

CERTIFIED ATHLETIC TRAINERS' PERCEPTIONS ON THEIR
UNDERGRADUATE APPROVED CLINICAL INSTRUCTORS' PROFESSIONAL
EFFECTIVENESS

A THESIS

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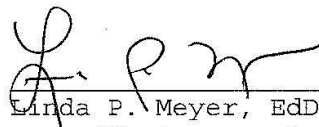
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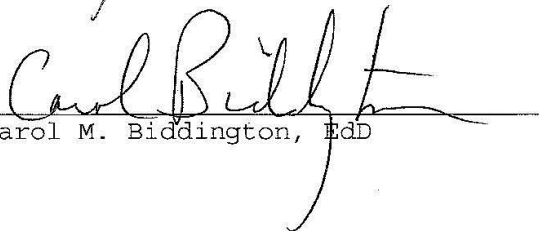
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INTRODUCTION

The purpose of this thesis study was to determine athletic training approved clinical instructors' professional effectiveness based on six previously researched standards. A secondary purpose was to determine the reliability for each of the six standards.

Clinical education includes numerous clinical teaching and evaluating opportunities for student growth that are the responsibility of the approved clinical instructor (ACI). The National Athletic Trainers' Association (NATA) defines the ACI as being an appropriately credentialed professional providing instruction and evaluation of Educational Competencies.¹

Weidner and Henning² state that the ACI should provide supervised acquisition, practice, and evaluation of athletic training students during clinical education. Their research suggested that all approved clinical instructors should work in a similar manner and cover related material. However, according to research, many certified athletic trainers who serve as ACIs have not had a proper, pedagogic focus of study to teach to the best of their abilities.² An athletic trainer who is well-prepared and knowledgeable in the clinical setting, does not

automatically make him or her the best candidate to serve as an ACI.

Weidner and Henning's² research developed a set of standards and associated criteria which to base the selection, training, and evaluation of ACIs in the clinical setting. Weidner and Henning² define the term 'standards' as a level of requirement, excellence, or attainment. Further, they define 'criteria' as items on which a judgment or decision can be based for the attainment of a standard.

The defined standards include communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, clinical skills and knowledge, and legal and ethical behavior. The listed standards are important to fully understand obligations and requirements of an ACI in athletic training clinical education.² Additional research by Weidner and Henning³ reports that an important component for creating quality clinical education is training educators on how to evaluate, instruct, and teach students.

Raab et al⁴ recognized specific abilities that should be addressed in athletic training clinical education. These abilities included thinking critically, solving problems, and oral communication skills. The ACI must help prepare the entry-level students with the certain qualities and

employability skills needed for professional success. Raab et al⁴ clarifies that the ACI should gain the knowledge needed to become effective in their position by demonstrating and teaching students interpersonal skills.

It is critical that the entry-level athletic training student can look to his or her ACI as a mentor. The research by Phan et al⁵ recognized that one of the most prominent parts of clinical education is the ACI. Approved clinical instructors are to become an effective mentor by demonstrating attributes that would apply to a clinician, educator, and that of an effective communicator. Research by Phan et al⁵ showed that ACIs who recognize a balance between autonomy and guided practice will provide an effective learning environment for students.

The current thesis study analyzed Weidner and Henning's standards in an effort to show their appropriateness for evaluating ACIs in clinical education. The results of this thesis research may assist the approved clinical instructor with professional effectiveness.

METHODS

The primary purpose of this research was to examine the perception of newly certified athletic trainers on their undergraduate approved clinical instructors' professional effectiveness. Professional effectiveness was based on the following six standards: communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge. A secondary purpose was to determine the reliability for each of the six standards. This section will include the following subsections: research design, subjects, instruments, preliminary research, procedures, research question, and data analysis.

Research Design

This thesis study utilized a descriptive research design. There are six variables within the current study. The variables came from the standards in Drs. Weidner and Henning's questionnaire from the research titled "Development of Standards and Criteria for the Selection, Training, and Evaluation of Athletic Training Approved

Clinical Instructors".² Each of the variables, or standards, were evaluated by the questions containing the associated criteria of each standard. The associated criteria are items on which decisions can be based for the attainment of a standard. The researcher took the scores of the questions, or associated criteria, to calculate the average score for each standard.

Subjects

Participants in this thesis study consisted of certified athletic trainers (N=77) from the Career Starter membership category of the NATA. The NATA Research Survey Service administered the survey to 1,000 members chosen at random. Career Starter category holds newly certified regular members. These individuals are held in the Career Starter category for the first full membership billing cycle following certification, but they cannot currently be students.

The subjects are over the age of 18 and have graduated from an athletic training education program accredited by Commission on Accreditation of Athletic Training Education (CAATE). The subjects are also certified by the Board of Certification. Informed consent was assumed by the

subject's participation in the survey. Each participant's identity was anonymous in the study.

Preliminary Research

The original questionnaire² that was utilized in the research was initially tested for validity using the Delphi technique. The Delphi panel members consisted of athletic training education experts and were not aware of each other's responses. The panel was made up of program directors of entry-level athletic training education programs that are accredited by Commission on Accreditation of Allied Health Education Programs (CAAHEP). This commission accredited athletic training education programs prior to the current governing body known as CAATE. A total of 16 panelists completed all of the responsibilities in the study.² The 16 panelists had to be a program director as of February 2003, completed a doctoral degree, served a minimum of five years supervising athletic training students, and hold interest in serving as a Delphi panelist.²

The Delphi technique determined the components of professional effectiveness which developed the validity of the study by Weidner and Henning.² The study was deemed

valid because of the relevancy of the standards by those who are experts in clinical education. The study is also deemed valid because the panel both identified and agreed on the essential standards.²

This current thesis study determined the reliability for the standards of communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge.

Instruments

The instrument used was a survey titled "Evaluation of Athletic Training Approved Clinical Instructors' Professional Effectiveness" (Appendix C1). The survey originated as a questionnaire by Drs. Weidner and Henning in their research titled "Development of Standards and Criteria for the Selection, Training, and Evaluation of Athletic Training Approved Clinical Instructors".² Permission was received via e-mail from the primary author, Dr. Thomas Weidner, to modify the questionnaire to use as a survey for this research.

The modified survey consisted of 34 total questions within two primary sections. The first section contains

five demographic questions which included: Age (participants were at least 18 years of age), NATA district, NCAA or NAIA Division school where the education was received, first clinical rotation assignment from fall semester of final academic year, and gender of the approved clinical instructor from the participants first clinical rotation of fall semester of their final academic year. The second section included 29 questions that dealt with the following six of the seven original standards from Drs. Weidner and Henning's questionnaire: communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge.² Legal and Ethical Behavior, from the seven original standards, was not included in this research because it was not a component of the researcher's interest.

The study was distributed through SurveyMonkey™ by the NATA. The second section of questions used a Likert scale. The scale was on a range from 1 to 5, with 1 being never and 5 being always.

Procedures

The researcher obtained approval from the Institutional Review Board at California University of Pennsylvania (Appendix C2) before any research was conducted. The researcher contacted the NATA Research Survey Service on the NATA website. The materials required by the Survey Service were the Institutional Review Board approval documentation, Word (.doc) version of survey, and targeted survey participants. The survey was distributed through an email to 1,000 randomly selected certified athletic trainers in the Career Starter membership category of the NATA. The online survey took approximately 15 minutes to complete. The NATA distributed the survey to the participants through a link in an email. The participants received the email to open the survey through the computer program SurveyMonkey™. Each email contained a cover letter (Appendix C3) explaining the purpose of the study as well as risks and benefits of participation and informed consent. At the end of the third week, the data was collected and analyzed.

Research Question

The research question asked in the current study is as follows: What is the perception of certified athletic trainers on their undergraduate approved clinical instructor's professional effectiveness for communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge?

Data Analysis

All data was analyzed by SPSS version 18.0 for windows. The research question was analyzed using descriptive statistics of mean, standard deviation and range of scores.

The reliability for communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge was determined by using a Chronbach Alpha analysis.

RESULTS

This research addressed the professional effectiveness of approved clinical instructors based on a set of standards. These standards included: communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge. Participants completed a survey titled "Evaluation of Athletic Training Approved Clinical Instructor's Professional Effectiveness". This survey is a modified version of the "Development of Standards and Criteria for the Selection, Training, and Evaluation of Athletic Training Approved Clinical Instructors".² The following results section is divided into three sections: demographic information, research question testing, and additional findings.

Demographic Information

The survey was sent to 1,000 Career Starter members of the NATA. Out of the 1,000 members, 13% (N=77), completed the survey. The following information reveals demographic and descriptive data found within the current thesis study.

Table 1 illustrates the clinical rotation assignment the participants had during their fall semester of their final academic year as an undergraduate student.

Table 1. Fall Semester Clinical Rotation Assignment

Clinical Rotation	Frequency	Percent
Basketball	11	14.3
Cheerleading	1	1.3
Cross Country	3	3.9
Football	24	31.2
Medical Rotation	2	2.6
Off-Campus High School	11	14.3
Physical Therapy Clinic	4	5.2
Soccer	12	15.6
Swimming and Diving	3	3.9
Volleyball	3	3.9
Wrestling	3	3.9
Total	77	100.0

Of the 77 participants, 39 had an ACI who was male and 38 had an ACI who was female for the reported clinical rotation assignment (Table 2).

