Spring 2007

Curricular Satisfaction Levels of NATA Accredited Post-Professional Athletic Training Graduates

Kevin J. Henry
Old Dominion University

CURRICULAR SATISFACTION LEVELS OF NATA ACCREDITED POST-PROFESSIONAL ATHLETIC TRAINING GRADUATES

by

Kevin J. Henry
B.S. May 2005, Marist College

A Thesis Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
Requirement for the Degree of

MASTER OF SCIENCE

EDUCATION

OLD DOMINION UNIVERSITY
MAY 2007

Approved by:

Bonnie L. Van Lunen (Director)

James A. Oñate (Member)

Brian Uhlemann (Member)

ABSTRACT

CURRICULAR SATISFACTION LEVELS OF NATA ACCREDITED POST-PROFESSIONAL ATHLETIC TRAINING GRADUATES

Kevin J. Henry
Old Dominion University, 2007
Director: Dr. Bonnie L. Van Lunen

The purpose of this study was to examine the overall satisfaction levels of recent graduates (2005 - 2006) of NATA-Accredited Post-Professional Graduate Athletic Training Education Programs as related to the 2002 *Standards and Guidelines* for Graduate Education. An electronic survey was developed by the researchers to gather demographic data about the subjects, and to assess their level of satisfaction with various curricular areas of their graduate program using a combination of open and closed-ended questions. A listing of the names of the graduates of the twelve programs from May 2005-May 2006 was generated, and these subjects were emailed a letter which contained a link to the online survey. The overall number of survey recipients was 211 and 123 surveys were returned, yielding a 58.29% response rate. Descriptive and frequency statistics were gathered for each question to determine patterns in demographics and open-ended questions. ANOVAs and Independent T-Tests were used to determine any differences in satisfaction areas in relation to gender, length of program, time between undergraduate and graduate degree programs, and time taken to complete their graduate degree requirements. Results revealed that there were no overall differences in satisfaction in any of the ten standard areas between genders, length of program, and if the student took time off from school between their undergraduate and graduate degree programs. Results demonstrated that students who took more than the allotted amount

of time to complete their graduate degree requirements were significantly less-satisfied in the areas of depth of learning, breadth of learning, instructor availability, writing, and overall program satisfaction. Our research has concluded that graduates are generally satisfied across all the areas of their graduate education, as it relates to their didactic curriculum. Student satisfaction and program evaluation are useful means of evaluating the efficacy of a program, and because limited research has been conducted in Post-Professional Graduate Athletic Training Education, it was important for the authors to determine if programs have been able to accurately convey the information that it intends to its students. Future studies should focus on reform and updates in graduate education standards.

Co-Directors of Advisory Committee: Dr. James A. Oñate
Dr. Brian Udermann

This thesis is dedicated to any student who chooses to pursue a graduate degree.
Higher education requires a vigorous commitment, and demands a level
of effort and sacrifice that not every student is willing to make.
You are the future of our profession, and your diligence and tireless energy
will ultimately bring our field to new heights. Best of Luck to you.

ACKNOWLEDGMENTS

First and foremost, I would like to thank the members of my thesis committee for their commitment to this research venture. This was my first research experience, and I never would have seen this project come to fruition if not for your efforts. To think that just fifteen months ago, I had packed my bags and was ready to throw in the towel; then to have made it to the end is an accomplishment in itself. For your faith in me and my abilities, I am eternally grateful.

To my thesis advisor, Dr. Bonnie VanLunen, thank you for your directed guidance and assistance through every facet of this thesis. You inspired the creation of the topic for this project, and have taken a vested interest in it to make sure that it achieved its capability. Often times, your students fail to see the tireless hours, efforts and commitment that takes place within your office walls (and car doors!), but know that the time and attention that you always seemed to have for me is very much appreciated.

Also, to Dr. Jimmy Oñate, for your undying determination to see all of your students succeed. There were many nights that first semester when I didn't appreciate all of the work or that smell of formaldehyde that never seemed to leave my clothes – but you always influenced us to find another gear within ourselves, and you have contributed greatly to my academic maturity. Thank you for the encouragement, and the constructive guidance. (And for the record, never once have I ever neglected to put the tilde over the letter N in your last name).

Thank you to Dr. Brian Udermann from the University of Wisconsin at LaCrosse. Dr. VanLunen recommended that you would be a great addition to our research committee, and I couldn't have been more pleased. Your contributions and suggestions

were always well-taken, and I have a deep respect for your contributions to athletic training education. Also, to my former professors and clinical supervisors at Marist College in Poughkeepsie, New York, thank you for the tremendous education that you provided me with. Due to your encouragement for me to pursue a Master's Degree, I have come to fully appreciate the value of your knowledge and experience.

The addition of a doctoral program at Old Dominion University has been a tremendous asset to our Post-Professional Program. In the absence of our advisors, these students were around to answer questions, offer advice, give valuable suggestions and provide crucial support. Karin Haines – you have been an integral element to the outcome of this thesis. You always seemed to have a positive attitude, words of encouragement, and a sincere appreciation for my efforts. I truly hope that this has been a helpful learning experience for you as well, and I wish you the best of luck as you complete your dissertation and advance into the field of athletic training education. Future students will be blessed to have someone as dedicated and motivating as you at the forefront of their education.

Alissa Siemers, my neighbor and partner in crime – we did it! Speaking as a student who doesn't historically work well in a group, never once did I regret having you on board. It was of tremendous assistance for me to have a classmate to work with, and I'm so pleased that our friendship has evolved as well. And to the rest of my classmates and colleagues, you all are the main reason that I was able to complete these two years. When my spirits were low, one of you was always right there with words of support and encouragement. We did it together; it is a great accomplishment, and I hope that I was able to support you as much as you were able to assist me.

Finally, to my parents and family. You have always had faith in me, regardless of the task – and the challenges I endured during graduate school were no different. Even though you were hundreds of miles away, I could always feel your steadfast support and guidance. I have always been a believer that a person's actions and attitudes are the result of the values that they have been brought up with. I hope that one day I will be able to lead with such a positive example as you have provided me. From the bottom of my heart, I never could have completed this journey without you.

TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

In 1972, the National Athletic Trainers' Association (NATA) approved its first athletic training education program in graduate studies. Since 1972, the profession has seen vast growth in the field of athletic training education, spearheaded by the NATA Education Council that was formed in 1994 out of an educational task force created by the NATA Board of Directors (Peer & Rakich, 2000). Most recently in May 2002, the Graduate Education Committee released a newly-revised edition of the *Standards and Guidelines for Post-Certification Graduate Athletic Training Education Programs,* which all NATA-Accredited graduate curriculums are required to abide by (NATA Education Council, S&G 2002).

Based on the most recent *Standards and Guidelines,* all programs must submit an annual report to the Post-Professional Graduate Review Committee following their accreditation. Contained within this review are ongoing evaluations of every aspect of the program, including curriculum revisions, research exposures, and clinical experiences, along with updates on faculty and facilities, and student outcome assessments (S&G, 2002). The latter of these elements proves to be an important, but often overlooked, aspect of any program.

There are a number of different methods by which program directors and graduate education committees can obtain outcome assessments on graduate programs, such as the use of evaluation forms, site visits, student achievement records, graduate employment settings, student publications, and overall classroom performance data (S&G, 2002). Both the existing students and the graduates of each education program are a crucial

source of information and feedback to an educator or program director regarding the conditions of the program. Therefore, recommendations and concerns identified by these individuals should be examined closely. Curricular satisfaction evaluations completed by the students are typically gathered by each program, however the results are rarely accumulated and reported to a larger body. A summation of overall satisfaction of post-professional athletic training programs has not yet been compiled, therefore limited information is available to support the quality of these education programs relating to graduate student assessment.

Despite an ongoing reformation in athletic training education, there has been little formal research published on graduate education student outcome assessment (Ingersoll, 2005). Aside from the annual review that is generated by every program director, there is currently no existing objective measure of how the students view their program and what suggestions they might have on how to improve the quality of graduate education in athletic training. We have no indication of whether or not students are satisfied in their choice to pursue an advanced degree in athletic training, and we have no evidence demonstrating if the academic programs are meeting the expectations and desires of its students.

Related allied health disciplines (i.e. physical therapy, nursing, occupational health) have been exploring similar questions within their respective settings (Jarski RW, Kulig K, Olsen RE, 1990; Stith J, Butterfield WH, Strube MJ, Deusinger SS, Gillespie DF, 1998; Herrmann, 1997; Norman L, Buerhaus PI, Donelan K, McCloskey B, Dittus R, 2005; Ribak J, Notzer N, Drezne E, 1995). The physical therapy profession has drawn the conclusion that instructional behaviors may need to change in order to meet the

varying needs of its students along with the educational standards that are being altered within the field (Jarski et al, 1990). Norman et al (2005) reported that the field of nursing is shifting from an emphasis in clinical experience to focus more on didactic knowledge (Norman et al, 2005). They reported that nursing students are conveying notable dissatisfaction with this move, which may in turn be furthering their financial and academic stresses. Thus, it is advisable that formal research be conducted within the field of athletic training in order to improve the quality and overall satisfaction of the students and professionals that are being produced from graduate-level programs, more specifically in regards to the recent update to the *Standards and Guidelines* for Graduate Education.

Statement of the Problem

The purpose of this study was to examine the overall satisfaction levels of recent graduates (2005 - 2006) of NATA-Accredited Post-Professional Graduate Athletic Training Education Programs as related to the 2002 Standards and Guidelines for Graduate Education. We also examined differences in satisfaction levels between various demographic variables.

Alternative (Research) Hypotheses

1. All graduates from 2005 and 2006 will be satisfied (above 80%) with all aspects of their accredited post-professional graduate athletic training education program.
2. Graduates of two-year programs will report higher satisfaction scores on all questions compared to graduates of one-year programs.

3. Graduates that took a respite from classes (more than six months) between their undergraduate and graduate courses of study will report higher satisfaction scores on all questions compared to those graduates who immediately entered their program following attainment of their Bachelor's Degree.
4. There will be no statistically significant differences in overall satisfaction levels between males and females.
5. Graduates that were able to complete their degree in the allotted amount of time will report higher satisfaction scores on all questions compared to graduates that needed an extension or extra semester(s) to complete their degree requirements.

Null Hypotheses

1. Graduates will neither be satisfied or dissatisfied with their post-professional graduate athletic training education program.
2. There will be no statistically significant difference in overall satisfaction levels between graduates of one-year programs and graduates of two-year programs.
3. There will be no statistically significant difference in overall satisfaction levels between graduates who immediately entered their program vs. graduates who waited more than six months to enter graduate school.
4. There will be no statistically significant differences between males and females in regards to overall program satisfaction.
5. There will be no statistically significant differences in overall satisfaction levels between graduates who were able to finish their degree requirements in the allotted time and graduates who needed an extension or additional semesters to finish their degree.

Independent Variables

1. Gender (Male, Female)
2. Length of Program (One-Year, Two-Year)
3. Time-Off between Undergraduate and Graduate Programs ('Time Off' – defined as more than six months, No Time Off)
4. Time for Completion of Graduation Requirements (No Additional Time Needed, Additional Time Needed)

Dependent Variables

1. Perceived level of satisfaction (Likert-Scale format), as it relates to a specific area of the *Standards and Guidelines for Graduate Education* (rev. 2002)

0-10%	11-20%
21-30%	31-40%
41-50%	51-60%
61-70%	71-80%
81-90%	91-100%

Operational Definitions

NATA – *National Athletic Trainers' Association (NATA)* 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)

CAATE - *The Commission on Accreditation of Athletic Training Education Programs (CAATE)* is the agency responsible for accreditation of professional (entry-level)Athletic Training education programs.. (www.caate.net)

Accreditation – Accreditation is an effort to assess the quality of institutions, programs and services, measuring them against agreed-upon standards and thereby assuring that they meet those standards. (www.caate.net) More specifically for graduate education, it is a collegial process of self review and peer review, involving three major activities: a self-evaluation (study), a peer-evaluation (site visit), and a judgment by the PPERC and NATA Board of Directors as to what degree (if any) the program should gain accreditation. (NATA Education Council)

NATA-Accredited Post-Professional Program – 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 professional credential. These twelve programs are all accredited by the NATA (NATA Education Council).

PPEC – *The Post-Professional Education Committee* is a standing committee of the NATA Education Council, charged with evaluating and reviewing the graduate standards and guidelines. (S&G 2002)

PPERC - *The NATA Post-Professional Education Review Committee* (PPERC) was organized and charged with the responsibility of evaluating and recommending accreditation status of post-professional graduate athletic training education programs to the NATA Board of Directors. The mission of the NATA PPERC is to assure quality in post-professional graduate athletic training programs through the accreditation process.

Breadth of Learning - Can be better understood as exposure to a variety of topics, many times beyond the traditional realm of our scope of practice; for example, geriatrics, special populations, or general medical disorders.

Critical Thinking - The examination and investigation of a scenario, and then the application of knowledge to determine the appropriate course of action.

Theoretical Basis - In the athletic training education realm, can be thought of as an in-depth exploration of reasons that may help to explain proven facts and phenomena.

Assumptions

1. The survey used has established acceptable face and content validity, and reliability measures; that the survey will, in fact, be an accurate indicator of satisfaction levels among recent graduates.
2. One of the survey answer choices will accurately reflect the true nature of the respondents' feelings.
3. The survey is distributed to all (and only to) the possible candidates in the survey pool.
4. The subjects will make an honest, unbiased decision on whether or not to willingly participate in the study.
5. The subjects will have a full understanding of the survey questions and how to respond, in both language and content areas.
6. The subjects will read the instructions clearly and will follow directions, as requested by the surveying body.
7. The respondents will answer the questions truthfully and without persuasion.
8. The survey will be returned to the correct institutional department, and in a timely manner.

9. The online deployer will maintain the confidentiality of the results as they are generated, as the independent school official will be gathering the results as they come into the database.

Limitations

1. The lack of ability to accurately obtain contact information on every graduate of an NATA-Accredited Post-Professional Program over the course of the two years; thus, there is no guarantee that every possible candidate for the survey was reached.
2. The answer choices for the survey questions may not have encompassed all of the possible answers for the respondent to select.
3. The possibility that the subjects may not fully understand how to answer a question, due to language or content errors. The subject may also inadvertently omit a question or not answer the question in the manner by which it was intended.
4. Examples given by the survey creators that attempted to facilitate understanding by the subjects may have influenced or predicted answer responses.
5. The survey administrators are unable to control for the environment in which the survey was taken, or to standardize the conditions and emotions that may influence the subject during the survey.
6. The survey respondent may not have access to the Internet and the World Wide Web.
7. The time that it may take a respondent to complete the survey cannot be controlled.

8. The receipt of incomplete surveys from the respondents.
9. The fact that the respondent has the right to choose not to take the survey.
10. The possibility that the respondents may not represent the views of the population accurately, as each institution is not guaranteed to be represented proportionately.

