

# Perceived Preparedness of Graduate Assistant Approved Clinical Instructors for Supervision of Athletic Training Students in Professional Programs

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**Context:** Approved clinical instructors (ACIs) are crucial for the development of athletic training students. Graduate students often serve as ACIs and usually do not have extensive clinical experience, and therefore may not feel adequately prepared to supervise students.

**Objectives:** 1) To determine the perceived preparedness of graduate assistant ACIs in the supervision of athletic training students in professional programs; 2) To determine perceptions of ACI training.

**Design:** Prospective, exploratory.

**Setting:** Programs that have been accredited by the Commission on Accreditation of Athletic Training Education (CAATE) for five years or more.

**Participants:** Thirty-three out of 140 graduate assistant ACIs (23.5% response rate) at 27 athletic training programs.

**Instrumentation:** A 47-item Graduate Assistant ACI Perceived Preparedness online questionnaire.

**Data Analysis:** Frequencies and percentages were used to describe the responses for questionnaire items; an ANOVA was used to examine self-assessment ratings among participant groups.

**Results:** Participants felt prepared in learning styles (79%), ACI responsibilities (100%), evaluation and feedback of student performance (79%). They felt most prepared to evaluate and provide feedback in students' clinical skills and least prepared in evaluating and providing feedback for professional behaviors. The greatest challenges faced by participants included time constraints (69.7%), controlling the learning environment (57.6%), and understanding institutional policies and procedures related to clinical education (39.4%). When asked to self-assess their first-year performance supervising students on a scale of 0 (worst performance) to 10 (best performance), the mean [SD] score reported was 6.97 [1.2]. There were no differences in first-year self-assessment performance ratings between participants who thought ACI training was adequate and/or beneficial and those who did not ( $P=0.05$ ).

**Conclusion:** Most of the participants felt prepared to be an ACI as a graduate assistant and believed the ACI training to be adequate and beneficial. There were no differences in self-reported first-year performance ratings between participants who believed their training to be adequate and beneficial and those who did not.

**Key Words:** Athletic training clinical education, clinical supervisor preparedness

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Athletic training clinical education can be described as the portion of the athletic training student's professional preparation that involves the formal acquisition, practice, and evaluation of clinical proficiencies through classroom, laboratory, and clinical experiences in medical care environments.<sup>1</sup> Clinical education comprises a large portion of professional preparation in athletic training. For example, athletic trainers perceive that approximately 53% of their professional education came from clinical education.<sup>1</sup>

The approved clinical instructor (ACI) is an appropriately credentialed professional identified and trained by the athletic training program's clinical instructor educator (CIE). The ACI instructs and evaluates the athletic training students' educational and/or clinical proficiencies<sup>2</sup> and serves as a professional mentor. To become an ACI, the individual must meet the minimum standards set forth by the Commission on Accreditation of Athletic Training Education (CAATE) and be invited by the athletic training education program to participate in student clinical education. CAATE requirements include: 1) attending the institution's ACI training; 2) being an athletic trainer for at least one year; and 3) having at least one year of clinical experience.<sup>3</sup>

New educational standards require ACIs to play a much more significant role in the education of their assigned students than in previous years. ACIs must provide daily personal contact and supervision of students and be physically present in order to intervene in the delivery of health care if necessary.<sup>4</sup> In addition to supervision, ACIs are also responsible for evaluating their athletic training students' competencies and proficiencies as set forth by the program and defined in the latest edition of the *Athletic Training Educational Competencies*.<sup>3</sup> However, many current ACIs have been selected because of their clinical skills, rather than their teaching skills and preparation to provide clinical instruction, and they do not have formal preparation in education.<sup>5</sup> Stemmans and Gangstead<sup>6</sup> identified that athletic trainers in their initial clinical instructor experiences tend to lack the necessary clinical instruction knowledge, skills, and abilities to facilitate student behaviors in the clinical setting. With the growth of the profession and increasing demand for the supervision and evaluation of athletic training students, there is an increasing need for better training and development of clinical instructors.<sup>7</sup> One important component of continuing professional development for clinical instructors is ACI training; however, in its current structure, it is questionable whether or not the training is adequate to aid in the preparation of novice athletic trainers to supervise students.

With the increasing emphasis on supervision, more graduate assistants have been placed in a position of responsibility by becoming ACIs. Novice graduate assistant athletic trainers are adjusting to new work demands and settings which may make student supervision even more challenging. Using qualitative methods, Reed and Giacobbi<sup>8</sup> identified sources of graduate

assistant stress that included time management issues as well as working with and evaluating students. Due to these stresses combined with the demands of being an ACI, it is important to determine if these individuals feel prepared for their ACI role. Therefore, the purposes of this study were to determine: 1) the perceived preparedness of novice graduate assistant ACIs in the supervision of athletic training students in the clinical setting; 2) whether or not graduate assistant ACIs felt the ACI training was adequate in preparing them to supervise students and whether or not training was beneficial; and 3) if there was a difference in first-year self-assessments between ACIs who believed their training was adequate and/or beneficial and those who did not. We hypothesized that ACIs who believed their training was adequate and beneficial would rate their first-year performance higher than those who did not.

