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Student-Athletes' Perceptions of Athletic Trainers

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STUDENT-ATHLETES' PERCEPTIONS OF ATHLETIC TRAINERS

by

Richard W. Brainerd III

B.S., Towson University, 2014

A Research Paper

Submitted in Partial Fulfillment of the Requirements for the
Master of Science in Education

Department of Kinesiology
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RESEARCH PAPER APPROVAL

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A Research Paper Submitted in Partial
Fulfillment of the Requirements for the Degree of
Master of Science in Education
in the field of Kinesiology

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TITLE: STUDENT-ATHLETES' PERCEPTIONS OF ATHLETIC TRAINERS

MAJOR PROFESSOR: Dr. Julie Partridge

The purpose of this study is to look at the perceptions student-athletes at Southern Illinois University have about their athletic trainers. Data was collected from 86 student-athletes at a NCAA Division I, mid-major university. The participants were administered an 11-question perception questionnaire. The perceptions scores of student-athletes with a full-time athletic trainer were compared to student-athletes with a graduate assistant athletic trainer. There was no significant difference in the perception scores between the two groups. The mean perception score for all 86 student-athletes was 28.14 ($SD = 2.49$) out of a total score of 33. Student-athletes with a full-time athletic trainer averaged 28.95 ($SD = 2.45$) while student-athletes with a graduate assistant athletic trainer averaged 27.53 ($SD = 2.36$). This study can lead to further investigation of student-athletes perceptions of athletic trainers especially the differences between full-time and graduate assistant athletic trainers.

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CHAPTER 1

INTRODUCTION

The field of athletic training can sometimes be a mystery to those who are not familiar with its required competencies and responsibilities. Often times athletic trainers are confused with personal trainers and commonly referred to as “trainers”. The National Athletic Trainers’ Association (NATA) defines an athletic trainer as:

Healthcare professionals who render service or treatment, under the direction of or in collaboration with a physician, in accordance with their education and training and the states' statutes, rules and regulations. As a part of the healthcare team, services provided by ATs include injury and illness prevention, wellness promotion and education, emergent care, examination and clinical diagnosis, therapeutic intervention, and rehabilitation of injuries and medical conditions (NATA, 2017).

The NATA and Board of Certification (BOC) collectively came up with the scope of practice for athletic trainers. The NATA published the *Athletic Training Educational Competencies* and the BOC published the *Role Delineation Study (RDS)*. There are five domains of The Athletic Training Scope of Practice: I Injury/illness prevention and wellness protection, II Clinical evaluation and diagnosis, III Immediate and emergency care, IV Treatment and rehabilitation, V Organizational and professional health and well-being. The *Competencies* and *RDS* are not the only documents that must be followed for the profession of athletic training. Each state has its own practice acts and regulations (NATA, 2010).

Domain I of the *RDS* is injury/illness prevention and wellness protection. Athletic trainers are skilled in ways to improve the overall health of individuals. Athletic trainers must be able to assess patients for potential injuries and/or risk factors through assessments such as pre-

participation physical exams. They must be able to develop programs to reduce injury risk, create emergency action plans, identify environmental risk factors, educate patients, parents, and coaches about the importance of fluid replacement, inspect facilities and equipment for potential hazards, as well as provide nutritional help to patients. Domain II is clinical evaluation and diagnosis. Under this domain athletic trainers are trained to evaluate a patient to determine the pathology. Athletic trainers are trained to develop treatment plans to overcome the problem and return the patient to participation. Domain III is immediate and emergency care. Athletic trainers are often the first responders for accidents at an event for which they are providing coverage. This domain includes CPR and automated external defibrillator (AED) as well as splinting, control of bleeding and body temperature, and spine boarding. Domain IV is treatment and rehabilitation. This domain goes hand in hand with domain II. After the athletic trainer evaluates the patient, they develop an appropriate treatment plan. Athletic trainers are trained in multiple therapeutic interventions including: manual therapy (i.e., massage and joint mobilizations), agility training, proprioceptive activities to improve balance, stretching and flexibility techniques, sport specific and functional exercises, and modalities such as electrical stimulation, therapeutic ultrasound, and therapeutic laser. The final domain, domain V, is organizational and professional health and well-being. This domain has to do with the athletic trainer's ability to manage an effective healthcare facility by implementing policies, abiding by federal, state, and local regulations, maintaining medical records, and compliance with accrediting agencies.