Table 2. Approved Clinical Instructor Gender

Gender	Frequency	Percent
Male	39	50.6
Female	38	49.4
Total	77	100.0

Table 3 illustrates the participants belonging to each NATA District.

Table 3. NATA Membership District

District	Frequency	Percent
District 1	4	5.2
District 2	13	16.9
District 3	10	13.0
District 4	15	19.5
District 5	6	7.8
District 6	5	6.5
District 7	5	6.5
District 8	7	9.1
District 9	10	13.0
District 10	2	2.6
Total	77	100.0

Participants were also asked from what Division College/University they received their bachelor's degree. Table 4 illustrates how many participants were from each NCAA OR NAIA Division.

Table 4. College/University Division Size

Division	Frequency	Percent
NCAA Division I	40	51.9
NCAA Division II	18	23.4
NCAA Division III	13	16.9
NAIA Division I	4	5.2
NAIA Division II	2	2.6
Total	77	100.0

Research Question Testing

The research question is: What is the perception of newly certified athletic trainers on their undergraduate approved clinical instructor's professional effectiveness for communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge?

As illustrated in Table 5, the research question was analyzed using descriptive statistics of mean, standard deviation, and range of scores.

Table 5. Descriptive Results

Standard	Range	Minimum	Maximum	Mean	SD
Communication Skills	3.2	1.8	5.0	4.4	0.7
Interpersonal Relationships	2.8	2.2	5.0	4.6	0.6
Instructional Skills	4.0	1.0	5.0	4.1	1.0
Supervisory Skills and Knowledge	2.5	2.5	5.0	4.4	0.7
Evaluation of Performance	3.5	1.5	5.0	4.4	0.8
Clinical Skills and Knowledge	3.0	2.0	5.0	4.7	0.6

Additional Findings

The secondary purpose of this study was to determine the reliability of the six standards. A Chronbach Alpha analysis was used to determine the reliability for communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge. Table 6 illustrates the reliability analysis of the six standards associated with the survey. Reliability is considered high if a score is 0.8 and above.

Table 6. Reliability Data

Standards	Chronbach Alpha Reliability Analysis
Communication Skills	.942
Interpersonal Relationships	.943
Instructional Skills	.965
Supervisory Skills and Knowledge	.872
Evaluation of Performance	.935
Clinical Skills and Knowledge	.897

DISCUSSION

The results of this research may help entry-level athletic training education programs with evaluating approved clinical instructor's professional effectiveness. The following discussion is comprised of three subsections: discussion of results, conclusions, and recommendations.

Discussion of Results

The data results used descriptive statistics to analyze the associated criteria of the six standards. The mean scores were calculated based on the survey's 5-point Likert scale. The findings in this study are similar to other studies completed in this area of topic.

Clinical skills and knowledge received the highest mean score out of the six standards. The current thesis results showed that ACIs are usually demonstrating proper clinical skills with a mean score of 4.7 on a 5 point Likert scale. The results may imply that ACIs are appropriately completing clinical education units and continually increasing their knowledge.

Effective clinical skills and knowledge, according to Weidner and Henning,² are demonstrated when the ACI is fully

capable of teaching and evaluating students' clinical competencies. Also, the ACI's knowledge and skills are current and based on science and evidence-based practice. Research by Sibold⁶ recognizes that if the ACI can demonstrate making sensible decisions, the students may have increased self-confidence thus leading to better patient outcomes. Appropriate clinical competence can be demonstrated by offering students a clear understanding of clinical decisions. Sibold⁶ clarifies that it is significant for the athletic trainer to use critical thinking skills to make appropriate decisions in the clinical setting.

The next highest ranked standard was interpersonal relationships. The current thesis results discovered that ACIs are usually adequate in interpersonal relationships with a mean score 4.6 on a 5 point Likert scale. The results suggest that the ACI is demonstrating interpersonal relationships thus preparing the students for employer expectations.

According to Weidner and Henning,² appropriate interpersonal relationships are accomplished by being a professional mentor and demonstrating professional relationships. The ACI should have an open and approachable demeanor when working in a clinical setting. Research by Raab et al⁴ recognizes that employer expectations will

include interpersonal skills and being a quality health care provider. The ACI must help prepare entry-level students with the certain qualities and employability skills needed for professional success.⁴ Potteiger et al⁷ reveal that personal characteristics is an area that athletic training education programs are not improving in and interpersonal expectations are lacking.

The results from the current thesis research revealed that ACIs are usually proper supervisors of athletic training students. Supervisory and administrative skills received a mean score of 4.4 on a 5 point Likert scale.

Weidner and Henning² state that supervisory and administrative skills are demonstrated by encouraging athletic training students to arrive at clinical decisions on their own. Also, the students should be presented with clear performance expectations throughout the entire learning process. Effective supervisory skills also include supervising the athletic training students during formal acquisition, practice, and evaluation of clinical competency.² Rich⁸ suggests that ACIs have difficulty taking advantage of learning opportunities when they occur. In some cases, an ACI is not able to interact with the student due to other job constraints. Other job responsibilities

demand the ACI's attention and therefore, the ACI is not focusing on supervising the student.⁸

The current thesis research discovered that the participants felt their ACIs were usually evaluating their performance appropriately. Evaluation of performance resulted in a mean score of 4.4 on a 5 point Likert scale.

To effectively evaluate athletic training student's performance, Weidner and Henning² recommend the ACI approaches the evaluation process as constructive and educational. The ACI should recognize students' knowledge, skills, and behaviors as they relate to specific goals and objectives of the clinical experience. Also, the ACI participates with the students in evaluations that are formative and summative which provide ongoing feedback and overall performance.² Martin's⁹ research discussed how documenting student competencies can be a challenge for some ACIs. There is a need for better evaluating techniques of athletic training student's strengths and weaknesses.

The current thesis research discovered that the participants felt their ACI was usually effective in communication. Communication skills resulted in a mean score of 4.4 on a 5 point Likert scale.

As recognized by Weidner and Henning,² communication skills involve incorporating professional discussions with

athletic training students in the clinical setting. The ACI should provide constructive formative and summative feedback to athletic training students. Also, the ACI should receive and respond to feedback from the program director, clinical education coordinator, and athletic training students.² Researcher Carr¹⁰ found that certified athletic trainers felt under prepared in the ability to communicate in the professional setting. The participants in the study suggested that the lack of preparation in communication was due to their educational programs.

The standard that was ranked lowest according to its mean value was instructional skills. Instructional skills resulted in a mean score of 4.1 on a 5 point Likert scale.

In demonstrating instructional skills, Weidner and Henning² recommend the ACI to be enthusiastic about teaching and must employ a variety of teaching styles to meet individual student's needs. The ACI can also be effective by creating learning opportunities that promote critical thinking and problem solving.² Ristori et al¹¹ research emphasized that how an ACI decides to teach may have an impact on the students' ability to learn. It was concluded that of the 13 ACIs surveyed in their research, the ACIs were all able to identify with students' learning styles.¹¹ The current thesis research was consistent with the

literature because the subjects reported that their ACIs were usually effective instructors.

The mean scores of the six standards all fell between a mean score of 4.1 and 4.7 on a 5 point Likert scale. Unfortunately, important skills that should be consistently demonstrated by the ACI did not receive the highest mean. Instructional skills had the lowest mean score (4.1 out of 5) when compared to the other six standards evaluated. It should be significant for the ACI to properly instruct an athletic training student in the clinical setting. If an entry-level student is not properly instructed, he or she may risk failure in an emergency situation due to poor problem-solving skills.

Poor instructional skills could ultimately be the result of an ACI having poor communication skills. Communication skills also ranked on the lower end of the mean scores (4.4 out of 5) when comparing the average results of the six standards. A lack of effective communication from the ACI may result in further concerns for the entry-level athletic training student. Without proper demonstration of communication skills, the student may be at risk for not being able to form professional discussions with other students, athletes, colleagues, etc. Evaluation of performance and supervisory skills and

knowledge also received a mean of 4.4 which shows there is room for improvement in these areas. The ACI should work to improve on these standards to better the education for entry-level students.

Conclusions

Approved clinical instructors are responsible for utilizing clinical education time wisely to encourage growth and development as a professional. After reviewing the results of this thesis study as well as the literature, the researcher found that approved clinical instructors are usually effective in athletic training clinical education. This conclusion was determined based on the mean scores from the survey and the 5-point Likert scale. The survey was also deemed highly reliable by using Chronbach Alpha analysis on the associated standards.

According to the survey Likert scale, the mean scores of each standard are in accordance with the number four which can be associated with the result "usually". Overall, the current thesis study has found results that add uniqueness to the knowledge and profession of athletic training.

Recommendations

Based on this study and those completed in the past, it is clear that more research needs to be completed in the area of athletic training clinical education and approved clinical instructors. Research recommendations would be to continue to use survey research to gain the perspective of students and how they perceive their approved clinical instructor.