## METHODS

This was a prospective, exploratory study that included data from a 47-item online questionnaire. ACI perceived preparedness to supervise students was studied with regard to student learning styles, ACI responsibilities, challenges faced, and evaluation and feedback of student performance. The research also explored perceptions of ACI training, including whether participants believed the training was adequate and beneficial.

### Participants

One hundred seventy-eight professional athletic training education programs that have been CAATE-accredited for five years or more were contacted via e-mail regarding the nature of the study and invited to participate. These professional programs were identified from the CAATE website which lists all CAATE-accredited athletic training programs. Programs were excluded if: 1) they did not have graduate assistant athletic trainers supervising undergraduate students; 2) they had not been accredited for five or more years; or 3) the graduate assistantship position was less than a two year term. For the purpose of this study, a "novice" graduate assistant ACI was considered a graduate assistant who: 1) was a certified athletic trainer; 2) had attended ACI training at their respective institution; 3) had one or two (more than one year, but less than three) years of clinical experience; and 4) had the responsibility of supervising and evaluating students in either the collegiate or school setting. The study was approved by the institution's Office of Research Compliance.

A total of 178 programs met the eligibility criteria and an investigator obtained the professional program director's name and e-mail address. An e-mail was sent to the program directors inquiring: 1) whether they have novice graduate assistant ACIs supervising students; 2) the number of novice graduate assistant ACIs supervising students; and 3) if they were interested in participating in the study. Those programs interested in

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participating were instructed to respond to the e-mail and provide the number of novice graduate assistant ACIs meeting inclusion criteria.

After the initial e-mail, 19 program directors agreed to participate. After a reminder e-mail, eight more programs agreed to participate, for a total of 27 programs willing to participate in the study. An additional 13 programs responded to the e-mails declining participation due to not meeting the inclusion criteria. The invited program response rate was 15.17%. From the 27 programs that agreed to participate, there were 140 eligible graduate assistants meeting inclusion criteria. Of those, 33 completed the questionnaire for a graduate assistant response rate of 23.5%.

### **Instrumentation**

The Graduate Assistant ACI Perceived Preparedness Questionnaire was created according to the researcher's objectives from content included in the clinical instructor educator seminar for ACI training, current clinical education literature, and best clinical practice based on the current clinical ACI responsibilities and preparation. This questionnaire consisted of five sections: 1) demographic information; 2) learning styles; 3) ACI responsibilities and challenges; 4) evaluation and feedback; and 5) ACI training. There were 33 five-point Likert-items anchored with the following responses: strongly agree (5), agree, neutral, disagree, and strongly disagree (1). Likert items were used for questions related to student learning style, ACI responsibilities, evaluation of and feedback for student performance, and ACI training. There were 11 forced-choice items for demographics and comfort level with evaluating and providing feedback. One question asked the participants to rank the top three challenges of being an ACI from a prescribed list of responses. Another asked the participant to self-assess his or her overall performance during the first year of being a graduate student ACI on a scale of 0 (worst performance) to 10 (best performance). Participants were provided with a text area to type in any additional comments.

This questionnaire was pilot tested for readability and clarity prior to data collection using two CAATE-accredited program directors and five certified athletic trainers at National Collegiate Athletic Association Division I, II, and III institutions. A psychometric statistical expert experienced in questionnaire development also reviewed the questionnaire for face and content validity. Several drafts of the questionnaire were created and revisions were made following feedback from the pilot study and the psychometric expert. A majority of the changes were related to question wording. Cronbach's  $\alpha$ -level for each section was acceptable (learning style  $\alpha = .80$ ; ACI responsibilities  $\alpha = .83$ ; evaluation and feedback  $\alpha = .92$ ; and ACI training  $\alpha = .84$ ).

### **Procedures**

Once the program director agreed to participate in the study, a second e-mail was sent consisting of a cover letter explaining the study in more detail and provided a link to the questionnaire. Program directors were asked to forward the e-mail to all novice graduate assistant ACIs at their institutions who met the inclusion criteria for completion. If willing to participate, each ACI was

asked to follow the link to the questionnaire. At the end of the questionnaire they were asked to finish by clicking the submit button.

Program directors agreeing to participate were contacted again by e-mail two weeks later as a reminder to forward the cover letter and link to the eligible graduate assistant ACIs. The data were returned to the researcher via an e-mail that was addressed as "anonymous" for the confidentiality of the participants. Returned data were placed into an spreadsheet for analysis.