Delimitations

1. The testing subjects had enrolled in an NATA Accredited Post-Professional Graduate Athletic Training Education Program.
2. The subjects received a Master's Degree from their respective programs, or completed the requirements necessary for graduation by the time they completed their survey.
3. The sample population (n = 211) have all graduated within the past two years, 2005 or 2006.

CHAPTER II

REVIEW OF THE LITERATURE

History of Education in Athletic Training

The National Athletic Trainer's Association (NATA) was founded in 1950 with the goal of building and strengthening the profession of athletic training through the exchange of ideas, knowledge, and methods of athletic training (O'Shea, 1980). The roots of athletic training education can be traced back to the creation of the Committee on Gaining Recognition which was organized in 1955 (Newell, 1984). In addition to other accomplishments, this group was most noted for its development of the first athletic training education curriculum model.

Athletic training education disciplines that were first established included anatomy and physiology, applied kinesiology and exercise physiology, psychology, first aid, nutrition, and community health/safety, organization and administration of physical education programs, and advanced athletic training techniques. There were also certain physical therapy prerequisite courses that were required: biology, chemistry or physics, and social sciences (Delforge & Behnke, 1999). In 1971, Schwank and Miller began to direct the focus away from the physical therapy component, and described the goals of this early curriculum model to be professional preparation for the prospective athletic trainer for a position at the secondary school level where they would teach health, physical education, and adapted programs (Schwank & Miller, 1971).

Initially, it was discovered through a survey administered by a subcommittee of the NATA Committee on Professional Advancement that a large majority of physical education department heads did not recognize the need for athletic training education

beyond the basic courses offered by most colleges (Miller, 1999). The first four athletic training undergraduate programs were recognized by the NATA in 1969 at Mankato State University, Indiana State University, Lamar Tech, and the University of New Mexico. By the late nineteen-sixties graduate education had also begun to develop, although the first programs (Indiana State University and the University of Arizona) did not officially become approved until 1972 (Delforge & Behnke, 1999).

By 1982, there were a total of 62 new undergraduate programs and 9 graduate education programs that were representative of 33 states (Delforge, 1982). To coincide with classroom education, a national certification examination was developed and first administered in 1970. There were four different routes by which a candidate could qualify to take this exam; graduation from an NATA-approved program, graduation from a physical therapy program, completion of an apprenticeship program, or completion of a '*special consideration* route' which meant that the candidate had to be 'actively involved' as an athletic trainer for at least five years (Delforge & Behnke, 1999).

Over the next decade, both the NATA and education committees began to question why their curriculums were required to incorporate physical therapy prerequisites. At the same time, graduate education also began revisions within its domains which would lead to the first set of major revisions in graduate education being published in 1983. *Guidelines for Development and Implementation of NATA Approved Undergraduate Athletic Training Education Programs,* and *Guidelines* (for graduate education) were the two documents that were published by the NATA (Delforge & Behnke, 1999). One of the significant additions was inclusion of a standardized program evaluation tool, which had never been used before (Delforge & Behnke, 1999).

The NATA Board of Directors instituted a policy that was enacted by July 1, 1986, which decreed that all NATA-Approved undergraduate programs had to offer athletic training as a specific major field of study (Delforge, 1982). The proposal didn't become an official mandate until July 1990, but did set the stage for the first academic major in athletic training degrees to be issued. The board also instituted a requirement for annual updates from each program describing their goals and objectives, along with strategies for how to meet the goals (Delforge & Behnke, 1999). With these new standards also came a change in the clinical component of education programs, and the first edition of *Competencies in Athletic Training* (NATA, 1980) was published in 1980.

Athletic training education had begun to make significant progress, but had yet to be formally recognized among other allied health disciplines. In June of 1990, the American Medical Association (AMA) first recognized athletic training as an allied health profession (NATA, 1990), which would later open the door for its education programs to become accredited by the Committee on Allied Health Educational Programs (CAHEA). The Joint-Review Committee on Education Programs in Athletic Training (JRC-AT) was formed and charged with developing accreditation guidelines for all NATA entry-level undergraduate programs. The JRC-AT published *Essentials and Guidelines for an Accredited Educational Program for the Athletic Trainer* (CAAHEP, 1991). In 1993, the JRC-AT officially became the governing body responsible for recommendation of athletic training programs for accreditation to CAHEA, later known as the Commission of Accreditation of Allied Health Education Programs (CAAHEP) (Delforge & Behnke, 1999). Lastly, in 1994 the NATA Board of Directors created an Educational Task Force to investigate issues within the system that would lead the NATA

into the 21st century. The task force formed the NATA Education Council, whose goal was to develop a curricular model focusing on the educational preparation of athletic trainers (Delforge & Behnke, 1999).

In 1996, the educational reform focus in athletic training shifted to graduate education. The NATA Professional Education Committee stated that curricular approval would only be given to those graduate programs that offered 'advanced' learning experiences – beyond those of the entry-level programs, and that incorporated research/scientific inquiry (Delforge & Behnke, 1999). By 1998, only those students who had successfully completed the requirements to take the NATA Board of Certification examination were accepted for admission in the graduate programs. Realizing that this policy would exclude any students who wished to get an advanced degree in athletic training but held a Bachelor's Degree in another field, the Graduate Education Committee (of the NATA Education Council) was formed in 1997 in an effort to distinguish the standards and requirements of an entry-level Master's Degree programs and the Post-Certification programs (Delforge & Behnke, 1999). Establishment and differentiation of standard requirements was important because it was the first time that a distinction was made between an entry-level Master's degree program and a post-professional Master's degree program. The Graduate Education Committee (GEC) composed the first *Standards and Guidelines for Development and Implementation of NATA-Accredited Post-Professional Graduate Athletic Training Education Programs* document. This publication remains the standard for graduate education in athletic training, and was most recently updated in January 2002 (Standards & Guidelines, 2002).

Athletic Training Program Accreditation

Accreditation is a means of standardizing athletic training educational programs that facilitates efforts to promote quality in the athletic training profession as a whole (Peer & Rakich, 2000). The Graduate Review Committee (GRC) was created for the purpose of making recommendations for the accreditation of any new graduate programs to the NATA Board of Directors (NATABOD). The GRC was also responsible for pursuing and maintaining the accreditation of Post-Professional Graduate Athletic Training Education Programs. The Post-Professional Education Review Committee (PPERC) is a newly-formed conglomerate of the GEC and GRC, and defines accreditation as a collegial process of self-review and peer review. The Post-Professional Graduate Education *Standards and Guidelines* outline their accreditation process to include a self-study (evaluation) of the program, followed by a peer review of the self-study and subsequent visit to the institution to confirm the accuracy of the self-study report, and then an accreditation decision made by the GRC/NATABOD (S&G, 2002).

Accreditation is a method to ensure a certain level of standardization among programs, therefore allowing for consistency and quality across the athletic training profession. The accreditation route assures more consistency in its graduates because of the requirements that each program is mandated to adhere to. It is the goal that through these specific standards, programs are able to ensure that quality athletic trainers are emerging. Peer and Rakich (2000) state that when they work with an athletic trainer, they know they are always going to be working with a high-quality person who has been educated to a very rigorous standard. While it is promoted that accreditation is the best

option to standardize graduate education, there are also non-accredited graduate programs in athletic training and other related disciplines.

Accreditation of any graduate athletic training education program is a completely voluntary process that is initiated by the institution. Several components must be in place before initial accreditation can be sought. First, a program director must be hired to develop the program and then to oversee its daily function. The program director must function not only as a clinician and an educator, but also as a faculty member, recruiter of students, supervisor of clinical assignments, coordinator of educational experiences, and as a liaison between the academic program and the accrediting agency (Perkins & Judd, 2001). In addition, the program director often becomes a mentor to the students and an advisor to prepare their professional skills for the workforce, along with their responsibilities of organizing and controlling the curriculum (Judd & Perkins, 2004).

The program-specific responsibilities of the program director include the hiring of appropriate and qualified faculty, development of goals and objectives, defining areas of distinctiveness for the program, incorporation of both research and clinical components, organizing affiliate settings to enhance student opportunity, the recruitment and admission selection of potential students, facility maintenance and overseeing all fiscal matters (S&G, 2002). While many of these areas are strictly defined in the *Standards and Guidelines*, there are also ample opportunities for the program to develop its own identity along the expertise of its faculty and to build on the strengths of its facilities and its students. Upon completion of these standard requirements, the program can proceed with the accreditation process.

Once a program decides to continue to go forward with the accreditation process, then it becomes necessary for a committee to generate a self-study of the program. The purpose of the self-study is to critically examine the program in structure and substance, to judge the programs' overall effectiveness related to its mission, to identify specific strengths and deficiencies, and to indicate a plan for necessary modifications and improvements (S&G, 2002). A site-visit is then arranged by the Post-Professional Graduate Education Review Committee (PPERC) to validate and/or clarify the self-study contents, to determine compliance with PPERC Standards, and to provide recommendations and objective feedback on both program and student enhancement (GRC & GEC, 2003). Interviews and facility visits are conducted with the program director, school dean, tenured faculty, program students and clinical supervisors. At the conclusion of the site visit, the findings of the site review team are compiled into a report which is then submitted to the PPERC. Along with this detailed report is a recommendation for or against accreditation of the program to the NATA Board of Directors. It is then the ultimate decision of the NATABOD whether or not to grant accreditation for a time period of up to five years, and if any provisions and limitations are necessary.

There are currently twelve Post-Professional Graduate Athletic Training Education Programs in the United States that are accredited by the NATA. These programs represent nine states: Arizona, California, Indiana (2), Michigan, North Carolina, Oregon, Pennsylvania (2), Tennessee, and Virginia (2) (NATAEC, 2006). The mission of these programs is 'to expand the depth and breadth of the applied, experimental, and propositional knowledge and skills of entry-level certified athletic

trainers' (S&G, 2002). Each program's mission, goals, and objectives, must demonstrate the intent to provide instruction in advanced skills and knowledge, increase the student's critical thinking and writing skills, enhance their ability to function in clinical, teaching, administrative, or research environments, and to prepare these students for leadership roles within the field (Knight, 2002; Seegmiller, 2006). Perhaps most importantly, Knight (current chair of the NATA Education Council) goes on to say that programs must *provide evidence* that their students are meeting the program's goals and objectives (Knight, 2002). There have been several reasons brought forward to help explain the small number of accredited graduate programs in athletic training. The Association of American Universities suggests that institutions should refrain from establishing programs unless it is reasonably clear that regional support is present to be able to sustain a program (AAU, 1998).

Voll et al (1999) argues that a ranking system in some graduate programs could be valuable to an institution because it could potentially lend itself to an increase in both faculty and financial resources once it gains prestige and recognition within the field. However, no study to date has been published rating the graduate programs or specifically addressing the quality of learning at each institution. A reason for this could be that within each of the post-professional graduate programs lie varying areas of distinctiveness that represent the strengths and attributes of that program. These areas can vary in specific academic courses and/or in the research, clinical or teaching components. Evidence has shown program strength and excellence is best displayed through freedom of the institution to determine their own objectives and to experiment in the ways of education within the framework of their respective authority and

responsibilities (COPA, 1975). Further support is provided through a survey conducted by Seegmiller (2006), where respondents indicated that programs should not be forced to teach a 'prescribed, curricular package of information', rather each program should be permitted to express its own institutional autonomy.

Program Components

Student Demographics

Once accreditation has been established, it remains of equal importance to maintain and improve the components of the program. Provided that all of the required standards are adhered to, graduate education programs in athletic training are given the freedom to expand in various areas in order to make their program unique and appealing. It is understood that every student possesses different qualities that make him or her a better student – thus it should be the goal of the program to be able to reach out to all of these students in order to best meet their needs.

Admission into programs has typically been focused on Grade Point Average and overall performance on aptitude tests (ie. SAT or GRE), however it has become increasingly difficult to predict the professional outcomes of a student based solely on these preadmission criteria. Therefore, these should not be the only factors that are considered for admission into the program (Platt, Turocy, McGlumphy, 2001). The typical 21st century student has changed from the prototype that was seen in past decades. Students matriculating in today's educational system will continue to become more diverse in ethnic and religious backgrounds, age, class and culture (Hodgkinson, 1989). As expected, the athletic training classroom is experiencing student diversity that has never been seen before.

Due to the increasing demands that are being placed on graduate students, upward trends in age are inevitable. More part-time students and longer degree-completion times will likely emerge as a result. Program directors, too, may find themselves with an increased workload and a need for expanded hours of availability to ensure that they meet the needs of these students. This does not mean, however, that program standards and admissions criteria should be compromised.

Varying student situations may facilitate a need for increased financial compensation or assistance. Aside from a stipend gained from clinical experiences, financial aid offices need to be willing to reach out to these students and be able to offer assistance that will appeal to the student/family with financial need (Martin & Buxton, 1997; Jevack, Wilder, Mann, Hunt, 2000).

Clinical Education

The incorporation of a clinical component into the graduate athletic training curriculum has become just as important. Clinical education is designed to provide a bridge between academic classroom learning and clinical practice. Student learning in the clinical setting is facilitated by both the clinical instructor/supervisor and the setting in which the learning takes place. The current *Standards and Guidelines* for Graduate Education (2002) do not mandate a clinical component for academic programs; rather this element is left up to the discretion of the individual program.

Most programs do contain a structured clinical outline to coincide with the curriculum courses, as the *Standards and Guidelines* state that 'if a clinical experience is opted to be included then it must be incorporated into the curriculum effectively in an effort to maximize the experience while refining the skills of each student (S&G, 2002).

A structured plan must be established to regulate the clinical experience, and needs to be monitored and evaluated just as any other part of the graduate program. The guidelines also maintain that the experience must be educational in nature and could be positively supplemented with in-service trainings and clinics, though the quantity of the experience ought not to be so great that it interferes with the educational mission of the program.

Laurent and Weidner (2001) surveyed both entry-level students and clinical instructors (CI's) to determine which characteristics of the clinical instructor were best suited for a learning environment. Attitude of the CI towards teaching, problem solving, strategy for instruction, allowance of actual participation by the student in the learning, humanistic orientation, and self-perception were all noted as categories that contained useful elements for the student learning process. The authors also note that the clinical instructors seem interested in improving their own knowledge and skills along with the students. Further, it was found that often the clinical instructors are more critical than the students of their teaching styles, and that the majority of students are adequately supervised and satisfied with their clinical experience (Anderson, Larson, Luebe, 1997).

Turocy (2002) writes that CI's often attempt to model the positive characteristics that they expect to see exhibited in their students. Lauber et al (2003) reiterates this CI modeling behavior. Lauber goes on to show through a survey of program directors and clinical instructors that just as the CI-Student relationship is important, similar collaboration between the clinical and academic personnel is vital to the success and overall experience of every student. Among the behavioral categories that a CI ought to possess and consider are instructional, interpersonal, evaluative, professional and personal (Lauber et al, 2003). In 2004, Weidner and Henning (2004) expanded these

categories and criteria to also include sound ethical behavior, active communication skills, supervisory and administrative skills, and expanded clinical knowledge. Through this research, clinical instructor development tools and training programs can be implemented to ensure consistency among CI's within an institution.

