Perceived vs Actual Clinical Performance of Athletic Training Students

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by

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ABSTRACT

Perceived vs Actual Knowledge of Athletic Training Students in the Clinical Setting

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Context: Research has suggested a knowledge gap exist within the healthcare community. Identifying potential knowledge gaps and the use of self-reflection can be used to decrease these gaps can affect patient outcomes. **Objective:** To determine if knowledge gaps do exist within athletic training student's (ATS) clinical education. **Design:** Longitudinal non-experimental retrospective study. **Subjects:** 141 mid semester evaluations of sophomore ATS over a four year period. **Main Outcome Measures:** We assessed potential knowledge gaps of ATS in the clinical setting. We calculated the difference between a preceptor evaluation of the student and student's self-evaluation using a One-way ANOVA. We also looked to see if a relationship exists between a preceptor's evaluation of an ATS and ATS's self-evaluation using a Cohen's Kappa. Mean professional behavior scores, clinical proficiency scores and overall score will be assessed. **Results:** A significant difference was observed for CIP:6 emergent care (p=.016, F=4.661) while no significant difference existed for professional behaviors (p=.099,F=2.350), CIP:2 (p=.055, F=2.989), CIP:3 (p=.322, F=1.161), and overall score(p=.066, F=2.780). A fair to poor relationship was observed for professional behaviors (k=.128 p=.079), CIP:2 (k=.251 p=.001), CIP:3 (k=-.032 p=.723), CIP:6 (k=.381 p=.002), and overall score (k=.142 p=.035). **Conclusion:**

Preceptor and ATS paired evaluation depicted no significant difference but a poor inter-rater relationship was observed identifying a knowledge gap exists.

PREFACE

Knowledge gaps are prevalent within the healthcare community that can be detrimental to patient outcomes. Athletic training students(ATS) are not exempt from these knowledge gaps during their education and may not be aware of their existence. As a preceptor, I wanted to look into potential knowledge gaps in the clinical setting and find ways to help ATS recognize and reduce these gaps. This study was started in Sept 2012 and was finished August 2014. I hope my findings will have a positive effect on student education in the future.

ACKNOWLEDGMENTS

First, I would like to thank my thesis chair Dr. Kahonov and committee member Dr. Eberman for their time and efforts. I truly appreciate the dedication and guidance they gave me throughout my experience. Their contribution and advice were vital to my success. Last and most importantly, I want to sincerely thank them for the patience and diligence they displayed towards me from day one. I would not have been able to finish this project without them.

I would also like to thank Dr. Idlewine for her time spent on my thesis committee. Her input sparked new thoughts and guided this project to where it is today.

I wish to thank Indiana State University and the College of Graduate and Professional Studies for the opportunity. I would not be who I am today without the challenge and experience I have received over the past two years.

Lastly, I would like to thank my friends and family for believing in me. I am grateful for their drive and support during my educational journey. They are the main reason I have accomplished what I have thus far.

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CHAPTER 1

INTRODUCTION

Rapid changing expectations in healthcare due to evidence based medicine may create a disconnect between professionals actual knowledge, what they know, and perceived knowledge, what they believe they know, quantifying a knowledge gap.[1, 2] Lack of understanding or awareness of the knowledge gap may decrease patient outcomes and limit motivation in continuing education opportunities. An athletic trainer, an allied healthcare professional within the National Athletic Trainers' Association(NATA), is not immune to these knowledge gaps, which can be detrimental to patient health and the education of athletic training students (ATS).[2] Competency based and continuing education provides these healthcare professionals with current research and advances in medicine. In theory, continuing education would reduce the knowledge gap, yet research suggests that healthcare professionals are unable to detect knowledge gaps without an external mechanism (testing, feedback, etc).[2] Thus far, the literature has identified only knowledge gaps related to cognitive competence, but little research has investigated clinical performance or proficiency.

The athletic training education model consists of a competency based education (CBE) approach. For one to be competent, he or she has to demonstrate the "ability to do the right thing at the right time, in the right way, in a specific complex professional context."[3, 4] The CBE approach to learning employs knowledge application over a variable time period rather than

traditional learning styles of knowledge acquisition over a set period of time.[3, 5, 6] CBE provides an environment for students to build competence or help individuals make sound judgment and utilize knowledge. The athletic training competencies within the education programs are created from the role delineation study that assess current practices of athletic trainers.[4,7] The competencies are completed as students work through the curriculum to build clinical proficiency which entails the synthesis and integration of knowledge and decision-making skills into everyday practice.[4, 8]

Part of clinical practice is professional behavior. Professional behaviors create a standard of practice, which helps clinicians make professional and ethical decisions.[2, 9, 10] The professional behaviors embedded in the NATA's code of ethics are respect, caring, social responsibility, accountability, and integrity. Students model behaviors of their preceptors during clinical experiences.[10] These behaviors include primacy of the patient, teamed approach to practice, legal and ethical practice, advancing knowledge, cultural competence, and professionalism, which are detailed in table 2 of the appendix. To know if students are behaving appropriately, an assessment is needed to acquire feedback. For proper knowledge growth, both positive and negative feedback are critical to the educational process.[11, 12] Formative feedback, which is an immediate assessment of learning, can be helpful to students when conducted in a caring and professional manner.[13, 14] Summative feedback, which is the assessment of learning over time, can assist students to observe a broad perspective of knowledge growth.[15] A combination of summative and formative feedback during clinical experience may shape future healthcare professionals.[15]

Working within the healthcare profession requires that individuals have an attitude of life long learning due to frequent advances within the profession in order to provide quality patient

care. ATS are also expected to elicit this approach to evidence based medicine by either using internal or external performance feedback. Many learners obtain the ability to use external feedback or a critique from an outside source to help identify the knowledge gap. Other learners have the ability to use internal feedback such as a self-evaluation or an internal act of testing oneself. Performance feedback will likely help students identify what knowledge they are lacking to help them pursue the education needed to manage knowledge deficits.[2]

Purpose Statement

The purpose of this study is to examine ATS perceived and actual clinical performance, related to professional behavior behaviors and clinical proficiency. Literature suggests poor relationships between perceived and actual knowledge among various healthcare providers on various patient care issues, but research is lacking that evaluates clinical performance and professional behavior.[16]

CHAPTER 2

LITERATURE REVIEW

This literature review outlines characteristics of perceived and actual knowledge and behavior regarding athletic training students in the clinical setting. The purpose of this review is to help increase awareness of professional behavior and NATA competencies knowledge gaps among athletic training students in the clinical setting. Literature was extracted using EBSCOHOST, GOOGLE SCHOLAR, and PUBMED. Keywords used in searching the literature were perceived knowledge, actual knowledge, foundational behaviors, feedback, and education.

Perceived and Actual Knowledge

The healthcare profession is ever changing and allied healthcare professionals must stay updated regarding new information and practices.[2] Due to rapid changes, knowledge gaps exist which can be detrimental to the health of patients and to the success of the clinician. A knowledge gap is quantified by measuring what the individual's perceived level of knowledge compared to the actual level of competence or actual knowledge.[2] Many healthcare workers fail to acknowledge this gap. Knowledge gaps are identified among student populations due to outdated information being taught which will ultimately affects patient care.[2] Athletic Training, an allied healthcare profession, is not immune to knowledge gaps and that have a potential affect on athletic training student's (ATS) education within Athletic training education programs (ATEP). If we are able to help clinicians and students become aware of this knowledge gap,

they can take certain measures to narrow the gap ultimately increasing student competence and patient care.

