

Fall 8-1-2018

# COLLEGE STUDENT ATHLETES' PERCEPTIONS OF MALE AND FEMALE ATHLETIC TRAINERS

Salvador Chavez

*Southern Illinois University Carbondale*, [salvador.chavez@siu.edu](mailto:salvador.chavez@siu.edu)

Follow this and additional works at: [https://opensiuc.lib.siu.edu/gs\\_rp](https://opensiuc.lib.siu.edu/gs_rp)

---

## Recommended Citation

Chavez, Salvador. "COLLEGE STUDENT ATHLETES' PERCEPTIONS OF MALE AND FEMALE ATHLETIC TRAINERS."  
(Fall 2018).

This Article is brought to you for free and open access by the Graduate School at OpenSIUC. It has been accepted for inclusion in Research Papers by an authorized administrator of OpenSIUC. For more information, please contact [opensiuc@lib.siu.edu](mailto:opensiuc@lib.siu.edu).

COLLEGE STUDENT ATHLETES' PERCEPTIONS OF MALE AND FEMALE ATHLETIC  
TRAINERS

by

Salvador Chavez

B.S., Northern Illinois University, 2016

A Research Project  
Submitted in Partial Fulfillment of the Requirements for the  
Master of Science in Education

Department of Kinesiology  
In the Graduate School  
Southern Illinois University Carbondale  
August 2018

RESEARCH PAPER APPROVAL

COLLEGE STUDENT ATHLETES' PERCEPTIONS OF MALE AND FEMALE ATHLETIC  
TRAINERS

by

Salvador Chavez

A Research Paper Submitted in Partial

Fulfillment of the Requirement

for the Degree of

Master of Science in Education

in the field of Kinesiology

Approved by:

Dr. Julie Partridge, Chair

Graduate School  
Southern Illinois University  
July 6, 2018

## TABLE OF CONTENTS

<u>CHAPTER</u>	<u>PAGE</u>
LIST OF TABLES .....	ii
CHAPTERS	
CHAPTER 1 – Introduction.....	1
CHAPTER 2 – Methodology.....	11
CHAPTER 3 – Results .....	13
CHAPTER 4 – Discussion and Conclusion.....	18
REFERENCES .....	21
APPENDICES	
APPENDIX A – Cover Letter.....	23
APPENDIX B – Questionnaire .....	24
VITA .....	33

LIST OF TABLES

<u>TABLE</u>	<u>PAGE</u>
Table 1.....	13
Table 2.....	13
Table 3.....	14
Table 4.....	14
Table 5.....	14
Table 6.....	15
Table 7.....	16
Table 8.....	16

## CHAPTER 1

### INTRODUCTION

Athletic trainers have played a significant role in our health care system for many years. Although many people tend to confuse athletic trainers with other professions such as personal trainers, physical therapists and other allied health professionals, there is a substantial difference in the education that is received by athletic trainers compared to other professions. The National Athletic Trainers Association (NATA) describes athletic trainers as highly qualified, multi-skilled health care professionals who communicate with physicians, strength and conditioning staff and coaches to provide preventative services, emergency care, clinical diagnosis, therapeutic intervention and rehabilitations of injuries. (NATA, 2018). Prentice (2013) discusses how from the time athletic training began, athletic trainers have been known to help prevent sport and exercises-related injury and involve themselves with patients, who engage in exercises and strenuous work related to recreational and competitive sports.

Athletic trainers are also important in our health care system. The National Athletic Trainers' Association defines the use of athletic trainers as:

Athletic trainers provide medical services to all types of patients, not just athletes participating in sports, and can work in a variety of job settings. Athletic trainers relieve widespread and future workforce shortages in primary care support and outpatient rehab professions and provide an unparalleled continuum of care for the patients (NATA, 2018).

Athletic trainers also focus on patient education to help decrease injury and re-injury and help reduce the time spent during rehabilitation for their patients, which can translate to help reducing or eliminating health care costs (NATA, 2018).

## **Literature Review**

### **Roles of an Athletic Trainer**

Athletic trainers usually work at clinics, secondary schools, universities, hospitals, and industrial institutions. Athletic trainers have many responsibilities such as rehabilitation, injury prevention, evaluation, treatment, social support, nutritional guidance, and emergency care. Student-athletes and athletic trainers usually form a bond together especially when an injury occurs. Athletic trainers should develop a framework to help athletes understand their roles and responsibilities so they can meet athlete's perceptions within the scope of practice (Fincher et al., 2010). Certified athletic trainers (ATC's) clinical tasks are organized by five domains, 1) Injury/illness prevention and wellness protection, 2) Clinical evaluation and diagnosis, 3) Immediate and emergency care, 4) Treatment and rehabilitation, 5) Organizational and professional health and well-being (Fincher et al., 2010). With the roles and clinical tasks that are presented, student-athletes may perceive these roles differently.