Clinical evaluations, like curricular evaluations, should be thought of as another measure of the successes and weaknesses of the graduate program. Cleary and Happell (2005) recount their study on the satisfaction of nursing students with their clinical experiences in the field of mental health. Their conclusion was that it is important to continually monitor the clinical experience satisfaction of students in order to maintain their interest in the field. They further suggest that student recruitment and interest could come largely from satisfied graduates who have been guided through the clinical process and monitored periodically to see where beneficial improvements can be incorporated.

The clinical site or setting where the majority of the learning takes place is an integral part of the clinical education experience. Weidner and Laurent (2001) mention twelve specific standards that a clinical site ought to possess. Among the most vital of the guidelines are specified areas for studying, meetings, and private discussion for the student, and adequate space for the care, rehabilitation and record keeping of student-athletes. Ample staffing should also be considered. Finally, the appropriate clinical setting should coincide with the missions and objectives of the graduate program through which the clinical site is affiliated.

Advanced Educational Opportunities

Beyond the athletic training room lies the opportunity to gain additional specialization training. The Education Council developed the Certifications of Added

Qualifications (CAQ) Ad-Hoc Committee in order to further investigate these areas. It was found that additional areas of expertise could be developed and incorporated into sports medicine practices through training in occupational health, medial business/management practices, fitness and wellness, pediatric and/or geriatric health, and special needs populations (Wiksten et al, 2002). Attainment and recognition of these newly-acquired qualifications would probably come in the form of a standardized examination (Wiksten et al, 2002).

Although the CAQ Ad-Hoc Committee was disbanded, it should be considered that these certification areas could be incorporated into the various graduate education curriculums. This belief is supported, and thus it has become a current focus of the PPEC to further investigate the possibilities that may exist in these specialized qualifications areas. Wilkerson et al agree that a clinician who has completed an advanced-practice residency or a post-professional graduate program is likely to possess greater critical thinking skills that can enhance clinical decision-making (Wilkerson et al, 2006). Chad Starkey, former chair of the NATA Education Council, cautioned not to get too far ahead of ourselves however, because ensuring that the educational requirements are maximized and that quality of reputation within the field is preserved far outweighs the benefits of the dual-credentialed athletic trainer (Starkey, 1997).

Therefore, while trying to investigate the benefits of added qualifications, it becomes important to examine what it is exactly that employers will look for in a prospective job candidate. In the collegiate setting, Arnold et al found in 1998 that the two highest-rated qualities that employers wanted in their potential employees were a Master's Degree and collegiate clinical experience (Arnold et al, 1998). Kahanov and

Andrews (2001) also found that a Master's Degree was highly desirable for employment in the intercollegiate setting. Results from their survey to employers revealed that communication and interpersonal skills, enthusiasm, initiative and ambition, maturity, self-confidence and problem solving capabilities all rank among the most important qualities that a candidate can possess (Kahanov & Andrews, 2001).

Chris Ingersoll, Program Director at the University of Virginia, maintains that 'the more we know, the better we can treat patients' (Ingersoll, 2003). To that end, Cuppett (2001) reported that graduates desire to gain more knowledge in specified areas of athletic training. Basing her survey out of the NATABOC Role Delineation Study 4th edition (NATABOC *4th ed, 1999)*, Cuppett (2001) was able to break down the domains outlined and use the surveyed population to represent the shortcomings in entry-level education. Based on Cuppett's results both males and females agreed that their continuing education needs are not being met adequately, therefore better educational planning must result.

As more professional programs begin to surface, the desire for terminal degrees in discipline-specific areas will likely increase as well. These students will have the opportunity to receive more specialized training as instructors and administrators. Hertel, West, Buckley and Denegar, suggest that these skills, along with independent research expertise, will enable the doctoral graduate to attain positions in instruction, administration, or the research laboratory (Hertel et al, 2001). The acquisition of advanced skills and the opportunity to become experts in our field gives graduates of these programs more opportunities for competitive, 'upwardly-mobile' jobs. In 1994, Arnold et al reported that individuals who attained a doctorate degree averaged $8,000

more annually than those individuals who had only earned a Master's degree (Arnold et al, 1996).

Once a position in a desired setting is obtained, the graduate will then be able to reflect on their experiences in graduate school. It is at this time where their skills attained while pursuing an advanced degree will ideally be applied. Maybe now better than any other time is when the effectiveness of the graduate program can be assessed – a form of outcomes assessment. The recent graduate can determine what skills were useful or not, and where possible shortcomings were in the program. Suggestions for improvement and levels of satisfaction with the various components will hopefully emerge and lead educators forward on how to improve the programs.

Satisfaction in Related Allied Health Programs

While assessment of graduate program satisfaction for athletic training has been scarce, other allied health fields can provide us with some direction. Norman et al (2005) discussed the importance of graduation rates from nursing school and employee retention rates in the workforce upon graduate school completion. This survey reported that more nursing students (41%) who were enrolled in clinical courses claimed to be satisfied with their nursing education than those who refrained from the clinical component, perhaps suggesting that a clinical component with an opportunity to apply classroom learning can lead to more job satisfaction and success (Norman, 2005). In another nursing survey employers reported compliments on research knowledge, critical thinking, knowledge of health care policy issues and activism (Sakalys, Stember, Magilvy, 2001). Most all of these areas are also desired competence components for athletic training graduates.

Additionally, Norman's (2005) survey describes several areas of concern reported by the recent nursing school graduates. The quality of their education was questioned; in particular with the dedication of the professors, and that the amount of information overloaded the students. Further, feelings of disconnection between classroom learning and clinical observations surfaced, and also that the program contained too much 'busy work'; therefore purposeful learning time was compromised. This serves as a major point of interest as to where program directors and faculty may need to show additional concern with coursework to ensure that it is relevant and essential information, and also to monitor clinical experiences to make certain that they coincide with classroom learning.

Hermann (1997) agrees that nursing instructors are not always prepared to meet the needs of the students. This research suggests that the professional development of nursing educators should include workshops on instructional techniques, teaching practicums, and mentoring sessions sponsored by the institution. The survey results go on to reveal that the respondents feel that it is the responsibility of the institution to ensure that the instructors are properly qualified and adequately prepared to teach the courses. In support of this claim, nursing faculty out of Minnesota reported that an overwhelming majority of faculty felt supported in their endeavors by college deans and department chairs, and that 97% were committed to their instructional careers and to the nursing profession (Disch, Edwardson, Adwan, 2004).

The University Medical School in Tel Aviv, Israel, offers a Master's Degree in Occupational Health. At several points during the program, graduate satisfaction and opinion is assessed through personal interviews and questionnaires. Institutional heads

feel that they are able to detect problem areas and implement changes, and improve the student selection process therefore raising the standard for admission, all while adapting to the changing role of occupational health in Israel (Ribak, Notzer, Drezne, 1995). As a result, they report significantly higher levels of satisfaction with the curriculum.

Students of physical therapy report increased satisfaction when instructor availability and strong interpersonal communication skills meet (Jarski et al, 1990). Rather than have students assess the favorable characteristics of the CI, these students are suggesting that the clinical instructor assess their own behaviors and educational skills in an effort to see which are the most effective. As a student going through a program, one should be able to recognize the traits in a CI that they both like and dislike, and then be able to use that knowledge later in their career in the event that they get the opportunity to become a clinical instructor. Further, Stith et al (1998), propose that clinical education satisfaction in physical therapy is contributed to from a combination of personal, interpersonal, and organizational domains – very similar to later results seen through surveys of athletic training students, clinical instructors and undergraduate program directors (Laurent & Weidner, 2001; Weidner & Henning, 2004).

In a unique study (Cronk et al, 2005) conducted by the US Army, the satisfaction of surgical medical residents was surveyed. The authors' opinion was that the students were more likely to choose a program that produced graduates who expressed satisfaction with their residency. Two of the areas that produced lower satisfaction ratings were from residents who had less research experience and decreased contact time in surgery (analogous to clinical hours). This study, although related to medical residents rather than clinical experiences, reinforces the idea that satisfaction can be affected by both

didactic education and hands-on experience. Those residents who had less research and clinical experience reported decreased levels of satisfaction when compared with other residents.

Summary

The history of education in athletic training can be traced back fifty years to when the first programs were established. While immense change and reform has surfaced since, many burning questions remain surrounding the credibility of graduate programs in athletic training. Because graduate education is still evolving, it is important to analyze the programs that do exist to determine what the students feel are strengths as well as areas that need to be improved. It is possible that some of these areas may be consistent throughout all twelve programs, but there may be specific issues within each program that have arisen as well.

Thus, it is thought that the overall efficiency of a program may be best determined once the student has graduated and entered the workforce. Once employed, the student will likely be able to more-accurately identify the areas where their knowledge base exists, and determine their exact satisfaction levels with their graduate program. Evidence has been shown through research in related health fields that outcomes assessments can serve as accurate tools in the evaluation of program efficiency. Although little research has been conducted on post-graduate program satisfaction levels, it is highly suggested in order to improve the quality and standardization of education in athletic training.

CHAPTER III

METHODOLOGY

Subject Characteristics

Participants included sixty-two females (age = 25.93±2.19 years) and sixty-one males (age = 24.76± 1.20 years). All subjects were recent graduates (May 2005 – August 2006) of one of the twelve (as of May 2006) NATA Accredited Post-Professional Graduate Athletic Training Education Programs. Subject demographic characteristics are located in Table 1. These specific graduating classes were included in the population because these graduates represent students that had entered into their programs at a time where the 2002 *Standards and Guidelines* had been implemented. The total population was 221 graduates, however the e-mail addresses for twenty of those subjects was either not accurate or unable to be obtained. Therefore, the overall number of survey recipients was 211, and the number of subjects to respond to the survey was 123, yielding a 58.29% response rate.

Fifty-two subjects (42%) were graduates of one-year programs, while the other seventy-one subjects (58%) were graduates of two-year programs. Eighty-four percent (103/123) of the respondents were able to complete their degree requirements within the allotted time frame, while the other twenty subjects (16%) required additional time. Ninety-eight subjects (80%) entered their graduate program immediately after obtaining their undergraduate degree, and the remaining twenty-five (20%) subjects waited at least six months to pursue their Master's Degree (Table 2). The consent for participation and release of results was assumed upon their voluntary completion and submission of the survey, and anonymity was assured to all the participants. This investigation was

Table 1. Mean Demographic Descriptive Data

Demographic	n	Mean	Standard Deviation
Age (years)	123	25.34	1.85
Males	61	25.93	2.19
Females	62	24.76	1.20
Additional time needed (months)	21	9.14	7.40
Graduate school GPA	110	3.67	0.26
GRE score	85	1075.47	128.92
Credit hours	116	40.92	13.83
Class size	123	16.10	44.18
Number of instructors	123	5.93	3.20
Instructors daily availability	123	4.91	2.66

Table 2. Frequency Demographic Data

Demographic Area	n
Gender	
Males	61
Females	62
Graduation year	
2005	48
2006	70
Other	5
Program length	
One-year	52
Two-year	71
Time-off from school	
Yes (>6 months)	25
One year or less	13
More than one year	12
No	98
Completed program in allotted time frame	
Yes	103
No	20

approved by the Human Investigation Committee within the college.

Instrumentation

The researchers constructed an online survey instrument utilizing Inquisite 6.01 Corporate Survey Builder (Catapult System Corporation, Austin, Texas) to gather demographical and satisfaction data from the respondents. The electronic survey was developed and implemented in order to both reduce mailing costs and to encourage participation through an uncomplicated manner. The survey instrument was constructed after consultation with various experts in the field of athletic training and graduate education, and in conjunction with related literature.

Content and overall style of the survey was reviewed by the aforementioned experts for face and content validity. On-line survey experts were contacted for review and able to provide feedback on the overall question layout, in addition to making suggestions for ways to improve the appearance of the survey. The survey was then piloted on recent graduate athletic training education students (n=11) to test for reliability through a test-retest procedure. Survey instrument reliability measures ranged from r=0.602 – r=0.971. This range was considered acceptable based on the type of questions that were posed to the recipients and their respective answers (Table 3).

Questions that were included within the study included basic demographical questions (age, gender), as well as, more content-specific questions to assess student satisfaction in the areas of program components, graduate assistantships, clinical experience, and overall research exposure. These questions were all derived from the 2002 *Standards and Guidelines* and were based on the ten, main standard areas outlined in the standards. A variety of both closed-ended and mixed-ended questions were

Table 3. Reliability Values for Questions Regarding Satisfaction in Standard Areas

Standard Area	ICC Value	*p-value*
Depth	0.879	0.000*
Breadth	0.602	0.019*
Instructor availability	0.734	0.003*
Critical thinking	0.971	0.000*
Theoretical basis	0.820	0.001*
Writing	0.727	0.004*
Scholarly growth	0.912	0.000*
Community return	0.842	0.000*
Leadership	0.844	0.000*
Overall satisfaction	0.913	0.000*

incorporated into the survey instrument in an effort to allow for the most accurate responses from the respondents (Appendix F). The closed-ended questions were administered using a Likert Scale Format with ten scale choices, however the choices reflected quantitative, numerical responses (percent satisfaction) rather than more-traditional, qualitative words (extremely satisfied, dissatisfied, etc.). Likert scales are the most widely accepted form of attitudes assessment; therefore a ten-category Likert scale model was developed by the researchers because evidence has shown that the reliability of the scale increases when the number of scaling points is increased (Wall et al, 2002). The ten answer-choices format was developed because it coincided with the desired satisfaction scale, and because it is supported that an even-number of answer choices will force the respondent to express a directional attitude due to the lack of a 'middle-ground' answer choice (Turocy, 2002; Wall et al, 2002).

Testing Procedure

A listing of the names of all the graduates of the twelve programs from May 2005-May 2006 was obtained from the administrative offices of the Post-Professional Education Review Committee within the National Athletic Trainers' Association. Simultaneously, a list of recent graduates was also obtained from the program directors of all twelve programs to serve as a cross-reference to ensure that no student was omitted. These individuals were then contacted via electronic mail addresses obtained from the NATA Online Member Directory Database. If an e-mail address was not contained within this database, then the researcher made other attempts electronically to try to gain access to this individual.

Each graduate received a letter (Appendix D) via email that described the overall purpose and importance of the research study, the estimated time to complete the survey, the URL link for the survey instrument, and a request for their participation. The email also provided contact information for the researcher for comments or questions that concerned either the research study or the survey instrument.

Upon completion of the survey (indicated by clicking "submit"), the information was automatically sent to the University database system. Individual responses were generated in Microsoft Excel format and then matched with a file coding system to maintain confidentiality. At the conclusion of the survey, all participants were given the option to request the survey results, along with the opportunity to enter a drawing for the chance to win one of fifty (50) five-dollar ($5) gift certificates to various vendors. A follow-up email was then sent once per week for four weeks after the initial email to thank those who had already participated in the study, while also serving as a reminder to those who had not yet had the chance to respond (Appendix E). Studies have shown that at least two reminder e-mails (Turocy, 2002), in addition to a monetary incentive of two to five dollars generally increases the overall response rate (Wall et al, 2002).

