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**COLLEGIATE EMPLOYERS PREFERRED CHARACTERISTICS  
IN POTENTIAL JOB CANDIDATES**

by

Amber S. Landis, ATC  
B.S. May 2004, Eastern University

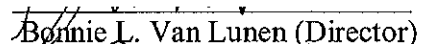
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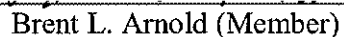
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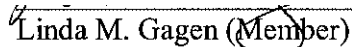
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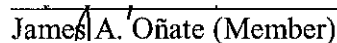
OLD DOMINION UNIVERSITY  
MAY 2006

Approved by:

  
Bonnie L. Van Lunen (Director)

  
Brent L. Arnold (Member)

  
Linda M. Gagen (Member)

  
James A. Oñate (Member)

## **ABSTRACT**

### **COLLEGIATE EMPLOYERS PREFERRED CHARACTERISTICS OF POTENTIAL ATHLETIC TRAINING JOB CANDIDATES**

Amber S. Landis  
Old Dominion University, 2006  
Director: Dr. Bonnie L. Van Lunen

The purpose of this study was to identify specific characteristics collegiate employers prefer in potential athletic training job candidates. A secondary purpose was to determine any relationships or differences in employer preferences based on characteristics of the employer or demographics of the institution. A survey instrument was developed to gather background information about the employer and hiring institution, rate the preferences of employers and collect information about the candidate who was actually hired. The instrument was piloted among survey experts and employers who had recently hired an athletic trainer at the college setting and the survey was considered reliable. Email addresses of employers seeking athletic trainers at the college setting were collected from the position vacancy notice (PVN) career center on the National Athletic Trainer's (NATA) Website from October 2004 to July 2005. Subjects were emailed a scripted letter and a link to the on-line survey. Their responses were coded and sent anonymously to an excel database. Two hundred fifty surveys were emailed to employers and 109 surveys were returned for a 44% response rate. Descriptive statistics were used to determine the most preferred characteristics. Pearson correlations, repeated measures ANOVAs and Tukey Post hoc tests were used to analyze relationships and differences among employers based upon characteristics of the employers and demographics of the institution. The results showed employers have the highest preference for a candidates performance on the interview, collegiate athletic training

experience and recommendations from references. An accredited post certification graduate athletic training education program was the highest preferred type of master's degree among employers. Significant differences existed among employers preference of master's education existed among males and females. Males had a significantly higher preference for a candidate with a master's degree from an accredited graduate athletic training education program. There was no significant difference between female employer's preference for a candidate from a specific master's education program. A significant relationship was also discovered among employers' age and their preference for candidates with a master's degree from an accredited program ( $r = .248$ ;  $p = .009$ ). This information is valuable as athletic trainers determine what type of master's degree to pursue. This research also suggests educators should continue to emphasize interview practice, clinical experience, and developing an extensive network of references among athletic training students. Future research should study the relationship and differences among employers preference for other characteristics in job candidates based upon information about the employer and demographics of the institution.

Co-Directors of Advisory Committee:

Dr. Linda Gagen  
Dr. Brent Arnold  
Dr. James A Oñate

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This thesis is dedicated to all athletic training students trying to determine what kind of graduate education to pursue. Good luck in your decision.

## ACKNOWLEDGMENTS

I would like to thank all of the people who have helped and supported me throughout this process. A special thanks to Dr. Arnold and Dr. Gagen for numerous crash courses in statistics to help me find results in the never ending data. Thanks to Dr. Bonnie Van Lunen for being a steady source of motivation and inspiration. Thanks to Dr. Jimmy Onate for providing advice for life. Thanks to my classmates for adding perseverance and purpose during two very challenging years of my life. And most important, thank you to my parents for being a constant source of support and believing in me despite my doubts.

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## **CHAPTER I**

### **INTRODUCTION**

The athletic training profession has followed the pathway of educational development of other allied health professions. Professions within the allied health field are acknowledging the importance of obtaining a post certification degree to produce more skilled professionals, as an entry level degree in some allied health fields is no longer adequate to compete for jobs. Graduate programs specialize in various domains of allied health to allow students to increase their knowledge and fine tune clinical expertise in a particular area (Murray, Judd, & Snyders, 2001). Physical therapy education has evolved to include a master's degree and now a Doctor of Physical Therapy (DPT) degree as the entry level degree program (Gwyer, Odom, & Gandy, 2003). Nurses can also pursue further education through graduate education programs in a variety of specialization fields (Rodgers & Healy, 2001). The professional world of nursing recognizes the need for master's and doctoral degrees in nursing to provide health care environments with individuals who can provide more advanced care and help to further the nursing profession (AACN publication, 2000).

Currently, education in athletic training requires that an individual complete a Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredited entry-level athletic training education program prior to sitting for the national board of certification exam. In 2006 324 accredited entry-level undergraduate and thirteen entry-level graduate athletic training education programs (ATEP) existed within various institutions throughout the country. Each of these programs is held accountable to CAAHEP through standards and guidelines to ensure that each program produces well

educated and experienced entry-level athletic trainers. Upon completion of the educational program the student is eligible to sit for the national certification examination and become a certified athletic trainer (NATA Education Council).

There are various educational venues that are available for an individual to obtain a Master's degree. Certified athletic trainers may choose to continue their education in a field similar to athletic training. Many schools offer graduate programs in topics closely related to athletic training, including kinesiology, biomechanics, sports administration, nutrition, education or pedagogy. These programs often offer the applicant the opportunity to work as an athletic trainer in the institution's athletic training room. According to the Position Vacancy Notices (PVN) on the NATA Career Center Website, numerous employers request a master's degree in athletic training or a related field (NATA Career Center, 3/2006).

Entry-level graduate athletic training education programs are for students already possessing an undergraduate degree in a field other than athletic training and are seeking to become a certified athletic trainer. Students in entry level Master's degrees in athletic training complete a 2-3 year program to become proficient in the six domains of athletic training. Each student is required to complete the same classroom work and clinical time (at least four academic semesters) as in entry-level bachelors ATEPs. Upon completion of the program students are eligible to take the Board of Certification (BOC) Exam. Upon successfully completing this exam the graduate is a certified athletic trainer and eligible to practice as a clinician pending any additional requirements by the state in which they find employment (NATA Education Council).

Post-certification graduate athletic training education programs (GATEPs) allow graduates of entry-level ATEPs to pursue further education within the field of athletic training while gaining experience as a clinician within the profession. These programs are accredited by the National Athletic Trainers' Association (NATA). The Post Professional Education Committee is a subdivision of the NATA education council and serves to develop and maintain the standards and guidelines that all post certification GATEPs must follow. The standards and guidelines for these programs are more general than the standards and guidelines for entry level athletic training education programs. Post certification GATEP are required to identify specific areas of distinctiveness related to the faculty, academic courses and the program's clinical, administrative, teaching and/or research components (Standards and Guidelines, 2002).

Post certification GATEPs serve to enhance critical thinking skills, offer research opportunities, provide more clinical experience, and offer an opportunity to specialize in a subject area of interest (Ingersoll & Gieck, 2003; NATA Education Council). Additionally, post certification GATEPs attempt to enhance the athletic training profession by preparing certified athletic trainers for leadership roles and expand the athletic training body of knowledge and infiltrate new information into the field through research endeavors (Standards and Guidelines, 2002).

A master's degree is important for an athletic trainer to be distinguishable from other job applicants. Certified athletic trainers with a Master's degree receive higher salaries than those with a lesser degree (Somerville & Stanwood, 1996). Further education is also common among program directors and athletic trainers that serve as faculty (Hertel, West, Buckley & Denegar, 2001). The placement vacancy notice (PVN)

on the NATA website indicates that many collegiate certified athletic trainer job postings prefer or require a master's degree (NATA Career Center, 2005). Research has made clear the need for a master's degree for students pursuing a career at the collegiate level (Kahanov & Andrews, 2001; Arnold, Gansneder, Van Lunen, Szczerba, Mattacola, & Perrin, 1998). However, there are no studies showing which type of graduate degree is preferred by employers (Arnold et al, 1998). The purpose of this study was to determine the characteristics that are important to employers of collegiate certified athletic trainers. A secondary purpose was to examine the relationship and differences between demographics of the employers and educational master's degree preference when hiring a certified athletic trainer at the collegiate setting. A third purpose was to examine the relationship and differences between demographics of the institution and educational master's degree preference when hiring a certified athletic trainer at the collegiate setting.

### **Statement of Problem**

The purpose of this study was to determine the characteristics that are important to employers of collegiate certified athletic trainers. A secondary purpose was to examine the relationship and differences between demographics of the employers and educational master's degree preference when hiring a certified athletic trainer at the collegiate setting. A third purpose was to examine the relationship and differences between demographics of the institution and educational master's degree preference when hiring a certified athletic trainer at the collegiate setting.

## Research Hypotheses

1. Characteristics such as type of degree, sport related experience, interview skills, and references will be important to employers when hiring a certified athletic trainer.
2. (A) Female employers will have a statistically significant greater preference for candidates with a master's degree from an accredited post certification GATEP.  
 (B) Caucasian athletic trainers will have a statistically significant greater preference for a candidate with a master's degree from an accredited post certification GATEP.  
 (C) There will be a strong positive correlation between the employers' age and employers' preference for a master's degree from an accredited graduate athletic training education program.  
 (D) There will be a strong negative correlation between employers with more years of experience as an ATC and the employers' preference for athletic trainers with a master's degree from a post certification GATEP.  
 (E) Employers with a higher educational degree will have a statistically significant higher preference for athletic trainers with a master's degree from a post certification GATEP  
 (F) Employers who claim to have more knowledge of graduate athletic training education will report a statistically significant higher preference for graduates from an accredited post certification GATEP.
3. (A) Employers at Division I universities will have a statistically significant greater preference for a candidate from an accredited post certification GATEP.



