

**COMPARISON OF PREFERRED CHARACTERISTICS
IN HIRING PRACTICES OF ATHLETIC
TRAINERS AT DIFFERENT
INTERCOLLEGIATE
DIVISIONS**

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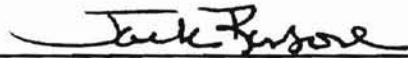
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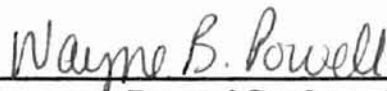
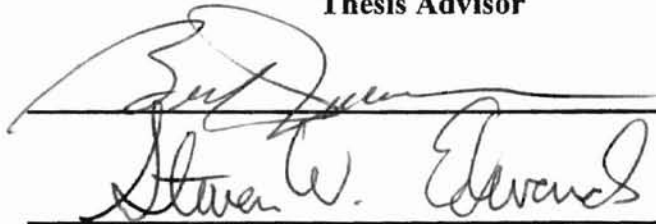
OKLAHOMA STATE UNIVERSITY

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Comparison of Preferred Characteristics in Hiring Practices of Athletic Trainers at Different Intercollegiate Divisions

Chapter I

Introduction

Over the last 10 years, a dramatic increase in the number of students pursuing certification by the National Athletic Trainers' Association (NATA) has resulted in a competitive job market for graduating students (National Athletic Trainers' Association International Task Force, 1995). The popularity of athletic training is increasing due to the number of persons becoming certified and also the number of high schools and colleges that are requiring certified athletic trainers to provide medical care for their athletes. The great importance society has placed on athletes has made the field of sports medicine an excellent career choice. Since 1993, total membership of NATA members increased from 19,080 members to 23,749 in the year 1997 (Bobby Donahoo, personal communication, Feb. 14, 1998). Resulting in almost 1000 new members per year. The increase in the number of individuals becoming Certified Athletic Trainers (ATC) has increased the types of employment settings available to athletic trainers in high schools, physical therapy clinics and the industrial rehabilitation settings (Sexton, Schmoldt, & Miles, 1994). However, this situation will change in the year 2004, when in order to be eligible to take the National Athletic Trainers' Association Board of Certification (NATABOC) certification exam, requires all candidates to possess a baccalaureate

degree and have successfully completed a Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredited entry level athletic training education program ("Recommendations to Reform Athletic Training Education", 1997). This will limit the number of athletic trainers that will become certified and will hypothetically increase the aptitude and competency level of all student athletic trainers preparing to take the exam.

The profession of Athletic Training is a sub-specialization of sports medicine. An athletic trainer is a qualified, allied health care professional, educated and experienced in the management of health care associated with sports participation. In cooperation with physicians and other allied health care personnel, the athletic trainer functions as an integral member of the athletic health care team in secondary schools, colleges, universities, professional sports programs, sports medicine clinics and other health care settings.

The athletic trainers professional preparation is directed toward the development of specified competencies in: 1) prevention of athletic injuries; 2) recognition, evaluation, and immediate care of athletic injuries; 3) rehabilitation and reconditioning of athletic injuries; 4) health care administration; and 5) professional development and responsibility (Role Delineation Study, 1995). Through the combination of formal classroom instruction and clinical experience, the athletic trainer is prepared to apply a wide variety of specific health care skills and knowledge, which are known as tasks, within each of the five domains of athletic training.

Presently there are two educational tracks an individual may choose in pursuing a career in athletic training. These two methods of obtaining national certification are the

internship and curriculum routes. Students must receive a baccalaureate degree as well as completing a clinical internship. The student athletic trainers in a internship program were required to complete 1500 hours of clinical experience under the supervision of a certified athletic trainer, whereas a student in a curriculum program complete 800 supervised hours (Arnheim & Prentice, 1997). Persons who are enrolled in these curriculum programs will theoretically obtain the same academic experience, so they will need the qualities and/or athletic training skills that will set them apart from other applicants when seeking employment. It would be important for these individuals to know what potential employers are looking for in candidates for an athletic training position.

So how does an athletic trainer candidate seeking employment become more distinctive from the other applicants? It would be helpful to have a better understanding of what perspective employers are seeking from future athletic training applicants. What qualifications and/or personal characteristics are employers searching for with applicants? Are some job-related tasks more important than others and are some personal characteristics more favorable in getting an athletic training position?

The educational experiences are similar for most athletic trainers, but the job experiences are quite different. The difference occurs within institutional and clinical settings. There appears to be obvious differences among collegiate divisions pertaining to responsibilities, budgets, and the number of sports covered by an athletic trainer (Lawton, Johnson, Moore, & Horbeck, 1994). The different intercollegiate divisions in question are the National Collegiate Athletic Association (NCAA) divisions one (I) through three (III) and smaller colleges such as junior colleges (JUCO) and National Association

Intercollegiate Athletics (NAIA) schools. Are employers looking for different qualifications at different intercollegiate divisions and are there consistency among the divisions? Noticeable differences among divisions would help applicants focus their job search toward specific divisions or to emphasize the applicants' strengths.

In the most recent Role Delineation Study of the NATABOC conducted in 1994 (National Athletic Trainers' Association Board of Education, 1995), five major domains of athletic training were revealed. These domains: 1) prevention of athletic injuries, 2) recognition, evaluation, and immediate care of athletic injuries, 3) rehabilitation and reconditioning of athletic injuries, 4) health care administration, and 5) professional development and responsibility. The effects of the study included changes in the structure and content of the performance domains of athletic training. It also introduced subsequent adjustment in the number of questions on the certification exam from each of the five domains. The certification exam consists of three parts; the written examination portion, which consists of 150 multiple choice; a written-simulation portion, which consists of situational injury cases; and the oral-practical exam portion, which is an oral demonstrative exam. The number of questions in the written exam pertaining to each domain reflect their importance in athletic training as a result of the most recent Role Delineation Study conducted by the NATABOC. The higher number of questions suggests a greater degree of importance in that specific domain on the written portion of the NATABOC certification exam. In the prior two role delineation studies, 1982 and 1989, there were six domains and the most recent Role Delineation Study 1995 decreased the number of the athletic training domains to five.

In the past 15 years, the field of athletic training has seen many changes from the increased number of people becoming certified, the number of domains of athletic training being decreased to the changing importance levels of those domains. With those changes, the needs and desires of future employers are also changing. However to my knowledge there has never been a study completed on what potential employers are seeking when hiring an assistant athletic trainer or an employee at the collegiate level.

Statement of the Problem

One problem affecting the profession of athletic training is the increasing number of people becoming certified versus the relative few numbers of new positions (Sexton, Schmoldt & Miles, 1994). In effect, there are too many Certified Athletic Trainers vying for jobs and not enough job opportunities. Goetze (1993) stated that if we don't limit the number of candidates, we will be allowing a person to go into a profession where only a few get a decent paying job. Individuals seeking a position as a certified athletic trainer must somehow set themselves apart from the rest of the job applicants. Knowing the differences in athletic training skills and personality traits desired at different intercollegiate divisions will be helpful in seeking employment. The purpose of the study is to determine the differences in the hiring practices of athletic trainers in different intercollegiate divisions.

Justification of the Study

There are many different employment opportunities for athletic trainers and with different opportunities come different needs and responsibilities. The only data found on

the collegiate setting suggests that athletic trainers interested in working in clinical or collegiate settings are encouraged obtain a master's degree, and those interested in solely working in the collegiate setting should also possess the cardiopulmonary resuscitation (CPR) instructors certification in order to instruct students (Arnold, VanLunen, Gansneder, Szczerba, Mattacola & Perrin, 1996). Athletic trainers should have a knowledge of what qualifications are needed for different employment settings. This will enable universities and colleges to better prepare students athletic trainers academically as well as arrange for more specific job-related experiences.

The Extent of the Study

Certain delimitations were set by the investigator of the study, which may have affected the results and conclusions drawn. The following delimitations were acknowledged:

- 1) The subjects included 300 Head Athletic Trainers at the intercollegiate levels throughout the United States randomly selected through the NATA database.
- 2) Only athletic trainers that work at intercollegiate levels were included in this present investigation. Athletic trainers that work in other settings such as high schools, clinic settings, and industrial settings were not included.
- 3) Random sampling may not produce equal representation of different intercollegiate divisions.