The NATA came up with 12 content areas and included them in the *Competencies*: 1) Risk Management and Injury Prevention, 2) Pathology of Injuries and Illnesses, 3) Orthopedic Clinical Examination and Diagnosis, 4) General Medical Conditions and Disabilities, 5) Acute

Care of Injuries and Illnesses, 6) Therapeutic Modalities, 7) Conditioning and Rehabilitative Exercise, 8) Pharmacology, 9) Psychosocial Intervention and Referral, 10) Nutritional Aspects of Injuries and Illnesses, 11) Health Care Administration, 12) Professional Development and Responsibilities. These *Competencies* are used during the education of athletic training students to guide them on the path to becoming certified. Beyond this course work athletic training students must complete supervised clinical hours to allow them the opportunity to apply their skills.

The first purpose of this study was to identify how Division I collegiate student-athletes at a mid-major university perceive their athletic trainers. The second purpose of this study was to see if there is a difference between the perceptions of student-athletes whose teams are covered exclusively by graduate assistant athletic trainers and the perceptions of student-athletes whose teams have a full-time athletic trainer. The sports that have graduate assistant athletic trainers at the sampled university include softball, baseball, volleyball, men's and women's swimming and diving, and men's and women's tennis. The sports that have full-time athletic trainers include football, men's and women's track and field, and men's basketball. The perceptions of the student-athletes were assessed through the use of a questionnaire.

Research Question 1: How do student-athletes at Southern Illinois University Carbondale perceive their athletic trainers?

Research Question 2: Are full-time athletic trainers and graduate assistant athletic trainers perceived differently by NCAA Division I student-athletes?

Hypothesis 1: Student-athletes with a full time athletic trainer will have a higher perception score than student-athletes who have a graduate assistant athletic trainer.

CHAPTER 2

LITERATURE REVIEW

An Athletic Trainer's Roles

Certified athletic trainers (ATC's) fill many different roles on a daily basis. They may be asked to provide social support to their athletes, direct rehabilitation programs for physical injuries, offer nutritional counseling, and give general guidance for injured athletes who are struggling to find their way back onto the field. These roles may be perceived different by various groups of stakeholders.

Social Support in the Athletic Training Room

While athletic trainers are most commonly known for their treatment of sports related injuries, they also are frequently expected to provide social support to athletes following these injuries. Social support has been defined as, "an exchange of resources between two individuals perceived by the provider or the recipient to be intended to enhance the well-being of the recipient" (Shumaker & Brownell, p.11, 1984). Barefield and McCallister (1997) studied the extent to which college athletes receive social support from their athletic trainers. Specifically, the purpose of their study was to compare athletes' satisfaction with the quality of support received. The study sampled 85 intercollegiate athletes ages 18-25 years old at Midwest DI universities who participated in either football, softball, baseball, women's volleyball, men's and women's track and field, and men's and women's tennis. Questionnaires were given to athletes at practices sites, those who answered yes to being treated for an injury or illness during that school year were asked to continue. Eight types of social support were assessed and these questions assessed the degree to which the athletic training staff or student provided the indicated type of support, the extent to which the athlete expected or hoped to receive support, and the

athlete's satisfaction with the quality of support. The results from this study showed that student athletic trainers scored slightly lower than certified staff members on provision of social support; there was no significant difference between social support received between staff and student athletic trainers or difference in the amount. It was also noted that injured athletes need athletic trainers to take the time to listen to them as well as appreciate their task accomplishment as forms of social support.

These results support the importance of psychological education of athletic training students in the aspect of sport and injury rehabilitation. Athletic trainers need to be aware of the psychological needs of the athletes as well as the time needed to work on the psychological aspects of an injury. When talking about athletes the authors stated:

They need to know that there are people in their corner who understand the frustration they are experiencing, the physical pain their injuries are causing, and the emptiness they are feeling from not being able to do what they love so much (Barefield & McCallister, 1997, p. 337).