(B) Employers at an institution with an accredited CAAHEP undergraduate ATEP will have a greater preference for a candidate with a master's from an accredited post certification GATEP.

(C) Employers at an institution with an NATA accredited GATEP will have a statistically significantly greater preference for a candidate with a master's degree from an accredited post certification GATEP.

### **Null Hypotheses**

1. There will be no difference in preference of characteristics identified by employers when hiring a certified athletic trainer at the collegiate level.
2. There will be no relationships or differences between demographics of the employers and educational master's degree preference when hiring a certified athletic trainer at the collegiate setting.
3. There will be no relationships or differences between demographics of the institution and educational master's degree preference when hiring a certified athletic trainer at the collegiate setting.

### **Independent Variables**

1. The characteristics that will be important to the employers
  - a. Bachelor's Degree via internship
  - b. Bachelor's Degree via approved undergraduate curriculum
  - c. Reputation of Bachelor's Education Program Quality
  - d. GPA upon Graduation from Undergraduate Institution
  - e. Master's Degree from Post Certification Graduate Athletic Training Education Program

- f. Master's Degree in Related Field
- g. Master's and Bachelor's Degree from same institution
- h. GPA upon graduation from Graduate Institution
- i. Terminal Degree
- j. Sports Related Experience
- k. Experience at the Collegiate Level
- l. Membership in Professional Organizations
- m. Personal Skills during Interview
- n. CSCS Certification
- o. EMT Certification
- p. CPR/FA Certified Instructor
- q. Physical Therapy License
- r. Teaching Experience
- s. Administrative Experience
- t. Non related work Activities
- u. Research Publications
- v. Recommendations from References

## 2. Demographics of the Employers

- a. the employers' degree, years of experience as an ATC, employers educational degree, employers knowledge of GATEP

## 3. The characteristics of the institution

- a. educational programs at the institution, number of sports at institution, division of institution, specific sports at the institution

## **Dependent Variables**

1. The level of importance of each characteristic (1,2,3,4,5)
2. The responses to the questions based upon the characteristics of the employers.
  - a. IE: type of degree of candidate – bachelor's, master's, doctorate
3. The responses to the questions based upon the characteristics of the hiring institution.
  - a. IE: Division of the institution – I, II, III, NAIA

## **Operational Definitions**

1. The placement vacancy notice (PVN) is a list of employment opportunities for athletic trainers posted on the NATA website. We utilized postings on the PVN from October 2004 to July 2005.
2. The Post Professional Education Committee (PPEC) is a standing committee of the NATA Education Council, charged with promoting graduate athletic training education, including establishing and interpreting guidelines for Post Certification Graduate Athletic Training Programs.
3. A Post Certification Graduate Athletic Training Program is a program whose goal is to expand the depth and breadth of knowledge and skills beyond those required of entry-level athletic trainers. Students admitted to these programs must have passed, or be eligible to take, the BOC examination or hold an equivalent certification. These programs are accredited by the NATA. (NATA Education Council, 2004)
4. Undergraduate Entry Level Athletic Training Education Programs (ATEP) are entry-level athletic training education programs that use a competency-based

approach in both the classroom and clinical settings. Using a medical-based education model, athletic training students are educated to serve in the role of physician extenders, with an emphasis on clinical reasoning skills. Educational content is based on cognitive (knowledge), psychomotor (skill), affective competencies (professional behaviors) and clinical proficiencies (professional, practice-oriented outcomes). (NATA Education Council Overview, 2004)

5. Graduate Entry Level Athletic Training Education Programs are programs for students who already possess an undergraduate degree and want to be eligible to sit for the BOC exam to become a certified athletic trainer. These programs are accredited by CAAHEP and must go through the same accreditation process as undergraduate ATEPs.
6. An employer is any person or committee seeking to hire a certified athletic trainer for the collegiate setting and posting their job vacancy on the NATA PVN.
7. A hiring committee consists of all the people involved in making the decision to hire the certified athletic trainer.
8. The National Athletic Trainer's Association (NATA) is the governing body for certified athletic trainers in the United States. The mission of the NATA is to enhance the quality of health care for athletes and those engaged in physical activity, and to advance the profession of athletic training through education and research in the prevention, evaluation, management and rehabilitation of injuries. (www.nata.org)

### **Assumptions**

1. The subjects answered all questions honestly and to the best of their ability.

2. The instrument is a valid tool to measure all aspects sought.
3. The survey reached the proper subjects and was completed by the appropriate person.
4. The option for answers represented the answer the subject is feeling.

### **Limitations**

1. The emotions of the subject at the time they completed the survey cannot be controlled.
2. The environment in which the subjects completed the survey cannot be controlled.
3. The availability of Internet access for all subjects cannot be controlled.
4. The ability for all subjects to interpret directions/questions correctly cannot be controlled.
5. The time to complete the survey varied for each subject.
6. The knowledge of the committee member's backgrounds may vary or be unavailable.
7. The employer may have already hired a candidate at the time the survey was filled out and may provide biased responses based on the qualities of the candidate who was hired.
8. There may have been a limited applicant pool for this position and the employer may not have been able to hire a candidate with his/her stated preferred characteristics.
9. There is no way to know if the hired candidate was the best fit for the position.

10. Subjects were gathered from the postings on the NATA Career Center web site.

Not all positions are posted on this website nor do all employers access this website.

**Delimitations.**

1. Employers consisted of those individuals who sought a certified athletic trainer to serve as a full time staff member, or as a split appointment staff member who has responsibilities as a clinician and an instructor.
2. All employers posted a job description on the NATA's PVN between October 2004 and July 2005.

## **CHAPTER II**

### **REVIEW OF THE LITERATURE**

Athletic training is just one career path that falls under the umbrella term of allied health. Other professions within the allied health field include physical therapy, exercise physiology, health education and numerous other career tracks. Nursing and physician's assistants are also closely related to the allied health field. In order to pursue a career in any one of these fields an individual must complete the educational requirements. The educational programs for each of the different fields have undergone significant changes over the years. This literature review will begin by reviewing some of the educational processes of various allied health and related professions. The second part of this review will focus on the characteristics that employers have deemed important when hiring employees in the allied health fields. The final part of this literature review will describe the importance of athletic training graduate education to both the profession of athletic training and the benefit to the knowledge and experience of the practicing certified athletic trainer.

#### **Educational Processes of Allied Health Education Programs**

##### *Physical Therapy Education*

Physical therapy education programs began in 1928 as nine month certification programs to educate and prepared people with rehabilitation skills to help injured war veterans of WWI and the many people left paralyzed and debilitated from the multiple poliomyelitis epidemics (Plack & Wong, 2002; Gwyer et al, 2003). The hospital based, nine to twelve month certification programs relying on an apprenticeship model of

teaching advanced to university based, 4 year programs integrating liberal arts courses and basic science courses with physical therapy studies (Gwyer et al, 2003).

Physical therapy education has changed due to a variety of factors. The increase of the elderly population, advances in medical technology such as joint replacements and heart transplants, federal legislation, and advances in fitness and prevention programs, are a few examples of changes that have required the knowledge base of physical therapists to expand. The evolution of physical therapy requires practitioners to be more than technicians. Examination, evaluation, and developing specialized plans of care based on individual circumstances are additional duties that are currently required of clinicians. As the role of physical therapists changed, the educational programs continued to transform. Physical therapy programs continued to increase the breadth and depth of the curriculum by adding subjects such as Neuroanatomy, psychology, research, administration and public health to produce more effective clinicians. The 4-year baccalaureate degree no longer sufficiently prepared an individual to be an effective clinician. In 1977 the American Physical Therapy Association (APTA) adopted a resolution to require a post baccalaureate degree to be eligible to practice as a physical therapist. As of January 1<sup>st</sup> 2002, the Commission on Accreditation in Physical Therapy Education (CAPTE) no longer recognized any program not granting a post baccalaureate degree (Plack & Wong, 2002).

In an attempt to enhance critical thinking skills, theoretical and integrative proficiency, many physical therapy education programs are developing a doctoral degree (Threlkheld, Jensen, & Royeen, 1999; Plack & Wong, 2002). Clinicians within the field of physical therapy believe a doctoral degree will demand more respect from health care



professionals and insurance representatives and potentially lead to a fully autonomous practice (Plack & Wong, 2002). The transition to doctoral entry-level education in physical therapy is swiftly taking place compared to other educational changes within the field. In October of 1999, only 3 entry-level doctorate of physical therapy (DPT) programs were accredited with 17 programs in the process of transition and 18-20 programs were contemplating making the conversion (Plack & Wong, 2003). In November 2003, there were 85 entry-level DPT programs and 89 programs intending to make the transition to an entry level DPT program (DPT frequently asked Questions, 2005). The field of physical therapy is focusing efforts towards researching outcome assessments to determine the need for doctoral degrees and the importance of master's degrees (Plack & Wong, 2003).

### *Nursing Education*

The nursing profession includes a variety of clinicians and educators alike with various degrees including diploma degrees, associates degrees, a bachelor's of science in nursing (BSN), a Doctor of Nursing Science (DSN), PhD in nursing, and additional degrees are in the process of being developed such as the Doctor of Nursing Practice (DNP) (Bellack, 2002). Entry-level education includes a bachelor's program, an associate program and the diploma program. Upon successful completion of each program the graduate holds the same practice license, duties and, most often, similar salaries. Despite the similarities in outcomes, the educational process for each tract is very different (Boyce, Brow, & Cole, 2001). Nurses can pursue further education through graduate education programs in a variety of specialization fields. A handful of entry level master's programs also exist to offer a master's of nursing degree to students

who have previously achieved a bachelors degree in another field (Rodgers & Healy, 2002).