The online questionnaire was housed on the university server, which, by using a firewall, protects data in transit from outside observation. The results of the questionnaire were automatically processed by a Common Gateway Interface (CGI) server, which is also protected by the firewall and is accessible only to two university webmasters. The data were processed in the working memory of the CGI server and were not stored to disk; after being processed the data no longer existed on the CGI server. The CGI server automatically sent the data via e-mail to the researcher, who saved it in a locked file. Upon completion of data collection, the spreadsheet was transferred to a Universal Serial Bus (USB) drive that was kept in a locked drawer and the data were then deleted from the researcher's e-mail account.

### **Statistical Analysis**

For the first two research questions, descriptive statistics, including frequency and percentages were calculated for each questionnaire item. For the third research question, the mean, range, and standard deviation were calculated for the first-year self-assessment performance rating. Normality and equality of variances were tested using Shapiro-Wilk's Test for normality and Levene's Test for equality of variances, respectively. Two, one-way analyses of variance (ANOVA) were used to determine if there was a difference between self-assessment ratings for individuals who thought ACI training was: a) adequate and those who did not and b) beneficial and those who did not.

For the inferential statistics, the dependent variable was the self-assessment of first-year performance rating. Grouping variables were determined from responses to questionnaire items 1 and 2 in the ACI training section (Table 5). For ACI training adequacy, participants who indicated "Strongly Agree" or "Agree" to question 1 were placed in the "Adequate" group. Those who indicated "Strongly Disagree" or "Disagree" were placed in the "Inadequate" group. The same grouping was done for question 2 related to whether or not the training was beneficial. Responses marked "Neutral" were omitted from this analysis. The alpha-level was set at 0.05 for these analyses. All data were analyzed using SPSS Version 16.0 for Windows (SPSS Inc. Chicago, IL.).

## **RESULTS**

### **Demographic Characteristics**

All participants were master's-level students and were ACIs at their respective institutions. Forty-nine percent ( $n = 16$ ) had less than one year of experience as an ACI, 39.4 % ( $n = 13$ ) were athletic

**Table 1.** Demographic Characteristics of Questionnaire Participants (n=33)

	n	%
<b>Graduate Student ACI</b>	33	100.0
<b>Years as an ACI</b>		
Less than 1 year	16	48.5
1 year	9	27.3
1–2 year	8	24.2
2 year	0	0.0
<b>Years as an ATC</b>		
1–2 years	13	39.4
2 years	12	36.4
More than 2 years	8	24.2
<b>Current clinical setting</b>		
College / University	24	72.7
High School	9	27.3
<b>Number of ATs supervised</b>		
1–2	13	39.3
3–4	15	45.5
5–6	3	9.1
8	2	6.1
<b>Other ACIs in your clinical setting</b>		
Yes	23	69.7
No	10	30.3
<b>Directly Supervised by staff ATC</b>		
Yes	10	30.3
No	23	69.7
<b>Supervised by GA ACI during own professional education experience</b>		
Yes	18	54.5
No	15	45.5

ACI = Approved Clinical Instructor; ATC = Certified Athletic Trainer; ATS = Athletic Training Student; GA = Graduate Assistant

trainers for less than two years, and 72.7 % (n = 24) were currently working in the college/university setting with the remaining 27.3% (n = 9) working at the secondary school level. Forty-six percent (n = 15) were currently supervising three to four undergraduate students. Seventy percent (n = 23) of the participants were in a setting where other ACIs are also supervising students, and 69.7% (n = 23) reported being directly supervised themselves on a daily basis by a staff athletic trainer. Fifty-five percent (n = 18) of the participants were supervised by a graduate assistant ACI during their own professional education. Additional demographic characteristics can be found in Table 1.

### Learning Styles

Data regarding learning style can be found in Table 2. Of the four questions for learning styles, the majority of the participants strongly agreed or agreed that information about different learning styles was presented during their ACI training (87.9%, n = 29), and 79% (n = 26) felt the information they received on learning styles during the ACI training prepared them to identify the different learning styles utilized by students. In addition, 75.7% (n = 25)

**Table 2.** Learning Style (n=33)

	n	%
<b>Information on learning style was presented during ACI training</b>		
Strongly Agree	17	51.5
Agree	12	36.4
Neutral	3	9.1
Disagree	0	0.0
Strongly Disagree	1	3.0
<b>ACI training prepared ACI to identify student learning style</b>		
Strongly Agree	10	30.3
Agree	16	48.5
Neutral	4	12.1
Disagree	2	6.1
Strongly Disagree	1	3.0
<b>Confident ACI clinical instruction fits student learning style</b>		
Strongly Agree	7	21.2
Agree	18	54.5
Neutral	6	18.2
Disagree	2	6.1
Strongly Disagree	0	0.0
<b>ACI can differentiate between learning style and teaching style</b>		
Strongly Agree	8	24.2
Agree	17	51.5
Neutral	7	21.2
Disagree	1	3.1
Strongly Disagree	0	0.0

ACI = Approved Clinical Instructor; ATS = Athletic Training Student

were confident that their clinical instruction was tailored to fit the learning style of the student with the same number indicating that they understood the difference between learning style and teaching style.

