

# Student and Supervisor Perceptions of the Quality of Supervision in Athletic Training Education

Mark B. Andersen, PhD; Gerald A. Larson, EdD, ATC; Jeffrey J. Luebe, BS

**Objective:** To assess the perceptions of the quality of athletic training supervision via the internship route to certification and the NATA-approved/CAAHEP programs.

**Design and Setting:** A questionnaire was mailed to head athletic trainers or NATA/CAAHEP program directors and athletic training students in 40 programs nationwide (stratified random sample).

**Subjects:** Head athletic trainers (20), NATA-approved or CAAHEP-accredited program directors (20), and athletic training students in those educational programs (149).

**Measurements:** The Athletic Training Supervisory Skills Inventory (ATSSI) was adapted from the Supervisory Evaluation Form (SEF) and athletic training literature. The ATSSI was reviewed by 30 certified athletic trainers, and their feedback

was incorporated into the final version of the questionnaire. The ATSSI contains 46 questions that cover six major domains of athletic training supervisor behavior.

**Results:** Overall, there were no differences in how internship route supervisors and NATA/CAAHEP program directors rated their own supervisory skills. Also, there were few differences in how students in those two types of athletic training education programs rated their supervisors.

**Conclusions:** This exploratory study's limitations included a one-time assessment approach and a small sample of supervisors. Future studies in supervision should take a longitudinal approach and include a larger sample size.

**Key Words:** assessment, internships, NATA/CAAHEP programs

In recent years, professionals in the field of athletic training have expended a considerable amount of effort in examining the field itself. For example, Weidner and Vincent<sup>1</sup> evaluated the professional preparation of athletic trainers. Draper<sup>2</sup> proposed a model for evaluating student athletic trainers' clinical experiences. Other self-examination studies have included evaluation of athletic training education programs,<sup>3</sup> the roles and responsibilities of athletic trainers in clinical settings,<sup>4</sup> the roles of NATA and Commission on Accreditation of Allied Health Education Programs (CAAHEP) curriculum directors as educators,<sup>5</sup> and clinical teaching roles for athletic trainers.<sup>6</sup>

One specific area that has not been addressed in the athletic training literature is an evaluation of the skills of athletic training supervisors in internship route programs and NATA/CAAHEP-approved route programs. (Both internship and NATA-approved programs are being phased out and will be replaced with CAAHEP-accredited programs by 2004, but one would expect similar responses from both.) One of the most important aspects of the student athletic trainer's education is working with athletes under supervision. The students we supervise will become athletic trainers, and an assessment of the quality of that supervision might help future supervisors deliver better clinical experiences to students.

Although the athletic training literature has not specifically examined student and supervisor views of the quality of supervision, other fields related to sports medicine (and medicine in general) have extensive literatures on supervision models, theories, and evaluations. For example, clinical and counseling psychology have entire journals dedicated to supervisory processes (eg, *The Clinical Supervisor, Counselor Education and Supervision*). Recently, in the sport psychology literature, Andersen, Van Raalte, and Brewer<sup>7</sup> published a survey of supervisors and students in training for sport psychology service delivery. They found that students rated their supervisors' skills more variably than supervisors rated themselves and that supervisors rated themselves slightly better than students did. In most studies where students rated their supervisors' skills, the students have been masters- or doctoral-level students. Thus, the average age of students in past supervision research has been well over 21 years. In athletic training education programs, however, many of the students are undergraduates. There may be differences in how younger and older students rate their supervisors and supervision experiences.

The purpose of this study was to assess the skills of supervisors in both internship programs and NATA/CAAHEP-approved programs from the viewpoints of the supervisors themselves and their students. We wished to examine both internship programs and NATA/CAAHEP programs, but no specific hypotheses were formulated for any differences between the two. It was, however, hypothesized that the supervisors would rate their skills more favorably than their students would rate them, following a trend found in other clinical settings.<sup>8,9</sup> We also hypothesized that older, more mature

---

**Mark B. Andersen** is Senior Lecturer in the Department of Human Movement, Recreation, and Performance, Victoria University, Melbourne, Australia. **Gerald A. Larson** is an instructor and former Head Athletic Trainer at Tabor Academy, Marion, MA 02738. At the time of this study, **Jeffrey J. Luebe** was a research assistant and a student at Wayne State College, Wayne, NE.

students would be more critical of their supervisors than younger students.