Data Analysis

Upon receipt of the participants' responses, the data were compiled and analyzed to determine statistical trends and associations. Statistical Package for Social Sciences (version 14.0, SPSS Inc. Chicago, IL) for Windows was used to calculate the statistical components. Descriptive statistics were gathered and analyzed for each individual question of the survey. Power analyses were conducted in regards to overall satisfaction and the minimum sample size required in order to achieve 80% power was 200 subjects

per group. Length of program detected a 0.23 effect size, which is considered low, and equates to about 30% power. Separate analyses of variance (ANOVA) were used to determine any differences in several different satisfaction areas in relation to gender, and length of program. Independent Samples T-Tests were used to determine group differences in satisfaction with regards to time between undergraduate degree completion and graduate school enrollment, and (additional) time taken to complete their graduate degree requirements. Levene's Test for Equality of Variances allowed for normalization of variance due to the relative inequality of subjects that existed between the time between degree program groups, and the time to complete degree requirements groups. Bonferroni adjustments were not performed due to the innate differences in the standard area, along with a lack of significant values. Statistical significance was set *a priori* at $p<0.05$.

CHAPTER IV

RESULTS

Demographic survey questions were analyzed using both frequency and descriptive statistics. Means and standard deviations were reported with descriptive statistics for all demographic characteristics (Table 1). Descriptive statistics were also computed for all subjects in regards to the various standard satisfaction areas (Table 4). Frequency values were reported for any remaining demographic variables (Table 2). The frequency quantities for each of the multiple-choice and ranking questions that were included in conjunction with the standard areas within the survey are provided in Appendix G. Further frequencies were utilized to assist in identifying the leading themes derived from the open-ended questions relating to overall depth of knowledge (Appendix G).

Separate ANOVAs revealed no statistically-significant differences between gender or between one and two-year program satisfaction in any of the ten standard areas (Tables 5 and 6, Figures 1 and 2).

Independent T-Tests demonstrated no statistically-significant differences in relation to any of the ten standard satisfaction areas for evaluation of time-off from school (in excess of six months) between attainment of a Bachelor's Degree and entrance into their Masters Program (Table 7, Figure 3).

Independent T-Tests identified several statistically-significant differences for time taken to complete graduate degree requirements in regards to satisfaction in the ten standard areas. Graduates who required more than the allotted amount of time to complete their degree when compared to those graduates who completed their

Table 4. Mean Satisfaction Values for Standard Areas

Standard Area	Mean Satisfaction	Standard Deviation
Depth	74.80	19.13
Breadth	65.30	22.59
Instructor availability	73.60	22.11
Critical thinking	75.90	18.50
Theoretical basis	72.30	19.99
Writing	73.20	22.23
Scholarly growth	74.40	23.26
Community return	71.80	21.31
Leadership	73.40	17.17
Overall satisfaction	75.10	21.09

Table 5. Length of Program x Standard Area

Standard Area	F	*p*-value
Depth	1.301	0.256
Breadth	3.063	0.083
Instructor availability	0.143	0.706
Critical thinking	0.144	0.705
Theoretical basis	1.170	0.282
Writing	0.202	0.654
Scholarly growth	0.143	0.706
Community return	0.936	0.335
Leadership	0.678	0.412
Overall satisfaction	1.612	0.207

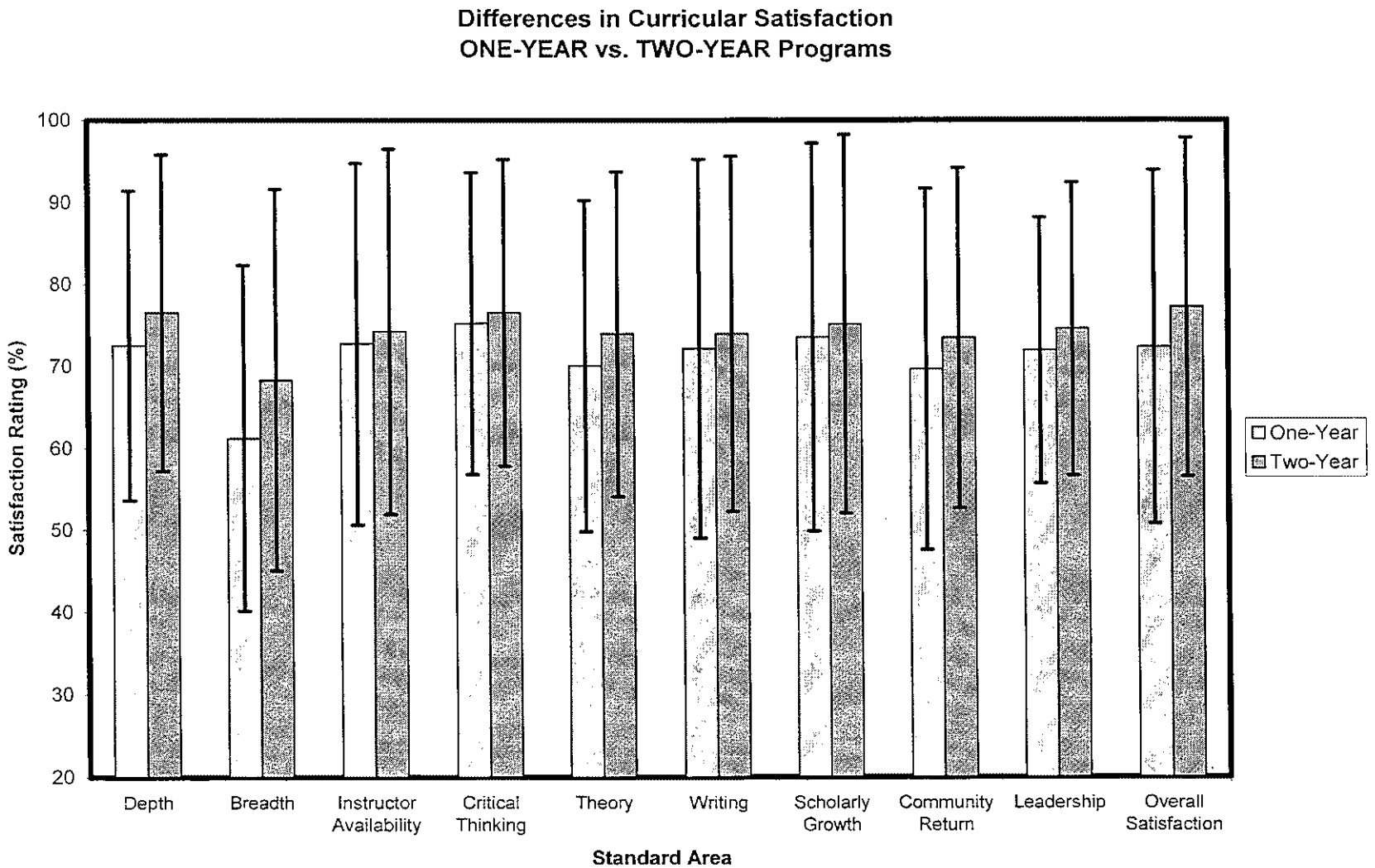

Figure 1. Program Length Differences in Curricular Satisfaction

Table 6. Gender x Standard Area

Standard Area	F	*p*-value
Depth	0.123	0.726
Breadth	0.048	0.826
Instructor availability	0.830	0.364
Critical thinking	0.097	0.756
Theoretical basis	0.384	0.537
Writing	0.012	0.914
Scholarly growth	0.981	0.324
Community return	0.851	0.358
Leadership	0.110	0.741
Overall satisfaction	0.000	0.983

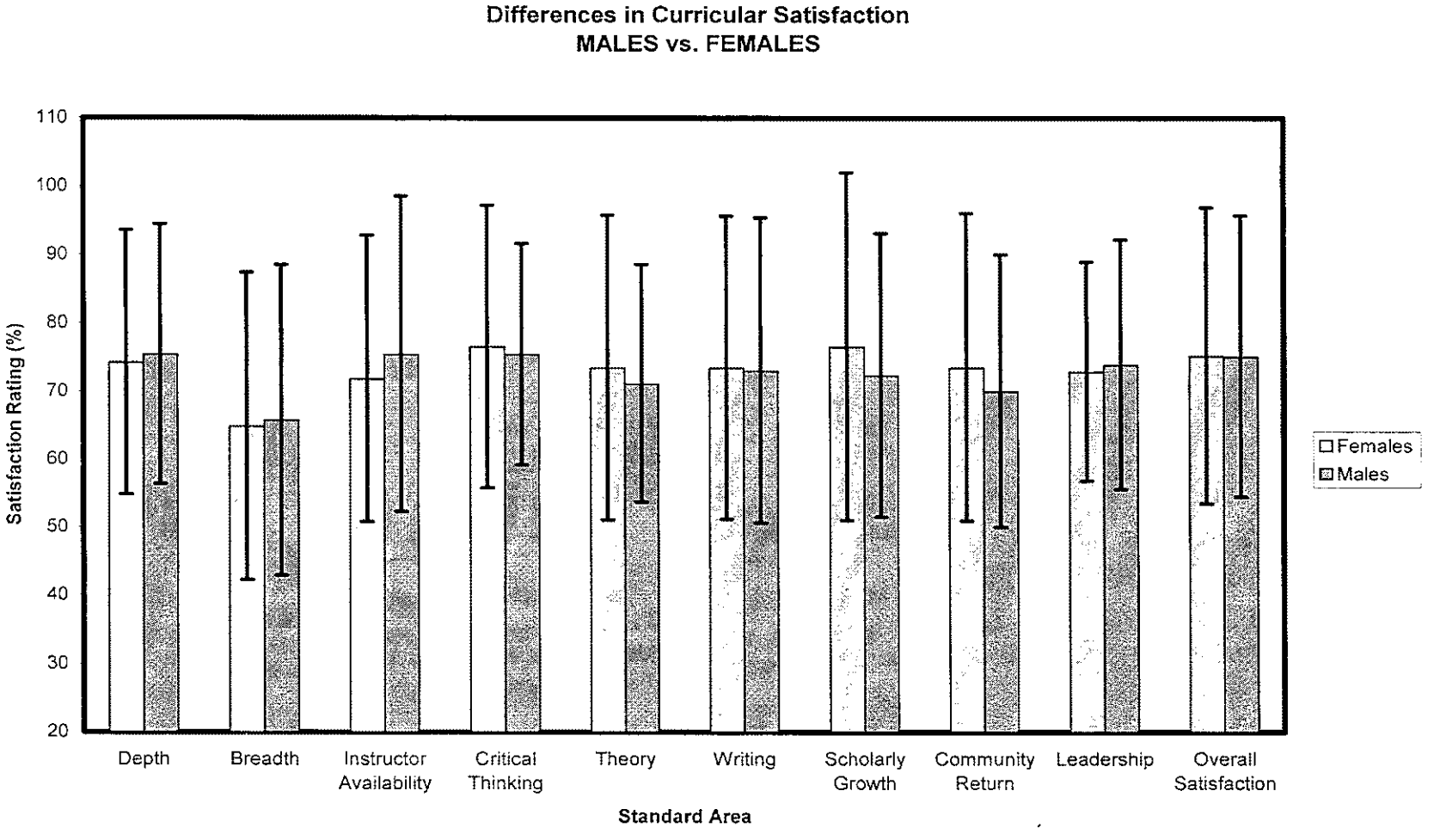

Figure 2. Gender Differences in Curricular Satisfaction

Table 7. Time-Off Between Degree Programs

Standard Area	t	*p*-value
Depth	0.585	0.560
Breadth	0.276	0.783
Instructor availability	-0.296	0.845
Critical thinking	0.261	0.795
Theoretical basis	-0.077	0.939
Writing	-0.294	0.769
Scholarly growth	1.664	0.101
Community return	0.370	0.712
Leadership	0.060	0.952
Overall satisfaction	0.232	0.817

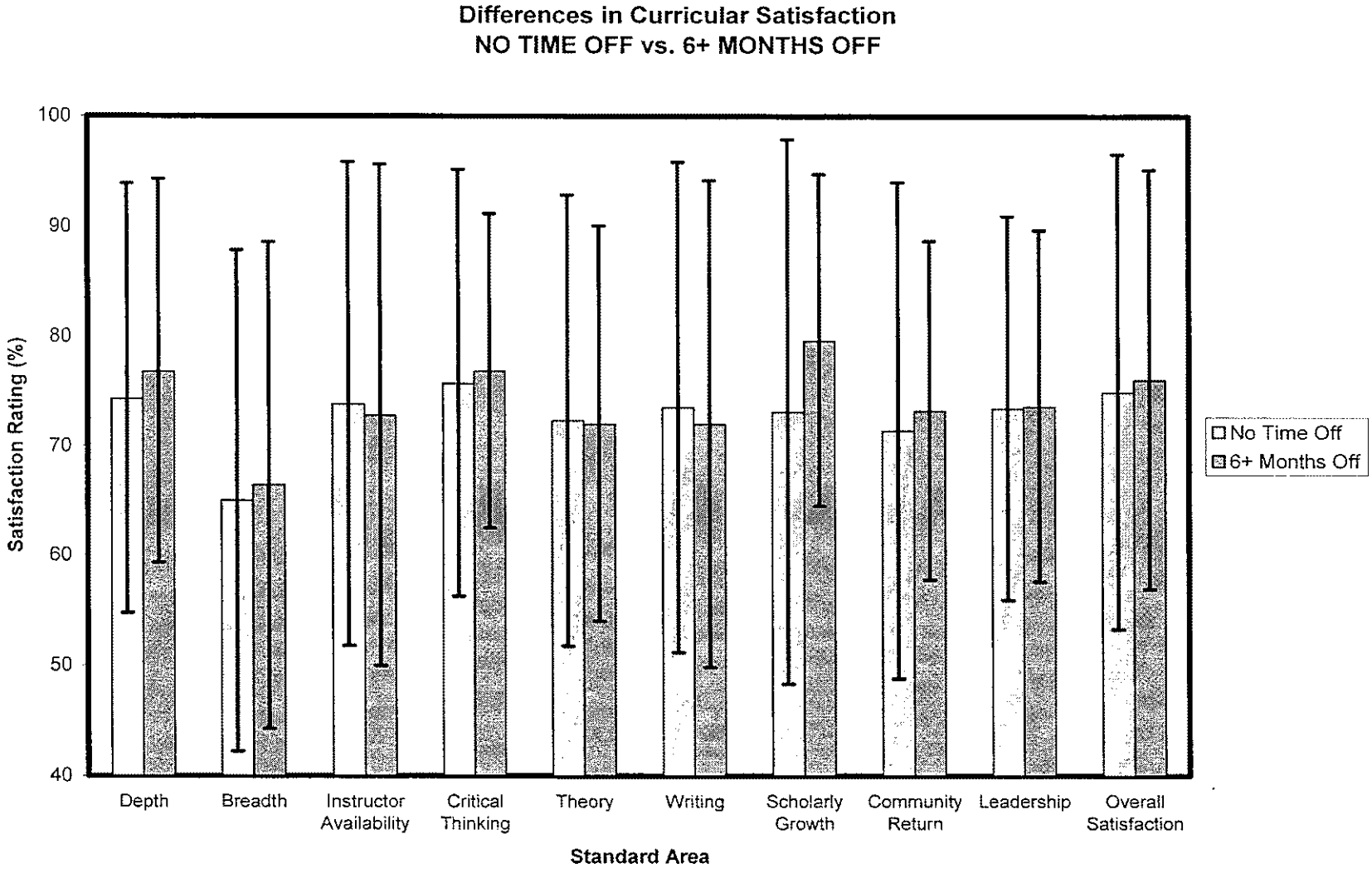

Figure 3. Time-Off Between Programs Differences in Curricular Satisfaction

requirements on-time were significantly less-satisfied in the areas of depth of learning ($t=2.367$, $p=0.027$), breadth of learning ($t=3.451$, $p=0.001$), teacher availability ($t=3.138$, $p=0.005$), writing ($t=2.467$, $p=0.022$), and overall program satisfaction ($t=2.625$, $p=0.016$). However, no statistically-significant differences were found in the areas of critical thinking, theoretical basis, scholarly growth, responsibility for community return, and leadership (Table 8, Figure 4).