This thesis study had a 13% (N=77) response rate. Future research should include a larger number of respondents and also provide open-ended response questions. Subjective concerns about students' experience with an approved clinical instructor could be received well with open-ended responses.

There is much potential for growth and development in terms of athletic training education. The potential for growth also creates a unique and necessary opportunity for research. This research should be completed to better evaluate the effectiveness of the approved clinical instructor in athletic training education.

REFERENCES

1. CAATE Clinical Education Terminology. National Athletic Trainers' Association Web site. <http://www.nata.org/caate-clinical-education-terminology>. Accessed November 2012.
2. Weidner T, Henning J. Development of standards and criteria for the selection, training, and evaluation of athletic training approved clinical instructors. *J Athl Train*. 2004;39(4):335.
3. Weidner T, Henning J. Importance and applicability of approved clinical instructor standards and criteria to certified athletic trainers in different clinical education settings. *J Athl Train*. 2005;40(4):326-332.
4. Raab S, Wolfe B, Gould T, Piland S. Characterizations of a quality certified athletic trainer. *J Athl Train*. 2011;46(6):672-679.
5. Phan K, McCarty C, Mutchler J, Van Lunen B. Clinical preceptors' perspectives on clinical education in post-professional athletic training education programs. *Athl Train Ed J*. 2012;7(3):103-114.
6. Sibold J, Geisler P. A three-question framework to facilitate clinical decision making. *Athl Train Ed J*. 2012;7(1):11-17.
7. Potteiger K, Brown C, Kahanov L. Altering the athletic training curriculum: a unique perspective on learning over time. *Athl Train Ed J*. 2012;7(2):60-69.
8. Rich V. Clinical instructors' and athletic training students' perceptions of teachable moments in an athletic training clinical education setting. *J Athl Train*. 2009;44(3):294-303.
9. Martin M, Grant-Ford M. Utilizing web-based technology to track athletic training proficiencies. *Athl Ther Today*. 2007;12(4):40-43.

10. Carr W, Volberding J. Employer and employee opinions of thematic deficiencies in new athletic training graduates. *Athl Train Ed J*. 2012;7(2):53-59.
11. Ristori C, Eberman L, Tripp B, Kaminski T. Athletic training student learning style. *IJATT*. 2011;16(2):33-37.

APPENDICES

APPENDIX A

Review of Literature

Review of Literature

Entry-level athletic training education programs focus on clinical education for a large portion of students' learning and experience. Clinical education in an entry-level athletic training program is responsible for practice and evaluation of the National Athletic Trainers' Association (NATA) Clinical Proficiencies.¹ According to the NATA, Clinical Education is defined as the application of knowledge and skills, learned in classroom and laboratory settings, to actual practice on patients under the supervision of an Approved Clinical Instructor (ACI).¹

The clinical proficiencies, created by the NATA's Educational Council, require much responsibility from a certified athletic trainer. Clinical education includes numerous clinical teaching and evaluating opportunities that are provided by the ACI.

Weidner and Henning's study² developed a set of standards which to base the selection, training, and evaluation of ACIs in the clinical setting. Weidner and Henning² define standards as a level of requirement, excellence, or attainment. Criteria are defined as items on which a judgment or decision can be based for the attainment of a standard.

These defined standards include communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge. The listed standards are important for fully understanding obligations and requirements of clinical education.²

Additional research by Weidner and Henning³ informs that an important component for creating quality clinical education is training educators on how to evaluate, instruct, and teach the students.

The purpose of this Review of Literature is to inform the reader about what it means to be effective in the associated standards and criteria when evaluating an approved clinical instructor. This research will be accomplished in the following sections: Approved Clinical Instructor, Communication Skills, Interpersonal Relationships, Instructional Skills, Supervisory and Administrative Skills, Evaluation of Performance, and Clinical Skills and Knowledge.

Approved Clinical Instructor

The NATA defines the ACI as being an appropriately credentialed professional who can provide instruction and

evaluation of Educational Competencies and/or Clinical Proficiencies.¹ The ACI will have an influence on how athletic training students' learn and advance in their knowledge and skills in the clinical setting.

In 2004, Weidner and Henning² suggest that all approved clinical instructors should work in a similar manner and cover related material. However, according to research, many certified athletic trainers who serve as ACIs have not had a proper, pedagogic focus of study to teach to the best of their abilities. A well-prepared and knowledgeable athletic trainer in the clinical setting does not automatically make him or her best candidate to serve as an ACI.²

In 2005, Weidner and Henning's³ research makes a valid point that not only should students be evaluated; but, approved clinical instructors should also be evaluated. The questionnaire that contains Weidner and Henning's² developed standards and criteria was administered to evaluate ACIs in different clinical education settings. Their research suggested there was no significant difference in work setting. The research did discover that the ACI was having difficulty balancing the role of clinician and clinical instructor which negatively influenced the effectiveness of the ACI.³

Communication Skills

Effective communication skills in the clinical setting can be accomplished through several tasks. Communication includes incorporating professional discussions with athletic training students in the clinical setting.² Also, communicating with athletic training students in a non-confrontational and positive manner. The ACI should also provide constructive formative and summative feedback to athletic training students. Communication from an ACI should include open-ended questions and directed problem solving. Also, the ACI should receive and respond to feedback from the program director, clinical education coordinator, and athletic training students.²

Research completed by Raines⁴ showed that preceptors in the nursing profession desire faculty support and feedback when dealing with the students and curriculum. Communication is an important factor to nursing students' success and could be accomplished in the athletic training profession. Communications with school of nursing faculty was a key aspect in nurses' willingness to serve as preceptors. Proper communication may have made nursing students' successes with clinical skills easier to accomplish.⁴

Carr⁵ wanted to explore the opinions of employers and employees about the level of preparation new athletic training graduates had for a professional career. Communication was the most common deficit according to employers and employees. Communication with patients, coaches, parents, and other employees is important. Lack of interpersonal communication was a weakness of new graduates. Carr's⁵ research also found that certified athletic trainers felt under prepared in the ability to communicate in the professional setting. The participants in the study suggested that the lack of preparation in communication was due to their educational programs. Participants then suggested athletic training education programs should incorporate opportunities for communicating with others as a daily objective.⁵ The ACI must communicate better within the clinical experience to subsequently help the students communicate better.

Interpersonal Relationships

The ACI should demonstrate appropriate and professional interpersonal relationships. According to Weidner and Henning,² this is accomplished by forming and modeling professional relationships with athletic training students, colleagues, patients, athletes, and

administrators. It is also accomplished by demonstrating respect and being a positive role model and mentor for athletic training students. Lastly, the ACI has an open and approachable demeanor when working in a clinical setting. The ACI may have to monitor a group of students and must demonstrate the ability to relate to multiple students at a time.²

Raab et al⁴ recognized specific abilities that should be addressed in athletic training clinical education. These abilities included thinking critically, solving problems, and oral communication skills. The ACI must help prepare the entry-level students with the certain qualities and employability skills needed for professional success. Raab et al⁴ clarifies that the ACI should gain the knowledge needed to become effective in their position by demonstrating and teaching students interpersonal skills. Raab et al⁶ compared nursing and physical therapy professions and how they have characteristics that define quality care and professional performance. The abilities studied in these professions include the commitment to learn, interpersonal skills, communication, and professionalism.⁶ If the profession of athletic training is going to continue to advance, building interpersonal relationships is important.

The ACI should illustrate concern for the student as a learner and as a person². After 13 interviews from certified athletic trainers, Raab et al⁶ revealed five traits that make a quality athletic trainer. A quality athletic trainer means caring about patients and who they interact with, communication by expressing care and providing feedback, commitment to the profession and availability to whom they instruct, integrity by being loyal to whom they interact with, and the knowledge needed to be a proficient clinician.⁶ These abilities strengthen the opportunity for an athletic trainer to create a professional relationship with athletic training students.

According to Potteiger et al⁷, employers have reported that personal characteristics are important. These characteristics would include leadership skills, self-confidence, and interpersonal skills. The researchers of this study mention that personal characteristics is an area that athletic training education programs are not improving in and interpersonal expectations are lacking. Therefore, education programs must consistently prepare students to meet the technical educational standards as well as employer expectations.⁷ If these are skills that are practiced, then the ACI can demonstrate to students how to feel more comfortable in the clinical setting.

In the nursing profession, preceptors are showing a prosperous relationship with nursing students and new nurses. Research by Raines⁴ discussed that nurse preceptors facilitate learning and build confidence in nursing students. All of the nurses who participated in the study by Raines⁴ have experienced working with nursing students in the clinical area between three and 24 years. Nurse preceptors are the bridge needed between classroom education and the experiences students need to prepare for the clinical work environment. Preceptors have gained great recognition in academic settings due to their positive impact on the preparation of nursing students for real-world practice. Through proper role modeling and guidance, nursing students have developed knowledge, clinical skills, and professional attitudes from their preceptors.⁴

Instructional Skills

To demonstrate effective instructional skills, Weidner and Henning² mention that the ACI should be enthusiastic about teaching and must employ a variety of teaching styles to meet individual student's needs. The ACI should also help athletic training students progress toward reaching goals and objectives. The ACI may modify learning experiences based on individual's strengths and weaknesses.