Changes and trends in health care are influencing graduate nursing education. The rise in the elderly population, governmental constraints, increasing health care costs, inaccessibility of care, and inadequate delivery of care, have made a significant impact on advanced nursing preparation. Development of a graduate curriculum, which addresses the needs of society and the modern patterns of health care delivery, is a monumental task (Stokes, Whitis, & Thrasher, 1997). The National Board of Nurses is developing new roles for nurses, such as the clinical nurse leader. This new position would require a master's degree in nursing (Long, 2004). Ashworth, Gerrish, and McManus (2001) found that master's programs in the United Kingdom expanded graduate students cognitive competencies, practice-related competencies, and research requirements to attribute to advancement of job skills. The professional world of nursing recognizes the need for master's and doctoral degrees in nursing to provide professionals who will provide more advanced care and further the nursing profession (AACN publication, 2000).

#### *General Allied Health Education*

The allied health field is another example of a profession undergoing constant change. Exercise physiologists, health educators, rehabilitation specialists, kinesiotherapists, massage therapists, physical therapists, and anyone working to promote the well being of the population make up professionals within the allied health field. There are different educational routes to achieve a degree or certification in a specific allied health tract. The purpose of entry-level education, regardless of what tract or level, is to prepare students at a primary level of clinical competence in a specified discipline.

Advanced clinical knowledge, leadership skills, research and scholarly activity, mentor roles, professional development and agents of change are further responsibilities of successful professionals within the allied health field and need to be developed (Murray et al, 2001; McPherson, Shilling, Bellack, & West, 1996).

The additional skills required of allied health professionals are stressed in post professional education. Saturating the allied health field with professionals encompassing the additional characteristics is imperative to advancing the profession of allied health (Murray et al, 2001). Legislation was passed in 1992 requiring rehabilitation counselors to obtain a master's degree in order to meet the national or state licensing, certification or registration standards. Occupational therapy also requires a master's degree for entry-level education (Chapin, 2004).

### *Athletic Training Education Programs*

Athletic Training Education Programs have undergone great change since their inception in the 1950's, however preparing effective clinicians to enter the field of athletic training remains the main focus. In 1959 an individual with a dual degree in secondary education or physical therapy enhanced the resume of a recent graduate. The first athletic training educators presumed graduates would increase their marketability with additional degrees such as physical therapy and education. The early education programs of athletic training were composed of courses from related academic areas such as health or physical therapy. In 1969 the first athletic training education program was recognized by the NATA (Delforge & Behnke, 1999).

Athletic training education continued to transform and develop as the profession progressed. The NATA professional education committee continually reviewed and

revised course work and clinical experience requirements. The emphasis moved from physical therapy and education coursework to a focus on courses considered essential to clinical athletic training. Hours of clinical experience under direct supervision of a certified athletic trainer were specified. A skill competency checklist and behavioral objectives were identified. The profession of athletic training continued advancing toward identification of a specialized, common body of knowledge for certified athletic trainers (Delforge & Behnke, 1999).

Developing a specialized, common body of knowledge led to the emergence of an athletic training major in colleges and universities. Forming a specified major for athletic trainers was a key factor in gaining recognition by the American Medical Association (AMA). Another key component of recognition by the AMA was the decision to pursue accreditation by the Committee on Allied Health Education and Accreditation (CAHEA) later to be replaced by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). By June of 1998, 82 entry-level programs had been accredited by CAAHEP (Delforge & Behnke, 1999).

Graduate athletic training education programs developed alongside undergraduate athletic training education programs. Graduate athletic training education programs began as a means to achieve eligibility for certification. However in 1998, graduate education no longer served as a valid path to eligibility for certification. Students wishing to pursue graduate education in athletic training needed to be already eligible for certification, or already be certified as an athletic trainer (Delforge & Behnke, 1999).

Entry level master's athletic training education programs were developed to provide students who completed four years of undergraduate work in another subject

field with a pathway to become a certified athletic trainer. Presently thirteen of these programs exist throughout the country. A typical two or three year entry level master's program allows a student to be eligible to take the BOC exam (NATA Education Council, 2004). The delineation among entry level and post certification athletic training education encouraged advanced learning and research developments in the post certification graduate athletic training education programs (Delforge & Behnke, 1999).

According to the NATA council on education, entry-level athletic training education and post certification athletic training education are distinctly different in purpose, design, and content. Graduate education is defined by advanced systematic study and experience. The purpose of post certification graduate athletic training is the instruction in advanced skills and thinking, to develop leaders, and to advance research within the field of athletic training. The standards and guidelines for post certification graduate athletic training education programs are based upon the clinical proficiencies and educational competencies set in place for entry-level athletic training programs. Post certification graduate athletic training education programs are to build on entry level concepts to enhance the skills of an entry level athletic trainer (Standards and Guidelines for Post Certification Graduate Athletic Training Education Programs, 2002). Post certification graduate athletic training promotes the field of athletic training while offering highly qualified clinicians to practical sites of athletic training (Ingersoll & Gieck, 2003).

## **Characteristics Employers Desire**

### *Physical Therapy Employers Desired Characteristics*

There have been limited studies performed within physical therapy to determine which degree an employer would prefer. A study conducted by Gould, MacKinnon, and Herchenroder (1994) found that employers of physical therapists rate clinical experience and personal attributes as the most important qualities of job candidates. However, they failed to discover significant difference in job opportunities among graduates with a baccalaureate degree and those with a post baccalaureate degree. The 1996 American Physical Therapy Association salary survey showed no difference in salaries among physical therapists with a baccalaureate degree or a post baccalaureate degree. However, doctoral prepared physical therapists made about 10,000 dollars more annually than less educated practitioners (Prost, 1997). Mathwig, Clarke, Owens, and Gramet (2001) completed survey research that demonstrated that physical therapists throughout New York state rate good written and verbal communication skills, strong professional and time management skills, and previous clinical affiliation as the most important hiring criteria. Private physical therapy practitioners considered the applicant's education program very important. Physical therapists in the ambulatory setting were the only employers to relate a master's degree more desirable than a baccalaureate degree.

### *Nursing Employer's Desired Characteristics*

Research displays nursing employers recognize the importance of advanced education. Canavan (1997) found employers gave preference to applicants with advanced degrees. Nurses with a bachelor's degree are eligible to be licensed and have the clinical skills to be a certified nurse. However, sources show hospital administrators

and nurse employers prefer nurses with postgraduate education. According to the National Sample Survey of Registered Nurses for 2000, conducted by the Health Resources and Services, 40 percent of nurses with a master's degree will make more than 50,000 dollars a year while only 14 percent of registered nurses with a bachelor's degree will earn more than 50,000 dollars a year. Employers are willing to pay more for a registered nurse with a higher level of education (Nursing Salary, 2005)

#### *Allied Health Employer's Desired Characteristics*

Research reported by Murray et al (2001) supported the theory of employers seeking applicants with additional characteristics that are developed at the graduate level. Some of these characteristics included, advanced clinical knowledge, leadership skills, research and scholarly activity, mentor roles, and professional development. More and more employers desire their employees to be agents of change. They surveyed employers of graduates of a Masters of Health Science (MHS) program. Employers who returned the survey felt the skills of MHS graduates had benefited by participation in the MHS program. The employers gave high marks to their job performance and competency levels. Graduate education in allied health improves the competencies of graduates in numerous aspects of job capabilities and employers have recognized a master's degree as a route to improve competence.

#### *Athletic Training Employer's Desired Characteristics*

Arnold et al (1998) and Kahanov and Andrews (2001) have demonstrated that employers in the university setting rate a master's degree as a very important hiring characteristic to look for when seeking to hire a certified athletic trainer. Somerville and Stanwood (1996) demonstrated a higher salary for certified athletic trainers with a

master's degree in District II. An increasing number of athletic trainers are serving as program directors and faculty at universities with an accredited entry level athletic training program. Hertel et al (2001) demonstrated the need for doctoral degrees to be eligible for these faculty positions. A master's degree must be obtained prior to an entrance into a doctoral program. However, there is limited research on what kind of graduate degree is preferred among employers (Kahanov & Andrews, 2001).

### **Importance of Graduate Level Education**

A bachelor's degree no longer appears to be sufficient to handle the growing field of allied health. Professions such as health education, physical therapy and nursing have all moved to post baccalaureate education to enhance their clinicians and their profession as a whole, athletic training is no exception. Ingersoll and Gieck (2003) presented a variety of reasons to attend a post certification graduate athletic training program as opposed to another related allied health or administrative field. They included a higher salary, increased knowledge, greater opportunity, and better job and personal fulfillment as reasons to obtain an advanced master's degree in athletic training. Ingersoll and Gieck (2003) noted fundamental skills learned in graduate school included, understanding as opposed to memorizing, becoming an expert in your field, and creating new ideas and innovative techniques. Post certification graduate athletic training education programs also serve to further the profession of athletic training by increasing the competencies of athletic trainers in the field (Horodyski, 2004). Athletic trainers can enhance marketability by attending an accredited post certification graduate athletic training program.



## **Summary**

Education in nursing, physical therapy and other allied health fields has expanded and matured over the years. There are many post baccalaureate education programs within these fields. These programs serve to expand the knowledge of clinicians and provide better care. Employers also view graduate degrees as more attractive than a bachelor's degree.

Athletic training education is following the paradigm of allied health counterparts. Post professional education is essential to increasing the base of knowledge and skills of entry-level athletic trainers. More athletic trainers attending post certification graduate athletic training programs will further the field of athletic training and provide leaders and agents of change to future athletic training careers.