The limitations set in the study reflect the effect of the delimitations on the collections and interpretations of the data and the ability to expand the scope of inference beyond the

sample population. Generalization made from the results will be compromised by the following limitations:

- 1) Not all Head Athletic Trainers may be listed in the NATA database.
- 2) Athletic trainers employed in other health care settings may respond differently from those in the study.
- 3) Inference cannot be made outside of the tested population and generalization to other called health care professions can not be established.

Hypothesis

- 1) There will be no significant difference among different collegiate divisions regarding their preferences for hiring an athletic trainer.
- 2) There will be no difference in importance among major domains of athletic training or in personality characteristics in the different intercollegiate divisions.

Definition of the Terms

-Certified Athletic Trainer (ATC)-an athletic trainer who possesses a baccalaureate degree who has passed his certification exam, and has a knowledge of prevention, recognition, rehabilitation of injuries, along with health care administration and professional development and responsibility (Ray, 1994).

-Commission on Accreditation of Allied Health Education Programs

(**CAAHEP**)-the governing body for undergraduate athletic training educational programs. (Mathies, Denegar, & Arnhold, 1995)

-Domain-primary tasks performed by an entry level athletic trainer and a major element of athletic training that can not be put into any other group. (Arnheim & Prentice, 1997)

-National Athletic Trainers' Association (NATA)- the national organization formed in 1950 of athletic trainers in the United States, which established professional standards for athletic trainers. (Arnheim & Prentice, 1997)

-National Athletic Trainers' Association Board of Certification

(**NATABOC**)-the extension of the NATA that develops the certification exam and establishes requirements for continuing education. (National Athletic Trainers' Association, 1982)

-NATA Certification Exam-an exam consisting of three sections: a written portion, an oral-practical portion, and written-simulation portion that potential athletic trainers must pass to become a certified athletic trainer. (Role Delineation Study, 1995)

-Role Delineation Study-a study completed every five years by the NATABOC to determine the roles and responsibilities of an athletic trainer. It serves as the framework around which the certification examination is constructed. (Role Delineation Study, 1995)

-Task-certain elements of athletic training that “transcend” general domains.

(Arnheim & Prentice, 1997)

Chapter Summary

The field of sports medicine and the subdivision of athletic training are continually increasing in popularity. With the increase in popularity, there are more and more people becoming involved and certified in athletic training. The job market for athletic trainers is becoming more competitive with more applicants applying for the same positions. So it would be beneficial to know what employers are looking for when hiring an athletic trainer. This study looks into the different collegiate divisions and their hiring practices concerning domains, tasks, work and personality characteristics of athletic trainers desired for employment at specific collegiate divisions.

Chapter II

Review of Literature

Arnheim (1985) discussed athletic training by identifying ATC's as well trained and highly educated professionals who are concerned with "injury prevention, recognition and evaluation, and the management, organization and administration and administration, education, and counseling of the injured" (p. 31). Although the jobs or tasks of the athletic trainer have not changed, the terminology of those responsibilities and roles of the athletic trainer has however changed.

In 1982, the NATABOC initiated their first Role Delineation Study of the entry-level athletic trainer. It was a survey sent out to 300 certified athletic trainers throughout the United States. This Role Delineation Study asked athletic trainers to rate the tasks and knowledges on the same scales of athletic training as the role delineation panel (NATA, 1982). The results identified six major domains of athletic training; 1) prevention of athletic injuries; 2) recognition and evaluation of athletic injuries; 3) management, treatment and disposition of athletic injuries; 4) rehabilitation of athletic injuries; 5) organization and administration; and 6) education and counseling. The study determines how many questions will be asked from each domain of athletic training in the written portion of the certification exam.

The 1982 study determined the number of questions being asked for each domain of athletic training. It stated that the number of questions asked per domain were 27 questions concerning prevention of athletic injuries; 36 with recognition and evaluation of athletic injuries; 33 with management, treatment and disposition of athletic injuries; 30

with rehabilitation of athletic injuries; 13 with organization and administration; and 11 with education and counseling for a total of 150 questions.

In the 1989 Role Delineation Study by the NATABOC the domains of athletic training remained the same, but the number of questions asked per domain on the NATA certification exam had changed. The 1989 numbers were 26 questions pertaining to prevention of athletic injuries; 30 with recognition and evaluation of athletic injuries; 30 with management, treatment and disposition of athletic injuries; 26 with rehabilitation of athletic injuries; 19 with organization and administration and 19 with education and counseling. The data shows that the 1989 study slightly decreased the number of questions concerning recognition and evaluation (-6), management, treatment, and disposition (-3), and rehabilitation (-4). On the other hand organization and administration (+6) and education and counseling (+8) had increases in the number of questions (Table I).

The Role Delineation Study completed in 1994 resulted in some major changes being introduced into athletic training. There was a reduction in the number of major athletic training domains from six to five. Prevention of athletic injuries was the only domain left unchanged. The two domains of recognition and evaluation of athletic injuries, and management, treatment and disposition of athletic injuries were combined to form recognition, evaluation and immediate care of athletic injuries. Rehabilitation was changed to the rehabilitation and reconditioning of athletic injuries. Organization and administration was changed to health care administration. Lastly, professional development and responsibility replaced education and counseling.

Table I
Questions Pertaining to Each Domain on the NATABOC Certification
Exam

Domains	<u>1982</u>	<u>1989</u>	<u>Change</u> <u>1995</u> Within Domain
Prevention of Athletic Injuries	27	26 (-1)	31(+5)
Recognition & Evaluation of Athletic Injuries	36	30 (-6)	Recognition, Evaluation & Immediate Care of Athletic injuries 59 (-1)
Management, Treatment & Disposition of Athletic Injuries	33	30 (-3)	
Rehabilitation of Athletic Injuries	30	26 (-4)	Reconditioning Added 42 (+16)
Organization and Administration	13	19 (+6)	Health Care Administration 9 (-10)
Education & Counseling	11	19 (+8)	Professional Development & Responsibility 9 (-10)
Totals	150	150	150

*The number in the chart represents the number of questions asked pertaining to each athletic training domain on the written portion of the NATABOC certification exam as decided by the NATABOC Role Delineation Study of the appropriate year.

**The numbers in parenthesis are the differences of questions asked compared to the last NATABOC Role Delineation Study

Not only were the titles of the major domains changed, but also the number of questions asked in the written portion of the NATA certification exam also changed due to the latest Role Delineation Study. The change of questions is a representation of the importance level of each domain as discovered by the completed study. The 1995 Role Delineation Study determined 31 questions would be asked for prevention of athletic injuries; 59 with recognition, evaluation, and immediate care of athletic injuries; 42 with rehabilitation and reconditioning of athletic injuries; 9 with health care administration; and 9 with professional development and responsibility. This resulted in the addition of questions in prevention of athletic injuries (+5) and rehabilitation and reconditioning of athletic injuries (+16) and a decrease questions in health care administration (-10) and professional development and responsibility (-10) (Table I). In addition, there is another Role Delineation Study scheduled to be completed in the year 1999.

The domains and the level of importance of each domain have changed over the years. This is what the NATABOC has determined from the role delineation study, but is it the same as what Head Athletic Trainers are seeking in prospective employees. As of yet, there is no study to my knowledge on this subject pertaining to the field of athletic training. In some of the literature there is some tools or characteristics that an athletic trainer should possess.

An athletic trainer's personal qualities are very important and may determine his or her success. Personal qualities are the many characteristics that identify individuals in to who they are and how they act. The personal qualities of athletic trainers are the most important, because of the diverse settings they work (Arnheim & Prentice, 1997). The authors also identified six personal qualities commonly seen in an athletic trainer: 1)

stamina and ability to adapt; 2) empathy; 3) sense of humor; 4) ability to communicate; 5) intellectual curiosity; and 6) ethical practice.