### ACI Responsibilities and Challenges

The majority of the participants strongly agreed or agreed with items in this section. The participants indicated that they possess the clinical skills (100%, n = 33) and knowledge (100%, n = 33) needed to serve as an effective ACI, with 97% (n = 32) feeling adequately able to serve as a professional mentor. Ninety-four percent (n = 31) were confident in demonstrating legal and ethical behavior, and 81.8% (n = 27) were prepared to handle a situation involving a student for improper or unethical behavior in the clinical setting. Eighty-eight percent (n = 29) were prepared to handle a situation involving a student and a compromising interpersonal relationship in their clinical setting. In regard to ACI skills, the majority felt confident in their communication skills (97%, n = 32), overall supervisory skills (93.9%, n = 31), overall instructional skills (97%, n = 32) and overall evaluation skills

**Table 3.** Approved Clinical Instructor Responsibilities (n=33)

	n	%
<b>ACI has clinical skills needed to serve as effective ACI</b>		
Strongly Agree	11	33.3
Agree	22	66.7
Neutral	0	0.0
Disagree	0	0.0
<b>ACI has clinical knowledge needed to serve as effective ACI</b>		
Strongly Agree	9	27.3
Agree	24	72.7
Neutral	0	0.0
Disagree	0	0.0
<b>ACI is adequately able to serve as a professional mentor</b>		
Strongly Agree	15	45.5
Agree	17	51.5
Neutral	1	3.0
Disagree	0	0.0
<b>ACI is confident in demonstrating legal/ethical behaviors</b>		
Strongly Agree	14	42.4
Agree	17	51.5
Neutral	2	6.1
Disagree	0	0.0
<b>ACI is confident in handling an ATS's improper legal/ethical behavior</b>		
Strongly Agree	11	33.3
Agree	16	48.5
Neutral	5	15.2
Disagree	0	0.0
<b>ACI is confident in his/her communication skills</b>		
Strongly Agree	12	36.4
Agree	20	60.6
Neutral	1	3.0
Disagree	0	0.0
<b>ACI is confident in his/her overall supervisory skills</b>		
Strongly Agree	10	30.3
Agree	21	63.6
Neutral	2	6.1
Disagree	0	0.0

**Table 3.** Continued

	n	%
<b>ACI is confident in his/her overall instructional skills</b>		
Strongly Agree	8	24.2
Agree	24	72.7
Neutral	1	3.0
Disagree	0	0.0
<b>ACI is confident in overall evaluation skills</b>		
Strongly Agree	11	33.3
Agree	19	57.6
Neutral	3	9.1
Disagree	0	0.0
<b>ACI is confident in handling an ATS's improper/compromising interpersonal relationship</b>		
Strongly Agree	11	33.3
Agree	18	54.5
Neutral	4	12.1
Disagree	0	0.0
<b>ACI has good understanding of institution's ATR policies/procedures related to clinical education</b>		
Strongly Agree	9	27.3
Agree	21	63.6
Neutral	2	6.1
Disagree	1	3.0
<b>ACI is confident in using his/her institution's clinical education evaluation tools</b>		
Strongly Agree	7	21.2
Agree	20	60.6
Neutral	4	12.1
Disagree	2	6.1
<b>ACI is able to perform a constructive self-evaluation of his/her own skills/performance</b>		
Strongly Agree	7	21.2
Agree	22	66.7
Neutral	4	12.1
Disagree	0	0.0

ACI = Approved Clinical Instructor; ATS = Athletic Training Student; ATR = Athletic Training Room