### **Social Support and Satisfaction**

When an athlete sustains an injury, it is typical for the first and most consistent people contact point within the health care system to be athletic trainers (Barefield & McCallister, 1997). Athletic trainers physically see their student-athletes or are in contact with them via text almost every day. Athletic trainers are involved when it comes to initial care, physician appointments, surgeries, and rehabilitation. Since the student-athletes and athletic trainers are in contact with each other consistently, the rapport that has been established between these groups can have a far-reaching effect (Barefield & McCallister, 1997). Athletic trainers should develop social support systems for student-athletes, so that student athletes can feel comfortable while receiving care, treatment and other services that may be provided (Unruh, Unruh, Moorman, & Seshadri, 2005). Athletic trainers are involved from the initial injury, to the time that the athlete

is ready to return to play. While being involved with the return to play process, it is important that the athletic trainer provides good services and maintains a good relationship with the athletes.

Yang, Schaefer, Zhang, Covassin, Ding, and Heiden (2014) studied the support that was received from athletic trainers and the effect during injury recovery. Social support can be defined as:

An exchange of resources between at least two individuals perceived by the provider or the recipient to be intended to enhance the well-being of the recipient and information from others that one is loved and cared for, esteemed and valued, and part of a network of communication and mutual obligations (Barefield & McCallister, 1997, p. 333).

Specifically, the main purpose of the study was to view the social support received from the athletic trainers during injury recovery that was recorded on reported systems of anxiety and depression during the return to play throughout rehabilitation. The study sampled a cohort of athletes that attended two Big 10 Conference universities. The participants had to be at least 18 years of age and had to have at least sustained one injury who participated in either football, baseball, wrestling, men's and women's basketball, women's field hockey, women's soccer, and women's volleyball. The trained research team used a six-item social support questionnaire at a location and time that was convenient to each of the injured athletes. The trained research team used the Center for Epidemiological Study Depression Scale for the symptoms of depression that involved 20 symptoms that were used at the point of the initial injury and at the return to play. They also used the State-Trait Anxiety Inventory for the measurement of anxiety that included 20 items to measure state anxiety and 20 items to measure trait anxiety. The results from this study showed 84.3% ( $n = 501$ ) of injured athletes perceived that they did receive social support

from their athletic trainers during recovery from injury. However, 53.1% ( $n = 501$ ) of the athletes stated they were satisfied with the social support that was received from their athletic trainers.

When comparing the participants that were dissatisfied from the social support that was received from their athletic trainers, the participants showed that some of the symptoms that were reported on the depression scale and anxiety scale did not have a significant difference whether they were satisfied with the social support or not (Yang et al., 2014).

These results support how important it is that social support is provided by athletic trainers, especially when it involves rehabilitation and return to play protocols. Social support can be seen to influence both physical and psychological outcomes that deal with injured collegiate athletes in a positive way (Yang et al., 2014). When discussing the findings the authors stated:

Our findings on the buffering effect of social support from ATs in recovery, along with results from other studies, suggest that current athletic training education programs need to incorporate the psychosocial competencies into their curricula to better serve injured athletes and facilitate effective physical and psychological recovery from injury (Yang et al., 2014, p. 777).

Based upon their results, the authors suggested that there should be evaluations on athletic trainers regarding how competent they feel about the psychological aspect during rehabilitation and return to play protocol. The results also suggest that social support from athletic trainers during the injury recovery protocol has an important implication for successful physical and psychological recovery for the injured athletes (Yang et al., 2014). With social support from the athletic trainers, the authors' mentions how the effect of stress on an injured athlete can affect their wellbeing; social support can help reduce distress after an injury and can help an injured athlete cope with the injury and improve motivation during rehabilitation (Yang et al., 2014).

Having no social support and a the lack of quality of care can break trust that athletes have with their athletic trainer and may make the athletes perceive their athletic trainer differently (i.e., more negatively).

### **Perceptions of Athletic Trainers**

Perceptions of athletic trainers tend to vary among athletes and the collegiate setting. Athlete's perception of care from their athletic trainer can make it easier for other athletes to decide if they like to use the medical services provided by the athletic trainer. Kahanov and Fairchild (1994) discuss how communication between a student-athlete and an athletic trainer is substantial especially during medical services. When communicating a message to a student-athlete, how that message is communicated can greatly influence how it is received and this communication may be just as important as the message itself (Kahanov & Fairchild, 1994). Having a good rapport and trust the athletic trainer can develop the foundation necessary for an effective communication with the student-athlete (Kahanov & Fairchild, 1994). If some of the athletes perceive the care they receive from their athletic trainer as poor, they will be less likely to go to that individual in the future (Unruh, 1998).