In the literature, different personal characteristics of an athletic trainer were important to different authors. The characteristics they suggest are: 1) intelligence and articulate (proficient in both verbal and written communication); 2) sense of humor; 3) dedication to athletes' safety; 4) stamina and adaptability; and 5) sound judgment and sterling ethics (Fahey, 1986).

In the research pertaining to the general population there are similar ideas of what personal and/or job-related qualities a job applicant should possess. Employers today are searching for well-rounded employees who can do it all. They desire work and personality qualifications such as: 1) computer skills; 2) being a team player; 3) management/leadership skills; 4) being a risk taker; 5) communication skills; 6) flexibility; 7) willingness to learn; 8) entrepreneurial skills; 9) specializing in a specific area; 10) transferable skills; and 11) a positive attitude (Career World, 1996). In another related article discussing what it takes to be an ideal candidate states, they desire and expect their ideal candidate to have experience in their related field. The ability to learn new information and adapt to different situations is essential for all candidates. On the road to becoming the ideal candidate, the future employee must have: 1) teamwork; 2) basic skills; 3) adaptability; and 4) an understanding of individual and organizational behavior. Ideal candidates strive to be the best employees at home and also at work. They need to be dedicated to their employers (Smith, 1993).

In literature directly concerning the field of athletic training states, the job seeking athletic trainer should have the NATA certification, attempt to obtain additional

certification such as a teaching endorsement, physical therapy, or other related area. They should be aggressive and try to establish a job niche (Sexton, Schmoldt, & Miles, 1994).

It was also discovered in the literature the “a master’s degree is preferred in collegiate settings with 80.9% of collegiate athletic trainers possessing a master’s degree” (Arnold, VanLunen, Gansnedder, Szczerba, Mattacola, & Perrin, 1996, p. 217). This is generally due to academic institutions requiring instructors to possess a degree at a higher level in which they teach. Many of these studies emphasize an athletic trainer’s employment and salary characteristics and job marketability rather than hiring practices of Head Athletic Trainers and what they are specifically looking for in job applicants at the collegiate level.

In a similar study involving the roles and responsibilities in a clinical setting, the researcher looked at the athletic training domains on a seven point Likert scale. Duncan and Wright (1992) stated, “competencies that reflected high performance scores when evaluation, prevention, and rehabilitation/reconditioning of athletic injuries” (p. 314). The study was completed by athletic trainers in the clinical setting concerning the then six domains of athletic training.

To my knowledge and following an extensive literature review, there have been no studies similar to this research being attempted. This was the first study of its kind concerning what Head Athletic Trainers are looking for when hiring an athletic trainer or future employee at the collegiate division. Specifically what domains are most important in the hiring process and associated tasks within the specific domains of athletic training?

Chapter Summary

There have been no prior studies in comparing the differences in hiring practices in athletic training at different collegiate divisions. There have been three Role Delineation Studies that the outcome determines the domains of athletic training and the importance of the individual tasks associated with each domain. These studies also determine the number of questions concerning each domain in the written portion of the NATABOC certification exam. The number of domains, the importance of the domains, and the number of questions asked on the certification exam concerning each domain has changed throughout the three Role Delineation Studies. Other literature has identified personal characteristics they believe athletic trainers should possess such as; adaptability, sense of humor, and stamina just to name a few. Another study stated if you want to seek employment in the collegiate setting, you possess a master's degree and a cardiopulmonary resuscitation (CPR) instructor certification. The following studies have all been influential in developing the instrument and the study.

Chapter III

Method

The main objective of this study was to determine the differences, if any, among the four selected collegiate divisions in hiring an athletic trainer. There are many differences among colleges and universities such as the number of athletes involved in the sports program, the annual budget, duties of athletic trainers and the number of athletic trainers employed by the college or university (Lawton, Johnson, Moore & Horbeck, 1994). With these differences it seems that athletic trainers should possess certain qualities depending on the different intercollegiate divisions. The instrument used in this study was designed to examine the differences in the hiring practices at the four selected collegiate divisions. The results may help prospective applicants when searching for an athletic training position.

Preliminary Procedures

The researcher for this study developed the test instrument and using the five domains of athletic training as stated in the 1995 Role Delineation Study. It also included tasks and personal work qualities pertaining to those domains identified in the literature. A survey evaluation form was developed to determine the accuracy and validity of the survey (See Appendix D). The survey evaluation form was consequently given to 10 certified athletic trainers (ATC). After the expert review of the survey was completed, the feedback from the respondents was incorporated into the final design of the questionnaire. The survey evaluation form used a five point Likert scale. The rating scale choices were: (1) strongly agree, (2) agree, (3) neutral, (4) disagree, and (5) strongly

disagree. The survey forms from the panel of experts were then tallied and averaged. Of the 10 questions, all of the question means were between averages of 1.3 to 2.0. The mean for all of the questions was 1.71 (Table II). The panel agreed that the survey was valid according to the questions asked on the survey evaluation form.

Table II
Survey Evaluation Form Results

<u>Question Asked</u>	<u>Mean</u>
1. Is the survey clear and easy to understand?	1.9
2. Are the directions clear for filling out the survey?	1.7
3. Are the tasks of each Athletic Training domain appropriate	1.6
4. Are the tasks a good representation of the domains of Athletic Training?	1.3
5. Is the survey clear that the questions should be answered with concerns to hiring an Athletic Trainer?	2.0
6. Were the personal and work qualities appropriate for Athletic Trainers?	1.6
7. Is the opinion scale easily understood?	1.9
8. Is it clear how to return the questionnaire?	1.7
9. Overall, would you consider this a well written, easily understandable survey?	1.9
10. If you were to receive this survey, would you fill it out?	<u>1.5</u>
	<u>M</u> = 1.71 <u>SD</u> = 2.18

Likert scale used for the survey evaluation form.

- 1 = Strongly Agree
- 2 = Agree
- 3 = Neutral
- 4 = Disagree
- 5 = Strongly Disagree

Subject Selection

The subjects involved in this study included 300 randomly selected Head Athletic Trainers from 682 Head Athletic Trainers working at the intercollegiate level in the United States who were in the NATA database. The NATA database does not have the capacity to select Head Athletic Trainers according to collegiate division (Sandy Ward, personal communication, Nov. 7, 1997). The NATA computer database can randomly select Head Athletic Trainers after it was given certain perimeters. The criteria for subject selection was that each subject had to be Head Athletic Trainer at the college/university level and in this situation a member of the NATA. The NATA then proceeded to send two identical sets of 300 address labels of the subjects selected by the computer database for the initial mailing and a subsequent postcard reminder was sent out two weeks later.

The Head Athletic Trainers were selected as the survey respondents because although they may not be the sole selectors of a new employee, but they would have significant input into the hiring process. They would also have the more extensive knowledge of the domains of athletic training and what job-related skills they are looking for in potential assistant athletic trainer or a new employee.

Operational Procedures

A questionnaire was developed by the researcher for this study to determine the difference in hiring practices at different intercollegiate divisions (Appendix A). Following expert review of the study questionnaire, the survey design consisted of three pages and forty-three questions concerning the specific tasks of the five domains of athletic training and several work and personality characteristics. The study questionnaire

examined the respondents' demographic information, such as the intercollegiate division the Head Athletic Trainer was currently employed. The potential respondents had a choice between selecting NCAA Division I through Division III and smaller colleges or universities such as junior colleges and NAIA schools.

A mailed questionnaire was distributed along with a self addressed stamped envelope to all 300 randomly selected Head Athletic Trainers. The survey used a combination of a five point Likert scale and yes/no questions. The Likert scale ranks of various domains and tasks were; (1) most important, (2) more important, (3) important, (4) less important, and (5) least important. The scale questionnaire format was used to give respondents the opportunity to be objective when answering the questions and also to make it easier for the respondents. The respondents were asked to rank the specific domains, tasks and work and personality characteristics in the survey. The questionnaire also consisted of yes or no questions in order to help clarify some of the questions asked in the last portion of the questionnaire (Appendix A).