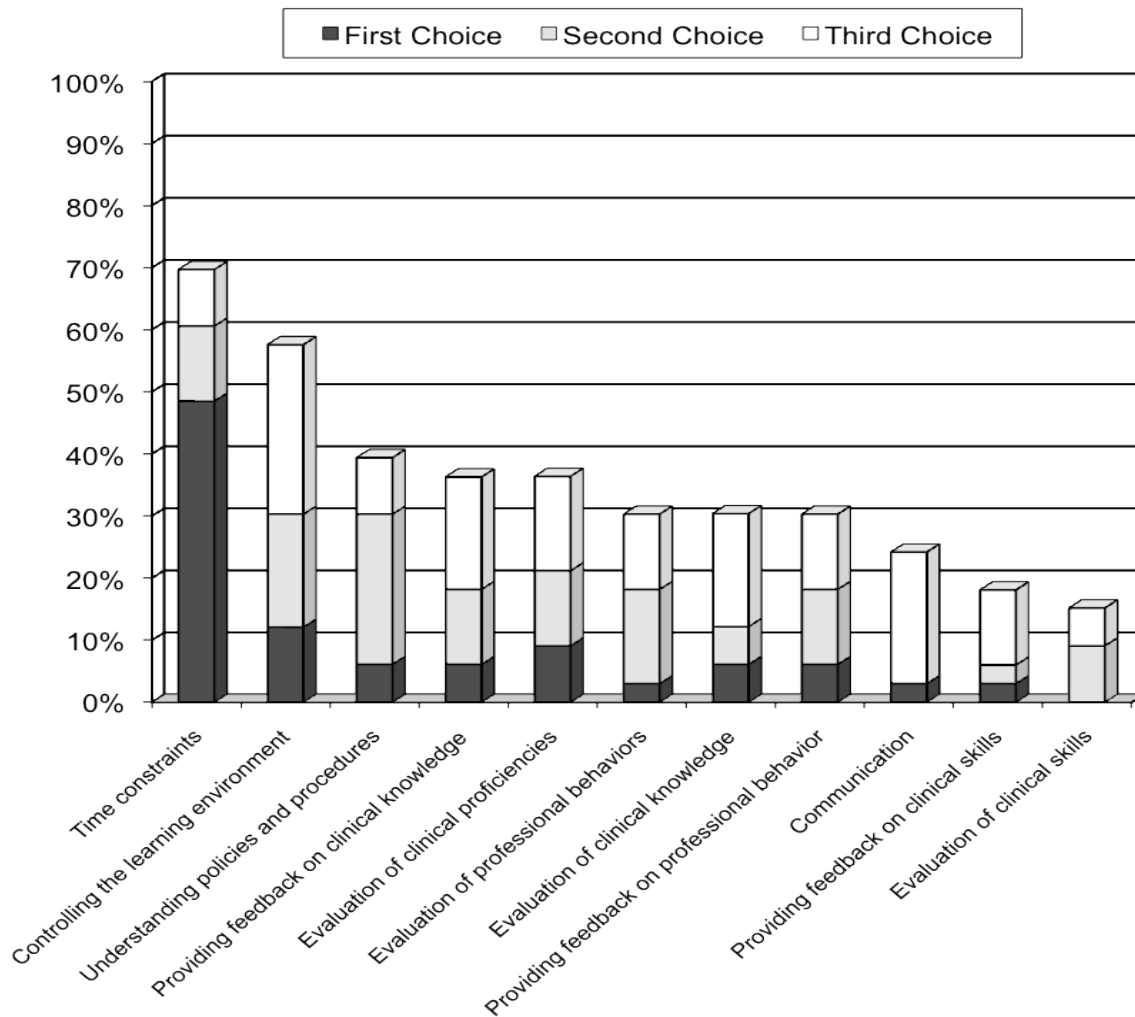
(90%, n = 30). When asked about the institution's policies and procedures related to clinical education, 91% (n = 30) reported having an understanding necessary to serve as an ACI. Eighty-two percent (n = 27) agreed to feeling confident in the use of their institutions' evaluation tools, while 88% (n = 29) felt confident in performing a constructive self-evaluation of their skills and performance as an ACI (Table 3).

Participants were asked to rank the three greatest challenges of being a first-year ACI. Of the 33 participant responses for this question, only 28 were usable. Figure 1 shows the total

percentage of respondents' rankings of their perceived greatest challenges. The greatest challenges the ACI experienced were time constraints (69.7%, n = 23), controlling the learning environment (57.6%, n = 19), and understanding institutional policies and procedures (39.4%, n = 13).

#### Evaluation and Feedback of Student Performance

Of the five questions related to evaluation, the participants strongly agreed or agreed that they felt prepared to evaluate their student's first clinical proficiency (79%, n = 26). The majority felt



**Figure 1.** Self-reported Ranking of Greatest Challenges to Being a First-year Graduate Assistant ACI (n=28)

confident in evaluating a student’s clinical knowledge (100%, n = 33) and clinical skills (100%, n = 33), but the other selections were varied with 88% (n = 29) feeling confident evaluating a student’s professional behavior, and 90.9% (n = 30) feeling confident in evaluating a student’s clinical decision making.

Based on the six feedback questions, only one question had all the participants respond with either strongly agree or agree: feeling comfortable providing students feedback on clinical knowledge (100%, n = 33). The remaining five responses were varied. Ninety-seven percent (n = 32) felt prepared to give effective constructive feedback to a student to improve performance and in providing students feedback in clinical skills, 94% (n = 31) felt confident in providing students feedback on clinical decision making, and 91.0% (n = 30) felt confident in providing students feedback on professional behavior. When asked to indicate areas in which they felt most confident evaluating and providing feedback, 60.6% (n = 20) felt the most confident in evaluating clinical skills, while 66.7% (n = 22) felt the most confident in providing feedback for clinical skills (Table 4).

### ACI Training

Eighty-eight percent (n = 29) indicated that an athletic trainer with one year of clinical experience and completion of the ACI training could serve as an ACI. The majority of participants selected either strongly agree or agree for the five questions in this area. Seventy-nine percent (n = 26) reported that their institution’s ACI training prepared them to be an effective ACI in their first year, and 75.7% (n = 25) reporting that their institution’s ACI training was beneficial (Table 5). However, in the “Comments” section, one of the participants responded, “The first workshop I attended was completely unhelpful (it was part of the graduate assistant orientation and was less than 10 minutes) they basically just handed me a book.”