## METHODS

### Participants

Participants were 20 NATA/CAAHEP program directors and 20 head athletic trainers of internship programs, along with their students (stratified by geographic regions in the United States and then randomly selected). Each program director and head athletic trainer/supervisor was asked to contact 10 of his or her students. Exactly how many students would be contacted was unknown because the sizes of individual athletic training education programs could not be determined.

### Inventory

The Athletic Training Supervisory Skills Inventory (ATSSI) was developed from the Supervisory Evaluation Form (SEF).<sup>9</sup> The ATSSI was modified from the SEF to better assess athletic training supervisors. The ATSSI was sent to 30 experts in the field (athletic trainers with substantial backgrounds in scholarly inquiry and histories of delivering supervisory services) for their feedback on the appropriateness of the items for assessing athletic training supervisory skills. Their feedback (18 responded) was incorporated into the final version of the ATSSI (Figure). The ATSSI contains 46 items that cover six major domains of athletic training supervisor behaviors: (1) providing information and technical support, (2) fulfilling supervisory responsibilities, (3) facilitating interpersonal communication, (4) fostering student autonomy, (5) competencies in athletic training domains, and (6) providing a professional model. A few items from the original SEF were deleted because they lacked relevance to athletic training supervision (eg, “returned lesson plans within reasonable time”), and several items were modified slightly to address athletic training supervision specifically (eg, “conveys understanding of clinical supervisor’s role to student” became “conveys understanding of the athletic training supervisor’s role to the students”). The subjects rated each item on a five-point scale, where 1 = very poor, 2 = poor, 3 = fair, 4 = good, and 5 = very good. NA (not applicable) was available as a choice if the item was in no way applicable to the supervisory services. We could not assume that the original reliability and validity of the SEF<sup>9</sup> would hold for the ATSSI. We could not run a factor analysis on the data gathered because we lacked the minimum 5:1 participant-to-variable ratio (some experts say a 10:1 ratio is necessary for a valid factor analysis). As a check for internal consistency, we calculated Cronbach’s alphas. All the subscales had alphas between 0.72 and 0.81, and these are all in the acceptable range.

### Procedures

After randomly choosing athletic training programs, we sent inventories to head athletic trainers and program directors

(internship programs and NATA/CAAHEP-certified programs, respectively). Each head athletic trainer/supervisor and program director received an inventory for self-rating and ten similar inventories for his or her students ( $n = 440$ ). Follow-up letters were sent to each head athletic trainer/supervisor and program director 4 weeks after the initial mailing.

## RESULTS

The return rate for supervisors was 62.5% ( $n = 25$ ). For student athletic trainers, 149 surveys were returned. An exact percentage for return rate for students could not be determined because the number of forms distributed by the supervisors to their students was unknown. If it is assumed that all of the inventories were distributed, then the return rate would be 37%.

### Description of Supervisors

The average age of all athletic training supervisors was 39.5 years ( $SD = 5.0$ ). Approximately three-fourths of the supervisors were male (76%). Nearly half of the supervisors graduated after 1980. Terminal bachelor’s degrees were held by 16%; 64% had master’s degrees, and 20% had doctoral degrees. About half of the supervisors had received their NATA certification by the year 1979. The athletic training supervisors had supervised students for an average of 14.2 years ( $SD = 5.6$ ).

### Description of Students

The average age of student athletic trainers was 21.9 years ( $SD = 3.0$ ). Fifty-eight percent of the students were female. Eighty-two percent of the students planned to graduate before the year 1996. Seventy-nine percent planned to take their NATA Board of Certification entry-level examination before 1996. Only 5% of the students did not expect to fulfill their clinical hours requirements for certification before graduation.

### ATSSI

No significant differences were found between supervisors of NATA/CAAHEP-approved programs and internship programs on the six composite scores (eg, providing information, fostering student autonomy) and the “overall rating” item (Figure). Similar findings were true for student athletic trainers’ ratings of their supervisors. Only the overall rating item (item 46) was significantly different for supervisors and students. Supervisors gave themselves a slightly lower overall rating than their students did.

For students in internship programs versus NATA/CAAHEP programs, three items were significantly different from each other. Item 14 (“conveys opinions regarding students’ specific athletic training weaknesses”), item 31 (“encourages students to become increasingly more independent and autonomous professionals”), and item 41 (“discusses with the students the NATA Code of Ethics”) were all rated higher by students in

## **The Athletic Training Supervisory Skills Inventory\***

---

### **Providing Information and Technical Support**

1. Conveys practicum/clinical requirements to the students.
2. Conveys understanding of the athletic training supervisor's role to the students.
3. Provides information to supplement the students' theoretical knowledge.
4. Communicates knowledge effectively.
5. Suggests appropriate outside resources and reading material.
6. Demonstrates sufficient athletic training expertise with the presenting problems of athletes.
7. Provides direct suggestions for evaluation and/or treatment when needed or requested.
8. Demonstrates athletic training skills, techniques, and procedures when needed or requested.
9. Provides guidance in evaluation and assessment procedures.
10. Provides guidance for maintaining records and report writing tasks.