The survey was mailed in early February 1998 including a cover letter (Appendix B), a computer response sheet to report the data, and a self addressed stamped envelope. A postcard to the 300 randomly selected Head Athletic Trainers were sent out two weeks after the initial mailing to remind the subjects to complete and return the questionnaire (Appendix C). Six weeks were allowed for the respondents to return the questionnaires for analysis.

Research Design and Statistical Analysis

After the questionnaires were returned, the responses were compared among divisions using a one-way analysis of variance (ANOVA). The central tendency scores for the domains were ranked to determine importance levels within a sub-group. The next analysis was to determine if the sub-sets of the domains were correlated with the rating of the actual domain. The sub-set of the domain is the average of all the questions asked under each of the five domains. The relationship between the ranking of individual domains was compared to the subset of the domain scores using a Pearson r . All of the data was analyzed at an alpha level of $p < .05$.

Chapter Summary

A survey designed by the researcher was mailed to 300 randomly selected Head Athletic Trainers at different collegiate levels, along with a cover letter explaining the study. The questionnaire was validated by expert review and changes were incorporated in the final design. The questionnaire asked the Head Athletic Trainers to rank the level of importance of domains, tasks, work and personality characteristics of athletic training using a five point Likert scale. The demographic questions gave the potential respondents the choice between NCAA Division I, II, III and other category, which consisted of smaller schools such as junior colleges and NAIA schools. A follow up postcard was mailed two weeks after initial mailing as a reminder to return the questionnaire. After the data was collected, it was analyzed using a one way analysis of variance, Pearson r correlation and central tendency scores.

Chapter IV

Results

Introduction

The purpose of the study was to determine the difference in hiring practices of athletic trainers at different intercollegiate settings. The sample group represented National Collegiate Athletic Association (NCAA) Division I, II, and III athletic programs as well as smaller schools such as junior colleges and NAIA schools. The present investigation hypothesized that there would be no differences in Head Athletic Trainers responses regarding their preferences for hiring an athletic trainer and no difference in importance among major domains of athletic training or in personality characteristics in the different intercollegiate divisions.

A forty-three question survey was sent out to 300 randomly selected Head Athletic Trainers that work at the various collegiate levels. These subjects were selected randomly by the NATA computer database out of a possible 682 Head Athletic Trainers at a collegiate level. The survey was mailed out including a cover letter explaining the study, and a self-addressed stamped envelope to help ensure return of the questionnaire.

Subjects

Of the 300 surveys that were distributed, 211 were returned, of those returned 206 were usable for a return rate of 68.7%. Of the five surveys that were unusable, two were returned with no information, and three were filled out incorrectly and unable to be used in the study. As seen in Table III, the NCAA Division III group had the most respondents

with 69, NCAA Division I had 56 respondents, NCAA Division II had 43 respondents and the other category of smaller schools such as junior colleges had 38 respondents.

Table III
Respondent Demographics

<u>Collegiate Level</u>	<u>Number Returned</u>	<u>Percentage</u>
Division I	56	27.2%
Division II	43	20.9%
Division III	69	33.5%
Other (NAIA, JUCO)	38	18.4%
Totals	206	100.0%

Statistical Analysis

The research hypotheses stated that no significant difference would exist among different collegiate divisions regarding their preferences for hiring an athletic trainer and there would be no significant difference in importance among major domains of athletic training or in work and personality characteristics in the different intercollegiate divisions. The survey was initially tested by ten certified athletic trainers to determine reliability of the survey. A five point Likert scale was used in the survey evaluation form with ten questions pertaining to the questionnaire and to check its reliability and validity (Appendix D). The Likert scale went from one representing strongly agree to five representing strongly disagree.

In the survey the respondents had the option of choosing between four choices of work affiliation. These choices were NCAA Division I, II, III and other group which were smaller colleges such as junior colleges and NAIA schools. The null hypotheses was then tested using the responses to these questions to determine if there is a difference between the collegiate groups. Central tendency scores were used to analyze the demographic data.

A one-way analysis of variance (ANOVA) was used to determine if there were differences among the divisions. An ANOVA was conducted for each domain and the tasks associated with each domain among the different groups. The central tendency scores for all of the respondents were used to determine what they identified as the most important characteristic, task, or domain associated with athletic training. These scores were ranked to determine importance level within the domains or characteristics.

The Pearson r was used in the study to determine if the respondents answers on the domain question was correlated with their response on the subset of the domain. The subset was the combination of all the tasks associated with each domain to get one common score. The alpha level that was used throughout this study was $p < .05$.

Statement of Design

The study questionnaire was designed to investigate what factors are important when hiring an athletic trainer and the relationships those factors may have at different intercollegiate settings. The questionnaire addressed different areas of expertise within athletic training, work and personality traits associated with athletic training. The study looked at the five domains of athletic training and several tasks that fit under each

domain. These domains are: 1) prevention of athletic injuries; 2) recognition, evaluation, and immediate care of athletic injuries; 3) rehabilitation and reconditioning of athletic injuries; 4) health care administration and; 5) professional development and responsibility (Role Delineation Study, 1995).

The potential respondents, Head Athletic Trainers, were then asked to rank the domains, individual tasks, work and personality traits when hiring an athletic trainer on a five point Likert scale. The five point Likert rating scale were; (1) most important, (2) more important, (3) important, (4) less important, and (5) least important

The returned questionnaire was then analyzed with emphasis on the differences that existed between the various divisions. The groups were compared using a one-way analysis of variance (ANOVA). The Pearson r was used to compare the sub-groups of tasks of each domain with the actual importance level of the domain. The central tendency scores were examined to determine importance level of domains, tasks, work and personality characteristics.

Results

When testing to see if the questionnaire was valid and reliable, an expert review of ten Certified Athletic Trainers (ATC) rated the questionnaire with the survey evaluation form (Appendix D) with ten questions on a five point Likert scale for the purpose of looking at hiring practices at various intercollegiate divisions. The mean of the ten questions was ($\bar{M} = 1.71$, $SD = 2.18$) with a range between 1.3 and 2.0. The central tendency score of 1.71 for all the questions establishes the results between strongly agree

and agree (Table II). On the rating scale for the survey evaluation form were; (1) strongly agree, (2) agree, (3) neutral, (4) disagree, and (5) strongly disagree.

Of the 300 surveys that were mailed to various Head Athletic Trainers around the country, 206 were returned and useable for statistical analysis. This is a return rate of 68.7%. The range for the different collegiate divisions were from 38 respondents to 69 respondents (Table III).

Multiple one-way analysis of variance (ANOVA) were implemented to check if there were significant differences between the different collegiate divisions when looking at the domains, tasks, and work and personality characteristics. When looking at the means of the questions investigated in the survey, the responses were more similar than different between different divisions. The divisions used in this study were NCAA Division I, II, III, and other divisions which consist of junior colleges (JUCO), NAIA and other smaller collegiate settings. In the five domains of athletic training, ANOVA found no difference ($p > .05$) existed in the various intercollegiate divisions in the importance levels of each domain. However, there were similarities in how the domains were answered involving the four groups. The different divisions had similar means, so the total mean for all the respondents will be used and identified due to their similarities. The prevention of athletic injuries ($M = 2.11$, $SD = .88$), recognition, evaluation, and immediate care of athletic injuries ($M = 1.17$, $SD = .41$), rehabilitation and reconditioning ($M = 1.87$, $SD = .80$), health care administration ($M = 3.00$, $SD = 1.17$), and professional development and responsibility ($M = 2.68$, $SD = 1.27$). These scores of all respondents in all divisions are very similar to the individual division scores.

The ten work and personality characteristics had very similar responses between the divisions and the totals are a good representation of the different divisions. The work and personalities that had the lowest score which represent the most important were; positive attitude ($\underline{M} = 1.39$, $\underline{SD} = .60$), professionalism ($\underline{M} = 1.57$, $\underline{SD} = .75$), willingness to learn ($\underline{M} = 1.58$, $\underline{SD} = .60$), and adaptability ($\underline{M} = 1.60$, $\underline{SD} = .67$).