The ACI can also be effective by creating learning opportunities that promote critical thinking and problem solving.²

Athletic training educators should strive to connect classroom learning with clinical education learning. Research by Sibold⁸ proposed a three-question framework for practical clinical decision making in therapeutic modalities and rehabilitation contexts. The three questions included asking about the treatment goal, the target tissue, and the modality that meets the need. Sibold⁸ defines critical thinking as the ability to make purposeful, self-regulatory judgments. Within the clinical setting, critical thinking skills will help the students make more sensible decisions and subsequently gain clinical confidence.⁸

To create fairness and equality with the students involved in the clinical setting, Ristori et al⁹ completed research on student learning styles and the importance of recognizing those different styles. It is important to be able to relate to different learning styles of athletic training students. An ACI may not know how to communicate in a way that is beneficial to the students, which could negatively influence students' learning opportunities. The research also emphasized that how an ACI decides to teach

may have an impact on the students' ability to learn. It was concluded that of the 13 ACIs surveyed in this research, they were all able to identify with students' learning styles.⁹

A study by Henning and Weidner¹⁰ recognized the topic of peer-assisted learning and its effectiveness as a learning technique. A survey was administered as a self-report tool to athletic training students. Results were that 66% of the students said they practice clinical skills with other athletic training students and 60% reported that it was easy to learn with peers. The research encourages peer-assisted learning because the students reported that it was beneficial.¹⁰

Supervisory and Administrative Skills

According to Weidner and Henning,² The ACI can demonstrate effective supervisory and administrative skills by encouraging athletic training students to arrive at clinical decisions on their own. Also, the students should be presented with clear performance expectations throughout the entire learning process. The ACI should effectively complete evaluation forms in a timely fashion. Effective supervisory skills also include supervising the athletic training students during formal acquisition, practice, and

evaluation of clinical proficiencies. Finally, the ACI should be sure students understand policies and procedures of the clinical settings.² The ACI may have multiple responsibilities within the athletic training program and it can be difficult to manage their time well and still complete all tasks.

Entry-level athletic training students should be given purposeful clinical instruction. Anderson¹¹ discusses the importance of safety aspects and how pre and post-screenings, emergency plans, and environmental policies are important for protecting athletes. In order to be able to assist in injury prevention, athletic training students must have the knowledge and skills to recognize symptoms and help in high risk scenarios that may include life-threatening problems. If the students are guided well enough to help with situations in the clinical setting, daily tasks can run more smoothly and they can be more successful with prevention and safety. To perform tasks independently, students must understand their priorities and responsibilities based upon their ACI expectations.¹¹

Dealing with the difficulty of balancing the role of clinician and ACI, researcher Rich¹² suggests that ACIs have difficulty taking advantage of learning opportunities when they occur. In some cases, an ACI is not able to interact

with the student due to daily constraints of other responsibilities that come along with the job. These constraints and barriers should be managed and dealt with so that no student is missing a learning opportunity. Other job responsibilities demand the ACI's attention and therefore, the ACI is not focusing on supervising the student.¹²

Rich¹² also recognizes that several barriers occur between the ACI and athletic training students. These barriers include lack of time, busy caring for athletes, ACI is performing other tasks and duties, and lack of student initiative. If the ACI cannot manage tasks and time, he or she is less likely to engage in meaningful clinical activities, discuss clinical progression, and discuss student performance.¹²

The aim of an integrative review by Omansky¹³ was to describe the nurses' experience when functioning as an undergraduate nursing student preceptor. Omansky¹³ discovered that there is little research regarding the nurse preceptor's experience in the work setting. The study covered 1,486 nurse preceptors who worked with undergraduate nursing students. Research discovered that nurse preceptors experience role ambiguity, role conflict, and role overload. If there can be fewer conflicts and

issues with role strain as a supervisor, the nurse preceptor and the ACI can provide a better learning environment. Role conflict is created when certain responsibilities dealing with students interferes with the responsibilities of patient care. To have successful administrative skills, a preceptor, and an ACI, must be able to manage their time with a variety of tasks.

Omansky¹³ discovered that some nurse preceptors were never shown a preceptor guideline. This caused anxiety because nurse preceptors felt they were unsure of how to be a proper supervisor. The role of a preceptor is to guide student nurses from the theory of nursing to the application of nursing theory. With a proper definition of what makes a nurse preceptor, future generation of nurses can be appropriately guided by their preceptor. By recognizing the nurse preceptor role, there can be a positive impact on role conflict.¹³

A study performed by Craig¹⁴ at Northern Arizona State University discusses how the 300+ accredited undergraduate athletic training education programs have limited clinical opportunities. In Northern Arizona State University, they utilize the entire state for clinical placement sites. The research says those opportunities provide benefits to the students and the research wishes to persuade programs to

consider expanding clinical placement sites. Another benefit listed is that the ratio of student to approved clinical instructor can be 1:1, compared to most situations where it is 2:1 or more. The senior athletic training class of Northern Arizona State University mentioned that with one-on-one attention, there can be enhanced learning and mentoring.¹⁴ In conclusion to this research; there was an increase in confidence and professionalism which was documented by the alumni survey data.¹⁴ Unfortunately, one-on-one attention is not always an option and an ACI must be able to appropriately interact with multiple students at a given clinical site.²

Evaluation of Performance

To effectively evaluate athletic training student's performances, Weidner and Henning² state that the ACI should approach the evaluation process as constructive and educational.² The ACI should recognize students' knowledge, skills, and behaviors as they relate to specific goals and objectives of the clinical experience. Lastly, the ACI participates with the students in evaluations that are formative and summative which provide ongoing feedback and overall performance.²

The entry-level athletic training students can be critiqued on how well they are learning in the clinical setting based on how well they complete certain tasks. Injury evaluations and other paperwork can be completed independently while still being guided by a certified athletic trainer. Students should feel confident enough to complete daily tasks as needed to fulfill daily evaluation requirements.

The clinical rotation assignment is an important factor in entry-level athletic training education programs. During the clinical assignment, the students should have an understanding of their objectives and requirements to complete.

Documenting clinical skills and competencies is critical for identifying student's level of performance. In research done by Martin,¹⁵ a web-based program for evaluating athletic training students has shown to be innovative for athletic training education programs. It is a user-friendly electronic process that will increase the amount of evaluations students receive from their ACIs. Properly evaluating athletic training students' skill progression and competence development is critical. Martin's¹⁵ research discussed how documenting student competencies can be a challenge for some ACIs. However, by

using a web-based database, it will be easier to evaluate students. With web-based technology for evaluation, athletic training student can know their strengths and weaknesses on a regular basis. The significance of this research is that the athletic training education program, specifically the ACI, can monitor students' progress more closely.¹⁵

Athletic training students will evaluate and treat patients as they go through the athletic training education program. Patients will have a variety of conditions, injuries, and illnesses, but it does not mean students are being challenged. Research by Walker¹⁶ discussed how clinical proficiencies are to represent the integration of clinical skills and decision-making abilities to prepare for professional careers. Rather than documenting the clinical proficiencies based off of clinical performance, ACIs will simulate a scenario for students to answer from. The research by Walker¹⁶ recommends evaluating students' clinical proficiencies by using a standardized patient. This means, using an individual who can appropriately portray signs and symptoms of a condition for students to examine.¹⁶

According to Armstrong,¹⁷ more standardized evaluations will help ACIs better evaluate student's clinical skills

and confidence in knowledge and abilities. A scenario created by a standardized patient can guide the ACI to a fair means of assessment to provide formative and summative feedback. Within this research, there was success in using a standardized patient for evaluation of clinical progression.^{16,17}

Clinical Skills and Knowledge

According to Weidner and Henning,² The ACI should demonstrate clinical skills and knowledge that meet and surpass athletic training education competencies and clinical proficiencies. These effective clinical skills are demonstrated when the ACI is fully capable of teaching and evaluating students' clinical proficiencies. Also, the ACI's knowledge and skills are current and based on science and evidence-based practice. The ACI must also continue participation in continuing education programs.²

Clinical education requirements are organized so that students can actively learn and interact with instructors and patients. It is necessary for approved clinical instructors in the athletic training field to demonstrate appropriate clinical abilities. Sibold⁸ clarifies that it is significant for the athletic trainer to use critical thinking skills to make appropriate decisions in the

clinical setting. The ability to understand and demonstrate clinical proficiencies in clinical practice is important for the development of clinical decision making. It is vital for the ACI to demonstrate the knowledge needed to make clinical decisions. If an athletic trainer has a great amount of knowledge, it is not uncommon that he or she lacks the ability to make clinical decisions. An ACI should be able to make clinical decisions to aid in problem solving. Students should be taught by their ACI on how to reach sensible decisions in the clinical setting. If the ACI can demonstrate making sensible decisions, the students may have increased self-confidence thus leading to better patient outcomes. The ACI should not assume that students understand clinical decision making by simply observing actions. Appropriate clinical competence can be demonstrated by offering students a clear understanding of clinical decisions.⁸