### **Fulfilling Supervisory Responsibilities**

11. Remains up-to-date regarding students' ongoing practicum/clinical experience.
12. Provides adequate amount of direct supervision.
13. Conveys opinions regarding students' specific athletic training strengths.
14. Conveys opinions regarding students' specific athletic training weaknesses.
15. Suggests ways for students to improve areas of weakness.
16. Appropriately confronts students for not fulfilling practicum/clinical requirements.
17. Provides opportunities for sufficient number of supervisory conferences.
18. Provides comprehensive supervisory evaluations periodically.
19. Evaluates students' performance fairly.

### **Facilitating Interpersonal Communication**

20. Allows the students sufficient opportunity to interact during the supervisory conferences.
21. Listens attentively to students.
22. Demonstrates empathy and respect toward students.
23. Communicates at a level consistent with the students' professional development.
24. Maintains emotional stability during supervisory encounters.
25. Exhibits an appropriate sense of humor.
26. Encourages student feedback concerning the supervisory process.

### **Fostering Student Autonomy**

27. Remains receptive to student ideas concerning assessment and treatment strategies.
28. Shows flexibility in permitting student to explore a variety of treatment procedures.
29. Motivates the students to develop listening skills.
30. Encourages the students' self appraisals of their athletic training skills.
31. Encourages students to become increasingly more independent and autonomous professionals.

### **Competencies in Athletic Training Domains**

32. Helps students in planning and implementing comprehensive athletic injury/illness prevention programs.
33. Helps students recognize and evaluate injuries and illnesses commonly sustained by athletes.
34. Models appropriate referrals to physicians for diagnosis and medical treatment.
35. Demonstrates appropriate first aid and emergency care for acute athletic injuries/illnesses.
36. Helps students plan and implement comprehensive rehabilitation/reconditioning programs for illnesses/injuries sustained by athletes.
37. Provides a good model for the organization and administration of an athletic training program.
38. Instructs the student in financial, personnel, and public relations management.
39. Demonstrates good counseling skills when interacting with athletes, coaches, and parents.

### **Providing Professional Model**

40. Maintains appropriate ethical behavior with athletes.
41. Discusses with the students the NATA Code of Ethics.
42. Demonstrates interest and enthusiasm regarding the profession.
43. Provides an appropriate model of speech and language.
44. Maintains an appropriate professional appearance.
45. Provides an appropriate professional model overall.
46. Overall rating of supervisory effectiveness.

---

\* Respondents were asked to rate their supervisor using 1 = very poor, 2 = poor, 3 = fair, 4 = good, 5 = very good, and NA = not applicable to you or your supervisor.

## **The Athletic Training Supervisory Skills Inventory.**

NATA/CAAHEP-approved programs (all  $t$  values  $> 2.0$ ,  $p < .05$ ).

Individual item analysis for all supervisors versus all students revealed that students rated their supervisors better on item 2 (“conveys understanding of the athletic training supervisor’s role to the students”) than supervisors rated themselves ( $t(170) = 2.51$ ,  $p < .01$ ). Students also rated their supervisors on item 3 (“provides information to supplement the students’ theoretical knowledge”) better although this result was not statistically significant ( $t(170) = 1.92$ ,  $p < .06$ ). Finally, along with the “overall rating” (item 46), students also rated item 43 (“provides an appropriate model of speech and language”) better than their supervisors did.

The analysis of results of student ratings of supervisors by age of student revealed that older students (ie, 22 years and older) rated their supervisors lower on the composite score “Providing Information and Technical Support” than their younger counterparts did ( $t(147) = 2.75$ ,  $p < .01$ ). For “Fulfilling Supervisory Responsibilities,” older students rated their supervisors marginally lower than younger students did ( $t(147) = 1.92$ ,  $p < .06$ ). Finally, “Competencies in Athletic Training Domains” was rated lower by older students ( $t(147) = 2.49$ ,  $p < .02$ ).

For student ratings on individual items, older students rated items 2, 4, 6, 8, 9, 10, 12, 17, 21, 29, 33, 36, 37, and 39 lower than younger students did (see Figure,  $p < .05$  for all  $t$  values). No other items were significantly different when students were compared by age.