## **CHAPTER III**

### **METHODOLOGY**

#### **Subject Characteristics**

Seventy-seven male (age =  $40 \pm 8.8$  yrs) and 32 female (age =  $37 \pm 8.6$  yrs) collegiate employers who advertised for a certified athletic trainer (ATC) on the National Athletic Trainers' Association placement vacancy notice (PVN) from October 2004 to August 2005 participated in this study. Employers included individuals who were searching for a full time staff ATC or positions splitting time between teaching and athletic training clinical duties. Employers whose clinical positions outsource staff to universities or colleges were also included in this study. Internship positions, graduate assistant positions, and full time academic positions were not included. A total of 248 surveys were sent out and 109 surveys were returned for a response rate of 44%. Our subject response pool included 57 head athletic trainers (52%), 24 directors of athletic training services/sports medicine (20%), and 11 athletic directors (10%). Other survey respondents included assistant athletic directors, athletic training education program directors, assistant athletic trainers, and employers serving dual roles as athletic trainer and associate athletic director or athletic trainer and athletic training education program director (Table 1). The Human Subjects Committee at the University approved this study and consent was granted by the subjects' voluntary completion and submission of the survey.

#### **Instrumentation**

Inquisite 6.01 Corporate Survey Builder (Catapult System Corporation, Austin, Texas) was utilized to develop an online survey to gather information about employers

**Table 1. Employer Title Demographics**

Employer Title	Number Of Subjects
Head ATC	57
Director of AT Services	24
Athletic Directors	11
Program Directors	5
Assistant ATC	5
Assistant AD/Director of Sports Medicine	4
Program Directors/Head ATC	2
Asst Director of Club Sports	1

and the respective institution, employer's knowledge of different graduate education programs, to identify the characteristics an employer prefers when hiring certified athletic trainers, and to identify the characteristics of the individual that was actually hired. The survey was constructed by the researchers using a variety of questions from previous surveys (Kahanov & Andrews, 2001; Arnold et al, 1998; Murray et al, 2001) and additional questions were added based on the responses of the pilot study. Face and content validity were assessed by educational experts in the field of athletic training, experts in survey research, and employers who had recently hired certified athletic trainers for the collegiate setting. Minor technical and formatting changes were made to the survey based upon the suggestions of the pilot subject pool. The survey was then distributed to a group of 10 employers on two separate occasions to examine reliability of the instrument. Reliability measures of the instrument ranged from  $r = .27 - r = 1.00$ . This range was considered acceptable based upon the type of question and elicited response (Appendix A).

The survey instrument was broken into four sections to gain specific information. The first section utilized fill in the blank and multiple choice questions to request demographic information from the employer including gender, ethnicity, age, years as an ATC, years in current position, highest educational degree, other certifications held by the employer (i.e. CSCS, PT License, EMT, Teacher certification), and the responsibilities of the employer (i.e. teaching duties, administrative duties, research responsibilities). This primary section also contained questions to determine the demographics of the institution including what male and female sports are covered by ATCs, what division and conference the institution competes in, athletic training

education programs offered by the university, the number of full time ATCs on staff, and if graduate assistants are employed by the athletic department. The second section assessed the employers' knowledge about the differences between post certification graduate athletic training programs, entry-level graduate athletic training programs, entry-level undergraduate athletic training programs, and other related graduate degrees in the field of allied health via a five point Likert scale and ranking questions. A five point Likert scale was also utilized in the third section of the survey to identify the characteristics employers most highly preferred in potential job candidates. The subjects were instructed to mark a one for characteristics most preferred. A three was equivalent to neutral preference for the characteristic. The subject was instructed to mark a five for a characteristic that they would not prefer to hire. Employers also had the option to mark a two or a four as a preference level for a specific characteristic. Two and four were not given a stated equivalency in the survey. It was assumed employers would understand these numbers were equivalent to preference levels between the defined preference levels. Fill in the blank and multiple choice questions made up the final section of the survey. The final section requested information about the individual whom was actually hired for the advertised athletic training position (Appendix B).

### **Testing Procedures**

Email addresses of employers were obtained from the placement vacancy notice on the National Athletic Trainers Association website. An email (Appendix C) describing the purpose and importance of this survey research, the estimated time to complete the survey, and the URL link for the instrument was sent to the email addresses that were collected from the PVN. The email also included contact information for

comments or concerns and offered an opportunity to enter a raffle to win a prize for completing the survey.

After the subjects completed the survey, the information was automatically sent to an excel database. Individual responses were matched with a code number to maintain anonymity. Follow-up emails were sent to the group of employers at one, two, three, four and five weeks following the initial mailings to thank them for participating and remind them to complete the survey if they had not already done so. We believe each subject only filled out the survey one time.

### **Data Analysis**

Statistical Package for Social Sciences (version 12.0, SPSS Inc. Chicago, IL) for Windows was utilized to calculate descriptive statistics for each question of the survey. Pearson correlations were used to determine relationships among characteristics of the employer and their preference for a candidate with a master's degree from a certain GATEP. Repeated measures and one-way ANOVAs were utilized to determine group differences among employers' preferences based on characteristics of the employer and demographics of the institution. Tukey's post hoc testing was conducted to determine specific interactions. An alpha level of .05 was used for all tests of statistical significance.

## CHAPTER IV

### RESULTS AND DISCUSSION

#### Results

Each question of the survey was analyzed using frequencies and descriptive statistics (Appendix D). We utilized descriptive statistics to determine specific characteristics employers preferred in potential athletic training job candidates. The preferences of educational background, other professional certifications held by the potential candidate, professional experience, personal qualities based on the interview and recommendations from references were all analyzed with descriptive statistics and frequencies. Information about the candidate who was actually hired was also examined utilizing descriptive statistics and frequencies.

#### *Employers' preference of specific characteristics*

The mean preference for each characteristic is displayed in Table 2. The candidate's performance on the interview ( $1.33 \pm .545$ ), athletic training experience at the collegiate setting ( $1.34 \pm .548$ ), and good recommendations from references ( $1.41 \pm .627$ ) were the characteristics employers reported the highest mean preferences. The characteristics employers had the lowest preference for included a candidate with a physical therapy license ( $3.14 \pm 1.04$ ), a candidate with teaching experience at the K-12 setting ( $3.43 \pm .946$ ), and a candidate with a master's and bachelor's degree from the same institution ( $3.44 \pm .799$ ).

Employers' preferences for three types of athletic training master's education programs were also analyzed. An ANOVA revealed significant differences in employers'

**Table 2. Mean Preferences for Specific Characteristics in Potential Athletic Training Job Candidates**

Employers Preferred Characteristics	Mean Preference	Standard Deviation
Personal Skills During Interview	1.33	0.545
AT Experience in College Setting	1.34	0.548
Good Recommendations from References	1.41	0.627
Sport Specific AT Experience	1.46	0.631
Reputation of Undergraduate ATEP	1.84	0.796
NATA Accredited Post Cert GATEP	1.86	0.938
Membership in Professional Organization	1.87	0.918
CAAHEP Accredited Undergraduate ATEP	2.04	0.952
Certified First Aid/CPR Instructor	2.06	0.859
Master's Degree in Related Field	2.2	0.743
High GPA from GATEP	2.38	0.704
University Teaching Experience	2.38	0.848
Administrative Experience	2.4	0.734
High Undergraduate GPA	2.46	0.811
CSCS Certification	2.67	0.721
Certified EMT	2.72	0.818
CAAHEP Accredited Entry Level GATEP	2.86	0.799
Non Related Work Experience	2.98	0.828
Internship Undergraduate ATEP	2.98	1.163
Research Publications/Presentations	3.01	0.811
Completed Terminal Degree	3.08	1.02
Physical Therapy License	3.14	1.041
K - 12 Teaching Experience	3.43	0.946
Master's and Bachelor's Degree from same Institution	3.44	0.799



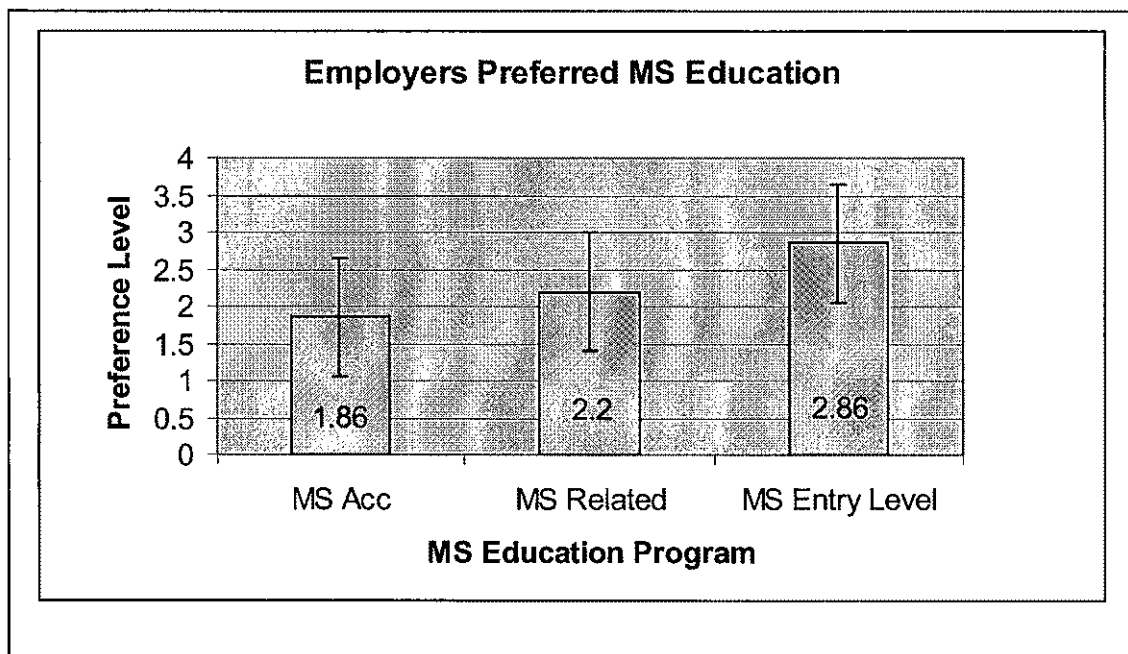
preference for graduate education degrees ( $p = .00$ ). Employers reported the highest preference for a master's degree from an accredited post certification GATEP ( $1.86 \pm .938$ ) when compared to the two other master's education degrees employers rated. A master's degree in a related field was given the second highest mean preference among master's education degrees ( $2.2 \pm .743$ ), followed by a master's degree from a CAAHEP accredited entry level graduate ATEP ( $2.86 \pm .789$ ). Tukey's post hoc testing revealed significant differences between an employer's preference for each of the three graduate athletic training education degrees (Figure 1).