The results of this study indicate one of the many ways that ATC's provide an important psychosocial service for athletes, and demonstrate the potential need to add more formalized psychological training to the standard curriculum for athletic training students. The results also provide an accurate knowledge of what competencies future athletic trainers need to know in order to be successful in this field (Barefield & McCallister, 1997).

Counseling Collegiate Athletes

Athletic trainers have a unique relationship with their athletes given the amount of time spent together. This relationship can breed trust and a bond that athletes may not form with a coach. As a result of this bond, athletic trainers are often sought out by student-athletes in times

of stress, to provide an outlet for emotional, social, and performance-related concerns. Moulton, Molstad, and Turner (1997) looked into athletic trainers' beliefs in relation to their role as a counselor to their athletes. One purpose of the study was to determine how athletic trainers felt about their role in counseling athletes. Another purpose was to determine how qualified the athletic trainers believed they were to address psychological issues, and the final purpose was to determine the current procedures for psychological support of the athletes by athletic trainers. The authors created a 47-item, open-ended survey that was distributed to 14 Division I athletic trainers. Five of the participants in the study were head athletic trainers, five were assistant athletic trainers, three were graduate assistant athletic trainers, and one was associate director of athletics and sports medicine. The results showed that all of the athletic trainers believed that their duties went beyond prevention and care of athletic injuries, the highest percentage of which were their roles of education and counseling. Participants ranked the importance of their roles as follows: 1) educator, injury advisor, 2) nutritionist, 3) counselor, problem solver, 4) friend, 5) academic advisor, 6) mentor, 7) physical therapist, 8) tutor, 9) physician. The biggest issues the athletic trainers dealt with their athletes included: 1) conflicts with coach or player, health-related issues, 2) career decisions, sexually transmitted diseases, injury mechanisms, sports enhancement, 3) sport demands, rehabilitation protocol, 4) rehabilitation compliance, eating disorders, sexuality, drugs and alcohol, academic concerns, 5) social pressures, 6) family-related issues. Results indicated that 86% of athletic trainers felt they were qualified to handle personal issues but only 36% believed they received the proper training. These results suggest a greater need for athletic trainers to be educated in how to identify and respond to psychological/personal/social crises in the athletes with whom they work (Moulton, Molstad, & Turner, 1997).

Nutritional Counseling

Proper nutritional intake should be an important consideration for everyone in life and it is amplified for athletes, given the physical demands of playing sport, particularly at the NCAA Division I level. Athletic trainers are educated in the area of nutrition as well, and, as noted previously, are frequently utilized as a source of information on topics related to nutritional intake. Recent research has revealed that 71.4% of athletic trainers showed adequate knowledge of proper nutrition, indicating that athletic trainers have enough nutrition knowledge to inform their athletes of adequate and factual nutrition tips (Torres-McGehee, Pritchett, Zipple, Minton, Cellamare, & Sibilia, 2012).

Burns, Schiller, Merrick, and Wolf (2004) conducted a study to look at the nutritional knowledge of athletic trainers as perceived by their athletes. The authors sent surveys on athletic trainers' nutritional knowledge to 11 head athletic trainers in the Big Ten Conference, three of whom declined to participate. The surveys were handed out to the first 15 athletes to enter the facility on three consecutive days to ensure random selection of participants. Responses to statements on ATC perceived nutritional knowledge were graded on a five-point Likert-type scale (1 = Strongly Disagree, 5 = Strongly Agree). An example of one of the questions was, "Athletic trainers have a good knowledge about nutrition and nutrition supplements." The results indicated that student-athletes perceived their athletic trainers to have good nutritional knowledge which was measured as a mean score of 3.8 ± 0.9 , only 8% gave a score lower than 3. 49.6% of the institutions had access to a dietitian but athletic trainers were a more frequent source of nutritional information. This study concluded that dietitians need to develop a strong working relationship with athletic trainers to better provide nutritional information for student-athletes. The authors also suggested that dietitians should also educate strength coaches, athletic

trainers, and student-athletes on proper nutrition. These results suggest that athletic trainers are more accessible than athletic department dietitians but less knowledgeable on the subject (Burns, Schiller, Merrick, & Wolf, 2004).

