATA MUST BE KEPT BY THE PRINCIPAL INVESTIGATOR FOR A MINIMUM OF THREE YEARS.

CERTIFICATIONS:

Rowan University maintains a Federalwide Assurance (FWA) with the Office of Human Research Protection (OHRP), U.S. Department of Health & Human Services. This Assurance includes a requirement for all research staff working with human participants to receive training in ethical guidelines and regulations. "Research staff" is defined as persons who have direct and substantive involvement in proposing, performing, reviewing, or reporting research and includes students fulfilling these roles as well as their faculty advisors.

Please attach a copy of your "Completion Certificate for Human Participant Protections Education for Research Teams" from the National Institutes of Health.

If you need to complete that training, go to the Web Tutorial at <http://cme.nci.nih.gov/>

Responsible Researcher: I certify that I am familiar with the ethical guidelines and regulations regarding the protection of human participants from research risks and will adhere to the policies and procedures of the Rowan University Institutional Review Board. I will ensure that all research staff working on the proposed project who will have direct and substantive involvement in proposing, performing, reviewing, or reporting this research (including students fulfilling these roles) will complete IRB approved training. I

will not initiate this research project until I receive written approval from the IRB. I agree to obtain informed consent of participants in this project if required by the IRB; to report to the IRB any unanticipated effects on participants which become apparent during the course or as a result of experimentation and the actions taken as a result; to cooperate with the IRB in the continuing review of this project; to obtain prior approval from the IRB before amending or altering the scope of the project or implementing changes in the approved consent form; and to maintain documentation of consent forms and progress reports for a minimum of three years after completion of the final report or longer if required by the sponsor or the institution. I further certify that I have completed training regarding human participant research ethics within the last three years as indicated below my signature.

Signature of Responsible Researcher: _____

Date: _____

Faculty Advisor (if Responsible Researcher is a student): I certify that I am familiar with the ethical guidelines and regulations regarding the protection of human participants from research risks. I further certify that I have completed training regarding human participant research ethics within the last three years as indicated below my signature (attach copy of your "Completion Certificate for Human Participant Protections Education for Research Teams" from the National Institutes of Health).

Signature of Faculty Advisor: _____

Date: _____

APPENDIX B

Cover Letter to Participants

Kristin Sacerdote
Kristinsacerdote4@hotmail.com
Graduate Assistant Athletic Trainer
Rowan University
201 Mullica Hill Rd.
Glassboro, NJ 08028

Dear Athletic Trainer,

My name is Kristin Sacerdote, and I am a graduate student in the Higher Education Administration Program at Rowan University. I will be conducting a research project under the direction of Dr. Burton Sisco as part of my master's thesis project on issues and concerns of athletic trainers at the collegiate level.

I am asking for your assistance in collecting data for my master's thesis. I am interested in determining what issues and concerns that athletic trainer's feel that they face at the collegiate level. I have enclosed a survey for you to complete and return to me by **April 1, 2006** understand that all of the information that you provide is completely confidential and it will only be seen by the researcher and only used as a part of the research project.

If you have any questions regarding the survey, please feel free to contact Dr. Burton Sisco, my thesis advisor at (856) 256-4500 ext. 3717. You can also contact me directly at (856) 848-6187 or via email at kristinsacerdote4@hotmail.com. I have enclosed a self addressed stamped envelope for you to return the completed survey and consent form. Please have the survey back by **April 1, 2006**. I thank you in advance for your help in this study.

Sincerely,

Kristin Sacerdote

APPENDIX C

Consent Form

Consent Form

I agree to participate in a study entitled, "Issues and Concerns Facing Athletic Trainers at the Collegiate Level" which is being conducted by Kristin Sacerdote, a graduate student at Rowan University. The purpose of this study is to determine what issues and concerns are facing athletic trainers who practice at the collegiate level. The data collected in this study will be used as part of the master's thesis project.

I understand that I will be required to answer questions on a survey. My participation in this study will not exceed 20 minutes.

I understand that my responses will be anonymous and that all the data collected in the study will be confidential. I agree that any information obtained from this study may be used in any way thought best for the research project provided that I am identified and my name is not used.

I understand that there are no physical or psychological risks involved in this study and that I am free to withdraw from the study at any time.

If I have any questions or concerns regarding my participation in this study I may contact Dr. Burton Sisco at (856) 256-4500 ext. 3717 or Kristin Sacerdote via email kristinsacerdote4@hotmail.com or (856) 848-6187.

(Signature of Participant)

(Date)

(Signature of Investigator)

(Date)

APPENDIX D

Survey

Attitudes Towards the Athletic Training Profession

This survey is about issues and concerns that athletic trainers face at the collegiate level. The purpose of this survey is to determine the attitudes of athletic trainers towards their profession. A second purpose is to determine if there are any recommendations for improving the athletic training profession.

Section 1: Background Information: Please circle or fill in the appropriate answer for each question.