*Differences in preferences according to employer and institution demographics*

A statistically significant relationship existed between the age of the employer and the employer's preference for a master's degree from an accredited post certification GATEP. Pearson's correlation demonstrated that as employers advance in age their preference for a candidate with a master's degree from an accredited post certification GATEP increases ( $r = -.248$ ;  $p = .009$ ). No statistically significant relationships were found among an employers number of years as an ATC or their number of years employed by the hiring institution and the employers preference for a specific master's education.

Statistically significant differences were found between the gender of the employer and their preference for a master's degree from an accredited post certification GATEP. A 2x3 repeated measures ANOVA revealed a main effect for the employers' preference for the candidate's master's education degree ( $p = .00$ ). A significant interaction also existed for employers' preference for a specific master's education degree and the employers' gender ( $p = .01$ ). Tukey's post hoc revealed numerous

**Figure 1: Employers Preferred MS Education**



\* = AccMS < MSRelated; † = AccMS < Entry MS; ‡ = MSRelated < Entry MS

significant differences between employers' preferences for the three different master's education programs according to the employers' gender. However, no significant differences existed between gender for any specific preference. We did find that males have a higher preference for an advanced degree, related or accredited, than an entry level master's degree, while there is no significant difference in master's education preference among females (Figure 2).

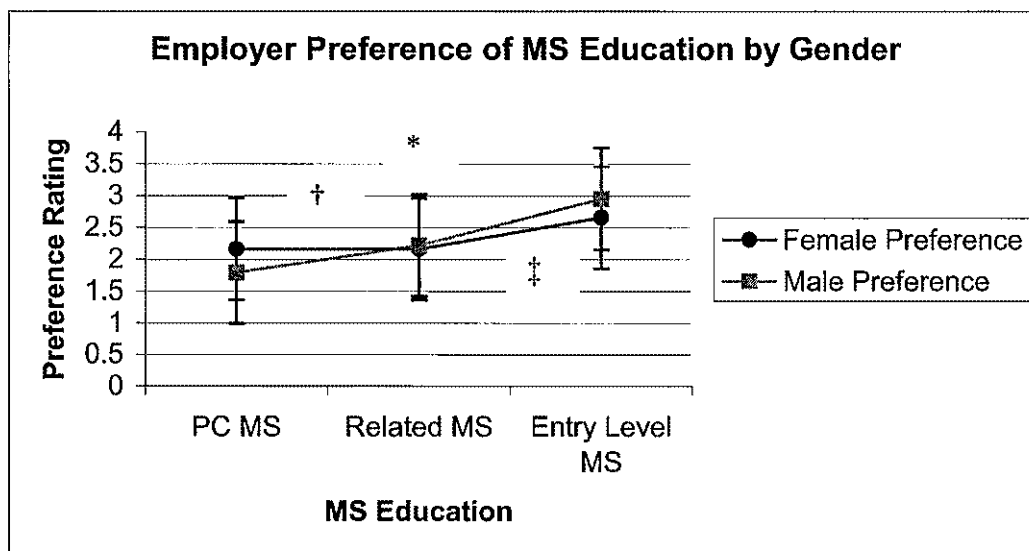
Repeated measures ANOVAs revealed no significant group differences based on an employers ethnicity, the employers highest level of degree, the employers self assessed knowledge of graduate athletic training education, an employers additional certifications (ie: CSCS, EMT, PT, First Aid/CPR Instructor) or additional responsibilities (ie: teaching duties or administrative duties) and the employers preference for a specific master's education degree. Repeated measures ANOVA's also revealed no statistically significant group differences between an employer's preference for a specific master's education based on the hiring institution's division or athletic training education programs at the hiring institution (Appendix E). Additionally, no significant relationship was found between the employers' preference for master's level education and the employers' years as an athletic trainer or years employed at the hiring institution.

## **Discussion**

### *Employers' preference of characteristics in potential job candidates*

We hypothesized that employers would highly prefer characteristics such as sport related experience, interview skills, type of degree and references in potential athletic training job candidates. We found that employers reported the performance on the interview, sport specific athletic training experience, athletic training experience at the

**Figure 2: Employer Preference of MS Education by Gender**



**\* = Males prefer PC MS > EL MS**

**† = Males prefer PC MS > Related MS**

**‡ = Males prefer Related MS > EL MS**

collegiate level and the recommendations from references as the top four preferred characteristics in potential job candidates. These findings are similar to the results of previous research which examined employers from three different settings (clinic, college, and high school) (Arnold et al, 1998; Kahanov & Andrews, 2001). The characteristics employers highly prefer have remained consistent over the past five years.

Athletic training education has undergone a variety of changes in the past ten years (Delforge & Behnke, 1999). According to the previous findings from Kahanov and Andrews (2001) and Arnold et al (1998) and our findings, educators should provide new graduates with sufficient opportunities to rehearse interview scenarios and focus on providing their students clinical experience at the collegiate setting if their students' ambition lies in working with college athletes. Students should also be informed of the importance of networking with the athletic trainers they have the opportunity to work with in order to enhance their pool of references. Understanding the characteristics that employers' value can help educators, students and current athletic trainers to prepare for a transition into their desired athletic training career.

We also hypothesized that employers at the college setting would highly prefer a Master's degree from an accredited NATA post certification GATEP. This characteristic was not listed among the top four most highly preferred characteristics. However, this characteristic was the most preferred attribute related to the master's level educational background of the applicant. Employers preferred a master's degree from an NATA accredited post certification GATEP (1.86) over a master's degree in a related field (2.2) or an entry level master's degree (2.86). Previous research revealed employers at the college setting placed significant value on a candidate with a master's degree. However,

the earlier research could not determine if these employers placed more preference on a specific type of master's degree (Arnold et al, 1998; Kahanov & Andrews, 2001).

Employers surveyed in this research remained consistent with previous research by reporting a higher preference for a candidate with a master's degree. The group of employers also displayed a higher preference for a candidate with a master's degree from an NATA accredited graduate program. The standards and guidelines for graduate education continue to change and advance. Employers might be aware of this, thus highly valuing a candidate from a post certification GATEP.

Employers at the college setting value a master's degree from a post certification program and also highly prefer good recommendations from references. It is possible these two preferences compliment each other. Students entering a post certification program are expanding their network as they join a class of 10 – 15 athletic trainers. It is also possible that program directors of post certification programs have a wider network among athletic trainers thus helping students in their program meet a variety of athletic trainers. Athletic trainers attending accredited GATEPs should be aware that these programs could significantly increase their reference network and assist their job search.

These findings are important as more and more athletic trainers pursue post baccalaureate education. Athletic training education program directors should be aware that a sample of employers prefer candidates with a master's degree from an accredited graduate program. This knowledge can better equip undergraduate educators to assist their students in making choices to best suit their ambitions. If a student desires to work at the college setting they should be made aware of the accredited graduate programs as they are applying for master's programs.

*Employer master's education preferences based on the demographics of the employer and the institution*

We hypothesized that a variety of factors pertaining to the employer's background and demographics of the hiring institution would affect preferences for master's education routes. Age was the only aspect of an employer's background that displayed a significant relationship to an employer's preference for a master's degree from an accredited GATEP. We hypothesized that there would be a positive relationship between age and preference. We thought younger employers would have a higher preference for a candidate with a master's degree from an accredited GATEP. Our hypothesis was based on the significant transformation of GATEPs over the years and the continual revisions of the standards and guidelines. Originally these programs existed as a method for students to gain eligibility to take the BOC exam. GATEPs have also developed a more vigorous research aspect over the years along with considerable curriculum changes. It can be difficult to keep up with the constant changes in education. However, this research revealed that older employers have a higher preference for a master's degree from an accredited GATEP, counter to our hypothesis.

One explanation for this finding might pertain to the hiring experience of an older athletic trainer. An older employer is more likely to have more experience in hiring athletic trainers. Perhaps these employers have had the chance to compare athletic trainers with degrees from different graduate education programs and have come to prefer candidates with accredited master's degrees. Research might be warranted to determine what characteristics of applicants with a master's degree from an accredited GATEP are appealing to the employer.

We also hypothesized there would be significant differences in an employer's master's educational preference based upon the employer's gender. We believed female employers would have a higher preference for a candidate with a master's degree from a post certification GATEP. With more females graduating in athletic training from accredited GATEP (NATA News, 2005) it might be safe to infer there are more females in positions to hire employees from the same type of graduate programs from which they graduated. However, our results revealed no significant differences among female employer's preferences for a candidate from a specific type of graduate education program. Males had a significantly higher preference for a candidate from an accredited post certification GATEP. The change from a male dominated profession to a female dominated profession is a recent occurrence. Our subject pool displayed the prevalence of male employers at the college setting. Despite the fact that presently more females are graduating from accredited programs, it is feasible male employers serve as the hiring agents and have more experience with job applicants from different educational backgrounds. More experience with the hiring process and candidates from different educational backgrounds could give males a better understanding of the importance of a master's degree from different programs and thus a higher preference for a candidate with a master's degree from an accredited GATEP.

These findings are beneficial to accredited graduate program directors. The fact that older employers have a higher preference for accredited graduate programs is important, but the fact that younger employers have a lower preference should be addressed. Graduate program directors should continue to educate employers of the



rigorous educational standards within accredited programs and how these educational programs enhance athletic trainers seeking employment.