Perceptions of Athletic Trainers

Athletic Training Students' Perceptions

For a field that tends to be often misunderstood, what continues to attract people to athletic training? Mensch and Mitchell (2008) studied student athletic trainers and their perceptions of their potential future job field. One of the purposes of the study was to understand why undergraduates decided to enter an Athletic Training Education Program (ATEP), and the other was to examine the potential athletic training recruits' perceptions of the roles and responsibilities of athletic trainers. Forty-six students were selected, (23 of whom were pursuing a career in athletic training) and participated in an interview. All 46 were enrolled in a two-year academic introductory ATEP course. The questions that were asked to those who were pursuing athletic training included: Why did you decide to become an athletic trainer? What most attracted you? How did you learn about the athletic training profession? Those who were not interested were asked: Why have you decided against becoming an athletic trainer? How did you learn about the athletic training profession? What is the main reason for deciding against it? The results showed that all 23 students who were interested in the field of athletic training stated that sports and athletes were the main reason they wanted to become an athletic trainer. The top three attractions were: association with sports and athletes, like to help people, and feel like part of a team. The top two barriers were 1) too much time involvement, and 2) interested in a different career. The top three perceptions of roles and responsibilities were 1) rehabilitation of injuries, 2) tape ankles, and 3) first responders/aiders. The top two skills were: taping skills and

social/personal skills. Analysis of the qualitative data indicated that most of the participants were heavily influenced by their high school athletic trainers to pursue a career in athletic training. Recruits at this point in their program were considered to still have a very limited understanding of what it means to be an athletic trainer and the profession itself. This study provided a basis for future studies to look at the role and influence on potential athletic training students of secondary school athletic trainers, identifying what attracts and discourages students, and examine perspective of secondary school athletic trainers due to their high influence of future athletic trainers (Mensch & Mitchell, 2008).

High School Parents' Perceptions of Athletic Trainers

Weitzel, Miller, Giannotta, and Newman (2015) performed a study to look at athlete parents' perceptions of athletic trainers. There were two purposes to the study. The first purpose was to understand what parents of high school athletes believed athletic trainers did. The other purpose was to see if past experiences with an athletic trainer influenced the parents' perception of athletic trainers as well as their knowledge of athletic trainers. The parents of 539 student-athletes were given a 32-question survey that addressed perceptions of athletic trainers as well as the knowledge of athletic trainers' skills. These surveys were handed out at sport meetings and banquets for the fall, winter, and spring sport seasons. The results showed that 28% of parents had experience with an athletic trainer through an injury they themselves suffered while 60% had experience through an injury their child had suffered. Parents with a past personal experience with an athletic trainer showed a higher perception score of athletic trainers. Sixty-two percent of parents believed society needed athletic trainers, while 61% of parents did not trust the opinion of the athletic trainer. After taking the survey, 57% of parents responded yes to, "sending his or her child to see an athletic trainer", 38% said, "they already do", and 5% said,

“they would not be more likely to send their child (to an athletic trainer)”. Parents who had limited experience with athletic trainers had limited knowledge. Based on these results, Weitzel et al. suggested that athletic trainers should be encouraged to be more accessible to parents and bring them into the injury-management process. This study does have limited generalizability due to only sampling parents from southwest Michigan. This study can lead to future studies that look at a wider range of participants, as well as future research looking at the experiences parents have had with athletic trainers (Weitzel, Miller, Giannotta, & Newman, 2015).

Student-Athletes’ Perceptions of Athletic Trainers

Unruh (1998) investigated student-athletes’ perceptions of athletic trainers. The purpose of his study was to determine if there was a difference between the perceptions of different subgroups of athletes. Fourteen athletic training programs from the SEC and 17 from the Division II level Gulf South Conference were invited to answer a 50-question questionnaire. Two athletes from each male and female sport were selected. A total of 343 participants (males = 165, females = 178) from 18 of the 31 programs responded. Football, basketball, and baseball were considered high profile sports while the only high profile women’s sport was basketball. The results showed that high-profile sports had higher cumulative perceptions scores than low profile sports. Female athletes in a low-profile sport at DII had the lowest mean score. Females in low-profile DI sports and men in low-profile DII sports had significantly lower cumulative mean scores compared to other subgroups. These results show that student-athletes believe that athletic trainers do not show equal attention to all sports.