Table 8. Time to Complete Degree Requirements

Standard Area	t	*p*-value
Depth	2.366	0.027*
Breadth	3.451	0.001*
Instructor availability	3.138	0.005*
Critical thinking	1.758	0.093
Theoretical basis	1.786	0.088
Writing	2.467	0.022*
Scholarly growth	1.918	0.069
Community return	1.880	0.073
Leadership	1.958	0.062
Overall satisfaction	2.625	0.016*

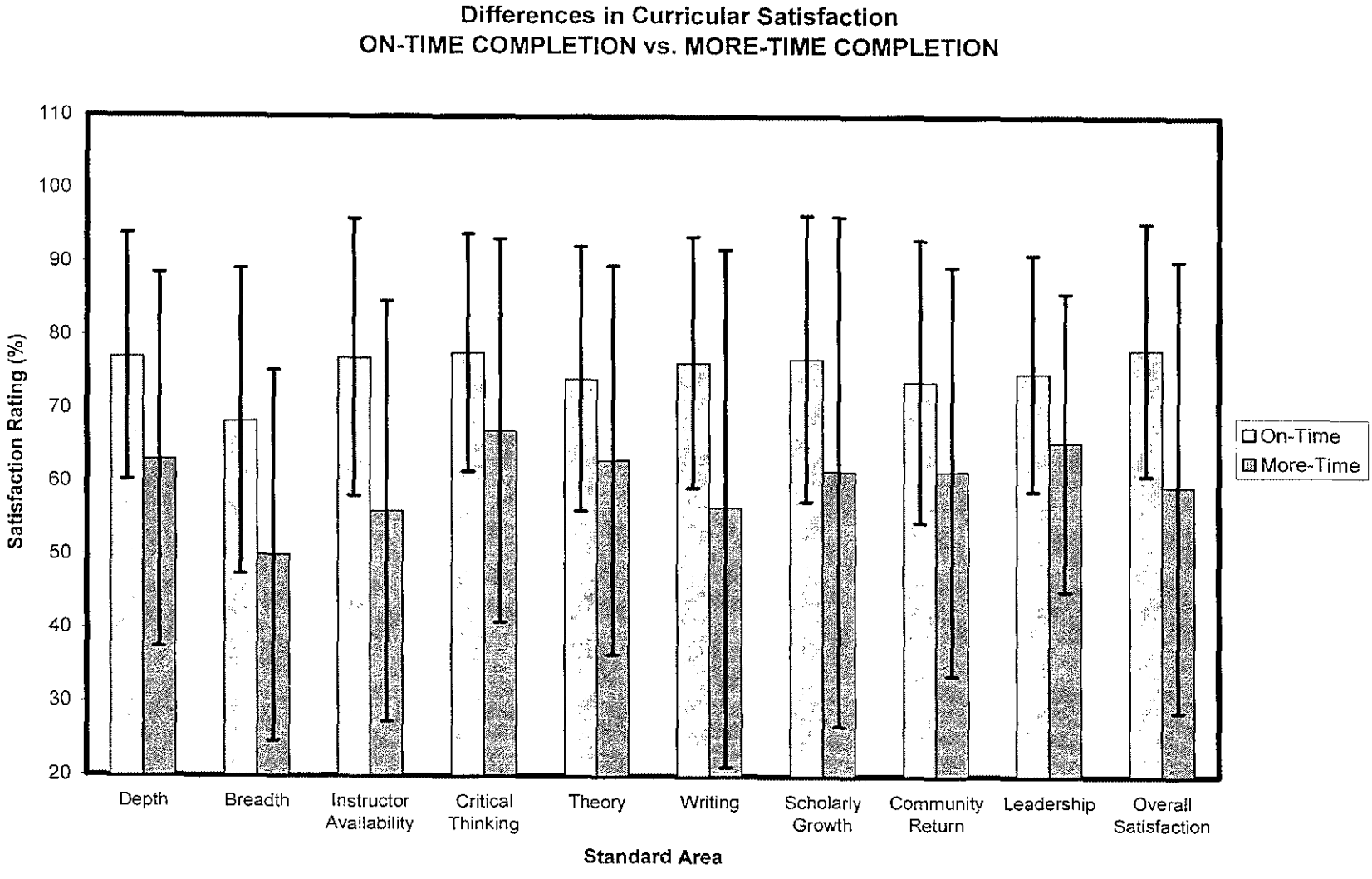

Figure 4. Degree Completion Time Differences in Curricular Satisfaction

CHAPTER V

DISCUSSION AND CONCLUSION

Discussion

We hypothesized that the 2005 and 2006 graduates from NATA-Accredited Post-Professional Athletic Training Education Programs would be 80% satisfied with every aspect of their respective graduate program as it relates to the 2002 *Standards and Guidelines* for Graduate Education. A score of 80% was represented by selecting an answer choice corresponding with 80% or higher on the satisfaction scale for each of the ten standard area questions. The results demonstrated that none of the ten standard areas had mean levels of 80% satisfaction or higher. The three areas where the highest mean satisfaction ratings were generated were critical thinking (75.9% satisfied), overall curricular satisfaction (75.1%), and depth of learning (74.8%). The three areas where the lowest standard mean satisfaction ratings were reported were in breadth of learning (65.3%), desire to return and disseminate knowledge into the community (71.8%), and theoretical basis of learning (72.3%). When reporting those respondents who were at least 80% satisfied in the standard area, the three standard areas with the highest number of respondents were critical thinking (70.0% of population were at least 80% satisfied, n=87), and scholarly growth (69.9%, n=86) and overall curricular satisfaction (69.9%, n=86) were tied. The three areas where the least amount of respondents were at least 80% satisfied were breadth of learning (43.1%, n=53), leadership (56.9%, n=70), and theoretical basis of learning (59.4%, n=73).

Previous research conducted in various nursing education programs reported that 86% of graduates were satisfied with their nursing education (38% were 'very satisfied'

and 48% were 'somewhat satisfied') (Norman et al, 2005). The researchers utilized a traditional five-point Likert Scale as opposed to the ten-point scale that we developed and utilized, so drawing direct comparisons between the two studies is difficult due to the fact that one scale uses a descriptive scale with the other uses a numerical scale.

The mission of Post-Professional GATEPs is 'to expand the depth and breadth of...knowledge and skills of entry level athletic trainers...' (S&G 2002). It is interesting to observe that the depth of learning standard produced one of the highest overall mean satisfaction scores, and yet respondents identified breadth of learning as the lowest of the ten standards in regards to satisfaction. This is not necessarily surprising because it coincides with one of the focuses of the *Standards and Guidelines* known as 'Areas of Distinctiveness'. The standards allow each program freedom to vary their subject matter in order to cater to the strengths of its faculty and resources. This varies tremendously from undergraduate curricular exposure, where students were required to prove competency in a breadth of educational areas set forth by the Board of Certification. Therapeutic modalities, pharmacology, and risk management were among the required areas that graduates of CAATE-Accredited undergraduate programs were required to develop entry-level proficiency in. When compared with undergraduate experiences, there seems to be a lack of breadth at the graduate degree level – as there is no standard that mandates that specific areas of study must be covered in the curriculum.

The autonomy that programs are given reflects a dramatic shift in emphasis that promotes diversity of curricular content and clinical experiences (Wilkerson, 2006). So while one program may focus on lower extremity injury prevention programs, another program may specialize in developing the athletic training educator. Sauers & Parsons

(2005) suggest that this directed focus could be making way for implementation of specialty certifications or residency/fellowship programs. This could provide students with an option to gain even more specialized knowledge in a certain domain through additional coursework and clinical practice.

Another explanation for this could be that students are having trouble distinguishing the difference between depth of knowledge and breadth of knowledge. Anticipating this dilemma, the researchers attempted to assist the respondent by giving supportive definitions for both terms in hopes that the graduate would be able to differentiate between the two standards. Graduates were asked to identify the three areas that (s)he felt they received both the greatest and the most limited amount of depth of learning towards a mastery of subject matter, and specific examples of this depth included manual therapy and rehabilitation for overhead throwing injuries. While depth of learning refers to the level that a specific topic can be specifically studied in-depth, breadth of learning refers to the amount of exposure that students can be given to a wide variety of topics, often even beyond the traditional scope of our practice. Examples that were given for breadth of learning included rehabilitation for special populations and treatment of general medical disorders. It is possible that these example areas may have influenced or inadvertently misled subjects with their answer choices. Our results show that students are more satisfied with the amount of depth that certain subject matters are explored, however they also desire more exposure to diverse topics.

We hypothesized that graduates of two-year programs would be more satisfied in the ten standard areas of a GATEP than graduates of one-year programs. Results revealed that there was no significant difference between the graduates' satisfaction

levels based on the length of their program. Although there were no differences between one and two-year graduates satisfaction of defined areas, two-year program graduates reported higher satisfaction percentages than the one-year graduates in all ten standards. Fifty-eight percent (n=71) of the respondents were from two-year programs, while the other forty-two percent (n=52) were graduates of one-year programs; however, this difference in group size is relatively proportionate to the number of one and two-year GATEPs – at the time of the survey there were nine (66%) two-year GATEPs and three (33%) one-year GATEPs.

It was theorized that a longer program would be able to provide more time for students to gain additional didactic and clinical knowledge, to have more opportunities to think critically and to delve into advanced subject matter, more time to complete research requirements, and to develop professionally. Generally speaking, the more exposure that you have to a subject matter then the more knowledge and experience can be gained in that area. Although length of program should be among the factors to be considered when selecting a graduate program, it does not necessarily indicate that length of program has any affect on the satisfaction levels of graduates (Ingersoll, 2003).

Perhaps more important than the length or *quantity* of the program is the *quality* of program. Unfortunately, this is not easily measurable, thus promoting the need for further outcomes assessments. No studies, to date, have specifically addressed the quality and ranking of athletic training education programs, at any level (Voll et al, 1999). Students have varying reasons for selecting a one-year or a two-year program; some reasons, such as acceptance into a program, are not able to be controlled. Time and cost of education are two of the more common reasons for selection of a one-year

program; however this is not the best choice for every student. Accelerated learning of both basic and advanced-discipline concepts appears to come easier for those students who have received an extensive undergraduate preparation in the basic sciences (Wilkerson et al, 2006).

Graduates of a nursing doctoral program had the option between academic-year courses or summer only courses and results showed that those graduates who selected the longer, academic-year coursework reported job placement in more research venues than those graduates who selected summer-only courses (Sakalys et al, 2001). Additionally, a trend developed to demonstrate that the nursing doctoral students who were enrolled in a longer time-frame of coursework were showing more scholarly productivity. This study gives explanation of our theory that students who utilize a longer amount of time to complete coursework perhaps have more research exposure and the ability to be exposed to aspects of critical thinking application, one of the goals of post-professional athletic training education students. Wilkerson et al (2006) concur with the goal of these programs to expand the body of research and clinical-decision making skills, as it will ultimately lead to the development of new knowledge within our field.

Students of nursing education at both the associate and baccalaureate levels offer conflicting views regarding length of program as it relates to depth of learning. Students questioned the amount and depth of clinical practice opportunities, and therefore perceived a disconnection between didactic and clinical practice (Norman et al, 2005). Other students felt that they were experiencing "information overload". Yet while the attitudes of those students support a longer, quantitative learning experience, other students from this same population felt that their program contained too much "busy

work" (Norman et al, 2005). It remains that there is no apparent consensus on which length of program option is the most effective – and likely that depends on the individual student. Peer & Rakich (2000) propose that the best way to ensure that programs are able to provide quality education is through standardization by the accreditation process. Thus, ultimately it becomes the responsibility of the PPERC and its *Standards and Guidelines* to ensure that students are receiving the same quality of education, regardless of the focus or length of the program.

We hypothesized that there would be no difference between gender in regards to curricular program satisfaction and our results support this hypothesis. Although there were no differences between male and female graduates' satisfaction of defined areas, females did report higher satisfaction percentages in five areas – critical thinking (Δ_{score} = 0.11), theoretical basis (Δ_{score} = 0.23), writing (Δ_{score} = 0.04), scholarly growth (Δ_{score} = 0.42) and desire to return knowledge to the community (Δ_{score} = 0.35), and the males reported higher satisfaction than the females for both depth (Δ_{score} = 0.12)and breadth of learning(Δ_{score} = 0.09), instructor availability(Δ_{score} = 0.36), and leadership(Δ_{score} = 0.10).

The overall demographics of students enrolled in post-professional GATEPs is shifting; however program satisfaction is not affected. It is apparent from our results that the curriculum is having a similar affect on both males and females, which is the desired outcome. In a clinical education satisfaction study reporting on physical therapy students (Stith et al, 1998), the researchers also hypothesized that there would be no gender differences because the previous literature had never before supported any differences. The authors actually found that there was a definite interaction between gender and phase of the clinical cycle (first vs. fourth or fifth clinical rotation); however they were unable

to explain why these differences were present. Further, the authors suggested that further research be conducted in an attempt to explain differences in gender satisfaction.

We hypothesized that students who took a respite from classes, longer than six months, between their undergraduate and graduate courses of study would report higher satisfaction scores for all ten standard areas compared with those graduates who immediately entered their graduate program following attainment of their Bachelor's Degree, however our results did not support this hypothesis. A total of 27 graduates (22.0%) of the respondents reported taking time off from school, in excess of six months, after earning their Bachelor's Degree. Fifteen of those graduates took less than one year off, while the other twelve graduates took more than one year away from school. One explanation for why there may not have been any significant differences between the two groups could be that the time off from school may have been too short in duration to produce any significant differences in curricular satisfaction.