We hypothesized other demographics of the employer and institution would affect an employer's preference for a specific master's degree. These demographics included the employer's ethnicity, the employer's highest level of degree, the employer's self assessed knowledge of graduate athletic training education, or an employer's additional certifications (ie: CSCS, EMT, PT, First Aid/CPR Instructor) or additional responsibilities (ie: teaching duties or administrative duties) and the hiring institution's division or athletic training education programs at the hiring institution. All of these factors had no effect on the employers' preference for master's education. We speculated that employers at higher divisions, employers with more experience as an athletic trainer or employers with additional responsibilities might prefer an applicant from one type of graduate program over another. Different demographics or responsibilities could cause an employer to value different characteristics such as what type of graduate education a job applicant has received. However, the results of our survey did not show this. Understanding what causes employers to value specific characteristics could provide explanation for athletic trainers why certain attributes are important to learn for when they enter the job field.

We hypothesized employers who knew more about graduate athletic training programs would have a higher or lower preference for specific programs, however employers may not be aware of the changes that have been made in graduate athletic training education. The curriculum differences between accredited graduate programs and graduate programs in related fields are substantial. The different types of graduate

programs shape and mold job candidates differently. It is imperative for graduate athletic training education program directors to intentionally educate both students and employers about the different aspects of accredited graduate programs. If employers are more informed of graduate education programs they might have an increased ability to hire candidates that most closely match their position.

We also hypothesized significant differences would exist between employers preference for a candidate from a specific athletic training graduate program based upon the employers specific degree. Employers who have graduated from accredited master's programs might have a better understanding of these programs and prefer a candidate from this program. An employer who received his/her master's degree from a related field may believe this degree is sufficient for an athletic trainer at the college setting, however, these differences were not found. It might be interesting to note the degree the employer has and when he/she received their degree. If the employer received their degree prior to the implementation of changes in athletic training education they may not be aware of the differences in curricula among different master's programs. The results of this survey continue to show the importance of making employers aware of the differences in educational master's degrees within the field of athletic training.

Employer preferences of a candidate's type of graduate degree were not significantly different based upon any institutional demographics. We hypothesized there would be significant differences in employer preference for a candidate with a certain master's degree according to athletic training programs at the hiring institution. According to the NATA Career Center, many employers are seeking to hire an athletic trainer who can also serve as an approved clinical instructor (ACI). A recent graduate

from an entry level master's GATEP would not have enough experience to supervise athletic training students. Employers did have a lower mean preference for these candidates, but the difference was not significant.

We also hypothesized employers from higher divisions would prefer a candidate from an accredited post certification GATEP. If an institution has to compete at a higher level it is possible the employer would look for an athletic trainer with more intensive athletic training experience and education. However, according to the results of the survey employers continue to hold sport specific experience and experience at the college setting as the most preferred characteristics. Accredited GATEP's combine athletic training education and clinical experience to provide students with more intensive athletic training experience as opposed to a master's from a general field where students work in the athletic training room and could be learning about administration, education or something outside the realm of athletic training. The fact that students of accredited GATEPs can apply what they are learning in the classroom and the athletic training room helps them become better clinicians and should be more appealing to an employer seeking an experienced candidate.

### *Hired Candidates*

The subjects of this research clearly have a higher preference for a candidate with a master's degree from an accredited graduate program. However, the information about the candidates who were actually hired does not reflect the employer's reported preference. 101 of the 109 candidates hired had a master's degree. These numbers support the previous research efforts which found a master's degree to be important to employers (Kahanov & Andrews, 2000; Arnold et al, 1998). However, only 26 of the

hired candidates graduated from an accredited graduate athletic training education program. These numbers do not reflect the findings of this study. Collegiate employers claim to highly value candidates from an accredited graduate program, but these are not the candidate they are hiring.

The applicant pool could help explain why employers are not hiring the applicants with the master's education they most highly prefer. In our study employers reported an average of 33 applicants for each position, but only an average of 20 applicants actually met the criteria. The results of our study showed 100 of the 109 candidates who were hired had a master's degree, however only 26 of the hired candidates had a master's degree from an accredited post certification GATEP while 68 of the newly hired athletic trainers had a master's degree in a related field. We do not know how many of the total applicants had a master's degree from a post certification GATEP of the average three that were brought on campus or the average nine that were phone interviewed.

The number of NATA accredited post certification GATEPs throughout the country is small. In 2004 there were only 141 graduates of accredited GATEPs. Less than half of these graduates found employment within the collegiate setting. In 2004 35% of graduates from accredited GATEP found employment at a clinic, 14% were employed by high schools and 6% worked with professional sports (NATA NEWS, 2005). These graduates may also continue their education or choose a field outside of athletic training. With graduates of post certification programs pursuing jobs outside the collegiate athletic training setting, employers at the college setting may not have an applicant pool with the qualities they most prefer.

## CHAPTER V

### CONCLUSIONS

Previous research has documented the importance collegiate employers place on a master's degree when hiring athletic trainers (Kahanov & Andrews, 2000; Arnold et al, 1998). Education in athletic training is continually evolving and there are numerous methods for an athletic trainer to obtain a master's degree. No research has been done to determine collegiate employer's preference for a master's degree from a specific type of graduate athletic training program. The purpose of this study was to determine the characteristics collegiate employers are seeking in potential athletic training job candidates, specifically what type of masters education employers seek in job applicants. We also looked for differences among employers preferences based upon the characteristics of the employer and the demographics of the institution.

The results coincided with previous research (Kahanov & Andrews, 2001; Arnold et al, 1998). Performance on the interview, collegiate athletic training experience, and recommendations from references received the highest mean preferences. However, when employers were asked to specifically rate three different forms of master's education, employers had the highest preference for a candidate with a master's degree from an accredited post certification GATEP. The results also revealed significant differences among employers preferences based on the age and gender of the employer. No significant differences existed among employer preferences according to institutional demographics.

This research reinforced the importance of athletic training educators providing athletic training students with sufficient opportunity to gain interview experience, athletic

training experience specific to the students' career goals and networking occasions to increase their reference pool. According to this research, athletic training educators should also make students aware of the accredited graduate athletic training programs if students intend to seek employment at the collegiate setting.

### *Future Studies*

Significant differences among employers preference for candidates from a specific type of GATEP only existed among gender and age. Additional research should determine more specific information about employers' knowledge of graduate athletic training education to gain a better understanding how to effectively advertise accredited graduate athletic training programs. Finally, it may be interesting to compare employers satisfaction with athletic training employees from the three different types of master's athletic training education programs examined in this study.

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**A.1 Reliability Values for Questions Regarding Employer Demographics**

Employer Demographic	Reliability Value
Gender	1.00
Ethnicity	1.00
Age	1.00
Title	1.00
Yrs as ATC	1.00
Yrs at Institution	1.00
Highest Education Degree	0.95
Knowledge of GATEP	1.00

**A.2 Reliability Values for Questions Regarding Employer Responsibilities**

Additional Employer Information	Reliability Value
Teaching Duties	1.00
Administration Duties	1.00
Research Responsibilities	1.00
CSCS Credential	1.00
Certified EMT	1.00
Physical Therapy License	1.00
First Aid Instructor	1.00

### A.3 Reliability Values for Questions Regarding Demographics of the Institution

Institution Demographics	Reliability Value
Division	0.93
# of Sports	0.99
# of Staff Athletic Trainers	0.92
Graduate Assistants	1.00
Undergraduate CAAHEP ATEP	1.00
Accredited GATEP	1.00

#### A.4 Reliability Values for Questions Regarding Employer Preferences

Preferred Characteristic	Reliability Value
Internship Undergraduate	0.82
Accredited Undergraduate	0.56
Reputation of Undergraduate Program	0.74
High GPA from Undergraduate	0.84
Master's Degree in Related Field	0.71
Master's Degree from Accredited GATEP	0.66
Entry Level Master's Degree	0.27
Terminal Degree	0.95
Undergraduate and Master's from same institution	0.92
High GPA from Master's	0.64
Sport Specific AT Experience	0.88
Collegiate AT Experience	1.00
Membership in Professional Organization	0.82
CSCS Credential	0.75
First Aid/CPR Instructor	0.68
EMT	0.67
Administration Experience	0.56
College Teaching Experience	0.50
Physical Therapy License	0.83
K-12 Teaching Experience	0.82
Non Related Work Experience	0.84
Interview Skills	0.88
Prefer References	0.53

### A.5 Reliability Values for Questions Regarding the Characteristics of the Candidate who was hired

Characteristics of Hired Candidate	Reliability Value
Degree	0.67
Type of Undergraduate Degree	1.00
Type of Master's Degree	0.60
Years AT Experience	0.15
Employer Familiar with Education Background	1.00
First Aid/CPR Instructor	1.00
CSCS	1.00
Physical Therapist License	1.00
# of yrs sport specific Experience	0.84
# of years teaching experience	0.58
Administration experience	0.80
Interview performance	1.00

## To: Collegiate Employer Seeking a Certified Athletic Trainer

I am requesting your assistance for a research study that is being conducted at Old Dominion University. Please take a few moments to fill out the survey and help us to obtain a sufficient number of responses so that our results truly reflect the concept of the study. Please review the paragraphs below which describe the study or proceed directly to the URL web link (<https://periwinkle.ts.odu.edu/surveys/4CTDJM>)

This research seeks to study the characteristics collegiate employers are looking for in job candidates for an athletic training position. You have been sent this email because sometime between August 2005 and October 2004 you posted a position seeking a certified athletic trainer for a position in the collegiate setting on the placement vacancy notice on the National Athletic Trainers Association Website. Please forward this survey to the head of your hiring committee to provide more accurate information for this study. Your participation is essential to the success of this research.

Below you will find a link that will take you directly to an on-line survey that seeks to identify demographic information about you (the employer), your knowledge of graduate athletic training education programs, your desired job characteristics of candidates applying for the position you need to fill, and characteristics about the individual that you actually hired. The survey will require 10-15 minutes of your time and your answers will remain anonymous. By pressing the Finish button on the last page of the on-line survey your responses will be automatically sent in.