The findings from this study led to another one performed by Unruh, Unruh, Moorman, and Seshadri in 2005 that examined the satisfaction that collegiate student-athletes have with their athletic trainers and the services they provide. A total of 325 student-athletes from 20

institutions at the Division I and Division II levels were given a questionnaire that consisted of 50 questions. The results showed that the higher satisfaction score was directly related to the higher profile of the sport. Female athletes demonstrated a higher satisfaction score on average than male athletes. There was no significant difference between Division I and Division II institutions and the level of competition did not have an effect on the satisfaction scores. Satisfaction has an important part to play in the field of athletic training as it has been linked to many things including rehabilitation outcomes. These results also show that satisfaction is not uniform and that athletic trainers need to continue to improve their delivery of care (Unruh, Unruh, Moorman, & Seshadri, 2005).

After examining the existing literature, it appears that there is still a lack of knowledge about what an athletic trainer does among many different stakeholders (e.g., student-athletes, parents of athletes). The NATA has made a concerted effort to get away from the use of the generic term “trainer” to bring to light the difference between personal trainers and athletic trainers. Based on the literature already published there have been studies done on the social support of athletic trainers, their ability to counsel athletes, their nutritional knowledge and the perceptions of parents of high school athletes. The purpose of this study is to determine if Division I athletes at Southern Illinois University Carbondale interpret graduate assistant athletic trainers differently than full time athletic trainers.

CHAPTER 3

METHODS

The participants of this study were 86 athletes from the varsity football, baseball, softball, swimming and diving, men's basketball, track and field teams at Southern Illinois University Carbondale. The participants were recruited by the principal investigator in the SIU Athletic Training Room, given a handout describing the study, and asked to participate. The student-athletes who agreed to participate in the study filled out the questionnaires in a separate room connected to the Athletic Training room in the SIU basketball arena. A modified survey from Weitzel et al. (2015) was used to assess perceptions of athletic trainers. This survey was originally adapted from the Parents' Perceptions and Knowledge of Certified Athletic Trainers (PPKCAT) survey from the Role Delineation Study (BOC, 2010). This survey is comprised of 11 questions about their perceptions of an athletic trainer. The survey for this study has been modified to ask athletes to rate perceptions of athletic trainers. The perception questions will be scored on a 3-point scale ranging from (1) *never*, (2) *sometimes*, or (3) *always*.

The athletes were split into two groups for analysis, athletes with a graduate assistant athletic trainer and athletes with a full time athletic trainer. Two independent sample t-test were used to assess the overall scores between student-athletes with a full-time athletic trainer and student-athletes with a graduate assistant athletic trainer as well as the overall scores between student-athlete who had a high school athletic trainer and student-athletes who did not.

CHAPTER 4

RESULTS

The mean overall score on the modified survey from Weitzel et al. (2015) for the entire sample was 28.14 ($SD = 2.49$) out of 33, which translated to 85.27% perception score. Student-athletes who have a graduate assistant athletic trainer reported a mean overall perception score of 27.53 ($SD = 2.36$) and student-athletes who have a full-time athletic trainer had a mean overall score of 28.95 ($SD = 2.45$). An independent sample t -test was conducted to determine if there was any difference in perceptions of athletic trainers between student-athletes with a full-time athletic trainer or a graduate assistant athletic trainer. Using a significant value of $p < .05$, the difference between full-time athletic trainers and graduate assistant athletic trainers was not significant ($F = .019, p = .891$). An independent sample t -test was also used to test the significance between student-athletes who had an athletic trainer in high school ($n = 67$) and student-athletes who did not have an athletic trainer in high school ($n = 18$). There was no significant difference between the two groups ($F = .391, p = .534$). Table 1 displays the statistics for the difference between student-athletes with a full-time athletic trainer and student-athletes with a graduate assistant athletic trainer.