Unruh (1998) explored the athlete's perceptions of athletic training services. In the study, he examined the perceptions between gender, sport types in Division I and Division II level student athletes ( $n = 343$  student athletes, males = 165, females = 178). Unruh separated the sports into two profiles. The high profile sport category included football, baseball and men's and women's basketball. In the low profile sport category included cross-country, soccer, track, volleyball and women's softball. The questionnaire consisted of two sections and was based off a Likert style questionnaire. The first section consisted of 36 questions and the second part consisted of 14 questions designed to obtain either "yes" or "no" responses. These questions would elicit responses on how the student-athletes perceived their athletic trainers services and

the perceptions of general medical coverage that was provided by the athletic trainer. Some examples that were used during the questionnaire dealt with how satisfied were student-athletes with their athletic trainer by receiving care and if the athletic trainer performed their services well during the road to recovery.

The results indicated that females from low-profile sports did not favor their athletic trainer as much as most of the males and the student-athletes from the high-profile sports did. The male student-athletes and the student-athletes in high-profile sport had a higher mean perception score of 137.1 compared to 130.6 mean perception score of the females from low-profile sports (Unruh, 1998). Unruh (1998) discusses that with a higher level of satisfaction with health care, the perception of the patient or student-athlete has on their athletic trainer can make the overall experience during treatment and rehabilitation better. These results suggest that some student-athletes perceive their athletic trainers as not having demonstrated equal level of treatment towards student-athletes (Unruh, 1998). The more satisfied an athlete is with his or her athletic trainer; the more trust can be placed with the athletic trainer (Unruh, 1998). Athletic trainers should then continue to strive to improve their overall quality of care without regard gender, sport and level of competition.

### **Gender Bias in Athletic Training**

Being a female has served to become an obstacle to overcome in the profession of athletic training (Mazerolle, Borland, & Burton, 2012). Some of these barriers and obstacles that female athletic trainers tend to deal with are kinship responsibilities, parenthood and incongruent role perceptions that are held in the collegiate athletic setting (Mazerolle et al., 2012). Though Title VII and Title IX have been passed, women tend struggle when it comes to career development and acceptance into college athletics particularly (Mazerolle et al., 2012). Title IX can be defined as:

Unwelcome conduct of a sexual nature, which can include unwelcome sexual advances, requests for sexual favors, or other verbal, nonverbal, or physical conduct of a sexual nature (Mansell, Moffit, Russ & Thorpe, 2017, p.4).

As time has gone on female athletic trainers who hold a position in college athletic has increased, but not many female athletic trainers hold the head athletic training position in college athletics (Mazerolle et al., 2012). Gender stereotyping and other factors may limit the advancement of leadership roles for women.

Mazerolle et al. (2012) studied the challenges and obstacles that young female athletic trainers have when working in the National Collegiate Athletic Association Division I athletics. In this study the authors used a qualitative method and a critical qualitative method that included open-ended questions. There were 14 female participants that worked in Division I as a full-time assistant and had at least three years of work experience. Phone interviews were conducted then an interview guide was created which was based off the investigation of female perspectives.

The results suggested that female athletic trainers felt that mentorship, clear communication with staff members and having a supportive system were critical tools that could help alleviate gender bias in the workplace. From the study the authors found that female athletic trainers did encounter gender discrimination, especially when they worked with a male sport coach by a man (Mazerolle et al., 2012). When talking about discrimination due to gender the authors stated:

Receiving strong mentorship, serving as a role model, having the support of your supervisor, and developing strong communication skills were revealed as important elements in the female AT's professional development and learning to reduce or manage workplace discrimination due to gender (Mazerolle et al., 2012, p. 700).

From these results, the authors suggested that it is important for female athletic trainers to be assertive with coaches because this brought forth a greater perception of congruity as their role as an AT and their gender (Mazerolle et al., 2012). It would also be beneficial if female student athletic trainers also seek for a mentor to guide them throughout school and the future because with having a mentor it can encourage female athletic trainers to be assertive and confident.

Yet gender-role stereotyping still continues in the field of athletic training. Female athletic trainers may feel unwilling to take on leadership roles because of the lack of confidence they may have or the feeling of having the lack of skills to be known as a leader. Mazerolle, Burton and Cotrufo (2015) studied the understanding about the experience a female head athletic trainer has had to attain the role as the head athletic trainer at the National Collegiate Athletic Association Division I athletics. The authors recruited eight female participants for the study. The criteria that the participants had to meet were being a head athletic trainer, working in the National Collegiate Athletic Association Division I and being a woman. The authors used open-ended questions during the interview, which consisted of questions that were related to how they received the job, challenges they had faced and questions that were related to gender bias in athletic training. The interview took approximately 45 minutes to complete over the phone.