All the participants will be given multiple chances to enter to win gift certificates to various vendors. Participants will also be given the opportunity to receive the results of the study once the research has been completed. Your help with this study is greatly appreciated and will enable athletic training students to understand what direction they should take upon graduating from their undergraduate institution if they seek to work at the collegiate setting. This research has been approved by the Old Dominion University Darden College of Education Human Subjects Review Committee. Any questions regarding the format or results of this study can be directed towards Amber Landis (757-962-7154 or [aland012@odu.edu](mailto:aland012@odu.edu))

To begin, please click on the link below or copy the link and paste it into your internet browsers address area.

<https://periwinkle.ts.odu.edu/surveys/4CTDJM>

Thank you again for your time and participation.

## Collegiate Employer Preferred Characteristics Survey

The purpose of this study is to determine the characteristics that are most important to collegiate employers when hiring a Certified Athletic Trainer. A secondary purpose will be to examine demographics of employers and the institution that may influence their decisions when hiring a Certified Athletic Trainer at the collegiate setting.

### A: Demographics of Employer

#### PAGE 1

1. SEX M/F                      2. Ethnic Background: \_\_\_\_\_                      3. Age \_\_\_\_\_

4. Current Title at Institution:

\_\_\_\_ Director of Sports Medicine

\_\_\_\_ Athletic Director

\_\_\_\_ Head Athletic Trainer

\_\_\_\_ Other \_\_\_\_\_

\_\_\_\_ Assistant Athletic Trainer

5. Years as an ATC \_\_\_\_\_

6. Years at your present institution \_\_\_\_\_



**PAGE 2**

1. What is the highest educational degree you have attained?

- |  |   |
|--|---|
| <input type="checkbox"/> BS in Athletic Training               | <input type="checkbox"/> MA/MS in related field         |
| <input type="checkbox"/> BA/BS in Related Allied Health Field  | <input type="checkbox"/> PhD/EdD in Allied Health Field |
| <input type="checkbox"/> MS/MA from Post Certification         | <input type="checkbox"/> PhD/EdD in OTHER field         |
| <input type="checkbox"/> Graduate Athletic Training<br>Program | <input type="checkbox"/> Other: _____                   |

2. Do you have any teaching duties? YES/NO

3. Do you have any administrative duties? YES/NO

4. What additional credentials do you have?

- |   |  |
|---|--|
| <input type="checkbox"/> CSCS               | <input type="checkbox"/> Teacher Certification |
| <input type="checkbox"/> EMT                | <input type="checkbox"/> First Aid Instructor  |
| <input type="checkbox"/> Physical Therapist | <input type="checkbox"/> None of the Above     |

**B. Demographics of Institution****PAGE 3**

1. What Division is your institution?

\_\_\_\_ I

\_\_\_\_ III

\_\_\_\_ II

\_\_\_\_ NAIA

2. What Athletic Conference does your institution participate in? \_\_\_\_\_

3. How many sanctioned sports compete for your institution? \_\_\_\_\_

4. Is your AT staff required to cover club/intramural sports? YES/NO

**PAGE 4**

1. Please Check all the Female sports covered by the athletic training staff

<input type="checkbox"/> Field Hockey	<input type="checkbox"/> Track and Field
<input type="checkbox"/> Cross country	<input type="checkbox"/> Lacrosse
<input type="checkbox"/> Soccer	<input type="checkbox"/> Swimming
<input type="checkbox"/> Volleyball	<input type="checkbox"/> Diving
<input type="checkbox"/> Basketball	<input type="checkbox"/> Softball

2. Please Check all the MALE sports covered by the athletic training staff?

<input type="checkbox"/> Football	<input type="checkbox"/> Lacrosse
<input type="checkbox"/> Cross Country	<input type="checkbox"/> Swimming
<input type="checkbox"/> Soccer	<input type="checkbox"/> Diving
<input type="checkbox"/> Volleyball	<input type="checkbox"/> Baseball
<input type="checkbox"/> Basketball	<input type="checkbox"/> Wrestling
<input type="checkbox"/> Track and Field	

**PAGE 5**

1. How many FULL TIME Athletic Trainers on Staff? \_\_\_\_\_
2. Do you have graduate assistant athletic trainers? YES/NO
3. Does your institution have a CAAHEP Accredited undergraduate athletic training education program? YES/NO
4. Does your institution have an NATA accredited graduate athletic training education program? YES/NO
5. Is there a hiring committee? YES/NO
6. Who makes up the hiring committee?

\_\_\_\_ Athletic Director

\_\_\_\_ University Administration

\_\_\_\_ Athletic Coaches

\_\_\_\_ Academic Faculty

\_\_\_\_ Athletic Training Staff

\_\_\_\_ OTHER \_\_\_\_\_

**PAGE 6**

1. How knowledgeable are you concerning master's athletic training education?

\_\_\_\_very knowledgeable

\_\_\_\_minimally knowledgeable

\_\_\_\_somewhat knowledgeable

\_\_\_\_NO knowledge

**PAGE 7** (subjects who answered very knowledgeable, minimal knowledgeable, NO knowledge)

1. Please check which of the following educational backgrounds is the most desirable in a job candidate.

\_\_\_\_\_ Internship Undergraduate – Master's in a Related Field

\_\_\_\_\_ Internship Undergraduate -- Accredited Master's Degree

\_\_\_\_\_ CAAHEP Accredited Undergraduate – Master's in Related Field

\_\_\_\_\_ CAAHEP Accredited Undergraduate – Accredited Master's

\_\_\_\_\_ general undergraduate – Accredited entry level master's

\_\_\_\_\_ no preference

**PAGE 8** (Subjects who answered somewhat knowledgeable)

## 1. Please RANK the following educational backgrounds

1 = you would highly prefer someone with this background

5 = you would rank this as the least preferred background

\_\_\_\_ Internship Undergraduate – Master’s in a Related Field

\_\_\_\_ Internship Undergraduate – Accredited Master’s Degree

\_\_\_\_ CAAHEP Accredited Undergraduate – Master’s in Related Field

\_\_\_\_ CAAHEP Accredited Undergraduate – Accredited Master’s

\_\_\_\_ General undergraduate – Accredited entry level master’s

**PAGE 9**

Please rate your preference for each characteristic when considering an applicant for your advertised position

1 = prefer to hire

3 = neutral preference

5 = prefer not to hire

1. Bachelor's Degree via Internship \_\_\_\_\_
2. Bachelor's Degree via accredited undergraduate curriculum \_\_\_\_\_
3. Reputation of Bachelor's Education Program \_\_\_\_\_
4. High GPA upon graduation of undergraduate program \_\_\_\_\_



**PAGE 10**

1. Master's Degree from Accredited Post Certification Graduate Athletic Training

Education Program \_\_\_\_\_.

2. Master's Degree in Related Field \_\_\_\_\_

3. Entry Level Master's Degree \_\_\_\_\_

**PAGE 11**

1. High GPA upon completion of graduate program \_\_\_\_\_
2. Bachelor's and Master's Degree from the same institution \_\_\_\_\_
3. Completed Terminal Degree (PhD, EdD) \_\_\_\_\_

**PAGE 12**

1. Sport Related Experience \_\_\_\_\_
2. Experience at College Level \_\_\_\_\_
3. Membership in Professional Organization \_\_\_\_\_
4. CSCS Certification \_\_\_\_\_
5. CPR/FA Certified Instructor \_\_\_\_\_
6. EMT Certification \_\_\_\_\_

**PAGE 13**

1. Physical Therapy License \_\_\_\_\_
2. Teaching Experience at College level \_\_\_\_\_
3. Teaching experience at K-12 \_\_\_\_\_
4. Research Publications/Presentations \_\_\_\_\_
5. Administrative Experience \_\_\_\_\_

**PAGE 14**

1. Non related Work Experience \_\_\_\_\_
2. Personal Skills during the interview \_\_\_\_\_
3. Recommendations from references \_\_\_\_\_

**PAGE 15**

Please Rank which characteristics are important to you when hiring an athletic trainer

1 = most important

3 = somewhat important

5 = minimally important

\_\_\_\_\_ Educational Background

\_\_\_\_\_ Athletic Training Experience

\_\_\_\_\_ Additional Certifications (CSCS, PT License, EMT, First Aid Instructor)

\_\_\_\_\_ Performance on Interview

\_\_\_\_\_ Recommendations from References

**PAGE 16**

Please answer the following questions about the position you posted on the NATA PVN and the applicant pool that was available to you:

1. Did this position require a Master's Degree

\_\_\_ YES

\_\_\_ NO

\_\_\_ PREFERRED

2. Does your institution have any stipulations on whom you may hire? YES/NO

3. Approximately how many people applied for this position? \_\_\_\_\_

4. Approximately how many applicants met the criteria for this position? \_\_\_\_\_

5. Approximately how many applicants did you phone interview? \_\_\_\_\_

6. Approximately how many people did you bring to campus for an interview? \_\_\_\_\_

**Page 17**

If you have hired a person for the job description you placed on the NATA PVN please answer the following questions about that person

1. What level degree did the candidate you hired possess?

\_\_\_\_ Bachelor's                      \_\_\_\_ Master's                      \_\_\_\_ Terminal Degree