Researcher Phan et al¹⁸, notes that other health care professions, including physical therapy and nursing, are becoming more structured and organized in developing constructive learning experiences in clinical education. Clinical education requires the ability to transfer knowledge and apply learned concepts in new situations. The framework of other health care professions has provided a

base on how to approach athletic training clinical education. Phan et al¹⁸ recognized that one of the most prominent parts of clinical education is the ACI. Approved clinical instructors are to become an effective mentor by demonstrating attributes that would apply to a clinician, educator, and that of an effective communicator. Research shows that ACIs who recognize a balance between autonomy and guided practice will provide an effective learning environment for students.¹⁸

Potteiger et al⁷ mentioned that other evaluations of educational standards and the opportunity to practice skills can be done through evidenced-based practice. Evidenced-based practice is an important feature of clinical education and is something that can be incorporated in to accredited entry-level athletic training programs. The research declares that evidence-based practice will teach the students to apply the research evidence with his or her clinical observations to make for the best decision making. The use for evidence-based practice includes a foundation for delivery care, developing clinical questions, answering clinical questions, and to interpret clinical outcomes to assess patient status. If a student uses evidence-based practice

it is hopeful that they will feel more confident in their decisions and answers in the clinical setting.⁷

Summary

The literature review reveals different findings in terms of being an approved clinical instructor (ACI) in the athletic training education program. The literature depicts what it means to be effective in the following standards: communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge. Research is continuing to advance involving how an ACI should perform in the clinical setting. The ACI plays a significant role in the professional development and education of athletic training students. Therefore, it is critical to evaluate the professional effectiveness of an approved clinical instructor.

APPENDIX B

The Problem

STATEMENT OF THE PROBLEM

The purpose of this research was to determine the perception of newly certified athletic trainers on their undergraduate approved clinical instructors' (ACI) professional effectiveness. This research examined if the ACI is effectively performing their role in the clinical setting within the following six standards: communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge. There is minimal athletic-training based research that analyzes athletic training students' perception of ACIs and their effectiveness in the clinical setting. Athletic training education programs could use this research to potentially better the professional effectiveness of the ACI.

Definition of Terms

The following definitions of terms will be defined for this study:

- 1) Approved Clinical Instructor - An appropriately credentialed professional identified and trained by a Clinical Instructor Educator to provide instruction and evaluation of the Athletic Training Educational

Competencies and/or Clinical Proficiencies.¹ The ACI may not be a current student within the Athletic Training Education Program.¹

- 2) Athletic Training Student - Entry-level student in the Athletic Training Education Program who is working towards a Bachelors degree at a college/university.¹
- 3) Clinical Education - The application of knowledge and skills, learned in classroom and laboratory settings, to actual practice on patients under the supervision of an ACI.¹
- 4) Clinical Skills and Knowledge - Appropriate clinical competence is demonstrated through clinical decision making and professional approaches to problem solving.²
- 5) Communication Skills - Effective communication should be nonthreatening and provide a clear and honest perception of student's abilities.² Demonstrating active listening skills, asking open-ended questions, and clearly explaining clinical problems and expectations in a comprehensible manner is also effective means of communication.²

- 6) Evaluation of Performance - Effective evaluation and assessment skills identify student progress, strengths and weaknesses.²
- 7) Instructional Skills - Effective instructional skills means being knowledgeable on basic educational principles regarding clinical teaching.² Being effective means recognizing different teaching and learning styles and encouraging critical thinking and problem solving skills.²
- 8) Interpersonal Relationships - A positive and effective interpersonal relationship means showing professional behavior and being a professional role model and mentor.² Interpersonal qualities include being enthusiastic, positive, friendly, honest, approachable, and show interest and concern for students as a learner.²
- 9) Preceptor - A teacher or instructor more commonly used to describe an instructor in the clinical setting of nursing, physical therapy, and other health related fields.
- 10) Supervisory and Administrative Skills - Effective supervision is remaining readily accessible and serving as a resource for students.² An effective administrative

skill is time management and completing all necessary tasks.²

Basic Assumptions

The following are basic assumptions of this study:

- 1) The subjects completed the survey honestly and to the best of their ability.
- 2) The subjects completed the survey based on their own individual experiences.
- 3) The questions were not leading or biased.
- 4) All respondents were be given adequate time to complete the survey.

Limitations of the Study

The following are possible limitations of the study:

- 1) Only those who are a member of the National Athletic Trainers' Association Career Starter category were being studied which decreased the subject pool.
- 2) The subjects may not have been able to recall the information needed to successfully answer the survey questions.
- 3) The list of subject email addresses may not have been correct.

Delimitations

The following are possible delimitations of the study:

- 1) The subjects who participated in the survey were Career Starter membership category of the National Athletic Trainers' Association.
- 2) The subjects who participated in the survey were recently certified athletic trainers.
- 3) The subjects who participated in the survey were evaluating a previous approved clinical instructor from their first clinical rotation of fall semester of their final academic year.

Significance of the Study

The only athletic training research-based standards published are those by Drs. Weidner and Henning.

Individuals, who were once entry-level athletic training students, will rate their approved clinical instructor's professional effectiveness based on the developed standards. This thesis study was significant for assessing guidelines in selecting, training, and evaluating ACIs. The results of this research may help to better guide the approved clinical instructor (ACI) in the clinical setting.

The study showed what standards and criteria the ACI is performing well in, and where improvements were necessary.

APPENDIX C

Additional Methods

APPENDIX C1

Institutional Review Board -

California University of Pennsylvania



California University
of Pennsylvania

Proposal Number

Date Received

PROTOCOL for Research Involving
Human Subjects

Institutional Review Board (IRB) approval is required before beginning any research and/or data collection involving human subjects

(Reference IRB Policies and Procedures for clarification)

Project Title CERTIFIED ATHLETIC TRAINERS' PERCEPTIONS ON THEIR UNDERGRADUATE APPROVED CLINICAL INSTRUCTORS' PROFESSIONAL EFFECTIVENESS

Researcher/Project Director Abby Passaro, LAT, ATC

Phone # 4127589591

E-mail Address pas7374@calu.edu

Faculty Sponsor (if required) Linda P. Meyer, EdD, LAT, ATC, PES

Department Health Science

Project Dates March 10, 2013 to February 28, 2014

Sponsoring Agent (if applicable) _____

Project to be Conducted at California University of Pennsylvania - Online survey

Project Purpose: *Thesis* *Research* *Class Project* *Other*

Keep a copy of this form for your records.

Please attach a typed, detailed summary of your project AND complete items 2 through 6.

1. *Provide an overview of your project-proposal describing what you plan to do and how you will go about doing it. Include any hypothesis(es) or research questions that might be involved and explain how the information you gather will be analyzed. For a complete list of what should be included in your summary, please refer to Appendix B of the IRB Policies and Procedures Manual.*

The purpose of this research is to examine the perception of certified athletic trainers on their undergraduate approved clinical instructors' professional effectiveness based on the following six standards: communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge. A secondary purpose is to determine the reliability for each of the six standards. This study utilizes a descriptive research design.

The six standards are from the original questionnaire by Dr. Thomas Weidner in his research titled "Development of Standards and Criteria for the Selection, Training, and Evaluation of Athletic Training Approved Clinical Instructors". Permission was received via e-mail from the primary author, Dr. Thomas Weidner, to modify the questionnaire to use as a survey for this research.

The modified survey, Evaluation of Athletic Training Approved Clinical Instructors' Professional Effectiveness, consists of 34 total questions within two primary sections. The first section contains five demographic questions which will include: Age (participants must be at least 18 years of age), National Athletic Trainers' Association (NATA) district, NCAA or NAIA Division school where education was received, first clinical rotation assignment from fall semester of final academic year, and gender of the approved clinical instructor from the participants first clinical rotation assignment from fall semester of the final academic year. The second section will include 29 questions that deal with the following six of the seven original standards from Dr. Weidner's questionnaire: communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge. Legal and Ethical Behavior, from the seven original standards, will not be included in this research. The six standards will be evaluated based upon the associated criteria contained within each standard. The second section of questions will use a Likert scale. The scale is on a range from 1 to 5, with 1 being never and 5 being always.

The current researcher will obtain approval from the Institutional Review Board at California University of Pennsylvania before any research is conducted. Potential participants in this study will consist of 1,000 certified athletic trainers chosen at random from the National Athletic Trainers' Association (NATA) Survey System. The survey will be administered to the NATA membership category called Career Starter. Career Starter category holds certified regular members.

The online survey will take approximately 15 minutes to complete. The NATA will distribute the survey to the participants through a link in an email. The participants will receive the email to open the survey hosted by Survey Monkey™. A cover letter stating the purpose of the study and any risks of participation will be seen first in the email prior to opening the survey. Informed consent will be assumed by the subject's participation in the survey. Each participant's identity will be anonymous in the study. Two weeks after the survey is initially sent a reminder email will be sent that states there is one more week to complete the survey. At the end of the third week, the data will be collected and analyzed.

The following research question will be answered in this study:

What is the perception of certified athletic trainers on their undergraduate approved clinical instructor's professional effectiveness on the following standards: communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge?