The results indicated that the participants perceived barriers to becoming a head athletic trainer as a female. The six major themes that emerged from their results were: 1) Opportunities to become a head athletic trainer, 2) Leadership, 3) Uniqueness, 4) Women hold back, 5) Perceived work-family challenges, 6) Organizational barriers. When it came to having the opportunity to being a head athletic trainer the female athletic trainers in the study seemed to have been at the right place at the right time, in addition to persisting in their positions (Mazerolle et al., 2015). Females seem to have the disadvantage when it comes to the head

athletic training position because men seem to have the advantage in regard to having better networks and supportive mentors to help them advance their leadership roles.

Being the head athletic trainer requires attention to organization, detail and the ability to make decisions. Results of the data analysis suggested that, having great communication skills were very helpful in reducing gender bias or any discrimination for any sort in college athletics. Female athletic trainers from the study also discussed how they had some concerns of self-imposed limitations. The author's states:

Considering the gender stereotypes female athletic trainers are exposed to early in their careers, these stereotypes may lead to decreased aspirations for head athletic trainer positions later in their career (Mazerolle et al., 2015, p. 78).

These results suggest that these participants felt that the stereotypes of women as leaders can lead to misinterpretations and perceptions made about them being leaders. Most of the participants that were apart of the study did not seek the head athletic training position that they had, it was simply handed to them. The findings had suggested that having a strong job performance and persistence in the role of an athletic trainer at their current job could lead to a promotion on becoming a head athletic trainer (Mazerolle et al., 2015).

This existing literature suggests that gender can impact perceptions of athletic trainers and if gender bias still exists based off student-athlete perceptions. Whom do the student-athletes feel comfortable going to when it comes to medical services? Since there has been very limited research on perceptions and gender bias in the athletic training field, there has to be more research done solely on the perceptions that student-athletes have on their athletic trainer based on the athlete trainer's gender.

The overall purpose of this study was to identify how college student-athletes at Southern Illinois University perceive their athletic trainers, specifically, how their perceptions of male and female athletic trainers.

Research Question 1: Do male and female college athletes report different perceptions of male and female athletic trainers?

Hypothesis 1: It was hypothesized that female athletes would report a preference toward female athletic trainers compared to male athletic trainers.

Hypothesis 2: It was hypothesized that male athletes would report a preference toward male athletic trainers compared female athletic trainers.

## **CHAPTER 2**

### **METHODS**

#### **Participants**

The participants for this study were 60 student-athletes (female = 22, male = 38), from football, men's basketball, women's volleyball and women's basketball teams at Southern Illinois University. The participants ranged in age from 18 years old to 22 years old. Participants had to be exposed to both male and female athletic trainers and must be a Division I student-athlete at SIU. Student-athletes were recruited at team meetings that were held during the summer semester in Tedrick Auditorium at Southern Illinois University. The participants were asked if they like to partake in the current research and were given a handout describing the study. Surveys were completed on a voluntary basis.

#### **Data Collection Procedures**

Prior to any data collection, the Human Subjects Committee at Southern Illinois University approved this study. The author emailed the coaches of the teams asking for approval to collect data from each of the teams prior to the team meetings held in the summer. Data was collected at Tedrick Auditorium at SIU after the summer team meetings. The study was described to participants and they were asked if they like to partake in the study. The participants that completed in the study read and signed an informed consent form prior to answering any questions. Following completion of the questionnaire packet, participants were allowed to leave.

#### **Measures**

Section one consisted of questions about the participant's demographic information. The second portion of the survey provided information about the athlete's background and how the student-athletes felt about an athletic trainer on a 5-point Likert-type scale from 1 = strongly disagree to 5 = strongly agree. This section was adapted from Drummond, Velasquez, Cross, and

Jones (2005). One example of these questions is, “I feel more comfortable receiving services from male than female athletic trainer.” The third portion of the survey consisted of specific questions regarding the care that was received from male or female athletic trainers throughout different domains to allow the researcher to differentiate if gender bias lies within the field of athletic training. This portion included 18 questions with possible answers on a 5-point Likert-type scale from 1 = very uncomfortable to 5 = very comfortable. These questions were adapted from Drummond, Velasquez, Cross, and Jones (2005). The questions were about the comfort level of several domains such as general medication (hypertension), psychological issues (depression), gender specific (testicle/vaginal injuries), and upper (shoulder injuries), middle (hip injuries) and lower body injuries (knee injuries).

## CHAPTER 3

### RESULTS

This study examined gender bias for athletic trainers in college athletes and what perceptions student-athletes have of their athletic trainer. The study consisted of asking participants to complete a three-part questionnaire: part one was the demographic section, part two was about how the student-athletes perceived athletic trainers, part three consisted of different domains in regards to injuries and gender specific issues. It is hypothesized that male and female student-athletes will have preference of athletic trainer base from their own gender. The study consisted of mostly male athletes with 60% and female athletes at 40%. The sample had the greatest response from white individuals with a response of 56%, followed by African-Americans at 40%. The greatest response for sport type came from football (41%), followed by women's basketball (21%), men's basketball (18%) and women's volleyball (18%). The student-athletes were classified by their gender, academic class, ethnicity, and the intercollegiate sport they participate in are presented in Table 1-4.