In order to more fully understand student-athletes' perceptions of athletic trainers, the average scores of each question were explored further. The possible range of scores for each question was 1-3. The questions with the highest mean scores were: "I take the certified athletic trainer's recommendation seriously in regards to the recovery period of injuries" ($M = 2.90, SD = .308$), "I feel more comfortable about my well-being with a certified athletic trainer present on site" ($M = 2.86, SD = .322$). "I perceive a certified athletic trainer as an appropriate or effective source in rehabilitating injuries" ($M = 2.84, SD = 3.71$), "I feel society needs certified athletic

trainers” ($M = 2.77$, $SD = .425$), The summary of these statistics can be found in Table 2. Table 3 displays the statistics between student-athletes who had an athletic trainer in high school and student-athletes who did not have an athletic trainer in high school.

TABLE 1

Summary of Perceptions Scores Amongst Athletic Trainer Classification

Athletic Trainer	N	Mean	Std
Full-time ATC	37	28.9459	2.44888
GA ATC	49	27.5306	2.36381

TABLE 2

Summary of Mean Scores of Perception Questions

	Minimum	Maximum	Mean	Std
Question 1	1	3	2.51	.548
Question 2	1	3	2.57	.564
Question 3	2	3	2.84	.371
Question 4	1	3	2.08	.672
Question 5	1	3	2.73	.471
Question 6	1	3	1.67	.622
Question 7	2	3	2.77	.425
Question 8	2	3	2.90	.308
Question 9	1	3	2.73	.562
Question 10	2	3	2.88	.322
Question 11	1	3	2.45	.567

TABLE 3

Summary of Perceptions Scores Amongst Athletes With or Without a High School Athletic

Trainer

High School ATC	N	Mean	Std
Yes	67	28.2388	2.55301
No	18	27.6667	2.27519

CHAPTER 5

DISCUSSION

This study examined the perceptions of student-athletes from Southern Illinois University Carbondale regarding athletic trainers. The study looked the difference between student-athletes with a full-time athletic trainer and student-athletes with a graduate assistant athletic trainer. It also looked at the differences between student-athletes who had an athletic trainer in high school and student-athletes who did not. Individual scores on perception items were also examined to provide a more robust understanding of these perceptions.

Full-Time and Graduate Assistant Athletic Trainers

The results of this study indicated that there was no significant difference between the mean perception scores of student-athletes with a full-time athletic trainer and student-athletes with a graduate assistant athletic trainer. The mean perception score for student-athletes with a full-time athletic trainer ($N = 37$) was 28.95 while student-athletes with a graduate assistant athletic trainer ($N = 49$) scored a 27.53.

There may be multiple reasons for this non-significant difference between the two groups of student-athletes studied. One possibility is that there was only one sport sampled for this study treated by a single full-time athletic trainer, which was men's basketball. Track and field has a full-time and a graduate assistant athletic trainer working with them and football has a full-time ATC and two graduate assistants working with them. This means that athletes who have experience with a full-time also have the same amount of time spent with a graduate assistant athletic trainer. This makes it difficult to differentiate a student-athlete's response as far as how they perceive a full-time athletic trainer versus a graduate assistant athletic trainer.

Another possible reason that there were non-significant results could be that while the full-time athletic trainers have more experience than the graduate assistant athletic trainers, the graduate assistants are still certified athletic trainers, and therefore, there are truly no or very little difference in the way that these two groups of professionals engage with their student-athletes. Furthermore, graduate assistant athletic trainers have many other time commitments connected to their assistantship. In addition to their clinical responsibilities, they also have academic responsibilities in which to invest their time. Research examining the potential of burnout in graduate assistant athletic trainers found that “athletic trainers worked an average of 39.0 ± 13.5 hours in their clinical settings, were enrolled in 10.0 ± 3.5 graduate credit hours, and were assisted by an average of 10.0 ± 8.0 ATs in their work settings” (Mazerolle, Monsma, Dixon, & Mensch, p 322, 2012). The research also showed that graduate assistant athletic trainers who traveled with their sports teams were at a greater risk of burnout and that graduate assistant athletic trainers at the Division I level were at a higher risk than those at a Division III level (Mazerolle, Monsma, Dixon, & Mensch, 2012), which suggests that the hours put in by graduate assistants is significant and may influence how student-athletes perceive them as professionals.