For all participants, the mean [SD] first-year self-assessment rating was 6.97 [1.2] and the range was 4 to 10. Assumptions for normality and equality of variances were met. Results of the ANOVA indicated no significant difference in first-year self-assessment ratings between participants who reported their

**Table 4.** Evaluation and Feedback of Student Performance (n=33)

	n	%		n	%
<b>ACI was prepared to evaluate 1<sup>st</sup> clinical proficiency</b>			<b>ACI is confident in providing feedback to an ATS on clinical knowledge</b>		
Strongly Agree	13	39.4	Strongly Agree	16	48.5
Agree	13	39.4	Agree	17	51.5
Neutral	3	9.1	Neutral	0	0.0
Disagree	4	12.1	Disagree	0	0.0
<b>ACI is confident in evaluating an ATS's clinical knowledge</b>			<b>ACI is confident in providing feedback to an ATS on clinical skills</b>		
Strongly Agree	16	48.5	Strongly Agree	15	45.5
Agree	17	51.5	Agree	17	51.5
Neutral	0	0.0	Neutral	1	3.0
Disagree	0	0.0	Disagree	0	0.0
<b>ACI is confident in evaluating an ATS's clinical skills</b>			<b>ACI is confident in providing feedback to an ATS on professional behaviors</b>		
Strongly Agree	14	42.4	Strongly Agree	15	45.5
Agree	19	57.6	Agree	15	45.5
Neutral	0	0.0	Neutral	3	9.1
Disagree	0	0.0	Disagree	0	0.0
<b>ACI is confident in evaluating an ATS's professional behavior</b>			<b>ACI is confident in providing feedback to an ATS on clinical decision making</b>		
Strongly Agree	15	45.5	Strongly Agree	16	48.5
Agree	15	45.5	Agree	15	45.5
Neutral	3	9.1	Neutral	2	6.1
Disagree	0	0.0	Disagree	0	0.0
<b>ACI is confidence in evaluating an ATS's clinical decision making</b>			<b>Which is ACI most confident in evaluating?</b>		
Strongly Agree	11	33.3	Clinical knowledge	4	12.1
Agree	19	57.6	Clinical skills	20	60.6
Neutral	3	9.1	Clinical decision making	7	21.2
Disagree	0	0.0	Professional behavior	2	6.1
<b>ACI is confident in giving effective positive feedback to an ATS</b>			<b>Which is ACI most confident in providing feedback?</b>		
Strongly Agree	16	48.5	Clinical knowledge	4	12.1
Agree	15	45.5	Clinical skills	22	66.7
Neutral	1	3.0	Clinical decision making	4	12.1
Disagree	1	3.0	Professional behavior	3	9.1
<b>ACI is confident in giving constructive feedback to improve overall performance</b>					
Strongly Agree	15	45.5			
Agree	17	51.5			
Neutral	1	3.0			
Disagree	0	0.0			

ACI = Approved Clinical Instructor; ATS = Athletic Training Student

training was adequate (n = 26, mean [SD] = 7.08 [1.09], CI<sub>95</sub>: 6.64-7.52, range 5-10) and those who did not (n = 4, mean [SD] = 6.75 [2.06], CI<sub>95</sub>: 3.47-10.03, range 4-9); (F<sub>0,1</sub> = .244, P = .626). Results of the second ANOVA indicated no significant difference in first-year self-assessment ratings between participants who reported their training was beneficial (n = 25, mean [SD] = 7.08 [1.12], CI<sub>95</sub>: 6.62-7.54, range 5-10) and those who did not (n = 3, mean [SD] = 7.67 [1.16], CI<sub>95</sub>: 6.34-8.99, range 7-9); (F<sub>0,1</sub> = .737, P = .398).

## DISCUSSION

This is the first study to examine the perceived preparedness of novice graduate assistant ACIs in clinical education. Previous authors have evaluated preparedness of new clinical instructors;<sup>6</sup> however this work was done prior to the implementation of the ACI training requirements. Based on the results of the survey, the majority of participants reported feeling prepared to supervise

**Table 5.** Approved Clinical Instructor Training (n=33)

	n	%
<b>Overall, the institution's ACI training prepared me to be effective in my first year</b>		
Strongly Agree	8	24.2
Agree	18	54.6
Neutral	3	9.1
Disagree	3	9.1
Strongly Disagree	1	3.0
<b>Overall, the institution's ACI training was beneficial to me for being an ACI in my first year</b>		
Strongly Agree	11	33.3
Agree	14	42.4
Neutral	5	15.2
Disagree	3	9.1
<b>An ATC with one year of experience and ACI training should be able to serve as ACI</b>		
Strongly Agree	13	39.4
Agree	16	48.5
Neutral	3	9.1
Disagree	1	3.0
<b>ACI is aware of characteristics of an effective clinical instructor</b>		
Strongly Agree	10	30.3
Agree	19	57.5
Neutral	2	6.1
Disagree	2	6.1
<b>ACI utilizes characteristics of an effective clinical instructor to be a better ACI</b>		
Strongly Agree	5	15.2
Agree	21	63.6
Neutral	6	18.2
Disagree	1	3.0