#### *Survey Participation Demographics 1-4*

Table 1. *Gender*

<b>Gender</b>	<b>N</b>	<b>%</b>
Male	36	60
Female	24	40

Table 2. *Class Classification*

<b>Classification</b>	<b>N</b>	<b>%</b>
Freshman	8	13
Sophomore	12	20
Junior	24	40
Senior	16	27

Table 3. *Classification of Sport*

<b>Sport</b>	<b>N</b>	<b>%</b>
Men's Basketball	11	18
Football	25	41
Women's Basketball	13	21
Women's Volleyball	11	18

Table 4. *Race/Ethnicity*

<b>Race/Ethnicity</b>	<b>N</b>	<b>%</b>
White	34	56
Asian	0	0
Hispanic	1	.016
African-American	24	40
Other	1	.016

For the purpose of this study, only questions 1, 2, 4, and 5 were utilized, as these were the questions that specifically addressed gender perceptions. Tables 5 and 6 show the means and standard deviations for both male and female athletes.

Table 5. *Female Athletes Comfort Level Receiving Services from Male and Female Athletic Trainer*

<b>Question</b>	<b>Range</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>n</b>
Question 1	1-5	3.33	.868	24
Question 2	1-5	2.67	.637	24
Question 4	1-5	2.16	.916	24
Question 5	1-5	1.79	.832	24

Table 6. *Male Athletes Comfort Level Receiving Services from Male and Female Athletic Trainers*

Question	Range	Mean	Std. Deviation	n
Question 1	1-5	3.03	.609	36
Question 2	1-5	3.31	.577	36
Question 4	1-5	2.33	1.06	36
Question 5	1-5	2.13	1.17	36

A paired t-test was performed for each of questions 1, 2, 4, and 5 in Part II of the questionnaire. These questions asked participants to identify their comfort level receiving care from a male or female athletic trainer and if gender influenced any of the care that has been received. A paired sample t-test compares the means of male student-athletes and female student-athletes. From table 5 there was a significant difference from the female student-athletes scores that focused on the comfort level of receiving care from a male and female athletic trainer from question 1 ( $M = 3.03$ ,  $SD = .609$ ) and question 2 ( $M = 3.31$ ,  $SD = .577$ );  $t(23) = 3.112$ ,  $p = .005$ . There was a significant difference in the scores that focused on how gender influenced quality of care from an athletic trainer from questions 4 ( $M = 2.16$ ,  $SD = .916$ ) and question 5 ( $M = 1.79$ ,  $SD = .832$ );  $t(23) = 2.840$ ,  $p = .009$ .

From table 6 there was no significant difference male student-athletes scores that focused on the comfort level of receiving care from a male and female athletic trainer in the scores from question 1 ( $M = 3.03$ ,  $SD = .609$ ) and question 2 ( $M = 3.31$ ,  $SD = .577$ )  $t(35) = -1.824$ ,  $p = .077$ . There was no significant difference in the scores that focused on how gender influenced quality of care from an athletic trainer from question 4 ( $M = 2.33$ ,  $SD = 1.06$ ) and question 5 ( $M = 2.13$ ,  $SD = 1.17$ )  $t(35) = 1.48$ ,  $p = .147$ .

Table 7. *Female Athletes' Athletic Trainer Gender Preference with Injuries*

<b>Female Athletes Only</b>				
<b>AT Preference</b>	<b>Range</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>n</b>
Female Athletic Trainer	1-5	4.21	.728	24
Male Athletic Trainer	1-5	3.46	.656	24

Table 8. *Male Athlete's Athletic Trainer Preference with Injuries*

<b>Male Athletes Only</b>				
<b>AT Preference</b>	<b>Range</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>N</b>
Female Athletic Trainer	1-5	3.48	.613	36
Male Athletic Trainer	1-5	3.63	.638	36

A paired t-test was performed for tables 7 and 8, comparing the perception of treatment by a female athletic trainer and treatment by a male athletic trainer by both female and male student athletes. Results from table 7 indicated that there was a significant difference in the female student athletes' preference scores for female athletic trainers ( $M = 4.21$ ,  $SD = .728$ ) compared to male athletic trainers ( $M = 3.46$ ,  $SD = .656$ ),  $t(8.945)$ ,  $p = .000$ . Female student athletes significantly preferred female athletic trainers to male athletic trainers in this sample. Results from table 8 indicated that there was a significant difference in the male student athletes'

preference scores for female athletic trainers ( $M = 3.48$ ,  $SD = .613$ ) compared to male athletic trainers ( $M = 3.63$ ,  $SD = .638$ ),  $t(-3.12)$ ,  $p = .004$ , with male student athletes showing a slight preference for male athletic trainers.