The knowledge gap among healthcare professionals is very well documented within the literature.[2, 16-19] These studies used a diabetes self-report tool (DSRT) and correlated it with a standard diabetes basic knowledge test (DBKT) to identify knowledge deficits. The DBKT assessment is more of a cognitive knowledge tool rather than showing proficiency with which they are able to practice, which is used within multiply studies. A nursing diabetes education study of perceived knowledge suggest an inverse correlation between the perceived and actual knowledge on diabetes mellitus among nurses ($r=-.36$, $P< .001$) contrary to other reports resulting in weak but positive correlation ($r=.402$, $P< .0001$).[16, 17]

Table 1 Perceieved vs Actual Knowledge Research

Author	**Population**	**Results**
Baxley[1]	Nurses- Diabetes Mellitus	r=0.23 p=0.21
Drass[16]	Nurses-Diabetes Mellitus	r=-0.36 p<0.001
El-Deirawi[17]	Nurses- Diabetes Mellitus	r=0.402 p<0.0001
Lehna[20]	Nurses- Burn Prevention	r=0.124 p=0.052
Naughton[19]	Nurses-Pharmacy Students	P<0.001

The assessment of knowledge gaps in the healthcare profession may increase awareness and inspire professionals to pursue continuing education. [1, 2, 16, 17, 20] Research indicates athletic trainers were more likely to address their lack of knowledge when they are able to recognize information that they may not know.[2] Similar to athletic trainers, participants within nursing studies seemed to show professionals acknowledging their knowledge gaps. Two studies showed

that nurses were eager to review their result upon completion of the studies which would allow them to observe their deficits. One study specifically showed participants in dismay after completion of the DBKT because the realization of their lack of knowledge on the subjects in which they consulted the study investigators and fellow nurses over answers.[16] Results from studies indicate that performance feedback may influence healthcare providers to seek further knowledge when they become aware of knowledge deficits.

Competency Based Education

Competency based education is a curriculum that assess demonstration of competence or application of the knowledge. Competence is defined as "ones ability to do the right thing at the right time, in the right way, in a specific complex professional context."[5] This education model has been introduced into many different healthcare professions ranging from athletic training and nurse curriculum to medical school.

Competency based education was first introduced into the athletic training curriculum following the first role delimitation study (RDS) in 1982.[21] The RDS is a survey created by the National Athletic Trainer' Association Board of Certification (NATABOC) completed by current athletic training allied clinical directors to assess the current levels of professional practice.[9] The RDS is then used to create the educational competencies, which comprise the curriculum for CAATE accredited athletic training education programs. The educational competencies are the foundation of the national certifying examination (BOC)[4] which define the scope of practice of the allied healthcare professional.[7] Based on the RDS 6th edition, the 5th edition of the athletic training educational competencies were created and implemented into the education curriculum. The educational competencies are the bases for clinical proficiencies which integration and synthesis of didactic information necessary for clinical decision making.[7] The 5th edition

educational competencies implemented in to the BOC certification examination in April 2012 and the continuing education of all athletic trainers in January 2012. With the athletic training scope of practice ever changing, the education of athletic training students will need to adapt to best suit the profession of athletic training. [15]

Foundational Behaviors

The 5th edition of the *Athletic Training Education Competencies* highlights the need to implement the foundational behaviors of professional practice and virtue within the athletic training curriculum. [15]These foundational behaviors, which are guided by the values implicit in the NATA professional code of ethics, create the standard for practicing professionally and ethically. The professional values within the NATA code of ethics are respect, caring, social responsibility, accountability, and integrity.[10] Knowing and implementing the values that drive behaviors within an ATEP is necessity for the success of our athletic training students (ATS) to ensure the safety of patients during the decision making process.[10] Foundational behaviors are constantly redefined by the progression of medical knowledge and are then emphasized to the students and articulated through educational curriculum.

The professional identity of a student is what portrays their distinctive professional values and trust. The foundational behavior and professional values that are integrated into the clinical education will increase moral reasoning and help students fully develop the foundational behaviors. This will help the young professional practice ethically when such a dilemma arises.[9] Preceptors who model ethical practice have a greater impact on students than those who only discuss what is right.[10] Evaluating gaps within ATS' professional values and behaviors will educate where deficiencies may lie in moral reasoning.

Ethics education is often overlooked in healthcare education programs which is detrimental to growth of professional values and behaviors.[1] Ethics education is needed within the didactic curriculum along with the clinical setting. If students are to develop professional behaviors, they need to have an understanding of ethical behavior and values. Ethics education will help students identify moral issues and build moral reason or decision-making skills.[1] Professional integrity should be key points within any ATEP.[1] Once one has a basic understanding of ethical issues, student should be given more autonomy to help them fully develop professional behaviors and practices. Evaluation of ones professional values and behaviors will help the student learn of where deficits may be present. Professional values and behavior evaluations will help develop ethical clinicians.

Student Maturity

Maturity plays an important role in what information students learn and when they are allowed to apply the information to daily life.[21] The ATEP is a unique program that incorporates the didactic learning with clinical experience as compared to physician assistant, physical therapy, and occupational therapy curriculum. This education model is very similar to nursing curriculum. Students are provided educational competencies they are expected to perform at a professional level. Once a preceptor has evaluated an ATS' competencies, they are expected to synthesize that knowledge and use it in their clinical practice. [15]As students progress through the program, they are expected to start using more and more of that knowledge and build clinical proficiency and confidence. [21] The building concept in clinical education is known as socialization, which states a sophomore ATS should not be expected to be as proficient and may need more guidance than a senior ATS. Thus as the student works through the curriculum, they are given more autonomy to practice under the supervision of a preceptor. This autonomy creates

confidence and allow the student to work through the process needed to become a young professional.[21]

Feedback

Preceptor feedback, both positive and negative, is the foundation of learning and is crucial to the growth of ATS.[12] Positive feedback is used to reinforce positive behaviors or performances while negative feedback, which can be very detrimental if not handled correctly, is used to help change a behavior or performance.[12] Feedback needs to be conducted in an appropriate manner if the ATS is to grow in knowledge. Two main types of feedback are used within the educational system: formative feedback and summative feedback. Formative feedback is defined as an assessment for learning or used to alter behaviors and thought process to improve learning. [15,22] Formative feedback needs to be immediate or shortly after the performance and should be only one or two key points of that performance so the ATS is not overwhelmed.[11] The feedback should be phrased in a way that does not attack the student and ensure that the feedback will be useful to the ATS. All of these will aid ATS growth and minimize damaging your professional and educational relationships.[12]

Many different tactics exist for formative student feedback with no single correct way to apply.[23] The "sandwich" feedback theory is when a negative is masked with two positives. This method is used to semi mask the negative with the two positive and can give the student a false sense of confidence in which they did not learn anything.[12] Another method is the Pendleton model which the student states positives from the situation followed by the preceptor's positive. The same is structure is used for the negatives. A conversation between the preceptor and ATS is created using the Pendleton model but it does not allow for true reflection of the situation.[12] The last form of feedback is a reflective feedback conversation where the ATS is expected to reflect

on what was done well, what needs to be changed and how the change is going to take place.[12] This debriefing form of feedback is used to draw out performance assessment from individuals taking part as adults learn better when they are actively engaged in the learning process.[13]