In the domain of prevention of athletic injuries, four tasks were used as typical skills in the domain. The totals were similar to the different division statistics, except for physical conditioning. The most important were taping and wrapping skills ($\underline{M} = 1.93$, $\underline{SD} = .85$) and physical conditioning ($\underline{M} = 2.23$, $\underline{SD} = .82$). Physical conditioning was the only task that showed a significant difference between divisions tested at an alpha level of $p < .05$. Division III had totals of $\underline{M} = 2.45$ and $\underline{SD} = .88$, whereas the other category consisting of smaller schools such as junior colleges and NAIA schools totals were $\underline{M} = 2.00$ and $\underline{SD} = .77$. The smaller schools division responses state that physical conditioning is more important than at schools that are NCAA Division III. The difference between these categories suggests that the significant difference may have been due to random chance rather than an actual significant difference.

In the domain of recognition, evaluation, and immediate care of athletic injuries the tasks that were determined to be most important were accuracy and thoroughness of injury assessment ($\underline{M} = 1.27$, $\underline{SD} = .55$), and knowledge of anatomy and physiology ($\underline{M} = 1.47$, $\underline{SD} = .79$). This domain as a whole had the lowest means of all the domains with the highest mean being ($\underline{M} = 1.82$, $\underline{SD} = .95$), which was general first aid.

In the domain of rehabilitation and reconditioning of athletic injuries the totals that were most important are as follows: rehabilitation knowledge of various body parts

(\underline{M} = 1.61, \underline{SD} = .61) and progressive rehabilitation process of various body parts (\underline{M} = 1.67, \underline{SD} = .68). The highest mean in this group was under 2.00, indicative of a very strong domain in regards to the other domains.

The domain of health care administration had six tasks that were discussed and the tasks that appear to be most important were maintaining training room records (\underline{M} = 1.48, \underline{SD} = .65), interaction with other health professionals (\underline{M} = 1.88, \underline{SD} = .75) and establish policies and procedures (\underline{M} = 2.30, \underline{SD} = .89).

The final domain was professional development and responsibility with four tasks associated with this domain. The totals of all the divisions that were most important in this domain were instruction of student athletic trainers (\underline{M} = 1.84, \underline{SD} = .83), being able to teach (\underline{M} = 2.27, \underline{SD} = .95), and counseling knowledge (\underline{M} = 2.30, \underline{SD} = .82). Although the individual statistics for each division were so similar that they were not used, there can be observed in Table IV with the results of the multiple one-way ANOVA.

The tasks for all five athletic training domains at the various intercollegiate divisions were very similar in the average means and showed that no significant difference ($p > .05$) existed between the different intercollegiate divisions tested. The only significant difference ($p < .05$) occurred in physical conditioning between NCAA Division III and the other division. The other smaller schools scores were lower than NCAA Division III representing a greater importance level score at the smaller school division. The difference may be due to random chance. This summarizes that potential employers in a college setting are looking for similar characteristics and job-related tasks when hiring a new employee. Despite the differences at the variously sized colleges

Table IV

Means and Standard Deviations of the Survey

Question	Div. I	Div. II	Div. III	Other	Total	Group Rank	F
<u>Domains of Athletic Training (M, SD)</u>							
Q2	2.07(.97)	1.93(.80)	2.23(.88)	2.13(.81)	2.11(.88)	3 ^d	ns
Q3	1.20(.48)	1.11(.32)	1.20(.44)	1.13(.34)	1.17(.41)	1 st	ns
Q4	1.73(.75)	1.95(.95)	1.88(.80)	1.97(.71)	1.87(.80)	2 nd	ns
Q5	2.79(1.02)	3.00(1.22)	3.07(1.22)	3.18(1.23)	3.00(1.17)	5 th	ns
Q6	2.66(1.35)	2.74(1.26)	2.68(1.28)	2.63(1.17)	2.68(1.27)	4 th	ns
<u>Work & Personality Characteristics (M, SD)</u>							
Q7	1.57(.66)	1.58(.66)	1.59(.75)	1.68(.57)	1.60(.67)	4 th	ns
Q8	2.25(.81)	2.26(.73)	2.29(.88)	2.50(.80)	2.31(.81)	7 th	ns
Q9	1.84(.71)	1.79(.67)	1.87(.78)	1.84(.86)	1.83(.75)	5 th	ns
Q10	2.14(.86)	2.19(1.12)	2.25(.90)	2.34(.75)	2.22(.91)	6 th	ns
Q11	2.98(1.00)	3.00(1.22)	3.01(1.01)	2.82(.90)	2.97(1.03)	10 th	ns
Q12	1.52(.54)	1.51(.55)	1.70(.67)	1.53(.60)	1.58(.60)	3 ^d	ns
Q13	1.29(.56)	1.37(.54)	1.48(.66)	1.42(.60)	1.39(.60)	1 st	ns
Q14	2.73(.96)	2.86(.89)	2.88(.98)	2.89(.86)	2.84(.93)	9 th	ns
Q15	1.63(.75)	1.44(.59)	1.64(.82)	1.50(.80)	1.57(.75)	2 nd	ns
Q16	2.36(1.14)	2.58(1.26)	2.77(1.23)	2.66(1.07)	2.60(1.19)	8 th	ns
<u>Prevention of Athletic Injuries (M, SD)</u>							
Q17	1.93(.93)	1.93(.91)	1.96(.86)	1.89(.65)	1.93(.85)	1 st	ns
Q18	2.34(.69)	2.23(.81)	2.48(.88)	2.39(.75)	2.37(.80)	4 th	ns
Q19	2.21(.71)	2.12(.85)	2.45(.88)	2.00(.77)	2.23(.82)	2 nd	**
Q20	2.27 (.90)	2.09(.87)	2.39(.94)	2.39(.92)	2.30(.91)	3 ^d	ns

Question	Div. I	Div. II	Div. III	Other	Total	Group Rank	F
<u>Recognition, Evaluation and Immediate Care of Athletic Injuries (M, SD)</u>							
Q21	1.51(.60)	1.37(.58)	1.58(1.01)	1.32(.77)	1.47(.79)	2 nd	ns
Q22	1.60(.65)	1.44(.77)	1.74(.83)	1.50(.65)	1.60(.74)	4 th	ns
Q23	1.20(.40)	1.16(.48)	1.36(.62)	1.32(.66)	1.27(.55)	1 st	ns
Q24	1.68(.86)	1.74(.88)	1.93(1.03)	1.89(1.01)	1.82(.95)	5 th	ns
Q25	1.46(.87)	1.51(.70)	1.52(.72)	1.60(.75)	1.52(.76)	3 ^d	ns
<u>Rehabilitation and Reconditioning of Athletic Injuries (M, SD)</u>							
Q26	1.93(.74)	1.79(.74)	1.90(.84)	2.08(.91)	1.92(.81)	3 ^d	ns
Q27	1.52(.66)	1.60(.66)	1.80(.70)	1.71(.69)	1.67(.68)	2 nd	ns
Q28	1.82(.79)	1.91(.78)	1.96(.90)	2.13(.74)	1.94(.82)	4 th	ns
Q29	1.50(.57)	1.63(.62)	1.68(.68)	1.63(.54)	1.61(.61)	1 st	ns
<u>Health Care Administration (M, SD)</u>							
Q30	1.44(.66)	1.42(.63)	1.58(.67)	1.42(.60)	1.48(.65)	1 st	ns
Q31	2.71(1.02)	2.77(.84)	2.64(1.00)	2.42(.85)	2.65(.95)	4 th	ns
Q32	2.77(.95)	2.67(.75)	2.75(1.08)	2.47(.89)	2.69(.95)	5 th	ns
Q33	2.48(.93)	2.26(.73)	2.30(.99)	2.08 (.75)	2.30(.89)	3 rd	ns
Q34	1.79(.76)	1.84(.72)	1.99(.81)	1.87(.66)	1.88(.75)	2 nd	ns
Q35	2.55(.78)	2.77(.95)	2.72(.92)	2.84(1.00)	2.71(.91)	6 th	ns
<u>Professional Development and Responsibility (M, SD)</u>							
Q36	2.20(.77)	2.33(.64)	2.31(.93)	2.42(.86)	2.30(.82)	3 ^d	ns
Q37	2.16(1.04)	2.33(.92)	2.33(.93)	2.24(.88)	2.27(.95)	2 nd	ns
Q38	1.73(.88)	1.88(.73)	1.90(.91)	1.84(.72)	1.84(.83)	1 st	ns
Q39	2.52(1.03)	2.31(.84)	2.32(1.03)	2.32(1.04)	2.37(.99)	4 th	ns

Likert Scale: 1 = most important, 2 = more important, 3 = important, 4 = less important, 5 = least important

and universities, the employers are seeking applicants that possess similar characteristics and qualifications based on the results of this investigation.