Student-Athletes’ Perceptions on Individual Questions

There were four questions that averaged higher than a 2.75 on which means the participants believed it was always important for these statements to be true of athletic trainers. These four questions include: “I perceive a certified athletic trainer as an appropriate or effective source in rehabilitating injuries” (2.84), “I feel society needs certified athletic trainers” (2.77), “I take the certified athletic trainer’s recommendation seriously in regards to recovery period of

injuries” (2.90), and “I feel more comfortable about my well-being with a certified athletic trainer present on site” (2.86).

Question three had the highest mean score at 2.90 showing that the student-athletes highly trust an athletic trainer’s recommendation on time to return from an injury. Since the athletic trainers for this sample are in charge of the rehabilitation of these student-athletes this high perception score is promising. Question four shows that this sample of student-athletes feel more comfortable about their well-being when an athletic trainer is around. Question one is one of the main focuses of athletic training and one that is perceived as being highly important to athletes. Domain IV in the Role Delineation study is “Treatment and Rehabilitation” (BOC, 2010). The high perception score is reassuring to athletic trainers due to the fact that the student-athletes believe an athletic trainer is prepared to handle their rehabilitation needs. Question two indicates that these student-athletes believe athletic trainers are important in society, meaning they believe that athletic trainers are integral in keeping them healthy. These four questions are important and it is a good sign to see the student-athletes acknowledge the athletic trainers.

It is also worth noting that the lowest mean perception score was on the questions was, “I consider athletic training and personal training the same thing” (1.67). This is good because the student-athletes perceive the two careers differently while many people in society do not. The common use of the term “trainer” has caused confusion regarding the training, competencies, and scope of practice of these two fields. One big difference between personal training and athletic training is that personal trainers only need to have a high school diploma to sit for a certification exam through the American Council on Exercise (ACE), while to become a certified athletic trainer one must have a bachelor’s degree and pass the BOC exam (ACE, 2017). Personal trainers have many different governing bodies in which the individual has the choice to

get certified through while athletic trainers have one governing body in the BOC. The vision of the ACE is to “be the leading non-profit advocate for achieving health through physical activity and other lifestyle changes by providing accessible NCCA-accredited certifications and scientifically rooted education to fitness professionals and health enthusiasts to significantly impact preventable, inactivity-related lifestyle diseases by 2035” (ACE, p. 2, 2017). The vision of the BOC is “healthcare professionals worldwide have access to globally recognized standards of competence and exceptional credentialing programs that support them in the protection of the public and the provision of excellent patient care” (BOC, 2017).

Limitations

Due to the small sample size and the sample being all from one school, this study provides only a narrow look into the population, and should not be considered generalizable to the larger population. Another limitation is that only one team had only a full-time athletic trainer. If the sample sizes between the two groups of student-athletes were more equal then it is possible that this study would have provided a more accurate look into the difference in perceptions of student-athletes between full-time athletic trainers and graduate assistant athletic trainers. Finally, the questionnaire utilized did include a section designed to measure the student-athletes’ knowledge of the skills that their athletic trainer possessed as well as their perceptions of the profession in general. Due to a mistake in the questionnaire’s directions, the results from the knowledge section were deemed invalid, and were therefore excluded from further analysis in this study. Thus, we are unable to determine if the participants perceptions of athletic training and their understanding of the necessary skills/knowledge involved in the profession are congruent or not..

Future Research

The results of this study can lead to further investigation of student-athletes' perceptions of athletic trainers, particularly any differences between full-time and graduate assistant athletic trainers. This study exposed the lack of research on how student-athletes perceive their graduate assistant athletic trainers and may lead to the investigation of how they are perceived by a variety of stakeholders, including student-athletes, co-workers, athletic department personnel, and parents. Future studies should explore these perceptions among these groups from a variety of athletic environments (i.e., Divisions I, II, and III). Finally this research can lead to the investigation of knowledge of student-athletes on what skills and competencies athletic trainers possess.

Summary

This study looked into the perceptions of 86 student-athletes at Southern Illinois Carbondale of their athletic trainers. There was a high perception score from the student-athletes for both the full-time athletic trainers and the graduate assistant athletic trainers. The high perception score shows that the student-athletes have accurate perceptions of their athletic trainers. It also shows that the student-athletes perceived full-time athletic trainers and graduate assistant athletic trainers similarly. The perception scores between the student-athletes who had an athletic trainer in high school and those who did not were also similar.