Another form of feedback used is summative feedback or the assessment of what someone has learned over a period of time. Examples of summative feedback would be midterm or final grades, a test, or paper. Summative feedback can be very beneficial helping students understand what they have learned and what weakness they may have. Summative feedback needs to be used sparingly as it can cause decrease in student thought or lack of engaging in deeper approaches of learning.[15] For optimal learning to occur, a balance must exist between the summative and formative feedback. Excessive feedback, either formative, summative, or both, can be very detrimental to student success and learning.[15]

Other forms of feedback such as self-reflection and analysis can be very beneficial for student's knowledge. Self-reflection is defined as ones ability to evaluate personal work or intelligence and develop ways to get better. This type of emotional intelligence is important as emotions play a major role in today's work due to the interactions with others.[24] For one to grow in emotional intelligence, individual characteristics such as openness to experience, self-efficacy, and reception to feedback are needed.[24] With increasing emotional intelligence, one can reflect on what they perceive they know compared to what they actually know based off of reflection and analysis.

The art of giving feedback is something that takes time and practice.[23] Because of this, clinical teachers should implement different forms of feedback to help their students gain better knowledge of what they are doing well and what weaknesses need to be addressed to become more proficient.[12]

CHAPTER 3

METHODS

Research Design

We will use a longitudinal non-experimental retrospective study. The basis of our study is to investigate perceived and actual clinical performance of athletic training students.

Participants

We will sample using student self-evaluation and the preceptor evaluation of sophomore students obtained from an ATEP accredited by the Commission on Accreditation of Athletic Training Education (CAATE) within the National Athletic Training Association's (NATA) District 4. From the paired evaluations, we have a total population of 141 subjects.

Measurements/ Instrumentation

Program evaluations to assess professional practice are routine for CAATE programs. Students in the selected program took an online via qualtrics.com, based on the clinical proficiencies and foundational behaviors of professional practice, which are congruent with the NATA code of ethics.[10] The evaluation was created directly from the NATA code of ethics; thus face validity is well documented.

Evaluation Design

Evaluations of athletic training students(ATS) are based on the proficiency and the professional behaviors. Evaluation of proficiency is directly correlated with athletic training

education program curriculum or course sequence. Each year students are evaluated on the same foundational professional behaviors. Each year additional competencies are added to the evaluation to augment the standard of professional be evaluated annually. Sophomore proficiency evaluations are based on prevention, emergency medicine, lower extremity evaluations, and communication skills. The evaluation for junior proficiency encompasses all of the criteria within the sophomore evaluation along proficiency in upper extremity evaluation and referral process. Senior level ATS evaluation encompass all criteria from the junior level evaluation along with general medical evaluations, sports psychology, nutrition, and abuse intervention techniques. Evaluations are completed by the ATS' preceptor at mid and end of semester in which they are then used as feedback for that student.

Professional behavior summative evaluations of ATS are conducted at mid-term and at the end of the semester. Survey evaluations, completed on qualtrics.com, consist of the same information among each class and is used to evaluate student behaviors within their practice.

Procedures

After approval from the Indiana State University Internal Review Board, we will obtain the first time-matched self-evaluation and preceptor evaluation of sophomore students from the past six years via the ATEP program director. All names and identifiers will we redacted from the evaluation tools and evaluations will remain confidential.

Statistical Analysis

Using SPSS, a Cohen's Kappa and a one-way ANOVA will be use to analyze our data for inter-rater relationship and difference. Sum scores of the professional behaviors, clinical proficiency scores, and overall score variables of the evaluations will be entered into SPSS.

Mean scores of summed professional behavior scores, clinical proficiency scores, and overall score variables were also calculated.

CHAPTER 4

MANUSCRIPT

Introduction

Competency based and continuing education provides healthcare professionals with current research and advances in medicine. In theory, continuing education would reduce the knowledge gap, yet research suggests that healthcare professionals are unable to detect knowledge gaps without an external mechanism (testing, feedback, etc).[2] Thus far, the literature has identified only knowledge gaps related to cognitive competence, but little research has investigated clinical performance or proficiency.

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Part of clinical practice is professional behavior. Professional behaviors create a standard of practice, which helps clinicians make professional and ethical decisions.[2, 9, 10] The professional behaviors embedded in the NATA's code of ethics are respect, caring, social responsibility, accountability, and integrity. Students model behaviors of their preceptors during clinical experiences.[10] These behaviors include primacy of the patient, teamed approach to practice, legal and ethical practice, advancing knowledge, cultural competence, and professionalism, which are detailed in table 2 of the appendix. To know if students are behaving appropriately, an assessment is needed to acquire feedback. For proper knowledge growth, both positive and negative feedback are critical to the educational process.[11, 12] Formative feedback, which is an immediate assessment of learning, can be helpful to students when conducted in a caring and professional manner.[13, 14] Summative feedback, which is the assessment of learning over time, can assist students to observe a broad perspective of knowledge growth.[15] A combination of summative and formative feedback during clinical experience may shape future healthcare professionals.[15]

Working within the healthcare profession requires that individuals either use internal or external performance feedback to measure performance. Many learners obtain the ability to use external feedback or a critique from an outside source to help identify the knowledge gap. Other learners have the ability to use internal feedback such as a self-evaluation or an internal act of testing oneself. The use of self reflection to analysis performance has been shown be effective in increasing student emotional intelligence. With an increase in student EI, once can grow personally and professionally. Performance feedback will likely help students identify what knowledge they are lacking to help them pursue the education needed to manage knowledge deficits.[2]

Purpose Statement

The purpose of this study was to examine ATS perceived and actual clinical performance, related to professional behavior behaviors and clinical proficiency. Literature suggests poor relationships between perceived and actual knowledge among various healthcare providers on various patient care issues, but research is lacking that evaluates clinical performance and professional behavior.[16]

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Evaluations of ATSs are based on the proficiency and the professional behaviors. Evaluation of proficiency is directly correlated with athletic training education program curriculum or course sequence. Each year students are evaluated on the same foundational professional behaviors. Each year additional competencies are added to the evaluation to augment the standard of professional be evaluated annually. Sophomore proficiency evaluations are based on prevention, emergency medicine, lower extremity evaluations, and communication skills. The evaluation for junior proficiency encompasses all of the criteria within the sophomore evaluation along proficiency in upper extremity evaluation and referral process. Senior level ATS evaluation encompass all criteria from the junior level evaluation along with general medical evaluations, sports psychology, nutrition, and abuse intervention techniques. Evaluations are completed by the ATS' preceptor at mid and end of semester in which they are then used as feedback for that student.

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After approval from the Indiana State University Internal Review Board, we obtained the first time-matched self-evaluation and preceptor evaluation of sophomore students from the past six years via the ATEP program director. All names and identifiers were redacted from the evaluation tools and evaluations remained confidential and anonymous.