## CHAPTER 4

### DISCUSSION

#### Male and Female Student-Athletes

Overall, female athletes had a significantly greater preference towards female athletic trainers in the comfort level and gender influence questions. This indicated a strong preference toward female athletic trainers. Therefore, hypothesis 1 was supported and mirrored the results that were found by Drummond et al. (2005). This can also be the fact that athletes may be less likely to disclose medical information to their athletic trainer of the opposite sex because of the discomfort level and the athlete's willingness to disclose any information (Drummond, Benito, Cross, & Jones, 2005).

Male athletes however, did not have a significant difference in the preference towards male and female athletic trainers from the comfort level and gender influence questions, which did not support hypothesis 2. There may be multiple reasons for why males had no significant difference when it came to comfort level with male and female athletic trainers. This did not support Drummond et al. (2005) research since they found males would feel more comfortable receiving care from the same gender.

One possible reason that the males in this sample did not show a strong preference for male athletic trainers could be because of the comfort level the male athletes have developed with athletic trainers who may have been both male and female. Football, for example, receives a new graduate assistant athletic trainer every year. This new graduate assistant may be a female athletic trainer or a male athletic trainer. Football has also transitioned from having a full-time male athletic trainer to now only having one full-time female athletic trainer. This can mean with the experience they have had with their previous athletic trainer, they also have shared the same

experienced with their current athletic trainer. Personal experiences have been found to impact an individual's perceptions of health care professionals, and may be a reason why males in this sample did not have a significant difference when it came with their preference on their athletic trainer.

Results from the last part of the questionnaire (i.e., student athlete preference for male or female trainers with specific injuries), the male and female student athletes both had a significant difference in their preference towards a male and female athletic trainer when it came to specific injuries (e.g., groin injuries). Male and females both preferred an athletic trainer of the same gender when it comes to the questions that were presented in the survey. Drummond, Benito, Cross and Jones (2005) performed a study on the comfort level that athletic trainers had when providing care for gender-specific and non-gender-specific injuries. From their study they found that when it came to caring for female athletes the female athletic trainer appeared more comfortable, whereas when it came to caring for male athletes, the male athletic trainers appeared more comfortable (Drummond, Benito, Cross, & Jones, 2005). The results from the current study supports the work from Drummond et al. (2005), as they indicate that male and female student-athletes still view athletic trainers differently and that they prefer to have a same gender athletic trainer treating them.

### **Limitations and Future Research**

There are several limitations to this study. Due to having a small sample size and being from one school only, this study should not be considered generalizable to the overall college student athlete population. Another limitation is that the sample size between both males and females were not equal. Furthermore, the inclusion of football may have skewed results, as the injury rates for football may be different from the other sports sampled. Football teams also have multiple athletic trainers, which may impact these athletes' perceptions of athletic trainers

is general. Another limitation was that there were not many questions that were related to how student-athletes perceived their current and past athletic trainer, but rather, asked them about athletic trainers in general, which could have impacted the results.

The results of this study this can lead to further investigations of student-athletes' perceptions of athletic trainers, particularly how they feel about overall care from a male or female athletic trainer. This study also recommends future research on a larger population in regards to gender specific questions that are related to athletic training. Such research should focus on how much of an impact does an individuals gender plays a role in the field of the sports medicine team.

### **Conclusion**

This study examined the perceptions of athletic trainers and if gender bias exists within the athletic training field of 60 student-athletes at Southern Illinois University, and suggests that the male and female student athletes may differ in their comfort level and perceptions of male and female athletic trainers. Given the importance of athletic trainers as allied health professionals, particularly in college athletic settings, this study provides additional insight into how gender informs and impacts college student athletes and their level of care.

## REFERENCES

- Barefield, S., & McCallister, S. (1997). Social support in the athletic training room: Athletes' expectations of staff and student athletic trainers. *Journal of Athletic Training, 32*, 333-338.
- Drummond, J., Velasquez, B., Cross, R., & Jones, M (2005). Self-reported comfort in athletic training of gender-specific and non-gender specific injuries and issues. *Journal of Athletic Training, 40*(3), 211-217.
- Kahanov, L., & Fairchild, P.C. (1994). Discrepancies in perceptions held by injured athletes and athletic trainers during the initial injury evaluation. *Journal of Athletic Training, 29*, 70-75.
- Mazerolle, S. M., Burton, L., & Cotrufo, R. J. (2015). The experiences of female athletic trainers in the role of the head athletic trainer. *Journal of Athletic Training, 50*(1), 71-81.
- Mazerolle, S. M., Borland, J. F., & Burton, L. (2012). The professional socialization of collegiate female athletic trainers: Navigating experiences of gender bias. *Journal of Athletic Training, 47*(6), 694-703.
- National Athletic Trainer's Association. (2018). Retrieved on June 5, 2018 from <https://www.nata.org/about/athletic-training>
- National Athletic Trainers' Association (2010). Athletic training services: An overview of skills and services performed by certified athletic trainers. Retrieved from NATA.org.
- Prentice, W. E. (2013). Focusing the direction of our profession: Athletic trainers in America's health care system. *Journal of Athletic Training, 48*(1), 7-8.
- Unruh, S., Unruh, N., Moorman, M, & Seshadri, S. (2005). Collegiate student-athletes' satisfaction with athletic trainers. *Journal of Athletic Training, 40*, 52-55.