All data will be analyzed by SPSS version 18.0 for windows. The research question will be analyzed using descriptive statistics of mean, standard deviation and range of scores. The reliability for communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge will be determined by using a Chronbach Alpha analysis.

3

2. *Section 46.11 of the Federal Regulations state that research proposals involving human subjects must satisfy certain requirements before the IRB can grant approval. You should describe in detail how the following requirements will be satisfied. Be sure to address each area separately.*

- a. *How will you insure that any risks to subjects are minimized? If there are potential risks, describe what will be done to minimize these risks. If there are risks, describe why the risks to participants are reasonable in relation to the anticipated benefits.*

The risks to the participants in this study are minimal. There are no questions asking names or demographics that may identify the individual specifically. Subjects will be protected and all information will be confidential. All the information collected will be on password protected file on the Cal U server. There are minimal risks and those participating can stop the survey anytime they choose, and their data will be discarded.

- b. *How will you insure that the selection of subjects is equitable? Take into account your purpose(s). Be sure you address research problems involving vulnerable populations such as children, prisoners, pregnant women, mentally disabled persons, and economically or educationally disadvantaged persons. If this is an in-class project describe how you will minimize the possibility that students will feel coerced.*

The National Athletic Trainers' Association will contact 1,000 members of the Career Starter membership category. The participants will receive the Survey Monkey™ link in their email and then have the choice whether to participate. There is an initial demographic question asking the subject if he or she is over the age of 18 years old to ensure eligibility. If the subject is under the age of 18 years old, he or she will see a disqualification page and will not be permitted to participate in the survey.

- c. *How will you obtain informed consent from each participant or the subject's legally authorized representative and ensure that all consent forms are appropriately documented? Be sure to attach a copy of your consent form to the project summary.*

The cover letter containing the link to the survey states that the subject has the right to not participate or discontinue participation at any time. Informed consent will be implied by completion of the survey. This is stated implicitly in the survey cover letter.

- d. *Show that the research plan makes provisions to monitor the data collected to insure the safety of all subjects. This includes the privacy of subjects' responses and provisions for maintaining the security and confidentiality of the data.*

The survey responses are anonymous and will be confidential. Survey responses including all the information gathered will be in a password protected file on a Cal U server.

3. *Check the appropriate box(es) that describe the subjects you plan to use.*

<input checked="" type="checkbox"/> <i>Adult volunteers</i>	<input type="checkbox"/> <i>Mentally Disabled People</i>
<input type="checkbox"/> <i>CAL University Students</i>	<input type="checkbox"/> <i>Economically Disadvantaged People</i>
<input type="checkbox"/> <i>Other Students</i>	<input type="checkbox"/> <i>Educationally Disadvantaged People</i>
<input type="checkbox"/> <i>Prisoners</i>	<input type="checkbox"/> <i>Fetuses or fetal material</i>
<input type="checkbox"/> <i>Pregnant Women</i>	<input type="checkbox"/> <i>Children Under 18</i>

Approved, September 12, 2005 / (updated 02-09-09)

Physically Handicapped People *Neonates*

4. *Is remuneration involved in your project?* *Yes* or *No*. *If yes, Explain here.*
5. *Is this project part of a grant?* *Yes* or *No* *If yes, provide the following information:*
Title of the Grant Proposal _____
Name of the Funding Agency _____
Dates of the Project Period _____
6. *Does your project involve the debriefing of those who participated?* *Yes* or *No*
If Yes, explain the debriefing process here.
7. *If your project involves a questionnaire interview, ensure that it meets the requirements of Appendix ___ in the Policies and Procedures Manual.*

California University of Pennsylvania Institutional Review Board
Survey/Interview/Questionnaire Consent Checklist (v021209)

This form MUST accompany all IRB review requests

Does your research involve ONLY a survey, interview or questionnaire?

YES—Complete this form

NO—You MUST complete the “Informed Consent Checklist”—skip the remainder of this form

Does your survey/interview/questionnaire cover letter or explanatory statement include:

- (1) Statement about the general nature of the survey and how the data will be used?
- (2) Statement as to who the primary researcher is, including name, phone, and email address?
- (3) FOR ALL STUDENTS: Is the faculty advisor’s name and contact information provided?
- (4) Statement that participation is voluntary?
- (5) Statement that participation may be discontinued at any time without penalty and all data discarded?
- (6) Statement that the results are confidential?
- (7) Statement that results are anonymous?
- (8) Statement as to level of risk anticipated or that minimal risk is anticipated? (NOTE: If more than minimal risk is anticipated, a full consent form is required—and the Informed Consent Checklist must be completed)
- (9) Statement that returning the survey is an indication of consent to use the data?
- (10) Who to contact regarding the project and how to contact this person?
- (11) Statement as to where the results will be housed and how maintained? (unless otherwise approved by the IRB, must be a secure location on University premises)
- (12) Is there text equivalent to: “Approved by the California University of Pennsylvania Institutional Review Board. This approval is effective nn/nm/nn and expires mm/mm/mm”? (the actual dates will be specified in the approval notice from the IRB)?
- (13) FOR ELECTRONIC/WEBSITE SURVEYS: Does the text of the cover letter or explanatory statement appear before any data is requested from the participant?
- (14) FOR ELECTONIC/WEBSITE SURVEYS: Can the participant discontinue participation at any point in the process and all data is immediately discarded?

**California University of Pennsylvania Institutional Review Board
Informed Consent Checklist (v021209)**

This form MUST accompany all IRB review requests

Does your research involve ONLY a survey, interview, or questionnaire?

YES—DO NOT complete this form. You MUST complete the “Survey/Interview/Questionnaire Consent Checklist” instead.

NO—Complete the remainder of this form.

1. Introduction (check each)

- (1.1) Is there a statement that the study involves research?
- (1.2) Is there an explanation of the purpose of the research?

2. Is the participant. (check each)

- (2.1) Given an invitation to participate?
- (2.2) Told why he/she was selected.
- (2.3) Told the expected duration of the participation.
- (2.4) Informed that participation is voluntary?
- (2.5) Informed that all records are confidential?
- (2.6) Told that he/she may withdraw from the research at any time without penalty or loss of benefits?
- (2.7) 18 years of age or older? (if not, see Section #9, Special Considerations below)

3. Procedures (check each).

- (3.1) Are the procedures identified and explained?
- (3.2) Are the procedures that are being investigated clearly identified?
- (3.3) Are treatment conditions identified?

4. Risks and discomforts. (check each)

- (4.1) Are foreseeable risks or discomforts identified?
- (4.2) Is the likelihood of any risks or discomforts identified?
- (4.3) Is there a description of the steps that will be taken to minimize any risks or discomforts?
- (4.4) Is there an acknowledgement of potentially unforeseeable risks?
- (4.5) Is the participant informed about what treatment or follow up courses of action are available should there be some physical, emotional, or psychological harm?
- (4.6) Is there a description of the benefits, if any, to the participant or to others that may be reasonably expected from the research and an estimate of the likelihood of these benefits?
- (4.7) Is there a disclosure of any appropriate alternative procedures or courses of treatment that might be advantageous to the participant?

5. Records and documentation. (check each)

- (5.1) Is there a statement describing how records will be kept confidential?
- (5.2) Is there a statement as to where the records will be kept and that this is a secure location?
- (5.3) Is there a statement as to who will have access to the records?

6. For research involving more than minimal risk (check each),

- (6.1) Is there an explanation and description of any compensation and other medical or counseling treatments that are available if the participants are injured through participation?
- (6.2) Is there a statement where further information can be obtained regarding the treatments?
- (6.3) Is there information regarding who to contact in the event of research-related injury?

7. Contacts.(check each)

- (7.1) Is the participant given a list of contacts for answers to questions about the research and the participant's rights?
- (7.2) Is the principal researcher identified with name and phone number and email address?
- (7.3) FOR ALL STUDENTS: Is the faculty advisor's name and contact information provided?

8. General Considerations (check each)

- (8.1) Is there a statement indicating that the participant is making a decision whether or not to participate, and that his/her signature indicates that he/she has decided to participate having read and discussed the information in the informed consent?
- (8.2) Are all technical terms fully explained to the participant?
- (8.3) Is the informed consent written at a level that the participant can understand?
- (8.4) Is there text equivalent to: "Approved by the California University of Pennsylvania Institutional Review Board. This approval is effective nn/nn/nn and expires mm/mm/mm"? (the actual dates will be specified in the approval notice from the IRB)

9. Specific Considerations (check as appropriate)

- (9.1) If the participant is or may become pregnant is there a statement that the particular treatment or procedure may involve risks, foreseeable or currently unforeseeable, to the participant or to the embryo or fetus?
- (9.2) Is there a statement specifying the circumstances in which the participation may be terminated by the investigator without the participant's consent?
- (9.3) Are any costs to the participant clearly spelled out?
- (9.4) If the participant desires to withdraw from the research, are procedures for orderly termination spelled out?
- (9.5) Is there a statement that the Principal Investigator will inform the participant or any significant new findings developed during the research that may affect them and influence their willingness to continue participation?
- (9.6) Is the participant is less than 18 years of age? If so, a parent or guardian must sign the consent form and assent must be obtained from the child
 - Is the consent form written in such a manner that it is clear that the parent/guardian is giving permission for their child to participate?
 - Is a child assent form being used?
 - Does the assent form (if used) clearly indicate that the child can freely refuse to participate or discontinue participation at any time without penalty or coercion?
- (9.7) Are all consent and assent forms written at a level that the intended participant can understand? (generally, 8th grade level for adults, age-appropriate for children)

California University of Pennsylvania Institutional Review Board
Review Request Checklist (v021209)

This form **MUST** accompany all IRB review requests.
 Unless otherwise specified, **ALL** items must be present in your review request.