Statistical Analysis

Using SPSS, we used a Cohen's Kappa and a one-way ANOVA to analyze our data for inter-rater relationship and difference. Sum scores of the professional behaviors, clinical proficiency scores, and overall score variables of the evaluations were entered into SPSS. Mean scores of summed professional behavior scores, clinical proficiency scores, and overall score variables were also calculated.

Results

Of the 151 evaluations downloaded, 141 paired first time evaluations of sophomore students were used in our analysis. Ten evaluations were removed due to multiple, incomplete and incorrect submissions. Subject information was redacted to maintain confidentiality and prevent bias. Mean scores of the student and preceptor evaluations for clinical proficiencies and overall grade are depicted in Table 3.

ANOVA analysis of professional behavior mean scores revealed no significant difference in clinical perceived and actual behavior (p=.099,F=2.350). Analysis of the clinical proficiencies demonstrated a significant difference in CIP:6 emergent care (p=.016, F=4.661) perceived and actual knowledge revealing a knowledge gap. CIP:2 Taping/wrapping (p=.055, F=2.989) and CIP:3 at-risk individuals (p=.322, F=1.161) indicated no significant difference. A similar finding was evident when analyzing overall grade (p=.066, F=2.780).

Table 2: ANOVA Results

Clinical Proficiency/ Professional Behavior	Results
CIP-2: Taping/wrapping	p=.055, F=2.989
CIP-6: Emergent are	p=.016, F=4.661
CIP-3: At-risk individuals	p=.322, F=1.161

Professional behaviors	p=.099, F=2.350
Overall grade	p=.066, F=2.780

A Cohen's kappa coefficient for inter-rater agreement of the professional behaviors identified a poor insignificant relationship (k=.128 p=.079). A similar finding was established with CIP:3 at-risk individuals (k=-.032 p=.723). A poor but significant agreement was identified for CIP:2 taping/ wrapping (k=.251 p=.001) and overall score (k=.142 p=.035). A fair and significant relationship was found for CIP:6 emergent care (k=.381 p=.002). Our data indicates that a poor to fair agreement exist between preceptor and student evaluations.

Table 3: Cohen's Kappa Coefficient Results

Clinical Proficiency/ Professional Behavior	Results
CIP-2: Taping/wrapping	k=.251 p=.001
CIP-6: Emergent care	k=.381 p=.002
CIP-3: At-risk individuals	k=-.032 p=.723
Professional behaviors	k=.128 p=.079
Overall score	k=.142 p=.035

Discussion

The results demonstrate no statistical difference between perceived and actual clinical performance but a poor relationship between preceptor and student evaluation skills confirming a knowledge gap does exist among student clinical education. A one-way ANOVA identifies the overall difference of student perceived and actual clinical performance scores. A Cohen's kappa assessed inter-rater relationship between each individual set of paired evaluations. Because our

kappa results revealed a poor relationship between student and preceptor evaluations, we can confirm that a knowledge gap does exist.

Emotional intelligence (EI) may play a major role in student success and confidence levels in the clinical setting as emotions form the backbone of learning.[25, 26] EI is defined as the ability to perceive, understand, and use emotion effectively to modify behaviors and self-awareness. EI is individualistic, which may explain why people with similar background and education levels experience different levels of success. Intelligence, one's analytic and verbal talent, does not guarantee success and a lack of EI usually decreases positive outcomes both socially and behaviorally. Unlike intelligence, EI can be learned or improved overtime if taught correctly.[27] [25]Due to the knowledge gap that exists among sophomore students, we can speculate that students may be lacking in EI. Sophomore students are novice to the clinical education model making them more susceptible to knowledge gaps. Improving EI takes time, effort, and experiences, which mold appreciate behaviors. Students can successfully grow EI by actively engaging one's self in the evaluation process to help self-understanding, awareness of traits, virtues, and overall competence.[25] Provided an encouraging environment to engage emotionally, actively participate in learning opportunities and build healthy relationships are all ways to promote student learning and engagement. Connecting with students emotionally and caring about their progress fosters positive learning experiences.[24, 25, 27]

Preceptors play a vital role in student success within education programs. Our results suggest that sophomore students do not understand how to effectively evaluate in addition to lack confidence. Preceptors should educate novice students on how to self-reflect and use constructive feedback to help build confidence. Connecting with students emotionally and caring about their progress fosters positive learning experiences along with building a safe environment

for learning and engagement. Using these techniques, preceptors can potentially narrow the knowledge gaps that exist. Feedback is a critical component in student maturity, knowledge retention, and overall growth of an ATS. [12] Feedback, both positive and negative, is used to reinforce or change behaviors necessary for success. Feedback needs to be conducted in a suitable manner that is conducive to the goals a preceptor is trying to achieve when trying to educate ATS. Effective feedback will achieve a goal of building ones confidence or changing a negative behavior by promoting the student to think critically. If done incorrectly, feedback can be detrimental to student confidence levels and cause student withdrawal. Preceptors need to be cognizant in what manner feedback is presented to an ATS in order to create an environment suitable for success.[15, 21, 22]

Self-reflection is another essential source of feedback allowing students to analyze personal performance. Self-reflection forces ATS to use an internal source to critically critique one self and create ways to decrease knowledge gaps along with building evaluation skills. This debriefing form of feedback is used to draw out performance assessment from individuals taking part and research has indicated individuals retain information when they are actively engaged in the learning process.[13] With time and practice, ATS can create better ways to evaluate performance due to growth in EI.[22]

Limitations

Some limitations of my research would be that we did not choose to look at knowledge gaps overtime. We chose to use data from the first evaluation of novice first year students in the ATEP. Future research to look at knowledge gaps overtime as student's progress through the ATEP curriculum toward graduation.

Conclusions

In conclusion, the results of this study demonstrate the importance of proper feedback and building confidence among sophomore ATSs. Building an environment for positive student engagement, healthy interpersonal relationships and controlling emotion within the clinical setting are pertinent to student success. Preceptors should be cognizant of feedback that is given and involve the student in the evaluation process through self-reflection. With positive experiences, EI will improve decreasing knowledge gaps and increasing overall student success.

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APPENDIX A: STUDENT SELF EVALUATION RAW DATA

Student Number	Foundational Behavior Mean Score	CIP-2	CIP-3	CIP-6	Overall grade
1	4.00	N/A	N/A	N/A	1
2	3.00	N/A	N/A	N/A	2
3	3.00	N/A	N/A	N/A	2
4	3.00	N/A	N/A	N/A	2
5	3.00	N/A	N/A	N/A	2
6	4.00	N/A	N/A	N/A	2
7	4.00	N/A	N/A	N/A	2
8	4.00	N/A	N/A	N/A	1
9	3.00	N/A	N/A	N/A	2
10	4.00	N/A	N/A	N/A	2
11	4.00	N/A	N/A	N/A	1
12	4.00	N/A	N/A	N/A	2
13	4.00	N/A	N/A	N/A	2
14	4.00	N/A	N/A	N/A	2
15	4.00	N/A	N/A	N/A	1
16	3.00	N/A	N/A	N/A	2
17	4.00	N/A	N/A	N/A	1
18	4.00	N/A	N/A	N/A	2