The next component of the study was to determine if the sub-sets within the domains were correlated with the rating of the actual domain. The sub-set of the domain is the average of all the questions asked under each of the five domains. For example, the domain of prevention of athletic injuries have four tasks that were addressed. These tasks of the domain were then averaged to get a sub-set domain mean and standard deviation. All of the respondents were used for the sub-set rather than individual division characteristics because of the similarities of all the divisions (Table V).

Table V
Comparison of Sub-Set and Actual Domain

<u>Domain</u>	<u>M/ (SD)</u>	<u>Sub-Set</u>	<u>M/ (SD)</u>	<u>p</u>	<u>f</u>	<u>r</u>
Prevention of Athletic Injuries	2.11(.88)	Prevention	2.12(.57)	.005	*	.20
Recognition, Evaluation, & Immediate Care	1.17(.41)	R, E, & I	1.54(.54)	.001	*	.22
Rehabilitation & Reconditioning Of Athletic Injuries	1.87(.80)	R & R	1.78(.48)	.001	*	.28
Health Care Administration	3.00(1.17)	Admin	2.28(.53)	.001	*	.31
Professional Development & Responsibility	2.68(1.27)	D & S	2.20(.63)	.01	*	.19

When comparing the prevention of athletic injuries with its sub-set, a significant relationship existed with a correlation coefficient was ($r = .20$, $p < .005$) which results in the correlation determination at 40%. The domain of recognition, evaluation, and immediate care of athletic injuries and its sub-set had a significant relationship ($r = .22$,

$p < .001$) and a correlation determination of 44%. The rehabilitation and reconditioning of the athletic injuries domain ($r = .28$, $p < .001$) had a correlation determination of 56% with its sub-set. The domain of health care administration and its subset ($r = .31$, $p < .001$) had a correlation determination of 62% whereas the professional development and responsibility and its sub-set ($r = .19$, $p < .01$) and a correlation determination of 38%. A correlation determination with an average percentage of less than 50 percent does show some moderate correlation between the domains and their sub-sets (Baumgartner & Strong, 1994). The domains of professional development and responsibility, prevention of athletic injuries, and recognition, evaluation, and immediate care of athletic injuries had a correlation determination under 50 percent. These are lower correlation, but still are significant ($p < .05$) for a relationship between the domain and its sub-set. The domain of rehabilitation and reconditioning of athletic injuries and health care administration had correlation determination above 50 percent, which represents a stronger correlation. This was done to check if the respondents showed a relationship between how they rated the actual domains of athletic training and how they rated the tasks of the domain as a whole checking the survey's reliability. There were some individual task scores rated higher or lower on the importance compared to the rating of the domain. These scores on the extreme ends of the scale may have caused a lower correlation.

The central tendency scores were used to determine the level of importance within the domains. The means for all the respondents were used and then the tasks, domains or work and personality characteristics were placed from the most important to the least important. The lower the score of the mean represents a greater importance level. The means were then put into order from lowest mean to greatest mean to determine

importance level. Each task or characteristics were then placed in numerical order (Table VI).

Chapter Summary

To determine which factors might influence an employers decision in hiring an athletic trainer, data collected from 206 returned surveys (68.7% return rate) were statistically analyzed. The null hypotheses were accepted because there was no significant difference in various intercollegiate divisions from the questions asked, except for physical conditioning under the domain of prevention of athletic injuries. This difference is probably due to random chance. A significant relationship existed between the five domains and the sub-sets of the tasks of the domains. The results of this study suggest that there are no differences in the hiring practices of the athletic trainers at different collegiate levels from the questions asked in this study.

Chapter V

Discussion

The purpose of the study was to determine what differences exist in the hiring practices of athletic trainers at different intercollegiate divisions. In addition, this investigation looked at different areas of importance at the various sized colleges or universities. The different divisions are National Collegiate Athletic Association Division I, II, III, and an other division that consists of smaller schools such as junior colleges (JUCO) and NAIA schools. Prior to this investigation, no study has examined the differences that are present at the various collegiate settings in concerns to the field of athletic training or sports medicine, except for a couple of studies concerning salary comparison between divisions.

Examining the various divisions of intercollegiate athletes, there are some obvious differences such as size of the annual budget, number of sports played, quality and extensiveness facilities, duties of athletic trainers, salaries and the high profile atmosphere of some larger universities (Lawton, Johnson, Moore, & Horbeck. 1994). There has been in increase in the last decade on the emphasis placed on athletics (Duncan & Wright, 1992). There has also been in increase in the numbers joining the National Athletic Trainers' Association (NATA) with an average of just under 1,000 new members a year since 1993 (Bobby Donahoo, personal communication, Feb 14, 1998).

The NATABOC has conducted three Role Delineation Studies with the latest being completed in 1995. These studies provide the athletic training community with the domains of athletic training and the tasks associated with each of those domains. In the 1995 Role Delineation Study, five domains of athletic training were established: 1)

prevention of athletic injuries; 2) recognition, evaluation and immediate care of athletic injuries; 3) rehabilitation and reconditioning of athletic injuries; 4) health care administration; and 5) professional responsibility and development. Under each of the domains are several tasks that are in integral part of the domain (NATABOC, 1995).

These tasks and domains of athletic training were the emphasis of this study, along with work and personality characteristics associated with athletic trainers. Head Athletic Trainers at various collegiate settings were then asked to fill out a forty-three question survey concerning their perspective of what tasks, domains, work and personality characteristics are most important when hiring an athletic trainer. The different collegiate divisions were then looked at to determine if there were differences in importance levels.

Discussion of Descriptive Data and Treatment

The results of this investigation suggests that when hiring an athletic trainer, there are no significant differences in what Head Athletic Trainers at various collegiate settings are looking for in a new employee. The null hypotheses were accepted in this investigation. What this means is that employers at different intercollegiate divisions are looking for athletic trainers with similar characteristics and abilities in certain tasks as asked in this particular study. So potential, qualified athletic training employees are adequately prepared for employment at all of the intercollegiate divisions.

Arnold, VanLunen, Gansnedder, Szczerba, Mattacola, and Perrin (1996) stated that a master's degree is preferred in hiring in the collegiate setting. In this investigation, the importance level of work and personality characteristics sub group, a master's degree

came in eighth out of ten characteristics. This is a contradicting finding from the Arnold et al. (1996) literature which stated that a master's degree is preferred. It may be preferred, but in this particular study other work and personality characteristics were discovered to be more important such as positive attitude, professionalism and willingness to learn. Lawton et al. (1994) stated a master's degree may increase competence, but doesn't effect salary. Moss (1994) agrees stating that an entry-level position normally requires a master's degree at a collegiate setting. A master's degree was not as important of a work and personality characteristic in the clinical or high school setting as compared to the collegiate level (Arnold et al.).

The current study did present some interesting information on what the Head Athletic Trainers identified as most important domains, tasks and work and personality characteristics. This was assessed by looking at the data in terms of importance level order which was determined by taking the tasks and domains means and putting them in order from smallest number, which is greatest importance, to the largest number, which represents a task or domain of lesser importance (Table VI).