Have you:

(1.0) FOR ALL STUDIES: Completed ALL items on the Review Request Form?

Pay particular attention to:

- (1.1) Names and email addresses of all investigators
 - (1.1.1) FOR ALL STUDENTS: use only your CalU email address)
 - (1.1.2) FOR ALL STUDENTS: Name and email address of your faculty research advisor
- (1.2) Project dates (must be in the future—no studies will be approved which have already begun or scheduled to begin before final IRB approval—NO EXCEPTIONS)
- (1.3) Answered completely and in detail, the questions in items 2a through 2d?
 - 2a: NOTE: No studies can have zero risk, the lowest risk is “minimal risk”. If more than minimal risk is involved you **MUST**:
 - i. Delineate all anticipated risks in detail;
 - ii. Explain in detail how these risks will be minimized;
 - iii. Detail the procedures for dealing with adverse outcomes due to these risks.
 - iv. Cite peer reviewed references in support of your explanation.
 - 2b. Complete all items.
 - 2c. Describe informed consent procedures in detail.
 - 2d. NOTE: to maintain security and confidentiality of data, all study records must be housed in a secure (locked) location **ON UNIVERSITY PREMISES**. The actual location (department, office, etc.) must be specified in your explanation and be listed on any consent forms or cover letters.
- (1.4) Checked all appropriate boxes in Section 3? If participants under the age of 18 years are to be included (regardless of what the study involves) you **MUST**:
 - (1.4.1) Obtain informed consent from the parent or guardian—consent forms must be written so that it is clear that the parent/guardian is giving permission for their child to participate.
 - (1.4.2) Document how you will obtain assent from the child—This must be done in an age-appropriate manner. Regardless of whether the parent/guardian has given permission, a child is completely free to refuse to participate, so the investigator must document how the child indicated agreement to participate (“assent”).
- (1.5) Included all grant information in section 5?
- (1.6) Included ALL signatures?

(2.0) FOR STUDIES INVOLVING MORE THAN JUST SURVEYS, INTERVIEWS, OR QUESTIONNAIRES:

- (2.1) Attached a copy of all consent form(s)?
- (2.2) FOR STUDIES INVOLVING INDIVIDUALS LESS THAN 18 YEARS OF AGE: attached a copy of all assent forms (if such a form is used)?
- (2.3) Completed and attached a copy of the Consent Form Checklist? (as appropriate—see that checklist for instructions)

- (3.0) FOR STUDIES INVOLVING ONLY SURVEYS, INTERVIEWS, OR QUESTIONNAIRES:
- (3.1) Attached a copy of the cover letter/information sheet?
 - (3.2) Completed and attached a copy of the Survey/Interview/Questionnaire Consent Checklist? (see that checklist for instructions)
 - (3.3) Attached a copy of the actual survey, interview, or questionnaire questions in their final form?
- (4.0) FOR ALL STUDENTS: Has your faculty research advisor:
- (4.1) Thoroughly reviewed and approved your study?
 - (4.2) Thoroughly reviewed and approved your IRB paperwork? including:
 - (4.2.1) Review request form,
 - (4.2.2) All consent forms, (if used)
 - (4.2.3) All assent forms (if used)
 - (4.2.4) All Survey/Interview/Questionnaire cover letters (if used)
 - (4.2.5) All checklists
 - (4.3) IMPORTANT NOTE: Your advisor's signature on the review request form indicates that they have thoroughly reviewed your proposal and verified that it meets all IRB and University requirements.
- (5.0) Have you retained a copy of all submitted documentation for your records?

Project Director's Certification
Program Involving HUMAN SUBJECTS

The proposed investigation involves the use of human subjects and I am submitting the complete application form and project description to the Institutional Review Board for Research Involving Human Subjects.

I understand that Institutional Review Board (IRB) approval is required before beginning any research and/or data collection involving human subjects. If the Board grants approval of this application, I agree to:

1. Abide by any conditions or changes in the project required by the Board.
2. Report to the Board any change in the research plan that affects the method of using human subjects before such change is instituted.
3. Report to the Board any problems that arise in connection with the use of human subjects.
4. Seek advice of the Board whenever I believe such advice is necessary or would be helpful.
5. Secure the informed, written consent of all human subjects participating in the project.
6. Cooperate with the Board in its effort to provide a continuing review after investigations have been initiated.

I have reviewed the Federal and State regulations concerning the use of human subjects in research and training programs and the guidelines. I agree to abide by the regulations and guidelines aforementioned and will adhere to policies and procedures described in my application. I understand that changes to the research must be approved by the IRB before they are implemented.

Professional Research

Project Director's Signature

Department Chairperson's Signature

Student or Class Research

Abby Passara

Student Researcher's Signature

Quinta P. Meyer

Supervising Faculty Member's
Signature if required

Kevin A. Koury Dean

Department Chairperson's Signature

ACTION OF REVIEW BOARD (IRB use only)

The Institutional Review Board for Research Involving Human Subjects has reviewed this application to ascertain whether or not the proposed project:

1. provides adequate safeguards of the rights and welfare of human subjects involved in the investigations;
2. uses appropriate methods to obtain informed, written consent;
3. indicates that the potential benefits of the investigation substantially outweigh the risk involved.
4. provides adequate debriefing of human participants.
5. provides adequate follow-up services to participants who may have incurred physical, mental, or emotional harm.

Approved [_____]

Disapproved

Chairperson, Institutional Review Board

Date

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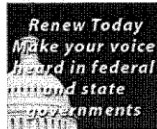
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Guidelines

Process:

For student members, NATA will broadcast email student surveys to a maximum of 1,000 participants. If a follow-up reminder is desired, NATA will transmit a second letter to the same members selected for the original broadcast.

For professional members, NATA will provide address or email lists at the lowest rate (94/ name). Prepayment and a signed one-time use agreement are required in addition to the documents below. There is no limit to the number of contact names a professional member can request for a project. NATA does not offer an email broadcast service for professional members.

Disclaimer:

The following disclaimer is required:
"This student survey is not approved or endorsed by NATA. It is being sent to you because of NATA's commitment to athletic training education and research."

Requirements:

1. Completed application form (next page).
2. Institutional Review Board approval - upload as part of form.
3. Informed Consent form, if applicable - upload as part of form.
4. Word (.doc) version of survey invitation email to participants - upload as part of form. See [Sample-Cover-Letter](#) for more information.
5. Description / criteria identifying targeted survey participants - see "Research-Survey-Criteria" document for more information.

Proceed to the Research Survey Request form

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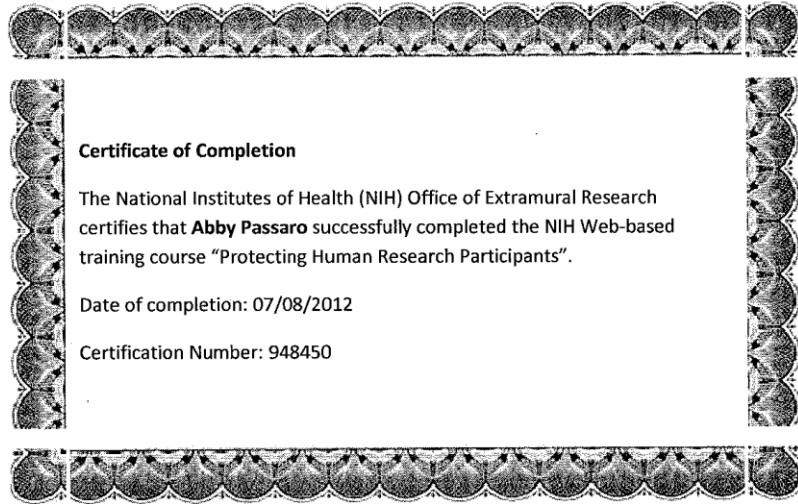
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- be entered in drawing to win a FREE trip to Vegas in 2013

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2013





Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Abby Passaro** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 07/08/2012

Certification Number: 948450

Institutional Review Board
California University of Pennsylvania
Morgan Hall, Room 310
250 University Avenue
California, PA 15419
instreviewboard@calu.edu
Robert Skwarecki, Ph.D., CCC-SLP, Chair

Dear Ms. Passaro:

Please consider this email as official notification that your proposal titled "Certified Athletic Trainers' Perceptions on their undergraduate approved clinical instructors' professional effectiveness" (Proposal #12-063) has been approved by the California University of Pennsylvania Institutional Review Board as submitted.

The effective date of the approval is 3/27/13 and the expiration date is 3/26/14. These dates must appear on the consent form .