19	4.00	N/A	N/A	N/A	1
20	4.00	N/A	N/A	N/A	1
21	3.00	N/A	N/A	N/A	2
22	4.00	N/A	N/A	N/A	1
23	4.00	N/A	N/A	N/A	2
24	4.00	N/A	N/A	N/A	1
25	4.00	N/A	N/A	N/A	2
26	3.00	N/A	N/A	N/A	2
27	3.00	N/A	N/A	N/A	1
28	4.00	N/A	N/A	N/A	2
29	4.00	N/A	N/A	N/A	3
30	4.00	N/A	N/A	N/A	2
31	3.00	N/A	N/A	N/A	2
32	3.00	N/A	N/A	N/A	2
33	3.00	N/A	N/A	N/A	2
34	4.00	4	4	4	2
35	4.00	4	4	4	1
36	4.00	4	4	4	1
37	4.00	5	5	5	1
38	4.00	4	N/A	N/A	1
39	4.00	5	N/A	5	1
40	4.00	4	4	4	1

41	4.00	4	5	N/A	1
42	4.00	4	N/A	N/A	2
43	3.00	4	3	3	2
44	3.00	4	4	4	1
45	4.00	5	5	5	1
46	3.00	3	3	N/A	1
47	4.00	4	4	4	1
48	3.00	3	3	3	2
49	4.00	4	3	4	1
50	4.00	3	N/A	N/A	1
51	3.00	3	N/A	N/A	2
52	4.00	5	3	3	2
53	4.00	4	3	4	1
54	4.00	4	5	4	1
55	3.00	3	3	3	1
56	4.00	4	3	4	1
57	4.00	4	N/A	N/A	1
58	4.00	3	3	3	2
59	4.00	4	3	4	2
60	4.00	5	4	5	1
61	4.00	5	5	5	1
62	4.00	4	4	4	1
63	3.00	3	3	3	2

64	3.00	4	N/A	N/A	2
65	4.00	4	3	4	1
66	4.00	4	N/A	N/A	1
67	3.00	3	N/A	N/A	2
68	4.00	4	4	4	1
69	4.00	4	4	4	1
70	4.00	4	N/A	N/A	3
71	4.00	4	N/A	N/A	1
72	4.00	5	5	5	1
73	4.00	4	3	3	2
74	4.00	4	N/A	N/A	2
75	4.00	N/A	N/A	5	1
76	3.00	3	N/A	N/A	2
77	3.00	3	N/A	N/A	2
78	4.00	4	4	5	1
79	4.00	5	5	5	1
80	4.00	4	4	4	2
81	3.00	3	N/A	N/A	1
82	5.00	N/A	N/A	N/A	1
83	4.00	4	3	N/A	2
84	3.00	3	3	3	1
85	4.00	4	4	N/A	1

86	4.00	4	N/A	N/A	1
87	4.00	4	3	3	2
88	3.00	3	3	3	2
89	3.00	3	N/A	N/A	2
90	4.00	4	3	4	1
91	4.00	3	4	4	2
92	4.00	5	N/A	4	2
93	4.00	3	3	3	2
94	3.00	4	3	4	2
95	4.00	4	N/A	N/A	2
96	3.00	4	4	4	2
97	3.00	4	N/A	N/A	1
98	4.00	4	4	5	1
99	4.00	3	3	N/A	2
100	4.00	4	3	4	1
101	3.00	N/A	3	N/A	2
102	4.00	4	N/A	4	2
103	4.00	N/A	N/A	N/A	1
104	3.00	4	4	4	2
105	4.00	5	5	5	1
106	3.00	3	3	N/A	3
107	4.00	4	N/A	N/A	1
108	3.00	5	4	4	1

109	4.00	4	4	5	1
110	3.00	3	N/A	N/A	1
111	4.00	5	5	4	1
112	4.00	N/A	N/A	N/A	2
113	3.00	4	3	3	2
114	4.00	5	N/A	N/A	1
115	4.00	5	5	5	1
116	4.00	5	5	5	1
117	3.00	3	3	3	2
118	4.00	5	3	4	1
119	4.00	4	N/A	N/A	2
120	4.00	5	4	5	2
121	4.00	4	4	4	2
122	4.00	4	4	N/A	1
123	4.00	4	5	5	1
124	4.00	5	3	N/A	1
125	4.00	5	4	N/A	1
126	4.00	5	5	5	1
127	4.00	5	5	5	1
128	4.00	5	3	4	2
129	5.00	5	5	5	1
130	4.00	4	3	3	1
131	4.00	4	4	4	1

132	4.00	4	5	4	1
133	3.00	N/A	N/A	N/A	3
134	4.00	5	4	N/A	2
135	3.00	3	3	4	2
136	4.00	4	N/A	N/A	2
137	4.00	N/A	4	N/A	2
138	3.00	4	4	4	1
139	3.00	4	4	N/A	1
140	4.00	5	4	3	1
141	3.00	4	N/A	N/A	2

APPENDIX B: PRECEPTOR EVALUATION OF STUDENT RAW DATA

Student Number	Foundational Behavior Mean Score	CIP-2	CIP-3	CIP-6	Overall grade
1	3.00	3	4	3	2
2	4.00	4		4	1
3	3.00	N/A	N/A	N/A	2
4	3.00	N/A	3	N/A	2
5	4.00	5	4	5	1
6	4.00	3	4	4	1
7	3.00	3	3	N/A	2
8	4.00	4	N/A	4	1
9	4.00	4	N/A	4	2
10	4.00	4	N/A	5	1
11	4.00	5	5	5	1
12	3.00	4	N/A	4	1
13	4.00	4	N/A	4	2
14	4.00	3	N/A	N/A	2
15	3.00	3	3	3	1
16	4.00	3	N/A	4	1
17	4.00	5	5	5	1
18	4.00	N/A	N/A	4	1
19	4.00	5	5	4	1
20	4.00	5	N/A	5	1

21	3.00	3	N/A	4	1
22	4.00	5	5	N/A	1
23	3.00	4	3	3	2
24	4.00	N/A	4	4	1
25	4.00	4	N/A	4	1
26	3.00	3	N/A	3	2
27	3.00	4	4	3	1
28	3.00	4	4	4	1
29	3.00	4	N/A	4	2
30	3.00	4	3	3	3
31	4.00	4	4	4	1
32	4.00	5	4	4	1
33	3.00	3	3	3	1
34	4.00	4	N/A	N/A	1
35	4.00	N/A	N/A	N/A	2
36	4.00	5	5	5	1
37	3.00	3	N/A	N/A	2
38	4.00	4	N/A	N/A	1
39	4.00	5	5	5	1
40	4.00	3	4	N/A	1
41	3.00	3	3	3	1
42	4.00	4	4	4	1

43	4.00	4	4	N/A	2
44	3.00	4	4	4	2
45	4.00	4	4	N/A	1
46	5.00	5	5	5	1
47	4.00	4	4	4	1
48	3.00	3	4	N/A	3
49	4.00	4	N/A	4	1
50	4.00	3	4	N/A	1
51	4.00	3	4	N/A	1
52	3.00	3	N/A	N/A	1
53	4.00	4	4	4	1
54	4.00	4	4	4	1
55	4.00	5	4	4	1
56	4.00	4	N/A	N/A	2
57	4.00	4	4	N/A	1
58	2.00	3	N/A	N/A	3
59	3.00	3	N/A	N/A	1
60	3.00	3	N/A	N/A	1
61	5.00	5	5	5	1
62	4.00	5	5	5	1
63	3.00	N/A	N/A	3	1
64	3.00	4	4	4	1