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APPENDICES

APPENDIX I:

Cover Letter

Dear Participants,

My name is Trey Brainerd, and I am a graduate student in the Sport Studies Program and a graduate assistant athletic trainer at Southern Illinois University. Thank you for agreeing to participate in this study. You must be at least 18 years of age to take part.

The main purpose of this study is to examine student-athletes' perceptions and knowledge of athletic training.

This study is being completed as a part of my graduate research paper. This survey was divided into three parts. Section 1 is related to your demographic information. Section 2 asks you to rate your perceptions of athletic training. Section 3 asks you to rate your knowledge of athletic training. It is estimated that this questionnaire will take approximately 5-10 minutes. Participation in this study will be entirely voluntary.

You may be assured of complete confidentiality. Individual responses will not be identified or reported. As the conclusion of the study, the data sheets and corresponding numbers on the questionnaires will be destroyed and disposed. The published and reported results of the study will not be linked to the name of any individual or institution, and any discussion will be based on group data. We will take all reasonable steps to protect your identity.

You may contact me at any time. It is estimated that the research project will be completed in the next few months. If you wish to have a copy of the results, please contact me. You may also contact my advisor, Dr. Julie Partridge at jpartrid@siu.edu. By completing this questionnaire, you are implying your consent. Thank you for your time and assistance.

Sincerely,

Richard (Trey) Brainerd III, ATC
Graduate Assistant Athletic Trainer
Southern Illinois University, Carbondale, IL 62901
E-mail: rbrain1@siu.edu Tel: 631-455-1862

This project has been reviewed and approved by the SIUC Human Subjects Committee. Questions concerning your rights as a participant in this research may be addressed to the Committee Chairperson, Office of Sponsored Projects Administration, Southern Illinois University, Carbondale, IL 62901-4709. Phone (618) 453-4533. E-mail: siuhsc@siu.edu

APPENDIX II:

Questionnaire

To respond to this section, please indicate the appropriate response in the area provided.

What is your age? _____

What is your gender? Male Female

In which NCAA sport(s) do you participate?

- | | |
|--|--|
| <input type="checkbox"/> Baseball | <input type="checkbox"/> Softball |
| <input type="checkbox"/> Basketball | <input type="checkbox"/> Swimming & Diving |
| <input type="checkbox"/> Cross Country | <input type="checkbox"/> Tennis |
| <input type="checkbox"/> Football | <input type="checkbox"/> Track & Field |
| <input type="checkbox"/> Golf | <input type="checkbox"/> Volleyball |

What is your current academic standing?

- Freshman Sophomore Junior Senior Fifth-year Senior

How much time do you spend with your current athletic trainer on a weekly basis (hours)?

- 0-1 1-5 5-10 10+

Did you have an athletic trainer at your high school?

- Yes No

Part 2: Perception Questionnaire

Instructions: Read each of the following statements carefully and indicate the degree in which you agree with each statement.

	Never	Sometimes	Always
1. I perceive a certified athletic trainer as a healthcare professional	1	2	3
2. I feel it is necessary for certified athletic trainers to obtain continuing education units.	1	2	3
3. I perceive a certified athletic trainer as an appropriate or effective source in rehabilitating injuries.	1	2	3
4. I perceive high school certified athletic trainers as less qualified than certified athletic trainers at the college or professional level.	1	2	3
5. I trust the certified athletic trainer's opinion.	1	2	3
6. I consider athletic training and personal training the same thing	1	2	3
7. I feel society needs certified athletic trainers.	1	2	3
8. I take the certified athletic trainer's recommendation seriously in regards to the recovery period of injuries	1	2	3
9. I consider the athletic training room a medical care facility and	1	2	3

expect the certified athletic trainer to maintain appropriate documentation and medical records.			
10. I feel more comfortable about my athlete's well-being with a certified athletic trainer present on site.	1	2	3
11. I would send my athlete to see the certified athletic trainer before taking them to the doctor or emergency room.	1	2	3

VITA

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Research Paper Title:
Student-Athletes' Perceptions of Athletic Trainers

Major Professor: Julie Partridge (Ph.D)