Unruh, S. (1998). Perceptions of athletic training services by collegiate student- athletes: A measurement of athlete satisfaction. *Journal of Athletic Training, 33*, 347-350.

Yang, J., Schaefer, J. T., Zhang, N., Covassin, T., Ding, K., & Heiden, E. (2014). Social support from the athletic trainer and symptoms of depression and anxiety at return to play. *Journal of Athletic Training, 49*(6), 773-779.

## **APPENDICES**

**APPENDIX A:  
Cover Letter**

Dear Participants,

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

The purpose of my study is to investigate college athletes' perceptions of male and female athletic trainers, and discover if gender biases still exist within the collegiate athletic training world.

This study is being completed as a part of my graduate research paper. The questionnaire will be divided into three parts. Section 1 is related to your demographic information. Section 2 asks you to rate your perceptions of athletic trainers. Section 3 includes questions about gender bias with athletic trainers. It is estimated that this questionnaire will take approximately 20-30 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 a group date. 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, Julie Partridge at [jpartrid@siu.edu](mailto:jpartrid@siu.edu). By completing this questionnaire, you are implying your consent. Thank you for your time and assistance.

Sincerely,

Salvador Chavez, ATC, LAT  
Graduate Student  
Southern Illinois University, Carbondale, IL 62901  
E-mail: [salvador.chavez@siu.edu](mailto:salvador.chavez@siu.edu) Tel: 708-612-9434

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, SIUC, Carbondale, IL 62901-4709. Phone (618) 453-4533. E-mail: [siuhsc@siu.edu](mailto:siuhsc@siu.edu)

**APPENDIX B:**

**PART I: DEMOGRAPHIC INFORMATION:** Please indicate your response by circling the **one** that fits you best or by filling in the blank.

1. Present Age: \_\_\_\_\_

2. Gender: \_\_\_\_\_

3. Classification:

- (1) Freshman
- (2) Sophomore
- (3) Junior
- (4) Senior
- (5) Graduate

4. Race/Ethnic Background:

- |                      |                     |
|----------------------|---------------------|
| (1) White            | (4) Asian           |
| (2) African American | (5) Native American |
| (3) Hispanic         | (6) Other           |

5. In what intercollegiate sport(s) do you participate?

---



---

6. I have received athletic training services from more female than male athletic trainers:

- (1) Agree
- (2) Disagree
- (3) Not Sure

7. I have received athletic training services from more male than female athletic trainers:

- (1) Agree
- (2) Disagree
- (3) Not Sure

8. Were athletic training services provided during your high school athletics?

- (1) Yes
- (2) No
- (3) Not Sure

If yes, were athletic training services provided by:

- (1) A male athletic trainer
- (2) A female athletic trainer
- (3) Both male and female athletic trainers

9. Are athletic training services provided for your intercollegiate sport?

- (1) Yes
- (2) No
- (3) Not Sure

If yes, are athletic training services provided by:

- (1) A male athletic trainer
- (2) A female athletic trainer
- (3) Both male and female athletic trainers

**PART II:** It is important that you read each statement carefully. Then, next to each statement, please circle the response that is **most true for you** by using the following scale: **(1) Strongly disagree (2) Disagree (3) Neutral (4) Agree (5) Strongly agree**

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. I feel more comfortable receiving athletic training services from female than male athletic trainers.   | 1 | 2 | 3 | 4 | 5 |
| 2. I feel more comfortable receiving athletic training services from male than female athletic trainers.   | 1 | 2 | 3 | 4 | 5 |
| 3. I feel more comfortable receiving athletic training services from certified athletic trainers than athletic training students.                              | 1 | 2 | 3 | 4 | 5 |
| 4. I feel that my gender influences the quality of athletic training services I receive.   | 1 | 2 | 3 | 4 | 5 |
| 5. I feel that the gender of the athletic trainer influences the quality of athletic training services I receive.  | 1 | 2 | 3 | 4 | 5 |
| 6. I feel more comfortable discussing injuries or conditions with the athletic trainer assigned to my sport than an athletic trainer not assigned to my sport. | 1 | 2 | 3 | 4 | 5 |
| 7. I feel more comfortable discussing injuries or conditions with a certified athletic trainer than my coach.  | 1 | 2 | 3 | 4 | 5 |
| 8. I feel more comfortable discussing injuries or conditions with an athletic training student than my coach.  | 1 | 2 | 3 | 4 | 5 |
| 9. I feel more comfortable discussing injuries or conditions with a female coach than a male coach.  | 1 | 2 | 3 | 4 | 5 |
| 10. I feel more comfortable discussing injuries or conditions with a male coach than a female coach.   | 1 | 2 | 3 | 4 | 5 |