Key: ACI = Approved Clinical Instructor; ATC = Certified Athletic Trainer

students with regards to learning style, ACI responsibilities, evaluation and feedback. Also, the majority of participants indicated feeling the ACI training was both adequate and beneficial. There were no differences in first-year self-assessment performance ratings between participants who thought ACI training was adequate and/or beneficial and those who did not.

### Learning Styles

Studies on learning style in athletic training have indicated that these students have a variety of learning styles.<sup>9,10</sup> Stradley et al<sup>9</sup> reported that educators should be aware of learning styles in order to provide an environment that stimulates and enhances student learning. The majority of participants reported that information on learning styles was provided during their ACI training, and that they were subsequently able to tailor instruction to fit student learning styles. Matching instruction to learning may be valuable in some situations; however, Gould and Caswell<sup>11</sup> suggested educators should expose students to opportunities challenging them to learn using unfamiliar styles. This may be an area to integrate into ACI training. One area for future study with regard

to learning style is to examine ACIs' awareness of his or her own learning style and how that might influence their clinical teaching.

### ACI Responsibilities

Overall, participants felt they possess the clinical skills and knowledge needed to be an effective ACI and were comfortable with ACI responsibilities. This is contrary to findings published by other authors.<sup>6,12</sup> Stemmans and Gangstead<sup>6</sup> reported clinical instructors in their initial experiences, tend to lack necessary knowledge related to student clinical instruction. Henning and Weidner<sup>12</sup> reported that graduate assistant athletic trainers experienced a greater degree of role incompetence when compared to head athletic trainers. Role incompetence was defined as lacking "requisite skills, knowledge, or ability to enact the role assumed."<sup>9</sup> However, both studies were conducted prior to the implementation of the one-year clinical experience requirement for ACIs implemented by the Commission on Accreditation of Allied Health Professions (CAAHEP) in 2007.

Ninety-seven percent of the participants felt confident in serving as a professional mentor. Serving as a professional role model is very important behavior in the delivery of athletic training clinical instruction as well as in other healthcare professions.<sup>13</sup> Authors have identified modeling professional behavior as an important behavior for clinical instructors.<sup>13,14</sup> Furthermore, most respondents in this study reported being comfortable performing a self-evaluation. This is encouraging in that self-evaluation is an important part of professional development.

### ACI Challenges

The participants reported that their three greatest challenges in their initial years as an ACI were time constraints, controlling the learning environment, and understanding their institution's policies and procedures. Of these, the greatest challenge was time constraints, which is consistent with Weidner et al<sup>15</sup> who reported there was an increasing difficulty to find time to accept the extra responsibility for educating students, potentially limiting the clinical experiences.<sup>15</sup> Rich<sup>16</sup> indicated that time constraints, including the clinical instructor's need to care for patients and perform other duties, prevented "students from being engaged in meaningful clinical activities."<sup>16</sup> p. 302 Novice ACIs may find the time factor to be even more of a challenge as they adjust to the workload and demands of the position. Reed and Giacobbi<sup>8</sup> identified "time management" as a source of stress in graduate assistant athletic trainers with one to two years of clinical experience. Discussion of time management and efficient student integration into the clinical setting may be beneficial during the ACI training.

The next biggest challenge was the ability of the ACI to control the learning environment. Weidner and Laurent<sup>17</sup> provided characteristics of a desirable clinical learning environment. These include good management, high staff morale, harmonious working relationships, and sound interdisciplinary athlete or patient management procedures. They also reported that less tangible characteristics for learning environments may be personnel receptiveness, a variety of expertise, interest in newer techniques,

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and involvement with other professionals outside of athletic training.<sup>17</sup> In addition, an active learning environment including hands-on experience is beneficial in student development.<sup>18</sup> Suggestions for creating an appropriate learning environment might be another positive addition to ACI training to help novice ACIs overcome this challenge.

The third greatest challenge for the ACI was in understanding the institutional policies and procedures related to clinical education. It is up to the institution to develop the clinical education policies and procedures, and ensure that supervising ACIs are familiar and comfortable with them. Clinical education policies and procedures should be an important part of ACI training.