65	4.00	4	N/A	4	1
66	4.00	4	N/A	N/A	
67	4.00	4	N/A	N/A	1
68	4.00	4	N/A	N/A	1
69	3.00	3	4	N/A	1
70	4.00	4	4	4	1
71	4.00	4	N/A	N/A	1
72	3.00	3	N/A	N/A	2
73	4.00	4	4	4	2
74	4.00	4	4	4	2
75	3.00	N/A	N/A	N/A	1
76	2.00	3	N/A	N/A	3
77	3.00	N/A	N/A	N/A	1
78	4.00	3	N/A	N/A	2
79	4.00	4	4	4	1
80	5.00	4	N/A	N/A	1
81	5.00	4	N/A	N/A	1
82	4.00	4	4	4	1
83	4.00	4	4	4	1
84	5.00	5	5	5	1
85	4.00	5	4	4	1
86	5.00	4	N/A	5	1

87	3.00	3	4	N/A	2
88	4.00	4	4	4	1
89	3.00	4	N/A	4	1
90	4.00	4	5	5	1
91	4.00	4	5	5	1
92	4.00	5	N/A	5	2
93	3.00	4	3	N/A	3
94	4.00	3	4	N/A	1
95	4.00	4	3	N/A	1
96	4.00	4	4	N/A	1
97	4.00	4	N/A	N/A	1
98	4.00	5	5	5	1
99	4.00	4	N/A	N/A	1
100	4.00	N/A	N/A	4	1
101	3.00	4	N/A	3	1
102	4.00	4	4	N/A	1
103	4.00	N/A	N/A	N/A	1
104	4.00	N/A	N/A	N/A	1
105	3.00	5	N/A	5	2
106	3.00	3	4	4	
107	3.00	4	N/A	3	1
108	4.00	4	N/A	4	1

109	3.00	4	3	N/A	1
110	4.00	4	4	4	1
111	4.00	4	4	4	1
112	3.00	N/A	3	4	2
113	3.00	4	4	N/A	2
114	4.00	5	N/A	N/A	1
115	4.00	5	5	5	1
116	4.00	5	4	4	1
117	4.00	3	3	3	1
118	3.00	4	4	4	2
119	3.00	3	3	N/A	2
120	3.00	4	4	5	2
121	4.00	3	N/A	N/A	1
122	3.00	3	N/A	3	1
123	4.00	5	4	5	1
124	3.00	3	3	N/A	2
125	4.00	N/A	4	N/A	1
126	4.00	4	4	4	1
127	3.00	4	3	3	3
128	5.00	5	5	5	1
129	5.00	5	5	5	1
130	4.00	5	N/A	N/A	1
131	4.00	5	5	N/A	1

132	0.00	N/A	N/A	N/A	2
133	3.00	4	4	N/A	2
134	5.00	5	5	N/A	1
135	3.00	3	3	4	2
136	4.00	4	3	N/A	1
137	4.00	4	5	5	1
138	4.00	5	4	4	1
139	4.00	4	3	N/A	1
140	4.00	5	5	3	4
141	4.00	5	4	5	1

APPENDIX C: STUDENT SELF EVALUATION FORM

ATS Self Evaluation 255

Q16 Name

Q18 Clinical Rotation
- ❍ Rotation 1 (1)
- ❍ Rotation 2 (2)

Q1 Please mark the appropriate box indicating your rating of yourself. Please rate yourself according to the expectations for an ATTR 255 ATS only. Do not compare yourself to any other level of ATS. Foundational Behaviors: Primacy of the Patient

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Recognizes sources of conflict of interest that can impact the patient's health (1)	❍	❍	❍	❍	❍	❍
Knows and applies the commonly accepted standards for patient confidentiality (2)	❍	❍	❍	❍	❍	❍
Provides the best health care available for the patient (3)	❍	❍	❍	❍	❍	❍
Advocates for the needs of the patient (4)	❍	❍	❍	❍	❍	❍

Q2 Please mark the appropriate box indicating your rating of yourself. Please rate yourself according to the expectations for an ATTR 255 ATS only. Do not compare yourself to any other level of ATS. Foundational Behaviors: Teamed Approach to Practice

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Recognizes the abilities of other health care professionals (1)	❍	❍	❍	❍	❍	❍
Understands the scope of practice of other health care professionals (2)	❍	❍	❍	❍	❍	❍
Understands and executes duties within the identified scope of practice for athletic trainers (3)	❍	❍	❍	❍	❍	❍
Includes the patient (and family, where appropriate) in the decision making process (4)	❍	❍	❍	❍	❍	❍
Demonstrates the ability to work with others in effecting positive patient outcomes (5)	❍	❍	❍	❍	❍	❍

Q3 Please mark the appropriate box indicating your rating of yourself. Please rate yourself according to the expectations for an ATTR 255 ATS only. Do not compare yourself to any other level of ATS. Foundational Behaviors: Legal Practice

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Practices athletic training in a legally competent manner (1)	❍	❍	❍	❍	❍	❍
Recognizes the need to document compliance with the laws that govern athletic training (2)	❍	❍	❍	❍	❍	❍
Understands the consequences of violating the laws that govern athletic training (3)	❍	❍	❍	❍	❍	❍

Q4 Please mark the appropriate box indicating your rating of yourself. Please rate yourself according to the expectations for an ATTR 255 ATS only. Do not compare yourself to any other level of ATS. Foundational Behaviors: Ethical Practice

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Understands and complies with the NATA's Code of Ethics and the BOC's Standards of Practice (1)	❍	❍	❍	❍	❍	❍
Understands the consequences of violating the NATA's Code of Ethics and BOC's Standards of Practice (2)	❍	❍	❍	❍	❍	❍
Understands and complies with other codes of ethics, as applicable (3)	❍	❍	❍	❍	❍	❍

Q5 Please mark the appropriate box indicating your rating of yourself. Please rate yourself according to the expectations for an ATTR 255 ATS only. Do not compare yourself to any other level of ATS. Foundational Behaviors: Advancing Knowledge

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Critically examines the body of knowledge in athletic training and related fields (1)	❍	❍	❍	❍	❍	❍
Uses evidence-based practice as a foundation for the delivery of care (2)	❍	❍	❍	❍	❍	❍
Understands the connection between continuing education and the improvement of athletic training practice (3)	❍	❍	❍	❍	❍	❍
Promotes the value of research and scholarship in athletic training (4)	❍	❍	❍	❍	❍	❍
Disseminates new knowledge in athletic training to fellow athletic trainers, patients, other health care	❍	❍	❍	❍	❍	❍

professionals, and others as necessary (5)						

Q6 Please mark the appropriate box indicating your rating of yourself. Please rate yourself according to the expectations for an ATTR 255 ATS only. Do not compare yourself to any other level of ATS. Foundational Behaviors: Cultural Competence

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Understands the cultural differences of patient's attitudes and behaviors toward health care (1)	❍	❍	❍	❍	❍	❍
Demonstrates knowledge, attitudes, behaviors, and skills necessary to achieve optimal health outcomes for diverse patient populations (2)	❍	❍	❍	❍	❍	❍
Demonstrates knowledge, attitudes, behaviors, and skills necessary to work respectfully and effectively with diverse populations and in a diverse work environment	❍	❍	❍	❍	❍	❍