Name of Institution: _____

State that Institution is located in: _____

Position at Institution: Head Athletic Trainer Assistant Athletic Trainer

Other (specify): _____

Gender: Male Female

How many certified athletic trainers are there at your institution for the clinical setting? _____

Approximately how many athletes do you provide care for? _____

How many NCAA sanctioned athletic teams do you have at your institution:

Men's teams: _____ Women's teams: _____

Educational Level: Bachelor's Degree Master's Degree Doctoral Degree

How many years have you been practicing as a certified athletic trainer? _____

Section 2: Thoughts about Athletic Training

Please rate the following on how you feel about the profession of athletic training:

Exciting	3	2	1	0	1	2	3	Dull
Known	3	2	1	0	1	2	3	Unknown
Confident	3	2	1	0	1	2	3	Uncertain
Satisfying	3	2	1	0	1	2	3	Disappointing
Strong	3	2	1	0	1	2	3	Weak
Rewarding	3	2	1	0	1	2	3	Worthless

Section 3: Attitudes about Athletic Training

Please read the following statements and respond to them as accurately as possible. The statements are on a scale from “Strongly Agree” to “Strongly Disagree”. Please circle the corresponding letter that depicts the degree to which you agree. If you feel neutral or undecided on a statement please circle (N).

Key:	SA	A	N	D	SD
	Strongly Agree		Neutral		Strongly Disagree

- | | | | | | |
|--|----|---|---|---|----|
| 1. It is important for athletic trainers to understand liability issues. | SA | A | N | D | SD |
| 2. Athletic trainers face burnout at a much higher rate than other professionals. | SA | A | N | D | SD |
| 3. Women athletic trainers have equal opportunities as men in obtaining jobs. | SA | A | N | D | SD |
| 4. Having more certified athletic trainers at an institution would decrease the stress and burnout of an athletic trainer. | SA | A | N | D | SD |
| 5. Memberships on Athletic Training Committees are greater for men than women. | SA | A | N | D | SD |
| 6. Budgets and resource allocation are a problem facing athletic trainers in higher education. | SA | A | N | D | SD |
| 7. Patient confidentiality is strongly practiced among athletic trainers. | SA | A | N | D | SD |
| 8. There are enough athletic trainers at higher education institutions to meet the needs of the athletes. | SA | A | N | D | SD |
| 9. Women obtain leadership roles as often as men do on athletic training committees. | SA | A | N | D | SD |

10. The cost of medical supplies makes it difficult to adequately supply an athletic training facility.	SA	A	N	D	SD
11. It is important that athletic trainers explain “Assumption of Risk” to athletes.	SA	A	N	D	SD
12. The “Appropriate Medical Coverage for Intercollegiate Athletics” policy is an appropriate formula for athletic practice and game coverage.	SA	A	N	D	SD
13. Stress from athletic training has a negative impact on the athletic trainers personal life.	SA	A	N	D	SD
14. Budget restrictions make it difficult to properly staff an athletic training facility.	SA	A	N	D	SD
15. Athletic trainers can use the “Good Samaritan” law as a defense against malpractice.	SA	A	N	D	SD
16. Women athletic trainers receive equal opportunities for rewards and recognition as men.	SA	A	N	D	SD
17. The increasing number of athletic teams and athletes makes it more difficult to properly staff athletic events.	SA	A	N	D	SD
18. Balance between work and personal life leads to a higher productivity of athletic trainers.	SA	A	N	D	SD
19. Athletic trainers should describe informed consent components to an athlete.	SA	A	N	D	SD

20. A certified athletic trainer should be present at all NCAA sanctioned athletic events.	SA	A	N	D	SD
21. Increased funding would help athletic training facilities stay more current with new technology and equipment.	SA	A	N	D	SD
22. Long hours leads to high burnout rates among athletic trainers.	SA	A	N	D	SD
23. Equal opportunities for minorities exist in athletic training.	SA	A	N	D	SD
24. Low funding at higher education institutions contributes to the imbalance between the number of athletic teams and events and the number of athletic trainers who are employed.	SA	A	N	D	SD
25. Most colleges or universities do not have adequate medical staffing for their athletic teams.	SA	A	N	D	SD
26. Athletic trainers have an understanding of risk management.	SA	A	N	D	SD
27. Leadership roles are equally available for men and women on athletic training committees.	SA	A	N	D	SD
28. Irregular hours (nights, weekends, holidays) lead to a high burnout rate among athletic trainers.	SA	A	N	D	SD
29. Requiring coaches of athletic teams to be First Aid and CPR certified would help to aid in the coverage of athletic events.	SA	A	N	D	SD
30. It is important to do a budget analysis at the end of every year.	SA	A	N	D	SD

Section 4:

List what you consider to be the top three issues and concerns facing athletic trainers in higher education institutions today:

Issue 1: _____

Issue 2: _____

Issue 3: _____

Other: _____

What recommendations do you have for improving the profession of athletic training?