When looking at the domains of athletic training, the data shows that recognition, evaluation, immediate care of athletic injuries was the most important domain. The other domains were 2) rehabilitation and reconditioning of athletic injuries, 3) prevention of athletic injuries, 4) professional development and responsibility, and 5) health care administration. This data parallels with the 1995 Role Delineation Study. The level of importance was established by the number of questions on the written portion of the certification exam. Recognition, evaluation, and immediate care questions had the greatest frequency ($n = 59$), and rehabilitation and reconditioning of athletic injuries

Table F Order of Importance

<u>Rank of Importance When Hiring</u>	<u>Order</u>
<u>Domains</u>	
Recognition, evaluation, and immediate care of athletic injuries	1 st
Rehabilitation and reconditioning of athletic injuries	2 nd
Prevention of athletic injuries	3 rd
Professional development and responsibility	4 th
Health care administration	5 th
<u>Work and Personality Characteristics</u>	
Positive attitude	1 st
Professionalism	2 nd
Willingness to learn	3 rd
Adaptability	4 th
Resourcefulness	5 th
Stamina	6 th
Sense of humor	7 th
Masters degree	8 th
Years of experience	9 th
"Handyman" skills	10 th
<u>Prevention of Athletic Injuries</u>	
Tapping and wrapping skills	1 st
Physical conditioning	2 nd
Environmental conditions knowledge	3 rd
Protective bracing skills	4 th
<u>Recognition, Evaluation and Immediate Care of Athletic Injuries</u>	
Accuracy and thoroughness of injury assessment	1 st
Knowledge of anatomy and physiology	2 nd
Planning and knowledge of emergency procedures	3 rd
Knowledge of special tests and muscle tests	4 th
General First Aid	5 th
<u>Rehabilitation and Reconditioning of Athletic Injuries</u>	
Rehab knowledge of various body parts	1 st
Progressive rehab process of various body parts	2 nd
Therapeutic modalities knowledge	3 rd
Creativity of rehab	4 th
<u>Health Care Administration</u>	
Maintains training room records	1 st
Interaction with other health care professionals	2 nd
Establish policies and procedures	3 rd
Ordering of supplies	4 th
Insurance knowledge	5 th
Knowledge of pharmacology	6 th
<u>Professional Development and Responsibility</u>	
Instruction of student athletic trainers	1 st
Being able to teach	2 nd
Counseling knowledge	3 rd
Increase athletic training awareness	4 th

was second with 42 questions (Table I). The area of health care administration and professional development and responsibility had the lowest frequency with nine questions asked on the certification exam (Role Delineation Study, 1995). This study and the 1995 Role Delineation Study determined similar levels of importance when examining the five domains of athletic training. However, if you look at the domain sub-sets, which are combined means of all of the tasks under each domain, it shows a slight difference. Prevention of athletic injuries was first and rehabilitation and reconditioning of athletic injuries was second. Professional development and responsibility had a slightly greater frequency than prevention of athletic injuries and health care administration was again fifth. The range for the sub-sets of the domains were between 1.54 and 2.28 for a range of only .74. This means when ranking the tasks of the domain, there was a closer relationship as a group and the highest and lowest means were much closer together (Table V).

In a survey (Duncan & Wright, 1992) investigating the job roles and responsibilities of athletic trainers in a allied clinical setting showed similar responses when they asked clinic directors to rate the relative importance of the NATA competencies. Prevention of athletic injuries was rated as most important. Then rehabilitation of athletic injuries was discovered to be next important followed by evaluation of athletic injuries. Organization and administration of athletic training and education and counseling were considered least important in this study.

When looking at the order of importance level in the group of work and personality characteristics some interesting results were suggested. Possessing a master's degree and the years of experience rated eighth and ninth respectfully out of ten.

Whereas, positive attitude, professionalism, willingness to learn, and adaptability were the top four work and personality characteristics desired in new employees. These are the characteristics that make an individual a more well-rounded candidate (Career World, 1996). Researchers cite adaptability or flexibility as an important characteristic in an employee (Arnheim & Prentice, 1997; Fahey, 1986; Smith, 1993). These characteristics could be very important when seeking an athletic training position at the various collegiate settings.

The domain of prevention of athletic injuries rank of order was taping and wrapping skills, physical conditioning, environmental conditions knowledge and protective bracing. The ranking order of the total means for the domain of recognition, evaluation, and immediate care of athletic injuries the task of accuracy and thoroughness of injury assessment was most important. Knowledge of anatomy and physiology was second and general first aid came fifth out of the five tasks.

Rehabilitation knowledge of various body parts was the most important in the domain of rehabilitation and reconditioning of athletic injuries. However, creativity of rehabilitation was least important of the four tasks. Maintaining training room records and interaction with other health care professionals was most important in health care administration. Insurance knowledge and knowledge of pharmacology were the least important of the tasks asked in the survey. In the domain of professional development and responsibility, the tasks rank order was instruction of student athletic trainers, being able to teach, counseling knowledge, and increasing athletic training awareness. The 1995 Role Delineation Study does not cite which tasks of the domains are most or of

lesser importance. This study could be the start of a framework to determine the importance of these tasks for the education of athletic trainers.

Practical Application

The results of this investigation describe what Head Athletic Trainers at different collegiate levels perceived as the most important tasks in each of the domains and what personality characteristics they believe are most important. Statistical analysis found no significant differences ($p > .05$) in the hiring practices at different collegiate divisions as estimated by the Head Athletic Trainers. Individuals with similar work qualities and athletic training knowledge should have an equal opportunity to seek employment at all collegiate divisions. This will give athletic trainers that are seeking employment at collegiate divisions an idea of what Head Athletic Trainers are desiring in job applicants. The results of this investigation will prepare the job seeking athletic trainer in their job search by informing them what are important tasks, work and personality characteristics, and which are not so important. This study could also be beneficial to athletic training educational programs. The results could be implemented to assist with instruction of students emphasizing the domains, tasks or characteristics that had a higher importance level.

Conclusions

Analysis of variance discovered there were no significant differences ($p > .05$) between the different intercollegiate divisions except for the task of physical conditioning within the domain of prevention of athletic injuries. The difference existed ($p < .05$)

between NCAA Division III and the smaller colleges division. This difference could have been due to random chance rather than an actual significant difference. The results of the study discovered that when hiring an athletic trainer, there are no significant differences ($p > .05$) in what Head Athletic Trainers are looking for in new employees. Thus the null hypotheses stated in this study are accepted. The results of this investigation have shown that different intercollegiate divisions are looking for athletic trainers with similar characteristics and abilities in certain tasks and domains as asked in this particular study. The conclusions of this investigation found that employers at different collegiate divisions are looking for generally the same job-related skills, work and personality characteristics when hiring an athletic trainer upon the review of the questions asked in this particular study despite obvious differences in the divisions.

Recommendations for Future Studies

The following recommendations are made based on the realization that this study could have been conducted differently in many ways. In hope that future research will further explore this area of interest, it is recommended that:

1. Future studies should compare collegiate athletic trainer positions with other work sites such as, high school, industrial, clinical and professional positions.
2. Future investigations should examine all tasks associated with each domain in attempt this study did not examine all tasks associated with each of the domains that relate to athletic training to reduce the length of the survey.

Some of the tasks were also combined to limit the number of questions asked in the survey.

3. Studies in the future could mail the questionnaires out to other personnel who may help select an athletic trainer for employment such as, athletic directors, assistant athletic trainers, and directors of sports medicine clinics.
4. Researchers could ask different work and personality characteristics that may also be important in the hiring of an athletic trainer in future studies.

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Appendix

Appendix A

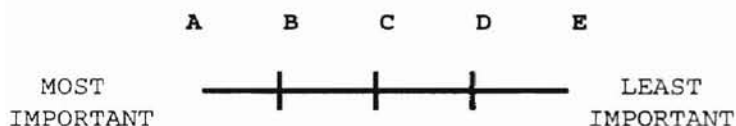
Athletic Training Questionnaire

Directions: For all of the questions below, place your answers on the computer answer sheet which has been provided for you. Do not put your name on the answer sheet. Respond to each statement using the scale provided below:

PART I - DEMOGRAPHIC QUESTION

1. In what collegiate division are you currently working as a Head Athletic Trainer?

A. Division I	C. Division III
B. Division II	D. Other (JUCO, NAIA, etc)



PART II - THE FIVE ATHLETIC TRAINING DOMAINS

Rate the domains below in terms of their individual importance in hiring an athletic trainer. (Use the computer answer form.)