(3)						

Q7 Please mark the appropriate box indicating your rating of yourself. Please rate yourself according to the expectations for an ATTR 255 ATS only. Do not compare yourself to any other level of ATS. Foundational Behaviors: Professionalism

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Advocates for the profession (1)	❍	❍	❍	❍	❍	❍
Demonstrates honesty and integrity (2)	❍	❍	❍	❍	❍	❍
Exhibits compassion and empathy (3)	❍	❍	❍	❍	❍	❍
Demonstrates effective interpersonal communication skills (4)	❍	❍	❍	❍	❍	❍

Q8 Please mark the appropriate box indicating your rating of yourself. Please rate yourself according to the expectations for an ATTR 255 ATS only. Do not compare yourself to any other level of ATS. Mentorship

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Served as a role-model for pre-professional Athletic Training majors (1)	❍	❍	❍	❍	❍	❍
Enhanced clinical experience of pre-professional Athletic Training majors (2)	❍	❍	❍	❍	❍	❍

Q9 Please mark the appropriate box indicating your rating of yourself. Please rate yourself according to the expectations for an ATTR 255 ATS only. Do not compare yourself to any other level of ATS. Personal Attributes

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Demonstrates reliability and dependability (1)	❍	❍	❍	❍	❍	❍
Demonstrates self initiative (2)	❍	❍	❍	❍	❍	❍
Demonstrates ability to manage stress (3)	❍	❍	❍	❍	❍	❍
Demonstrates confidence in abilities (4)	❍	❍	❍	❍	❍	❍

Q10 Please mark the appropriate box indicating your rating of yourself. Please rate yourself according to the expectations for an ATTR 255 ATS only. Do not compare yourself to any other level of ATS. Administrative Characteristics

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Follows the athletic training room policies and procedures (1)	❍	❍	❍	❍	❍	❍
Completes and maintains clinical evaluation forms (2)	❍	❍	❍	❍	❍	❍
Reports hours weekly (3)	❍	❍	❍	❍	❍	❍
Maintains neat and clean medical facility (4)	❍	❍	❍	❍	❍	❍

Q23 Please rate yourself on your determined goals for this rotation.

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Stated goals were attainable (1)	❍	❍	❍	❍	❍	❍
ATS showed initiative to meet stated goals (2)	❍	❍	❍	❍	❍	❍
Stated goals	❍	❍	❍	❍	❍	❍

were met (3)						

Q20 CIP-2. Select, apply, evaluate, and modify appropriate standard protective equipment, taping, wrapping, bracing, padding, and other custom devices for the client/patient in order to prevent and/or minimize the risk of injury to the head, torso, spine, and extremities for safe participation in sport or other physical activity.

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Rate the level of Clinical Proficiency (1)	❍	❍	❍	❍	❍	❍

Q22 CIP-3. Develop, implement, and monitor prevention strategies for at-risk individuals (eg, persons with asthma or diabetes, persons with a previous history of heat illness, persons with sickle cell trait) and large groups to allow safe physical activity in a variety of conditions. This includes obtaining and interpreting data related to potentially hazardous environmental conditions, monitoring body functions (eg, blood glucose, peak expiratory flow, hydration status), and making the appropriate recommendations for individual safety and activity status.

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Rate the level of Clinical Proficiency (1)	❍	❍	❍	❍	❍	❍

Q24 CIP-6. Clinically evaluate and manage a patient with an emergency injury or condition to include the assessment of vital signs and level of consciousness, activation of emergency action plan, secondary assessment, diagnosis, and provision of the appropriate emergency care (eg, CPR, AED, supplemental oxygen, airway adjunct, splinting, spinal stabilization, control of bleeding).

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Rate the level of Clinical Proficiency (1)	❍	❍	❍	❍	❍	❍

Q14 Overall Grade for performance: Circle the grade you believe best describes your performance according to the expectations for an ATTR 255 ATS only. Do not compare yourself to any other level of ATS.

- ❍ A=All major and minor behavioral and academic goals (inventoried above) have been achieved and the achievement level is considerably above the minimum. The ATS has progressed to the point where advanced course work can be easily achieved. (1)
- ❍ B=All major behavioral and academic goals (inventoried above) have been achieved, but the student has failed to achieve some of the less important goals. The ATS has progressed to the point where advanced course work can be achieved. (2)
- ❍ C=All major behavioral and academic goals (inventoried above) have been achieved, but many of the minor goals have not been achieved. In this grade range, the minimum level of proficiency represents an ATS who has achieved the major goals to the minimum amount of preparation and is capable of advanced course work without any major handicap or inadequacy. (3)
- ❍ D=A few of the major behavioral and academic goals (inventoried above) have been achieved, but the ATS's achievement is so limited that he/she is not well prepared for advanced course work. (4)
- ❍ F=All major and minor behavioral and academic goals (inventoried above) have NOT been achieved. The ATS has not progressed to the point where advanced course work can be achieved. (5)

Q17 Clinical Instructor's Name

APPENDIX D: PRECEPTOR EVALUATION OF ATS FORM

ACI Evaluation of ATS 256

Q16 Student's Name

Q18 Select the type of evaluation being completed.
- ❍ End of Rotation 1 (Mid-semester) (1)
- ❍ End of Rotation 2 (End-of-Semester) (2)

Q1 Please mark the appropriate box indicating your rating of the ATS. Please rate the ATS according to the expectations for an ATTR 256 ATS only. Do not compare this student to any other level of ATS. Foundational Behaviors: Primacy of the Patient

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Recognizes sources of conflict of interest that can impact the patient's health (1)	❍	❍	❍	❍	❍	❍
Knows and applies the commonly accepted standards for patient confidentiality (2)	❍	❍	❍	❍	❍	❍
Provides the best health care available for the patient (3)	❍	❍	❍	❍	❍	❍
Advocates for the needs of the patient (4)	❍	❍	❍	❍	❍	❍

Q2 Please mark the appropriate box indicating your rating of the ATS. Please rate the ATS according to the expectations for an ATTR 256 ATS only. Do not compare this student to any other level of ATS. Foundational Behaviors: Teamed Approach to Practice

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Recognizes the abilities of other health care professionals (1)	❍	❍	❍	❍	❍	❍
Understands the scope of practice of other health care professionals (2)	❍	❍	❍	❍	❍	❍
Understands and executes duties within the identified scope of practice for athletic trainers (3)	❍	❍	❍	❍	❍	❍
Includes the patient (and family, where appropriate) in the decision making process (4)	❍	❍	❍	❍	❍	❍
Demonstrates the ability to work with others in effecting positive patient outcomes (5)	❍	❍	❍	❍	❍	❍

Q3 Please mark the appropriate box indicating your rating of the ATS. Please rate the ATS according to the expectations for an ATTR 256 ATS only. Do not compare this student to any other level of ATS. Foundational Behaviors: Legal Practice

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Practices athletic training in a legally competent manner (1)	❍	❍	❍	❍	❍	❍
Recognizes the need to document compliance with the laws that govern athletic training (2)	❍	❍	❍	❍	❍	❍
Understands the consequences of violating the laws that govern athletic training (3)	❍	❍	❍	❍	❍	❍