Please note that Federal Policy requires that you notify the IRB promptly regarding any of the following:

- (1) Any additions or changes in procedures you might wish for your study (additions or changes must be approved by the IRB before they are implemented)
 - (2) Any events that affect the safety or well-being of subjects
 - (3) Any modifications of your study or other responses that are necessitated by any events reported in (2).
 - (4) To continue your research beyond the approval expiration date of 3/26/14 you must file additional information to be considered for continuing review.
- Please contact instreviewboard@calu.edu

Please notify the Board when data collection is complete.

Regards,

Robert Skwarecki, Ph.D., CCC-SLP
Chair, Institutional Review Board

APPENDIX C2

EVALUATION OF ATHLETIC TRAINING APPROVED CLINICAL
INSTRUCTOR'S PROFESSIONAL EFFECTIVENESS

SURVEY

Evaluation of Athletic Training Approved Clinical Instructor's Professional

***1. Are you 18 years of age or older?**

Yes

No

Evaluation of Athletic Training Approved Clinical Instructor's Professional

***2. In what NATA District did you receive your education?**

***3. From what size Division College/University did you graduate?**

- NCAA Division I
- NCAA Division II
- NCAA Division III
- NAIA Division I
- NAIA Division II

Evaluation of Athletic Training Approved Clinical Instructor's Professional

***4. What was your FIRST clinical rotation assignment in the FALL semester during your FINAL academic year as an athletic training student?**

- Basketball
- Bowling
- Cheerleading
- Cross Country
- Fencing
- Football
- Golf
- Gymnastics
- Ice hockey
- Medical Rotation
- Off-Campus High School
- Performing Arts
- Physical Therapy Clinic
- Rowing
- Soccer
- Swimming and Diving
- Tennis
- Volleyball
- Wrestling

Other (please specify)

***5. In your FIRST clinical rotation assignment of the FALL semester during your FINAL academic year was your approved clinical instructor male or female?**

- Male
- Female

Appendix C3

Cover Letter



California University of Pennsylvania

Dear Fellow Certified Athletic Trainer:

My name is Abby Passaro and I am currently a graduate student at California University of Pennsylvania pursuing a Master of Science in Athletic Training. Part of the graduate study curriculum is to complete a research thesis through conducting research. I am conducting survey research to determine the perception of certified athletic trainers on their undergraduate approved clinical instructor's professional effectiveness in clinical education. The survey will be generated through SurveyMonkey.com and will be distributed to the National Athletic Trainers' Association Career Starter membership category.

Your participation is voluntary and you do have the right to choose not to participate. You also have the right to discontinue participation at any time during the survey completion process at which time your data will be discarded. The California University of Pennsylvania Institutional Review Board has reviewed and approved this project. The approval is effective 3/27/13 and the expiration date is 3/26/14.

All survey responses are anonymous and will be kept confidential, and informed consent to use the data collected will be assumed upon return of the survey. The survey responses will be housed in a password protected file on the Cal U campus. Minimal risk is posed by participating as a subject in this study. I ask that you please take this survey at your earliest convenience as it will take approximately 15 minutes to complete. If you have any questions regarding this project, please feel free to contact the primary researcher Abby Passaro at pas7374@calu.edu or 412-758-9591. You can also contact the faculty advisor for this research (Linda Meyer, EdD, LAT, ATC, meyer@calu.edu). Thank you in advance for your participation. Please click the following link to access the survey (www.surveymonkey.com/s/JKGVVZ3).

Thank you for taking the time to take part in my thesis research. I greatly appreciate your time and effort put into this task.

Participants for this survey were selected at random from the NATA membership database according to the selection criteria provided by the student doing the survey. This student survey is not approved or endorsed by NATA. It is being sent to you because of NATA's commitment to athletic training education and research.

Sincerely,
Abby Passaro, LAT, ATC
Primary Researcher
California University of Pennsylvania
250 University Ave
California, PA 15419
pas7374@calu.edu

REFERENCES

1. CAATE Clinical Education Terminology. National Athletic Trainers' Association Web site. <http://www.nata.org/caate-clinical-education-terminology>. Accessed November 2012.
2. Weidner T, Henning J. Development of standards and criteria for the selection, training, and evaluation of athletic training approved clinical instructors. *J Athl Train*. 2004;39(4):335.
3. Weidner T, Henning J. Importance and applicability of approved clinical instructor standards and criteria to certified athletic trainers in different clinical education settings. *J Athl Train*. 2005;40(4):326-332.
4. Raines D. Nurse preceptors' views of precepting undergraduate nursing students. *J Nurs Educ Pers*. 2012;33(2):76-79.
5. Carr W, Volberding J. Employer and employee opinions of thematic deficiencies in new athletic training graduates. *Athl Train Ed J*. 2012;7(2):53-59.
6. Raab S, Wolfe B, Gould T, Piland S. Characterizations of a quality certified athletic trainer. *J Athl Train*. 2011;46(6):672-679.
7. Potteiger K, Brown C, Kahanov L. Altering the athletic training curriculum: a unique perspective on learning over time. *Athl Train Ed J*. 2012;7(2):60-69.
8. Sibold J, Geisler P. A three-question framework to facilitate clinical decision making. *Athl Train Ed J*. 2012;7(1):11-17.
9. Ristori C, Eberman L, Tripp B, Kaminski T. Athletic training student learning style. *IJATT*. 2011;16(2):33-37.
10. Henning J, Weidner T, Jones J. Peer-assisted learning in the athletic training clinical setting. *J Athl Train*. 2006;41(1):102-108.

11. Anderson B. Policies and philosophies related to risk management in the athletic setting. *Athl Ther Today*. 2006;11(1):10-16.
12. Rich V. Clinical instructors' and athletic training students' perceptions of teachable moments in an athletic training clinical education setting. *J Athl Train*. 2009;44(3):294-303.
13. Omansky G. Staff nurses' experiences as preceptors and mentors: an integrative review. *J Nurs Mgt*. 2010;18(6):697-703.
14. Craig D. Development of statewide clinical sites for an at education program. *IJATT*. 2012;17(3):25-29.
15. Martin M, Grant-Ford M. Utilizing web-based technology to track athletic training proficiencies. *Athl Ther Today*. 2007;12(4):40-43.
16. Walker S, Armstrong K. Standardized patients, part 1: teaching interpersonal and clinical skills. *IJATT*. 2011;16(2):38-41.
17. Armstrong K, Walker S, Jarriel A. Standardized patients, part 3: assessing student performance. *IJATT*. 2011;16(4):40-44.
18. Phan K, McCarty C, Mutchler J, Van Lunen B. Clinical preceptors' perspectives on clinical education in post-professional athletic training education programs. *Athl Train Ed J*. 2012;7(3):103-114.

ABSTRACT

Title: Certified Athletic Trainers' Perceptions on Their Undergraduate Approved Clinical Instructors' Professional Effectiveness

RESEARCHER: Abby Passaro

ADVISOR: Dr. Linda P. Meyer

DATE: May 2013

RESEARCH TYPE: Master's Thesis

CONTEXT: There is minimal athletic-training based research that analyzes athletic training students' perception of ACIs and their effectiveness in the clinical setting. Athletic training education programs could use this research to potentially better the effectiveness of the ACI.

OBJECTIVE: The purpose of this study was to determine the perception of certified athletic trainers on their undergraduate approved clinical instructor's professional effectiveness in clinical education. Professional effectiveness was determined based on the following standards: communication skills, interpersonal relationships, instructional skills, supervisory and administrative skills, evaluation of performance, and clinical skills and knowledge.

SETTING: An email was sent out to Career Starter members of the National Athletic Trainer's Association. The email contained a link to the survey to be completed on an internet based program at the students own discretion.

PARTICIPANTS: An online survey containing 29 questions and 5 demographic questions was randomly sent to 1,000 members of the National Athletic Trainers' Association who met the qualifying criteria. In total, 77 participants responded to the survey.

INTERVENTION: The survey originated from Drs. Weidner and Henning's questionnaire from the research titled "Development of Standards and Criteria for the Selection, Training, and Evaluation of Athletic Training Approved Clinical Instructors". Research was approved by the Institutional Review Board. The survey was created on a web server called Survey Monkey™ and sent via email using the National Athletic Trainers' Association Research Survey Services. A cover letter explaining the survey was attached in the email.

MAIN OUTCOME

MEASURES: The research question tested was analyzed using descriptive statistics of mean, standard deviation, and range of scores.

RESULTS: The mean and standard deviation for the six standards based on a 5-point Likert scale were as follows: Communication Skills, 4.4 ± 0.7 ; Interpersonal Relationships, 4.6 ± 0.6 ; Instructional Skills, 4.1 ± 1.0 ; Supervisory and Administrative Skills, 4.4 ± 0.7 ; Evaluation of Performance, 4.4 ± 0.8 ; Clinical Skills and Knowledge, 4.7 ± 0.6 .

CONCLUSION: The study concluded that based on the survey scale, approved clinical instructors (ACI) are usually demonstrating professional effectiveness in the clinical setting. The

survey's associated six standards were all deemed reliable by using a Chronbach Alpha analysis.