Respondents were not asked to specify the reasons for taking time away from school, however possible reasons why a student may take time away from school include educational burnout, need for employment experience, lack of desire to earn a Masters Degree or rejection from their program of choice. It often occurs that a student will complete their undergraduate requirements in either August or December – thus their entrance into graduate school would be delayed merely due to the fact that most schools accept their applicants in the early spring for programs that begin either in June or August. Students who take time off ('non-traditional students') may be more prepared and focused to handle the rigors of graduate school after taking a short respite from coursework. In one study by Sedlak (1999), the author examines the critical thinking

abilities of traditional vs. non-traditional nursing students. The author concludes that nontraditional students were more flexible than traditional students in adapting to their new clinical environment, therefore generating self-confidence sooner. Self-motivation and positive personal feedback were among the other reported feelings by the non-traditional nursing students.

Finally, we hypothesized that graduates that were able to complete their degree in the allotted amount of time will report higher satisfaction scores on all standards as compared to graduates that needed an extension, or additional semesters, to complete their degree requirements. Approximately seventeen percent (n=20) of the survey respondents reported needing additional time to complete their degree requirements. The average additional amount of time that these students required was 9.60±7.287 months. Of these twenty subjects, there were no apparent differences between gender, graduation year, length of program, site of clinical assistantship, or existence of a doctoral program. Average number of credit hours taken was 41; average grade point average was 3.61; and mean GRE entrance exam score was 1038. There may, however, be a difference regarding type of research conducted. Fourteen of the twenty subjects (70%) completed a thesis, while the remaining six chose the research project route.

Limited research exists to support the claim that completing graduation requirements within the proposed allotment of time contributes to program satisfaction. Martin and Buxton (1997) discuss the flexibility that education programs ought to consider, in order to reach each student's individual needs. Specifically, advisement sessions, clinical experiences and classes may all need to be offered in the evening or on weekends in order to accommodate the non-traditional student or for students who need

additional assistance. The authors go on to emphasize that taking more time to complete a degree or developing a more flexible clinical experience does not necessarily mean that programs should be forced to lower their academic standards and expectations.

Conclusion

The purpose of this study was to examine the overall satisfaction levels of recent graduates (2005 - 2006) of NATA-Accredited Post-Professional Graduate Athletic Training Education Programs as related to the 2002 *Standards and Guidelines* for Graduate Education. Our research has concluded that graduates are generally satisfied across all the areas of their graduate education, as it relates to their didactic curriculum. As discussed, every program contains Areas of Distinctiveness that emphasize the faculty and resources available to that institution. This also gives programs more independence in their curriculum to create a unique and yet fulfilling experience for its students. Due to this autonomy, it is difficult to gain an accurate knowledge of satisfaction across all of the programs because essentially every program is very different. That explains why the authors chose to use the 2002 *Standards and Guidelines* as an outline for their survey instrument questions, because these standards provide the backbone from which all programs are required to develop around and therefore are essentially a known commonality among all twelve programs.

Our hypotheses examined specific demographics such as gender and length of program. It is important to know whether or not one-year programs are able to disseminate the necessary amount of knowledge and experience to its graduates. The authors also wanted to know whether or not the programs are able to graduate their

students in a reasonable amount of time, and if not then does it affect the outcomes of the graduates. Our study demonstrated that students are receiving depth of learning towards a mastery of varying subject matter, which is going to produce expanded diversity and expertise in our profession. Limited research has been conducted in Post-Professional Graduate Athletic Training Education, and therefore it was vitally important that our research reflect an accurate interpretation of student outcomes assessments. Student and graduate satisfaction and program evaluation is a useful means of evaluating the efficacy of a program, and to determine if a program is able to accurately convey the information that it intends to its students.

We acknowledge that certain limitations were present in this research. The authors were unable to obtain accurate information on every subject in the population; therefore the sample size was affected. While the numbers for gender and length of program were nearly equal, these values do not necessarily accurately represent the population of graduates from 2005 and 2006. Also, it could not be assured that every program was represented proportionately in the results. Finally, because the survey instrument was developed originally by the researchers, it cannot be guaranteed that an open-ended question encompassed every possible view or opinion of the respondent. Further, environment, time and language/content errors could not be accurately controlled.

Future studies should begin to examine the Areas of Distinctiveness that each program possesses. Specifically, whether students are able to accurately identify what these areas are, and do the students' perceptions of their specialized areas correlate with the specialized areas as defined by their respective program director. Further research

should examine any associated differences between the one-year and two-year program options, especially in regards to the amount of depth in learning that is perceived by students. It would also be interesting to administer this exact survey instrument to the same subjects in five years to see if curricular satisfaction levels change over time.

It has been five years since the adoption of the most recent *Standards and Guidelines* for Graduate Education. It is time for a review of the most recent standards to determine if revisions need to be made. Research should be focused on both program directors and graduate students to see where any alterations should be made. A survey of GATEP Program Directors should reveal their opinions on any shortcomings in these guidelines, and should produce recommendations for amendments. It would also be interesting to research if GATEP students are familiarized with the *Standards and Guidelines*, along with being made aware of the objectives and didactic goals of their program.

REFERENCES

Anderson MB, Larson GA, Luebe JJ. Student and Supervisor Perceptions of the Quality Of Supervision in Athletic Training Education. *J Athl Train.* 1997;32(4):328-335.

Arnold BL, Van Lunen BL, Gansneder BM, Szczerba JE, Mattecola CG, Perrin DH. 1994 Athletic Trainer Employment and Salary Characteristics. *J Athl Train.* 1996;31(3):215-218.

Arnold BL, Gansneder BM, Van Lunen BL, Szczerba JE, Mattecola CG, Perrin DH. Importance of Selected Athletic Trainer Employment Characteristics in Collegiate, Sports Medicine Clinic, and High School Settings. *J Athl Train.* 1998;33:254-258.

Association of American Universities: Committee on Graduate Education. Report and Recommendations, October 1998. Association of American Universities, 1998.

Committee on Accreditation of Allied Health Education Programs (CAAHEP). *Essentials and Guidelines for an Accredited Education Program for the Athletic Trainer.* 1991.

Cleary M, Happell B. Recruitment and Retention Intiatives: Nursing Students' Satisfaction with Clinical Experience in the Mental Health Field. *Nurse Education In Practice.* 2005;5:109-116.

Council on Postsecondary Accreditation (COPA). *Provisions and Procedures for Becoming Recognized as an Accrediting Agency for Postsecondary Educational Institutions or Programs.* October 20, 1975.

Cronk DR, Hetz SP, Azarow KS. Are Army-Trained Surgeons Satisfied With Their Residencies? *Current Surgery.* 2005;62(2):199-203.

Cuppett MM. Self-Perceived Continuing Education Needs of Athletic Trainers. *J Athl Train.* 2001;36(4):130-135.

Delforge GD. The Athletic Training Major: A Report from the Professional Education Committee. *Athl Train, JNATA.* 1982;17:288-290.

Delforge GD, Behnke RS. The History and Evolution of Athletic Training Education in the United States. *J Athl Train.* 1999;34(1);53-61.

Disch J, Edwardson S, Adwan J. Nursing Faculty Satisfaction With Individual, Institutional, and Leadership Factors. *Journal of Professional Nursing.* 2004; 20(5):323-332.

Graduate Review Committee, Graduate Education Committee. Post-Certification Graduate Athletic Training Education Program Accreditation Site Visitor Workshop. June 2003. <http://nataec.org/AcademicPrograms/PostProfessionalEducation/tabid/97/Default.aspx >.

Hermann MM. The Relationship Between Graduate Preparation and Clinical Teaching in Nursing. *Journal of Nursing Education.* 1997;36:317-322.

Hertel J, West TF, Buckley WE, Denegar CR. Educational History, Employment Characteristics, and Desired Competencies of Doctoral-Educated Athletic Trainers. *J Athl Train.* 2001;36(1):49-57.

Hodgkinson H. All One System: A Brief Look at Education's Future. *College Student Affairs.* 1989;9(1):17-28.

Ingersoll CA, Gieck JH. Issues and Outcomes in Graduate Education. *Athletic Training Educators Conference.* January 2005. < http://nataec.org/AcademicPrograms/PostProfessionalEducation/tabid/97/Default.aspx>.

Jarski RW, Kulig K, Olsen RE. Clinical Teaching in Physical Therapy: Student and Teacher Perceptions. *Physical Therapy.* 1990;70(3):173-179.

Jevack JE, Wilder RS, Mann G, Hunt RJ. Career Satisfaction and Job Characteristics of Dental Hygiene Master's Degree Graduates. *Health and Wellness Resource Center.* 2000;74(3):219-238.

Judd MR, Perkins SA. Athletic Training Education Program Directors' Perceptions on Job Selection, Satisfaction, and Attrition. *J Athl Train.* 2004;39(2):185-192.

Kahanov L, Andrews L. A Survey of Athletic Training Employers' Hiring Criteria. *J Athl Train.* 2001;36(4):408-412.

Knight KL. Graduate Education Evolves. *NATA News.* January 2002: 37.

Lauber CA, Toth PE, Leary PA, Martin RD, Killian CB. Program Directors' and Clinical Instructors' Perceptions of Important Clinical-Instructor Behavior Categories in the Delivery of Athletic Training Clinical Instruction. *J Athl Train.* 2003;38(4): 336-341.

Laurent T, Weidner TG. Clinical Instructors' and Student Athletic Trainers' Perceptions of Helpful Clinical Instructor Characteristics. *J Athl Train.* 2001;36(1):58-61.

Martin M, Buxton B. The 21st-Century College Student: Implications for Athletic Training Education Programs. *J Athl Train.* 1997;32(1):52-54.

Miller SJ. Approval of Athletic Training Curriculums at Colleges and Universities. *J Athl Train.* 1999;34(1);62-63.

National Athletic Trainers' Association. AMA Endorses Athletic Training as Allied Health Profession. *NATA News*. September 1990: 4.

National Athletic Trainers' Association. *Guidelines for Development and Implementation of NATA Approved Undergraduate Athletic Training Education Programs.* Greenville, NC: National Athletic Trainers' Association; 1980.

National Athletic Trainers' Association Board of Certification. NATABOC Role Delineation Study. 4ed. Philadelphia, PA: FA Davis; 1999.

National Athletic Trainers' Association Education Council. NATA Accredited Post-Certification Graduate Athletic Training Education Programs. Accessed October 14, 2006. <http://nataec.org/AcademicPrograms/PostProfessionalEducation/tabid/97/Default.aspx>.

National Athletic Trainers' Association Education Council. *Standards and Guidelines for Post-Certification Graduate Athletic Training Education Programs.* 2002 ed. <*http://nataec.org/AcademicPrograms/PostProfessionalEducation/tabid/97/Default.aspx*>. Accessed September 3, 2005.

Newell WE. Reflection on Athletic Training. *J Athl Train.* 1984;19:256-259,311.

Norman L, Buerhaus PI, Donelan K, McCloskey B, Dittus R. Nursing Students Assess Nursing Education. *Journal of Professional Nursing.* 2005;21(3):150-158.

O'Shea ME. *A History of the National Athletic Trainers Association.* Greenville, NC: National Athletic Trainers' Association; 1980.

Peer KS, Rakich JS. Accreditation and Continuous Quality Improvement in Athletic Training Education. *J Athl Train.* 2000;35(2):188-193.

Perkins SA, Judd MR. Dilemmas of Program Directors: Then and Now. *J Athl Train.* 2001;36(4):396-400.

Platt LS, Turocy PS, McGlumphey BE. Preadmission Criteria as Predictors of Academic Success in Entry-Level Athletic Training and Other Allied Health Education Programs. *J Athl Train.* 2001;36(2):141-144.

Ribak J, Notzer N, Drezne E. Evaluation of an Integrative Masters Program in Occupational Health at the Tel Aviv University Medical School. *Safety Science.* 1995;20:343-347.

Sakalys JA, Stember ML, Magilvy JK. Nursing Doctoral Program Evaluation: Alumni Outcomes. *Journal of Professional Nursing.* 2001;17(2):87-95.

Schwank WC, Miller SJ. New Dimensions for the Athletic Training Profession. *J Health Phys Educ Recreation.* September 1971:41-43.

Sedlack CA. Differences in Critical Thinking of Nontraditional and Traditional Nursing Students. *Nurse Educator.* 1999:24(6); 38-44.

Seegmiller JG. Perceptions of Quality for Graduate Athletic Training Education. *J Athl Train.* 2006;41(4):415-421.

Starkey C. Reforming Athletic Training Education. *J Athl Train.* 1997;32(2):113-114.

Stith J, Butterfield WH, Strube MJ, Deusinger SS, Gillespie DF. Personal, Interpersonal, And Organizational Influences on Student Satisfaction with Clinical Education. *Physical Therapy.* 1998;78(6):635-646.

Turocy PS. Overview of Athletic Training Education Research Publications. *J Athl Train.* 2002;37(4supp):S162-S167.

Turocy PS. Survey Research in Athletic Training: The Scientific Method of Development and Implementation. *J Athl Train.* 2002;37(4supp):S174-S179.

Voll CA, Goodwin JE, Pitney WA. Athletic Training Education Programs: To Rank or Not To Rank? *J Athl Train.* 1999;34(1):48-52.

Wall CR, DeHaven MJ, Oeffinger KC. Survey Methodology for the Uninitiated. *J Fam Pract.* 2002;51:573-582.

Wiedner TG, Henning JM. Development of Standards and Criteria for the Selection, Training, and Evaluation of Athletic Training Approved Clinical Instructors. *J Athl Train.* 2004;39(4):335-343.

Weidner TG, Laurent T. Selection and Evaluation Guidelines for Clinical Education Settings in Athletic Training. *J Athl Train.* 2001;36(1):62-67.

Wilkerson GB, Colston MA, Bogdanowicz BT. Distinctions between Athletic Training Education Programs at the Undergraduate and Graduate Levels. *Athletic Training Education Journal.* 2006;1(April-Dec):38-40.

Wilksten, Kirkland, Berry, Gottshall, Carroll, Houglum, Lopez, Schlabach, Fandel, Laquale. Specialty Certifications in Athletic Training [Proposal]. *CAQ Ad-Hoc Committee Education Council.* 2002:1-16.

Dear PILOT SUBJECT NAME,

My name is Kevin Henry, and I am a graduate student at Old Dominion University pursuing a Master of Science in Education Degree with an emphasis in Athletic Training. My colleague, Alissa Siemers, and I are conducting research under the supervision of Dr. Bonnie Van Lunen to study the satisfaction levels of recent graduates of NATA-Accredited Post-Professional Graduate Athletic Training Education Programs. You have been sent this email because you have been identified as a graduate of one of only twelve programs in the country that offer a NATA-Accredited Post-Professional graduate curriculum. 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 graduate), and your overall satisfaction levels with various content areas within your respective graduate program. The survey will require 10-15 minutes of your time and your answers will remain confidential. At the conclusion of the survey, please enter your email address in the field in order to identify that you have completed the survey. You have been selected as a pilot subject for this study, thus you will be asked to retake this same survey a second time in the coming weeks to allow us to establish reliability measures for our survey instrument. By pressing the "Submit" button on the last page of the on-line survey, your responses will be automatically sent in.