Q4 Please mark the appropriate box indicating your rating of the ATS. Please rate the ATS according to the expectations for an ATTR 256 ATS only. Do not compare this student to any other level of ATS. Foundational Behaviors: Ethical Practice

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Understands and complies with the NATA's Code of Ethics and the BOC's Standards of Practice (1)	❍	❍	❍	❍	❍	❍
Understands the consequences of violating the NATA's Code of Ethics and BOC's Standards of Practice (2)	❍	❍	❍	❍	❍	❍
Understands and complies with other codes of ethics, as applicable (3)	❍	❍	❍	❍	❍	❍

Q5 Please mark the appropriate box indicating your rating of the ATS. Please rate the ATS according to the expectations for an ATTR 256 ATS only. Do not compare this student to any other level of ATS. Foundational Behaviors: Advancing Knowledge

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Critically examines the body of knowledge in athletic training and related fields (1)	❍	❍	❍	❍	❍	❍
Uses evidence-based practice as a foundation for the delivery of care (2)	❍	❍	❍	❍	❍	❍
Understands the connection between continuing education and the improvement of athletic training practice (3)	❍	❍	❍	❍	❍	❍
Promotes the value of research and scholarship in athletic training (4)	❍	❍	❍	❍	❍	❍
Disseminates new knowledge in athletic training to fellow athletic trainers,	❍	❍	❍	❍	❍	❍

patients, other health care professionals, and others as necessary (5)						

Q6 Please mark the appropriate box indicating your rating of the ATS. Please rate the ATS according to the expectations for an ATTR 256 ATS only. Do not compare this student to any other level of ATS. Foundational Behaviors: Cultural Competence

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Understands the cultural differences of patient's attitudes and behaviors toward health care (1)	❍	❍	❍	❍	❍	❍
Demonstrates knowledge, attitudes, behaviors, and skills necessary to achieve optimal health outcomes for diverse patient populations (2)	❍	❍	❍	❍	❍	❍
Demonstrates knowledge, attitudes, behaviors, and skills necessary to work respectfully and effectively with diverse	❍	❍		❍	❍	❍

populations and in a diverse work environment (3)						

Q7 Please mark the appropriate box indicating your rating of the ATS. Please rate the ATS according to the expectations for an ATTR 256 ATS only. Do not compare this student to any other level of ATS. Foundational Behaviors: Professionalism

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Advocates for the profession (1)	❍	❍	❍	❍	❍	❍
Demonstrates honesty and integrity (2)	❍	❍	❍	❍	❍	❍
Exhibits compassion and empathy (3)	❍	❍	❍	❍	❍	❍
Demonstrates effective interpersonal communication skills (4)	❍	❍	❍	❍	❍	❍

Q8 Please mark the appropriate box indicating your rating of the ATS. Please rate the ATS according to the expectations for an ATTR 256 ATS only. Do not compare this student to any other level of ATS. Mentorship

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Served as a role-model for pre-professional Athletic Training majors (1)	❍	❍	❍	❍	❍	❍
Enhanced clinical experience of pre-professional Athletic	❍	❍	❍	❍	❍	❍

Training majors (2)						

Q9 Please mark the appropriate box indicating your rating of the ATS. Please rate the ATS according to the expectations for an ATTR 256 ATS only. Do not compare this student to any other level of ATS. Personal Attributes

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Demonstrates reliability and dependability (1)	❍	❍	❍	❍	❍	❍
Demonstrates self initiative (2)	❍	❍	❍	❍	❍	❍
Demonstrates ability to manage stress (3)	❍	❍	❍	❍	❍	❍
Demonstrates confidence in abilities (4)	❍	❍	❍	❍	❍	❍

Q10 Please mark the appropriate box indicating your rating of the ATS. Please rate the ATS according to the expectations for an ATTR 256 ATS only. Do not compare this student to any other level of ATS. Administrative Characteristics

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Follows the athletic training room policies and procedures (1)	❍	❍	❍	❍	❍	❍
Completes and maintains clinical evaluation forms (2)	❍	❍	❍	❍	❍	❍
Reports hours weekly (3)	❍	❍	❍	❍	❍	❍

Maintains neat and clean medical facility (4)	❍	❍	❍	❍	❍	❍

Q20 Please rate the ATS on their determined goals for this rotation.

	UNSATISFACTORY (1)	POOR (2)	FAIR (3)	SUPERIOR (4)	EXCELLENT (5)	NOT APPLICABLE (6)
Stated goals were attainable (1)	❍	❍	❍	❍	❍	❍
ATS showed initiative to meet stated goals (2)	❍	❍	❍	❍	❍	❍
Stated goals were met (3)	❍	❍	❍	❍	❍	❍

Q11 CIP-4. Perform a comprehensive clinical examination of a patient with a lower extremity and/or spine injury or condition. This exam should incorporate clinical reasoning in the selection of assessment procedures and interpretation of findings in order to formulate a differential diagnosis and/or diagnosis, determine underlying impairments, and identify activity limitations and participation restrictions. Based on the assessment data and consideration of the patient's goals, provide the appropriate initial care and establish overall treatment goals. Create and implement a therapeutic intervention that targets these treatment goals to include, as appropriate, therapeutic modalities, medications (with physician involvement as necessary), and rehabilitative techniques and procedures. Integrate and interpret various forms of standardized documentation including both patient-oriented and clinician-oriented outcomes measures to recommend activity level, make return to play decisions, and maximize patient outcomes and progress in the treatment plan. Rate the ATS's level of Clinical Proficiency.

- ❍ Unsatisfactory (1)
- ❍ Poor (2)
- ❍ Fair (3)
- ❍ Superior (4)
- ❍ Excellent (5)
- ❍ Not Applicable (6)

Q14 Overall Grade for performance: Circle the grade you believe best describes this ATS's performance according to the expectations for an ATTR 256 ATS only. Do not compare this student to any other level of ATS.

- ❍ A=All major and minor behavioral and academic goals (inventoried above) have been achieved and the achievement level is considerably above the minimum. The ATS has progressed to the point where advanced course work can be easily achieved. (1)
- ❍ B=All major behavioral and academic goals (inventoried above) have been achieved, but the student has failed to achieve some of the less important goals. The ATS has progressed to the point where advanced course work can be achieved. (2)
- ❍ C=All major behavioral and academic goals (inventoried above) have been achieved, but many of the minor goals have not been achieved. In this grade range, the minimum level of proficiency represents an ATS who has achieved the major goals to the minimum amount of preparation and is capable of advanced course work without any major handicap or inadequacy. (3)
- ❍ D=A few of the major behavioral and academic goals (inventoried above) have been achieved, but the ATS's achievement is so limited that he/she is not well prepared for advanced course work. (4)
- ❍ F=All major and minor behavioral and academic goals (inventoried above) have NOT been achieved. The ATS has not progressed to the point where advanced course work can be achieved. (5)

Q15 Constructive Comments:

Q20 Electronic signature. Each party should click the box and type their name into the box to indicate that they have reviewed the evaluation.

- ❑ ATS Signature (1) _____
- ❑ ACI Signature (2) _____
- ❑ CI Signature (3) _____