2. Prevention of athletic injuries
3. Recognition, evaluation, & immediate care of athletic injuries
4. Rehabilitation & reconditioning of athletic injuries
5. Health care administration
6. Professional development and responsibility

A B C D E



PART III - WORK AND PERSONALITY QUALITIES

Rate the qualities below in terms of their individual importance in hiring an athletic trainer.

(Use the computer answer form.)

- | | |
|-----------------------|--------------------------|
| 7. Adaptability | 12. Willingness to learn |
| 8. Sense of humor | 13. Positive attitude |
| 9. Resourcefulness | 14. Years of experience |
| 10. Stamina | 15. Professionalism |
| 11. "Handyman" skills | 16. Master's degree |

PART IV - PREVENTION OF ATHLETIC INJURIES

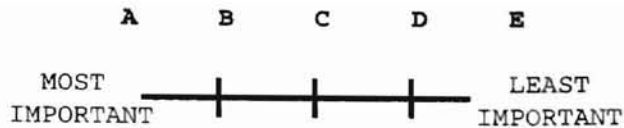
Rate the items below in terms of their individual importance in hiring an athletic trainer.

- 17. Taping & wrapping skills
- 18. Protective bracing skills
- 19. Physical conditioning
- 20. Environmental conditions knowledge

PART V - RECOGNITION, EVALUATION & IMMEDIATE CARE OF ATHLETIC INJURIES

Rate the items below in terms of their individual importance in hiring an athletic trainer.

- 21. Knowledge of anatomy & physiology
- 22. Knowledge of special tests & muscle tests
- 23. Accuracy & thoroughness of injury assessment
- 24. General first aid
- 25. Planning & knowledge of emergency procedures



PART VI - REHABILITATION OF ATHLETIC INJURIES

Rate the items below in terms of their individual importance in hiring an athletic trainer.

- 26. Therapeutic modalities knowledge
- 27. Progressive rehab process of various body parts
- 28. Creativity of rehab
- 29. Rehab knowledge of various body parts

PART VII - HEALTH CARE ADMINISTRATION

Rate the items below in terms of their individual importance in hiring an athletic trainer.

- 30. Maintains training room records
- 31. Ordering of supplies
- 32. Insurance knowledge
- 33. Establish policies and procedures
- 34. Interaction with other health professionals
- 35. Knowledge of pharmacology

PART VIII - PROFESSIONAL DEVELOPMENT AND RESPONSIBILITY

Rate the items below in terms of their individual importance in hiring an athletic trainer.

- 36. Counseling knowledge
- 37. Being able to teach
- 38. Instruction of student athletic trainers
- 39. Increase athletic trainers' awareness

PART IX - GENERAL QUESTIONS

Use the following scale to answer questions 40 to 43.

A = YES and B = NO

40. Would you ever hire someone due to their expertise in one of their major duties (e.g. rehabilitation)?
41. Would you ever hire someone solely on the recommendation of a colleague?
42. Do you think administrative duties of an athletic trainer have increased over the last 5-10 years?
43. Should there be a greater emphasis in the education of athletic trainers on the issue of health care administration?

Be sure that you have answered all of the questions using the computer answer form and return in enclosed business reply envelope.

THANK YOU FOR YOUR ASSISTANCE!

*** Survey was modified from original, in order to fit margin guidelines for binding. ***
*** The only changes were to margins, content remained the same***

Appendix B

Dear Head Athletic Trainer,

My name is Brian McWilliams and I am a Graduate Assistant Athletic Trainer at Oklahoma State University. I am conducting research for my thesis and would like to have about 10 minutes of your time to assist me in this project.

As a part of my research, I would like you to fill out the enclosed questionnaire regarding qualifications for employment as an Athletic Trainer at the intercollegiate level. The purpose of this investigation is to determine what factors are essential for potential employment as an Athletic Trainer. All results of the questionnaire will be held in strict confidentiality. The participation of many Head Athletic Trainers is necessary for this study to be successful and for the completion of my thesis. Each completed questionnaire greatly contributes to the quality of this project. Remember participation is strictly voluntary and all responses will remain confidential and anonymous.

If you do not wish to participate in the study, please return the blank questionnaire in the enclosed envelope. If you are willing to assist me, please read the directions on the questionnaire before beginning to respond. If you have any questions on the survey, please feel free to call at (H) (405)-372-2138 or (W) (405)-744-7416. Thank again for taking time out of your busy schedules to assist me with this important investigation.

Sincerely,

Brian J.P. McWilliams, ATC

Appendix C

Dear Head Athletic Trainer,

This is just a reminder to please feel out the Athletic Training survey from Brian McWilliams and Oklahoma State University. If you have done so already, I truly appreciate your time. If you have been unable to complete the survey, please take a couple minutes out of your busy schedule to fill it out. If you have misplaced the survey and need another, I would be happy to send you another copy. If you have any questions or need another survey, please feel free to call (H) (405)-372-2138 or (W) (405)-744-7416. Thanks again for your time.

Sincerely,

Brian J.P. McWilliams, ATC

Appendix D

Survey Evaluation Form

The following is a survey to help determine the readability and accuracy of the survey. The rating range extends from SA (strongly agree) to SD (strongly disagree). Other rating choices are A (agree), N (neutral), and D (disagree). Mark the box that is the closest in your opinion.

	SA	A	N	D	SD
1. Is the survey clear and easy to understand?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are the directions clear for filling out the survey?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are the tasks of each Athletic Training domain appropriate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are the tasks a good representation of the domains of Athletic Training?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the survey clear that the questions should be answered with concerns to hiring an Athletic Trainer?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Were the personal and work qualities appropriate for Athletic Trainers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is the opinion scale easily understood?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is it clear how to return the questionnaire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Overall, would you consider this a well written, easily understandable survey?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. If you were to receive this survey, would you fill it out?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments _____

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
HUMAN SUBJECTS REVIEW

Date: February 3, 1998

IRB #: ED-98-064

Proposal Title: Comparison of Job Related Tasks in the Five Domains of Athletic Training in Different Intercollegiate Divisions

Principal Investigator(s): Jack Ransone, Brian McWilliams

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

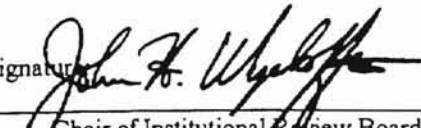
ALL APPROVALS MAY BE SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT NEXT MEETING, AS WELL AS ARE SUBJECT TO MONITORING AT ANY TIME DURING THE APPROVAL PERIOD.

APPROVAL STATUS PERIOD VALID FOR DATA COLLECTION FOR A ONE CALENDAR YEAR PERIOD AFTER WHICH A CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD APPROVAL.

ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

Comments, Modifications/Conditions for Approval or Disapproval are as follows:

Signature


Chair of Institutional Review Board

Cc: Brian McWilliams

Date: February 3, 1998

VITA

Brian J.P. McWilliams

Canidate for the Degree of

Master of Science

**Thesis: COMPARISON OF PREFERRED CHARACTERISTICS IN HIRING
PRACTICES OF ATHLETIC TRAINERS AT DIFFERENT
INTERCOLLEGIATE DIVISIONS**

Major Field: Health, Physical Education, and Leisure

Biographical:

Personal Data: Born in Cuba City, Wisconsin, On March 17, 1973, the son of John and Emma McWilliams.

Education: Graduated from Cuba City High School, Cuba City, Wisconsin in May 1991; received Bachelor of Science degree in Kinesiology from the University of Wisconsin-Madison in May 1996. Completed the requirements for Master of Science degree with a major in Health, Physical Education and Leisure Administration at Oklahoma State University in June 1998.

Experience: Raised in Cuba City, Wisconsin, employed as a student athletic trainer at University of Wisconsin-Madison 1992-1996; internship with the Green Bay Packers, summer 1996; employed as graduate assistantship at Oklahoma State University 1996-1998

Professional Membership: National Athletic Trainers' Association (NATA), Mid-America Athletic Trainers' Association (MAATA) Oklahoma Apprentice Athletic Trainer Licensure