Participants will 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 educators to evaluate the graduate programs to determine the overall strengths and weakness, and to be able to implement changes to the *Standards and Guidelines* for Graduate Education. Any questions regarding the format or results of this study can be directed towards Kevin Henry (845) 594-2985 or khenr003@odu.edu.

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

https://periwinkle.ts.odu.edu/surveys/C5DHSQ/

Thank you again for your time and participation.

Sincerely,

Kevin J. Henry, '07
Old Dominion University

Dear PILOT SUBJECT NAME,

Thank you again, very much, for your time and effort in choosing to be a subject in our pilot study. Alissa Siemers and I (Kevin Henry) are very excited with the responses that we received from the first set of surveys. Please understand that it is equally essential that you take a few moments to fill out the survey questions a second time. This is the first time that this survey instrument is being used, and therefore we must use the results of this pilot study to establish reliability.

Below you will again find the link that will take you directly to the on-line survey. The survey will require 10-15 minutes of your time and your answers will remain confidential. At the conclusion of the survey, please do not forget to **enter your email address in the field** in order to identify that you have completed the survey. This is vital information, so that we may compare your results to your first set of responses. By pressing the "Submit" button on the last page of the on-line survey, your responses will be automatically sent in.

Participants will 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 educators to evaluate the graduate programs to determine the overall strengths and weakness, and to be able to implement changes to the *Standards and Guidelines* for Graduate Education. Any questions regarding the format or results of this study can be directed towards Kevin Henry (845) 594-2985 or khenr003@odu.edu.

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

https://periwinkle.ts.odu.edu/surveys/C5DHSQ/

Thank you again for your time and participation.

Sincerely,

Kevin J. Henry, '07
Old Dominion University

Dear PROGRAM DIRECTOR'S NAME,

My name is Kevin Henry, and I am a graduate student at Old Dominion University pursuing a Master of Science in Education Degree with an emphasis in Athletic Training. My colleague, Alissa Siemers, and I are conducting research under the supervision of Dr. Bonnie Van Lunen to study the satisfaction levels of recent graduates of NATA-Accredited Post-Professional Graduate Athletic Training Education Programs. As a program director of one of only twelve programs in the country that offer a NATA-Accredited Post-Professional graduate curriculum, we request your assistance with our research.

Previously, the offices of the Education Council and the PPERC used to generate a list annually of the graduates from Master's Degree programs. The list is no longer made available for our purposes, so we must generate this list ourselves. We ask that you would please reply with a list of your program graduates from the years 2005 and 2006. We understand that programs vary upon when they confirm your degrees, so the month is unimportant. These individuals will then be contacted via email, from addresses gained from the online membership database of the NATA. So additionally, if you have current contact information for your graduates, please take a moment to pass that along as well. Any questions regarding this request or about the study can be directed towards Kevin Henry (845) 594-2985 or khenr003@odu.edu. Your time and efforts are truly appreciated.

Sincerely,

Kevin J. Henry, '07
Old Dominion University

Dear SUBJECT NAME:

My name is Kevin Henry, and I am a graduate student at Old Dominion University pursuing a Master of Science in Education Degree with an emphasis in Athletic Training. I am conducting research under the supervision of Dr. Bonnie VanLunen to study the satisfaction levels of recent graduates of NATA-Accredited Post-Professional Graduate Athletic Training Education Programs. You have been sent this email because you have been identified as a graduate of one of twelve programs in the country that offer a NATA-Accredited Post-Professional graduate curriculum. 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 graduate), and your overall satisfaction levels with various content areas within your respective graduate program. The survey will require 10-15 minutes of your time and your answers will remain confidential. By pressing the "Submit" button on the last page of the on-line survey your responses will be automatically sent in.

All the participants will be given the opportunity to enter to win a gift certificate to one of several 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 educators to evaluate the graduate programs to determine the overall strengths and weaknesses, and to be able to implement changes to the *Standards and Guidelines* for Graduate Education. Any questions regarding the format or results of this study can be directed towards Kevin at khenr003@odu.edu.

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

https://periwinkle.ts.odu.edu/surveys/MX3QPV/

Thank you again for your time and participation.

Sincerely,

Kevin J. Henry, '07
Old Dominion University

Dear SUBJECT NAME,

Below you will a link to our research survey:

https://periwinkle.ts.odu.edu/surveys/MX3QPV/

My name is Kevin Henry, and I am a graduate student at Old Dominion University pursuing a Master of Science in Education Degree with an emphasis in Athletic Training. I am conducting research under the supervision of Dr. Bonnie Van Lunen to study the satisfaction levels of recent graduates of NATA-Accredited Post-Professional Graduate Athletic Training Education Programs. You have been sent this email because you have been identified as a graduate of one of twelve programs in the country that offer a NATA-Accredited Post-Professional graduate curriculum. **If you have already had the opportunity to complete the survey, let me take this time to express my appreciation to you.** If not, we would again like to invite you to participate in this survey as your involvement is essential to the success of this research.

The survey link will take you directly to an on-line survey that seeks to identify demographic information about you (the graduate), and your overall satisfaction levels with various content areas within your respective graduate program. The survey will require 10-15 minutes of your time and your answers will remain confidential. By pressing the "Submit" button on the last page of the on-line survey your responses will be automatically sent in.

All the participants will be given the opportunity to enter to win a gift certificate to one of several 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 educators to evaluate the graduate programs to determine the overall strengths and weaknesses, and to be able to implement changes to the *Standards and Guidelines* for Graduate Education. Any questions regarding the format or results of this study can be directed towards Kevin at khenr003@odu.edu.

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

https://periwinkle.ts.odu.edu/surveys/MX3QPV/

Thank you again for your time and participation.

Sincerely,

Kevin J. Henry, '07
Old Dominion University

Post-Professional Graduate Education Survey

Page 1

The purpose of this study is to examine the overall satisfaction levels of recent graduates (2005 - 2006) of NATA Accredited Post-Professional Graduate Athletic Training Education Programs as related to the 2002 Standards and Guidelines for Graduate Education. A secondary purpose is to examine associated differences and relationships between various demographic variables and satisfaction levels.

Please read all questions and answer them to the best of your ability. Your completion of this survey will be considered your consent to participate in this study. All information that you provide will kept confidential. Upon completion of each survey page press the NEXT button and the next page of questions will appear. If you need to stop the survey and return to it later, please press the SAVE button. This will allow you to start the survey from where you left off.

At the end of the survey you will have the opportunity to request the results of the study as well as enter for a chance to win a $5 Gift Certificate. Thank you for your participation in this study.

Program Satisfaction Levels of NATA Accredited
Post-Professional Athletic Training Graduates

Page 2

Sex:
{Choose one}
( ) Male
( ) Female

Age:
{Enter text answer}
[ ]

Graduation Year from Program:
{Choose one}
( ) 2003
( ) 2004
( ) 2005
( ) 2006
( ) 2007

Program Length:
{Choose one}
( ) 1 year
( ) 2 years

Did you take any length of time off from school, exceeding six months, between graduation from your under-graduate institution and entrance into your graduate program?
{Choose one}
( ) Yes
( ) No

If Yes, how long were you out of school prior to entering graduate school?
{Choose one}
( ) 1 year or less
( ) more than 1 year

Did you complete your program requirements in that time frame?
{Choose one}
( ) Yes
( ) No

If No, how much more time did it take you to complete the program? (in months)
{Enter text answer}
[ ]

Page 2 (cont'd)

Graduate School Grade Point Average (GPA):
{Enter text answer}
[ ]

GRE Score (verbal and quantitative combined) [if applicable]:
{Enter text answer}
[ ]

Page 3

What type of research experience did you complete while you were enrolled in your graduate athletic training education program?
{Choose one}
( ) Thesis (involved committee, proposal and defense)
( ) Research Project
( ) Other

Number of credit hours in program:
{Enter text answer}
[ ]

Number of students in graduating class:
{Enter text answer}
[ ]

Total number of course instructors in program:
(An instructor is defined as a an individual assigned to teach a particular course; this would not include guest lecturers)
{Enter text answer}
[ ]

Did you receive any tuition assistance from your program, to help defray educational costs accrued during that time?
{Choose one}
( ) Yes
( ) No

If Yes, please specify the overall value of your tuition assistance?
{Choose one}
( ) Full Tuition Assistance
( ) Partial Tuition Assistance

Of this total number of instructors, how many of these professors were accessible on a daily basis during the semester in which they taught their course?
{Enter text answer}
[ ]

Page 4

How satisfied are you that the NATA Accredited Post-Professional Graduate Athletic Training Education Program you attended (herein referred to as 'your program') was able to facilitate depth of learning in various subject matters at the Master's Degree level?
{Choose one}
( ) 0-10% satisfied
( ) 11-20% satisfied
( ) 21-30% satisfied
( ) 31-40% satisfied
( ) 41-50% satisfied
( ) 51-60% satisfied
( ) 61-70% satisfied
( ) 71-80% satisfied
( ) 81-90% satisfied
( ) 91-100% satisfied

Name three areas where you feel that your depth in subject matter is most evident. (Please be as specific as possible. For example, write Rehabilitation" and further define it using specific terms such as "Manual Therapy", Lower Extremity Injury Prevention", or "Rehabilitation for Overhead Throwing Injuries")
{Enter text answer}
[ ]
[ ]
[ ]

Name three subject matters where you would have liked to have had more in-depth exposure. (Please be as specific as possible. For example, write Administration" and further define it using specific terms such as Insurance Procedures", or "Maximizing Budgets")
{Enter text answer}
[ ]
[ ]
[ ]

Page 5

How satisfied are you that your program was able to facilitate a breadth of learning in various subject matters at the Master's Degree level?
Breadth can be better understood as exposure to a variety of topics, many times beyond the traditional realm of our scope of practice; for example, geriatrics, special populations, or general medical disorders.
{Choose one}
( ) 0-10% satisfied
( ) 11-20% satisfied
( ) 21-30% satisfied
( ) 31-40% satisfied
( ) 41-50% satisfied
( ) 51-60% satisfied
( ) 61-70% satisfied
( ) 71-80% satisfied
( ) 81-90% satisfied
( ) 91-100% satisfied

How satisfied are you that the instructors within your program were accessible on a daily basis, or available to provide feedback when desired by the student?
{Choose one}
( ) 0-10% satisfied
( ) 11-20% satisfied
( ) 21-30% satisfied
( ) 31-40% satisfied
( ) 41-50% satisfied
( ) 51-60% satisfied
( ) 61-70% satisfied
( ) 71-80% satisfied
( ) 81-90% satisfied
( ) 91-100% satisfied

Page 6

How satisfied are you that your program was able to develop critical thinking skills?
For our purposes, critical thinking should be defined as the examination and investigation of a scenario, and then the application of knowledge to determine the appropriate course of action.
An example of critical thinking could be inspecting all of the special tests that could be used to detect anterior shoulder instability to determine which tests are the most accurate and to ensure that the tests are actually testing for anterior shoulder instability as opposed to another condition.
{Choose one}
( ) 0-10% satisfied
( ) 11-20% satisfied
( ) 21-30% satisfied
( ) 31-40% satisfied
( ) 41-50% satisfied
( ) 51-60% satisfied
( ) 61-70% satisfied
( ) 71-80% satisfied
( ) 81-90% satisfied
( ) 91-100% satisfied

Which mode(s) of learning provided the greatest opportunity for critical thinking skills enhancement?
(please check your top two choices, if applicable)
{Choose all that apply}
( ) Professor instruction on how to think critically
( ) Use of outside resources to supplement learning
( ) Self-exploration of written and oral skills for clarity
( ) Forming relationships between subject matter
( ) Discussion and exchanging of ideas with others
( ) Experience from the clinical setting
( ) Development of strategies to retain subject matter
( ) Other [ ]

Page 7

How satisfied are you that your program was able to expand on your theoretical basis in athletic training?
Theory, in the athletic training education realm, can be thought of as an in-depth exploration of reasons that may help to explain proven facts and phenomena.
For example, the theory behind the physiology of bone healing can be used to explain to an athlete why he/she cannot progress too rapidly through rehabilitation from a fracture.
{Choose one}
( ) 0-10% satisfied
( ) 11-20% satisfied
( ) 21-30% satisfied
( ) 31-40% satisfied
( ) 41-50% satisfied
( ) 51-60% satisfied
( ) 61-70% satisfied
( ) 71-80% satisfied
( ) 81-90% satisfied
( ) 91-100% satisfied

In which area do you feel that the most additional depth in theory was attained?
{Choose one}
( ) Prevention of Athletic Injuries
( ) Recognition, Evaluation and Assessment of Athletic Injuries
( ) Immediate Care of Athletic Injuries
( ) Treatment, Rehabilitation and Reconditioning of Athletic Injuries
( ) Organization and Administration
( ) Professional Development
( ) Research
( ) Other (please be specific) [ ]

Which source helped you to expand your theoretical knowledge the most?
{Choose one}
( ) Course Lectures
( ) Evidence-Based Medicine Research
( ) Course-Related Research
( ) Individual Research
( ) Clinical Experience
( ) Other (please be specific) [ ]

Page 8

How satisfied are you that your program was able to advance your writing skills?
{Choose one}
( ) 0-10% satisfied
( ) 11-20% satisfied
( ) 21-30% satisfied
( ) 31-40% satisfied
( ) 41-50% satisfied
( ) 51-60% satisfied
( ) 61-70% satisfied
( ) 71-80% satisfied
( ) 81-90% satisfied
( ) 91-100% satisfied

How satisfied are you that your program was able to enhance your desire to continue scholarly growth?
{Choose one}
( ) 0-10% satisfied
( ) 11-20% satisfied
( ) 21-30% satisfied
( ) 31-40% satisfied
( ) 41-50% satisfied
( ) 51-60% satisfied
( ) 61-70% satisfied
( ) 71-80% satisfied
( ) 81-90% satisfied
( ) 91-100% satisfied

Page 9

How satisfied are you that your program was able to instill and encourage the responsibility to return the special benefits of graduate study to the allied health community while pursuing your degree?
{Choose one}
( ) 0-10% satisfied
( ) 11-20% satisfied
( ) 21-30% satisfied
( ) 31-40% satisfied
( ) 41-50% satisfied
( ) 51-60% satisfied
( ) 61-70% satisfied
( ) 71-80% satisfied
( ) 81-90% satisfied
( ) 91-100% satisfied

Through which of the following method(s) were you able to 'give back' your higher education to the allied health community while you were pursuing your degree? (check all that apply)
{Choose all that apply}
( ) Student Organization
( ) Personal External Obligation (i.e. religious group, nonprofit organization)
( ) Professional External Obligation (i.e. presentation, poster, manuscript)
( ) Service Requirement for course(s)
( ) Other (please be specific) [ ]

Page 10

How satisfied are you that your program was able to prepare you to embrace and obtain leadership roles within the field?
{Choose one}
( ) 0-10% satisfied
( ) 11-20% satisfied
( ) 21-30% satisfied
( ) 31-40% satisfied
( ) 41-50% satisfied
( ) 51-60% satisfied
( ) 61-70% satisfied
( ) 71-80% satisfied
( ) 81-90% satisfied
( ) 91-100% satisfied

Through which mode(s) were you given the opportunity to establish a leadership role? (check all that apply)
{Choose all that apply}
( ) Teaching Experience
( ) Research Advancement / Scholarly Growth (e.g.. presentation)
( ) Clinical Instruction of students (CI/ACI)
( ) Mentoring of peers in the program
( ) Officer position in an organization
( ) Attainment of additional certifications, specializations
( ) Other (please be specific) [ ]

Page 11

Finally, please rate your overall level of curricular satisfaction with your NATA Accredited Post-Professional Graduate Athletic Training Education Program.