2. What Type of Bachelor's Program did the candidate you hired graduate from?

\_\_\_\_ CAAHEP Accredited

\_\_\_\_ Internship Program

\_\_\_\_ General Undergraduate

3. What type of master's program did the person graduate from?

\_\_\_\_ Accredited Post Certification Graduate Program

\_\_\_\_ Entry Level master's Program

\_\_\_\_ Master's in related field



**Page 18**

1. How many years of previous college experience did the applicant have? \_\_\_\_\_

2. Were you familiar with the academic program(s) the applicant graduated from?

YES/NO

3. What other credentials does the candidate hold?

\_\_\_\_ CSCS

\_\_\_\_ FA/CPR Instructor

\_\_\_\_ Physical Therapy License

\_\_\_\_ EMT

\_\_\_\_ None of the Above

4. How many years of sport experience did the applicant have? \_\_\_\_\_

5. How many years of teaching experience did the applicant have? \_\_\_\_\_

6. Did the applicant have administration experience? YES/NO

7. Did the applicant perform well on the interview? YES/NO

<b>D.1 Employer Demographics</b>			
	#	SD	Range
Males	77.00		
Females	32.00		
Caucasian	102.00		
Minority	7.00		
Age	39.73	8.86	25-60
Years at Institution	11.21	8.53	1 - 34
Years as ATC	14.21	8.60	0-35
Highest Educational Degree			
	Bachelor's	12.00	
	Accredited MS	34.00	
	Other MS	56.00	
	Terminal	16.00	
Knowledge of Master's GATEPs			
	Very	30.00	
	Somewhat	62.00	
	Minimal	15.00	
	None	2.00	

<b>D.2 Employer Other Duties and Certifications</b>	
	% of Employers answered YES
Teaching	55.00
Administration	94.50
Research	7.30
CSCS	14.70
EMT	9.20
Physical Therapist	3.70
First Aid/CPR Instructor	40.40

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**D.3 Institution  
Demographics**


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Division	I	36
	II	25
	III/NAIA	48
% with CAAHEP ATEP		34.9
% with Accredited GATEP		2.8

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**D.4 Information about the Applicant Pool**


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	Mean	SD	Range
# of Applicants	33.06	30.46	0 -155
# of Applicants Met Criteria	20.87	21.31	1 - 127
# of Phone Interviews	5.44	7.38	0 - 50
# of Applicants On Campus	3	1.51	0 - 10

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**D.5 Information about Hired  
Candidate**


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	#	% YES	Mean	SD	Range
Bachelor's	8.00	7.30			
CAAHEP	73.00	67.00			
Internship	31.00	28.40			
General	5.00	4.60			
Master's	100.00	91.70			
Accredited	26.00	23.90			
GATEP					
Related Field	68.00	62.40			
Entry Level	15.00	13.80			
Terminal Degree	1.00	0.90			
Familiar with Academic Program	90.00	82.60			
Administration Experience	60.00	55.00			
CPR/FA Instructor	39.00	35.80			
CSCS	21.00	19.30			
EMT	6.00	5.50			
Physical Therapist	2.00	1.80			
Perform Well On Interview	109.00	100.00			
Yrs Sport Specific Exp			4.65	3.75	0 - 25
Yrs Teaching Experience			1.31	2.37	0 - 16

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**E.1 Gender x Preference**

Source of Variance		Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance
Within	Preference	35.06	2.00	17.53	26.47	0.00
	Preference X Gender	5.90	2.00	2.95	4.46	0.01
	Error	141.72	214.00	0.66		
Between	Gender	0.03	1.00	0.03	0.04	0.85
	Error	75.78	107.00	0.71		

**E.2 Ethnicity x Preference**

Source of Variance		Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance
Within	Preference	23.27	2.00	11.64	17.14	0.00
	Preference X Ethnicity	2.37	2.00	1.18	1.74	0.18
	Error	145.26	214.00	0.68		
Between	Ethnicity	0.01	1.00	0.01	0.02	0.89
	Error	75.79	107.00	0.71		

**E.3 Employer Education x Preference**

Source of Variance		Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance
Within	Preference	40.60	2.00	20.30	29.42	0.00
	Preference X Employer Education	2.75	6.00	0.46	0.66	0.68
	Error	144.88	210.00	0.69		
Between	Employer Education	0.36	3.00	0.12	0.17	0.92
	Error	75.44	105.00	0.72		

**E.4 Employer Preference X Employer Knowledge of AT Ed**

Source of Variance		Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance
Within	Preference	17.15	2.00	8.57	12.45	0.00
	Preference X Employer Knowledge	3.02	6.00	0.50	0.73	0.62
	Error	144.61	210.00	0.69		
Between	Employer Education	3.47	3.00	1.16	1.68	0.18
	Error	72.33	105.00	0.69		

**E.5 Employer Preference X Institution GATEP**

Source of Variance		Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance
Within	Preference	13.35	2.00	6.67	9.78	0.00
	Preference X Institution GATEP	1.60	2.00	0.80	1.18	0.31
	Error	146.02	214.00	0.68		
Between	Employer Education	0.07	1.00	0.07	0.10	0.75
	Error	75.73	107.00	0.71		

**E.6 Employer Preference X Institution CAAHEP**

Source of Variance		Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance
Within	Preference	51.87	2.00	25.93	38.09	0.00
	Preference X Institution CAAHEP	1.92	2.00	0.96	1.41	0.25
	Error	145.71	214.00	0.68		
Between	Employer Education	1.04	1.00	1.04	1.49	0.23
	Error	74.76	107.00	0.70		

**E.7 Employer Preference X Institution Division**

Source of Variance		Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance
Within	Preference	53.94	2.00	26.97	39.03	0.00
	Preference X Institution Division	1.14	4.00	0.29	0.41	0.80
	Error	146.48	212.00	0.69		
Between	Institution Division	1.93	2.00	0.97	1.39	0.25
	Error	73.87	106.00	0.70		

**E.8 Employer Preference X Employer Title**

Source of Variance		Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance
Within	Preference	20.48	2.00	10.24	14.68	0.00
	Preference X Employer Title	5.32	12.00	0.44	0.64	0.81
	Error	142.31	204.00	0.70		
Between	Employer Title	3.26	6.00	0.54	0.76	0.60
	Error	72.54	102.00	0.71		

**E.9 Employer Preference X Employer Teaching Duties**

Source of Variance		Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance
Within	Preference	54.93	2.00	27.47	40.01	0.00
	Preference X Employer Teaching Duties	0.71	2.00	0.35	0.51	0.60
	Error	146.92	214.00	0.69		
Between	Employer Teaching Duties	0.00	1.00	0.00	0.01	0.94
	Error	75.80	107.00	0.71		

**E.10 Employer Preference X Employer Admin Duties**

Source of Variance		Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance
Within	Preference	13.42	2.00	6.71	9.74	0.00
	Preference X Employer Admin Duties	0.11	2.00	0.06	0.08	0.92
	Error	147.51	214.00	0.69		
Between	Employer Admin Duties	0.12	1.00	0.12	0.17	0.68
	Error	75.68	107.00	0.71		

**E.12 Employer Preference X Employer Research Duties**

Source of Variance		Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance
Within	Preference	31.64	2.00	15.82	23.70	0.00
	Preference X Employer Research Duties	4.79	2.00	2.39	3.59	0.03
	Error	142.84	214.00	0.67		
Between	Employer Research Duties	0.52	1.00	0.52	0.74	0.39
	Error	75.28	107.00	0.70		

**E.13 Employer Preference X Employer CSCS**

Source of Variance		Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance
Within	Preference	22.27	2.00	11.13	16.24	0.00
	Preference X Employer CSCS	0.91	2.00	0.45	0.66	0.52
	Error	146.72	214.00	0.69		
Between	Employer CSCS	0.83	1.00	0.83	1.18	0.28
	Error	74.98	107.00	0.70		

**E.14 Employer Preference X Employer EMT**

Source of Variance		Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance
Within	Preference	1.02	2.00	0.51	0.76	0.47
	Preference X EMT	5.11	4.00	1.28	1.90	0.11
	Error	142.52	212.00	0.67		
Between	Employer EMT	1.68	2.00	0.84	1.20	0.30
	Error	74.12	106.00	0.70		

**E.15 Employer Preference X Employer PT**

Source of Variance		Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance
Within	Preference	11.19	2.00	5.59	8.15	0.00
	Preference X PT	0.73	2.00	0.36	0.53	0.59
	Error	146.90	214.00	0.69		
Between	Employer PT	0.25	1.00	0.25	0.36	0.55
	Error	75.55	107.00	0.71		

**E.16 Employer Preference X Employer Teach Cert**

Source of Variance		Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance
Within	Preference	15.59	2.00	7.79	11.66	0.00
	Preference X Teach Cert	4.61	2.00	2.31	3.45	0.03
	Error	143.01	214.00	0.67		
Between	Employer Teach Cert	0.19	1.00	0.19	0.28	0.60
	Error	75.61	107.00	0.71		



**E.17 Employer Preference X Employer FA/CPR Instructor**

Source of Variance		Sum of Squares	Degree of Freedom	Mean Square	F Value	Significance
Within	Preference	52.84	2.00	26.42	38.87	0.00
	Preference X FA/CPR Instructor	2.16	2.00	1.08	1.59	0.21
	Error	145.46	214.00	0.68		
Between	Employer FA/CPR Instructor	0.10	1.00	0.10	0.14	0.71
	Error	75.71	107.00	0.71		

**Amber S Landis***Department of Study*

Old Dominion University  
 Department of ESPER  
 HPE Building  
 Norfolk, Virginia 23529

*Education*

May 2006	Master of Science in Education Old Dominion University Norfolk, Virginia
May 2004	Bachelor of Science in Biokinetics Eastern University St. Davids, Pennsylvania

*Professional Experience*

1/06 – 5/06	Graduate Teaching Assistant, Old Dominion University Acted as a teaching assistant for Prevention and Care of Athletic Injuries and Advanced First Aid. Responsibilities included certifying students in CPR, preparing the syllabus, lectures, and practical and written examinations for undergraduate students.
8/04 – 5/06	Graduate Assistant, Old Dominion University Coordinated the treatment and care for Division I Women's soccer, women's lacrosse, field hockey and women's basketball teams. Established communication with the coaches and the head athletic trainer regarding athlete's injury status. Generated injury reports and maintained daily records. Supported staff in daily functions of athletic training room.