### **Evaluation and Feedback**

While the majority of participants reported being comfortable evaluating and providing feedback on students' professional behaviors, only a small number of participants indicated this being an area where they were *most* confident (6% evaluation, 9% feedback). This suggests that an ACI may need more training in evaluating and providing feedback in the area of professional behavior. Professional-level behaviors and affective domain skills in students can be difficult to objectively evaluate. Given the vast range of athletic training student professional behaviors, ACIs need to be able to adjust their strategies to best fit the students' observed needs in specific situations.<sup>19,20</sup> Tangible behaviors that can be evaluated when assessing student professional behavior have been identified for other healthcare students. Wolff-Burke<sup>21</sup> reported that students should possess: 1) basic professional skills (such as dressing appropriately, good time management, being honest and ethical, having polite manners, and honoring confidentiality); 2) maturity (such as being confident, making patients feel comfortable, and being a "team player"); 3) the ability to be business-like (view the rotation as a job); and 4) competence appropriate to the educational level. The results from the Wolff-Burke<sup>21</sup> study provide a list of professional behaviors ACIs can use to evaluate and provide feedback to students.

### **ACI Training**

Most of the participants indicated that the ACI training prepared them for clinical instructor responsibilities in their first year. Approximately 21%, however, selected neutral, disagree, or strongly disagree for this item. Also, most participants indicated the ACI training was beneficial, yet 24% selected either neutral or disagree for this item. With the importance of the ACIs' roles in clinical education, it is expected that the ACI training would provide adequate preparation and be beneficial for all participants. Findings from a prior study suggested that individuals regarding their ACI course as adequate experienced less role strain than those who did not.<sup>12</sup> Identifying reasons why ACIs did not feel the course was not adequate or beneficial was not the focus of this study but could be an area of future research. Individuals supervising novice, graduate student ACIs should be aware of the ACI's comfort level and preparation for supervising students and be able to provide mentoring and additional resources when needed.

There were no differences in first-year self-assessment performance ratings for individuals who perceived their course to be adequate and beneficial versus those who did not. Individuals in this study perceived themselves as having adequate performance regardless of the training. An individual's teaching ability is determined by a variety of factors such as prior experiences, academic background, exposure to good clinical teaching, etc. Another area for future study would be to examine the ACI's actual performance as evaluated by a supervisor rather than using self-assessments. Also, more studies with larger samples are warranted. The low sample size may have led to inadequate power and Type II error.

It is not uncommon to find that clinical instructors in allied health professions do not have formal preparation in education and have been selected because of their professional skills rather than their teaching abilities.<sup>5</sup> Therefore, the purpose of the ACI training is to prepare these individuals to teach, provide feedback, and evaluate athletic training clinical proficiencies.<sup>1</sup> The credentialing of ACIs was developed and first conducted in June of 2000, and it is still a relatively new practice in athletic training clinical education.<sup>1,7,20</sup> The structure and quality of ACI training varies across institutions due to lack of strict standardization. For example, institutions are provided with guidelines for preparing ACIs, but they are allowed to develop their own training to meet their institutional needs. Feedback from clinical instructors, students, and institutions combined with results of research will help improve ACI training.

### **Limitations**

While this study provided insight into the perceptions of novice, graduate assistant ACIs regarding student supervision and the ACI training, limitations exist. One limitation of this study is the small sample size. The methods used in the study allowed the program director to distribute the link to the survey. Program directors may have chosen not to have the institution participate or may not have forwarded the link thus limiting the number of subjects who could participate. As this was the first study to examine the perceived preparedness of novice, graduate assistant ACIs in the supervision of undergraduate athletic training students in clinical education, more research using larger sample sizes are warranted. Additionally, because of the inclusion criteria, these findings are only generalizable to individuals at CAATE accredited undergraduate programs with five or more years of accreditation. The results from this study cannot be generalized to other graduate assistants assuming the role of an ACI. The results of the Graduate Assistant ACI Perceived Preparedness questionnaire are opinions of the ACIs at select institutions who chose to participate, and these individuals may be very interested in clinical education and so chose to participate, while those not interested may have opted not to participate. Additionally, an ACI's prior undergraduate academic curriculum as well as exposure to good clinical teaching during his or her own undergraduate curriculum may have positively influenced perceived preparation as well as their self-assessment rating. Future researchers could obtain more quantitative or qualitative data on ACI performance as evaluated by students and supervisors.

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## CONCLUSIONS

Based on the results of this study, the majority of participants indicated being prepared to be an ACI. The greatest challenges for these participants included time constraints, ability to control the learning environment, and understanding policies and procedures related to clinical education. Most of the participants felt that their ACI training was adequate and beneficial. There were no differences in self-assessments for first-year performance between participants who found the training adequate and beneficial and for those who did not.

Clinically this study can assist the academic faculty to have a better understanding of challenges for the novice, graduate assistant ACI. This can also help direct the institutions when constructing ACI training. The ACI training may be strengthened by providing additional, current information on learning styles and evaluation of student professional behaviors. Additional recommendations include providing more information on managing time in the learning environment (i.e. athletic training room or other clinical site) and understanding the institution's clinical education policies and procedures.

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