{Choose one}

( ) 0-10% satisfied
( ) 11-20% satisfied
( ) 21-30% satisfied
( ) 31-40% satisfied
( ) 41-50% satisfied
( ) 51-60% satisfied
( ) 61-70% satisfied
( ) 71-80% satisfied
( ) 81-90% satisfied
( ) 91-100% satisfied

Page 12

Did you accept a graduate assistantship while pursuing your Master's Degree?
{Choose one}
( ) Yes
( ) No.

Page 13

Was the assistantship assignment at your programs host institution site?
{Choose one}
( ) Yes
( ) No

If your clinical assistantship site was off-campus, do you feel that your overall program satisfaction levels were altered due this lack of on-campus experience?
{Choose one}
( ) Yes
( ) No
( ) N/A; On-Campus

What was the average number of hours worked at your clinical site per week?
{Enter text answer}
[ ]

Did you receive an assistantship stipend?
{Choose one}
( ) Yes
( ) No

If Yes, what was the stipend amount per year (in dollars)?
{Enter text answer}
[ ]

Page 14

How often did you have direct contact with your clinical supervisor?
{Choose one}
( ) Daily
( ) 5 times/week
( ) 3 times/week
( ) Once/week
( ) Less than once/week

At what setting/level was your clinical assignment? (check all that apply)
{Choose all that apply}
( ) Division I
( ) Division II
( ) Division III
( ) Junior College
( ) High School
( ) Clinic
( ) Military
( ) Industrial
( ) Teaching/Laboratory
( ) Other [ ]

What was your marital status during the majority of your graduate education?
{Choose one}
( ) Single
( ) Married

Were you raising any children during your graduate education experience?
{Choose one}
( ) Yes
( ) No

If Yes, how many?
{Enter text answer}
[ ]

Page 15

Did your clinical experience site have an entry level Athletic Training Education Program?
{Choose one}
( ) Yes
( ) No

If YES, did you have the opportunity to supervise any athletic training students?
{Choose one}
( ) Yes
( ) No

On average, how many ATS did you supervise during a semester?
{Enter text answer}
[ ]

If NO, were there any work study students that completed hours within the athletic training room?
{Choose one}
( ) Yes
( ) No

On average, how many work study students completed hours within the athletic training room during a semester?
{Enter text answer}
[ ]

Page 16

All comments and questions should be directed towards:

Kevin J. Henry, ATC
Graduate Student, Graduate Athletic Training Program
Old Dominion University
khenr003@odu.edu

Thank you for your time and participation in this study.

Your answers will be submitted after you press the FINISH button below.

If you are interested in receiving the results of this study or if you would like to enter a drawing for the chance to win one of fifty (50) $5 Gift Certificates to various vendors, then please fill in your current e-mail address below. The results of the study will be sent to you upon the completion of the study (if requested) and the winners of the gift certificates will be notified via e-mail.

{Enter text answer}
[ ]

Frequency Demographic Data

Demographic Area	n
Gender	
Males	61
Females	62
Graduation year	
2005	48
2006	70
Other	5
Program length	
One-year	52
Two-year	71
Time-off from school	
Yes (>6 months)	25
One year or less	13
More than one year	12
No	98
Completed program in allotted time frame	
Yes	103
No	20
Doctoral program	
Yes	63
No	60
Type of research conducted	
Thesis	87
Research Project	34
Other	2
Tuition assistance	
Yes	92
Full-assistance	37
Partial-assistance	55
No	31
Graduate assistantship	
Yes	123
On-campus clinical assignment	
Yes	63
No	60
Off-campus assignment affect program satisfaction	
Yes	14
No	46
N/A (on-campus)	63
Stipend for clinical assignment	
Yes	120
No	3

Clinical supervisor contact	
Daily	73
5x/week	10
3x/week	12
1x/week	20
<1x/week	8
Setting of clinical assignment(s)	
Division I college/university	63
Division II college/university	5
Division III college/university	8
Junior college	4
High school	48
Clinic	5
Teaching	6
Other	1
Marital status	
Single	113
Married	10
Raising child(ren) during program	
Yes	3
No	120
CAATE-accredited program at institution	
Yes	53
No	70
Athletic training students at clinical site	
Yes	51
No	17
Work-study students at clinical site	
Yes	40
No	40

Frequency Values for Open-Ended Survey Sections

Open-ended standard area	n
Critical thinking enhancement (choose two)	
Discussion/exchange	77
Clinical experience	73
Outside resources	25
Forming relationships	17
Professor instruction	16
Self-exploration	11
Strategy development	3
Other	2
In-depth theory area (choose one)	
Treatment, rehabilitation, reconditioning	60
Research	30
Recognition, evaluation, assessment	17
Professional development	7
Organization, administration	3
Other	3
Prevention	2
Immediate care	1
Theory expansion (choose one)	
Clinical experience	33
Evidence-based medicine research	33
Course lectures	27
Individual research	16
Course-related research	11
Other	3
Community return methods (all applicable)	
Professional obligation	86
Service requirement	30
Student organization	29
Other	18
Personal obligation	14
Leadership opportunities (all applicable)	
Teaching experience	88
Research/scholarly advancement	71
Clinical instruction	70
Peer-student mentoring	45
Attainment of additional certifications	41
Other	9
Officer position	7

Frequency Descriptive Data: Strong Depth of Learning

Theme	n
Treatment techniques	
Therapeutic modalities	35
Soft-Tissue mobilization (Graston)	6
Rehabilitation techniques	
Manual therapy	32
Core stability	7
Functional rehab	7
Overhead athlete rehab	7
Lower-extremity rehab	5
Upper-extremity rehab	4
Post-surgical rehab	4
Aquatic therapy	3
ACL rehab	2
Research	
Research methods	27
Evidence-based medicine	10
Statistics	2
Assessment	
Gross (cadaver) anatomy	27
Spine assessment	19
Upper-extremity assessment	10
Lower-extremity assessment	10
Gait/postural assessment	10
Pathophysiology	7
Education	
Teaching	16
Administration/professional development	16
Biomechanics	6
Pharmacology	5
Exercise physiology	4
Female athlete issues	4
Performance enhancement	3

Frequency Descriptive Data: Limited Areas in Depth of Learning

Theme	n
Administration	
Insurance	49
Budget	24
Facility management	12
Communication	6
Billing	3
Interviewing skills	2
Reimbursement	2
Business	2
Course-Related Areas	
Therapeutic modalities	12
Pharmacology	10
Strength and conditioning	9
Gross (cadaver) anatomy	4
Nutrition	3
Rehabilitation	
Manual therapy	18
Aquatic therapy	5
Special populations/alternative therapy	4
Program development/progression	4
Spine rehab	3
Upper-extremity rehab	3
Core stability	2
Lower-extremity rehab	1
Functional rehab	1
Assessment	
Spine	12
Evaluation	9
Lower-extremity	6
Upper-extremity	5
Gait/posture	2
Research	
Statistics	11
Research methods	10
Evidence-based medicine	4

T-TESTS

Time-Off Between Degree Programs

Standard Area	F	Sig.	Levene's Test for Equality of Variance	t	df	Sig.	Mean Diff.
Depth	0.354	0.553	Assumed	0.585	121	0.560	0.25
Breadth	0.035	0.851	Assumed	0.276	121	0.783	0.14
Teacher avail	0.287	0.593	Assumed	-0.296	121	0.845	-0.10
Critical think	1.820	0.180	Assumed	0.261	121	0.795	0.11
Theory	0.589	0.444	Assumed	-0.077	121	0.939	-0.03
Writing	0.053	0.819	Assumed	-0.294	121	0.769	-0.15
Scholar grow	**5.818**	**0.017**	Not assumed	1.664	61.1	0.101	0.65
Community	0.798	0.373	Assumed	0.370	121	0.712	0.18
Leadership	0.860	0.356	Assumed	0.060	121	0.952	0.02
Overall satisfy	0.001	0.972	Assumed	0.232	121	0.817	0.11

Time Taken to Complete Degree Requirements

Standard Area	F	Sig.	Levene's Test for Equality of Variance	t	df	Sig.	Mean Diff.
Depth	**8.329**	**0.005**	Not assumed	2.366	22.3	0.027*	1.41
Breadth	0.585	0.446	Assumed	3.451	121	0.001*	1.83
Teacher avail	**14.289**	**0.000**	Not assumed	3.138	22.3	0.005*	2.10
Critical think	**5.837**	**0.017**	Not assumed	1.758	21.9	0.093	1.07
Theory	**5.717**	**0.018**	Not assumed	1.786	22.5	0.088	1.11
Writing	**35.198**	**0.000**	Not assumed	2.467	20.8	0.022*	1.99
Scholar grow	**16.091**	**0.000**	Not assumed	1.918	21.4	0.069	1.54
Community	**6.479**	**0.012**	Not assumed	1.880	22.6	0.073	1.23
Leadership	**4.223**	**0.042**	Not assumed	1.958	23.8	0.062	0.95
Overall satisf	**22.533**	**0.000**	Not assumed	2.625	21.4	0.016*	1.87

ANOVA Gender x Standard Area

Standard Area	Groups Analysis	Sum of Squares	df	Mean Square	F	*p-value*
Depth	Between	0.455	1	0.455	0.123	0.726
	Within	446.244	121	3.688		
Breadth	Between	0.249	1	0.249	0.048	0.826
	Within	622.402	121	5.144		
Teach avail	Between	4.064	1	4.064	0.830	0.364
	Within	592.196	121	4.894		
Crit think	Between	0.334	1	0.334	0.097	0.756
	Within	417.341	121	3.449		
Theory	Between	1.542	1	1.542	0.384	0.537
	Within	486.084	121	4.017		
Writing	Between	0.059	1	0.059	0.012	0.914
	Within	602.576	121	4.980		
Scholar grow	Between	5.312	1	5.312	0.981	0.324
	Within	654.980	121	5.413		
Comm return	Between	3.871	1	3.871	0.851	0.358
	Within	550.194	121	4.547		
Leadership	Between	0.327	1	0.327	0.110	0.741
	Within	359.332	121	2.970		
Overall satisfy	Between	0.002	1	0.002	0.000	0.983
	Within	542.730	121	4.485		

ANOVA Length of Program x Standard Area

Standard Area	Groups Analysis	Sum of Squares	df	Mean Square	F	*p-value*
Depth	Between	4.752	1	4.752	1.301	0.256
	Within	441.947	121	3.652		
Breadth	Between	15.371	1	15.371	3.063	0.083
	Within	607.280	121	5.019		
Teach avail	Between	0.705	1	0.705	0.143	0.706
	Within	595.555	121	4.922		
Crit think	Between	0.497	1	0.497	0.144	0.705
	Within	417.178	121	3.448		
Theory	Between	4.668	1	4.668	1.170	0.282
	Within	482.958	121	3.991		
Writing	Between	1.003	1	1.003	0.202	0.654
	Within	601.631	121	4.972		
Scholar grow	Between	0.777	1	0.777	0.143	0.706
	Within	659.516	121	5.451		
Comm return	Between	4.255	1	4.255	0.936	0.335
	Within	549.810	121	4.544		
Leadership	Between	2.004	1	2.004	0.678	0.412
	Within	357.654	121	2.956		
Overall satisfy	Between	7.135	1	7.135	1.612	0.207
	Within	535.597	121	4.426		

VITA

Kevin Joseph Henry

EDUCATION

Master of Science in Education - Old Dominion University August 2005 to May 2007
Thesis: *Curricular Satisfaction Levels of NATA Accredited Post-Professional Athletic Training Graduates*

Bachelor of Science, *Cum Laude* - Marist College August 2001 to May 2005
Major: Athletic Training

PROFESSIONAL EXPERIENCE

Graduate Asst. Athletic Trainer - Old Dominion University August 2005 to Present

- Primary Sport Assignments: Womens Soccer, Wrestling, Mens Soccer, Mens Basketball, Baseball
- Assisted with the following sport assignments: Field Hockey, Tennis

Athletic Training Student August 2001 to May 2005

Marist College - Poughkeepsie, NY
- Sport Experiences: Football, Mens Soccer, Mens Lacrosse

USMA - West Point - West Point, NY
- Sport Experiences: Softball, Track & Field

Vassar College - Poughkeepsie, NY
- Sport Experiences: Mens Basketball

Spackenkill High School - Poughkeepsie, NY
- Sport Experiences: Winter scholastic sports season

RELATED EXPERIENCE

Instructor - Old Dominion University August 2006 to May 2007
- Advanced First Aid and Emergency Care (HE224)
- Care and Prevention of Athletic Injuries (EXSC340)

Undergraduate Teaching Assistant - Marist College August 2003 to May 2004
- Human Anatomy & Physiology Laboratory I/II (BIOL201/BIOL202)

CERTIFICATIONS

Board of Certification, Certified Athletic Trainer (#060502053)
Virginia Board of Medicine, Licensed Athletic Trainer
Instructor Certified - American Red Cross
Course Instruction: CPR/AED for Professional Rescuer, Lay Responder for Schools/Community, Emergency Response, Standard First Aid
CPR/AED for the Professional Rescuer, American Red Cross
Emergency Response Certified Responder, American Red Cross

PROFESSIONAL MEMBERSHIPS

National Athletic Trainers Association
Mid Atlantic Athletic Trainers Association
Virginia Athletic Trainers Association
Sigma Zeta, National Science & Mathematics Honor Society – Marist College
Graduate Athletic Training Organization, *Treasurer* – Old Dominion University

AWARDS/HONORS

Marist College Dean's List December 2002 to December 2004
2005 Faculty Award for Excellence in Athletic Training - Marist College
2001-2005 Hudson Valley Academic Scholarship
2004-2005 Dr. Steven and Mrs. Estelle Dobo Scholarship
2004-2005 Mary Lou Gantert Scholarship
2004-2005 Brother Tarcisius Valleries Scholarship
2005 Dr. Frank Gagen Memorial Scholarship

PROFESSIONAL PRESENTATIONS

Henry KJ. *Herpes Zoster in a Female Intercollegiate Cross-Country Runner: A Case Report.* Poster Presentation - Marist College Celebration of Undergraduate Research, Scholarship, and Creative Activity (CURSCA); April 2005

Henry KJ, VanLunen BL, Oñate JA, Haines K. *Curricular Satisfaction Levels of NATA Accredited Post-Professional Athletic Training Graduates.* Poster Presentation - Old Dominion University Research Day; April 2007