## DISCUSSION

The fact that no differences were found between internship programs and NATA/CAAHEP-approved programs and between supervisors and students was not too surprising given the large ceiling effect on the items of the ATSSI (most responses being 4 and 5 on a 5-point scale). As can be seen from the composite scores in the Table, supervisors and students as a whole generally rated supervisor’s skills in the good to very good range. It was a bit surprising, however, to

find that supervisors were more critical of themselves than their students were on some items. There was also ample evidence from the composite scores and the individual items that older students do not rate their supervisors as positively as younger students. Such findings did not occur in other similar supervision studies.<sup>7,9</sup> These results may be connected to the age of the sample. Of the total student sample, 57% ( $n = 85$ ) were 21 years or younger. Younger students may be more likely to have unrealistic or idealistic opinions of their superiors.

When performing multiple  $t$  tests, the problem of alpha slippage leads to a high likelihood of some of the significant findings being spurious (eg, if performing 20  $t$  tests at  $p < .05$ , the probability that one of the tests will be significant purely by chance is quite high). This study, however, was exploratory in nature, and the results are suggestive rather than definitive of where differences in perceptions of supervisors might be found in the future.

Most students believed that they receive adequate supervision. The results of the ATSSI also indicate that supervisors were satisfied with the quality of supervision they provide. Further, supervisors’ perceptions of themselves did not differ substantially from the perceptions of their students. These apparently positive results should receive cautious interpretation in light of the differences found between older and younger students.

The assessment of supervision is a new area of inquiry in athletic training and deserves further attention. This exploratory study does have some weaknesses other than alpha slippage. First, it was a “snapshot” approach. Supervision and supervisory relationships are dynamic and undoubtedly change over time. Future research might take a longitudinal approach and follow supervisors and students over a year or two, assessing skills and perceptions several times in the course of the study. Second, a larger sample size, including perhaps all athletic training education programs, might provide more generalizable results.

Finally, athletic training supervisors might use the ATSSI routinely as a tool to monitor the quality of the supervision they provide and to assess their students’ perceptions of the training received. Supervision in athletic training appears healthy. Future research may provide a better picture of the state of supervision and help pinpoint areas where supervisors could improve to better serve their trainees. Raising the quality and extent of supervision experiences can only help to improve the services that athletic trainers provide to their clients.

**Means and Standard Deviations for the Six Composite Scores and the Overall Rating Item on the ATSSI for Supervisors and Students**

ATSSI Scores	Supervisors		Students	
	Mean	SD	Mean	SD
Providing information and technical support	4.2	.65	4.3	.59
Fulfilling supervisory responsibilities	3.9	.77	3.9	.80
Facilitating interpersonal communication	4.2	.69	4.2	.76
Fostering student autonomy	4.1	.68	4.1	.72
Competencies in athletic training domains	4.2	.67	4.2	.61
Providing professional model	4.2	.79	4.5	.63
Overall rating	4.0	.80	4.4	.76*

\*  $p < .02$ .

## REFERENCES

1. Weidner TG, Vincent WJ. Evaluation of professional preparation in athletic training by employed, entry-level athletic trainers. *J Athl Train*. 1992; 27:304–310.
2. Draper DO. An evaluation model of the student athletic trainer’s clinical experience. *Athl Train, JNATA*. 1987;22:111–114.
3. Weidner TG. Undergraduate athletic training education programs: aspects of their operation, administration, and structure. *Athl Train, JNATA*. 1989;24:330–332.

4. Duncan KM, Wright KE. A national survey of athletic trainer roles and responsibilities in the allied clinical setting. *J Athl Train.* 1992;27:311-316.
5. Perrin DH, Lephart SM. Role of the NATA curriculum director as clinician and educator. *Athl Train, JNATA.* 1988;23:41-43.
6. Foster DT, Leslie DK. Clinical teaching roles of athletic trainers. *J Athl Train.* 1992;27:298-302.
7. Andersen MB, Van Raalte JL, Brewer BW. Assessing the skills of sport psychology supervisors. *Sport Psychol.* 1994;8:238-247.
8. Krause AA, Allen GJ. Perceptions of counselor supervision: an examination of Stoltenberg's model from the perspectives of supervisor and supervisee. *J Counseling Psychol.* 1988;35:77-80.
9. Sleight CC. Off-campus supervisor self-evaluation. *Clinical Supervisor.* 1990;5:4-7.