**PART III: Receiving care from a MALE athletic trainer**

The following is a list of 18 injuries or conditions you may experience during sport participation. Relate each of these to your comfort level in receiving care from a **MALE** athletic trainer using the following scale:

**(1) Very uncomfortable (2) Uncomfortable (3) Neutral (4) Comfortable (5) Very comfortable.** If you choose (1) Very uncomfortable or (2) Uncomfortable, circle the **reason for your discomfort** from the choices listed under each injury or condition. Please **circle only one** reason.

1. Hypertension (High Blood Pressure)

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

2. Head/Neck injuries

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

3. Depression

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

4. Urinary tract infections

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

5. Gastrointestinal disorders

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related  
 (2) Level of confidence in athletic trainer  
 (3) Level of experience of athletic trainer  
 (4) Other (Please specify): \_\_\_\_\_

6. Ankle injuries

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related  
 (2) Level of confidence in athletic trainer  
 (3) Level of experience of athletic trainer  
 (4) Other (Please specify): \_\_\_\_\_

7. Back injuries

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related  
 (2) Level of confidence in athletic trainer  
 (3) Level of experience of athletic trainer  
 (4) Other (Please specify): \_\_\_\_\_

8. Knee injuries

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related  
 (2) Level of confidence in athletic trainer  
 (3) Level of experience of athletic trainer  
 (4) Other (Please specify): \_\_\_\_\_

9. Groin injuries

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related  
 (2) Level of confidence in athletic trainer  
 (3) Level of experience of athletic trainer  
 (4) Other (Please specify): \_\_\_\_\_

10. Shoulder injuries

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related  
 (2) Level of confidence in athletic trainer  
 (3) Level of experience of athletic trainer  
 (4) Other (Please specify): \_\_\_\_\_

11. Rib injuries

1 2 3 4 5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer (4)
- Other (Please specify): \_\_\_\_\_

12. Sexually transmitted infections

1 2 3 4 5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

13. Addictions (e.g., drugs, alcohol)

1 2 3 4 5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

14. Abdominal injuries

1 2 3 4 5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

15. Breast/Chest injuries

1 2 3 4 5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

16. Eating disorders

1 2 3 4 5

**If you circled (1) or (2), please circle ONE reason for your discomfort**

- (1) Gender related
- (2) Level of confidence in athletic trainer

- (3) Level of experience of athletic trainer  
 (4) Other (Please specify): \_\_\_\_\_

17. Hip injuries

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related  
 (2) Level of confidence in athletic trainer  
 (3) Level of experience of athletic trainer  
 (4) Other (Please specify): \_\_\_\_\_

18. Testicle/Vaginal injuries/conditions

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related  
 (2) Level of confidence in athletic trainer  
 (3) Level of experience of athletic trainer  
 (4) Other (Please specify): \_\_\_\_\_

### **PART III: Receiving care from a FEMALE athletic trainer**

The following is a list of 18 injuries or conditions you may experience during sport participation. Relate each of these to your comfort level in receiving care from a **FEMALE** athletic trainer using the following scale:

**(1) Very uncomfortable (2) Uncomfortable (3) Neutral (4) Comfortable (5) Very comfortable.** If you choose (1) Very uncomfortable or (2) Uncomfortable, circle the **reason for your discomfort** from the choices listed under each injury or condition. Please **circle only one** reason.

1. Hypertension (High Blood Pressure)

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related  
 (2) Level of confidence in athletic trainer  
 (3) Level of experience of athletic trainer  
 (4) Other (Please specify): \_\_\_\_\_

2. Head/Neck injuries

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related  
 (2) Level of confidence in athletic trainer  
 (3) Level of experience of athletic trainer

(4) Other (Please specify): \_\_\_\_\_

3. Depression

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

4. Urinary tract infections

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

5. Gastrointestinal disorders

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

6. Ankle injuries

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

7. Back injuries

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

8. Knee injuries

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

## 9. Groin injuries

1          2          3          4          5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

## 10. Shoulder injuries

1          2          3          4          5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

## 11. Rib injuries

1          2          3          4          5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

## 12. Sexually transmitted infections

1          2          3          4          5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

## 13. Addictions (e.g., drugs, alcohol)

1          2          3          4          5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

## 14. Abdominal injuries

1          2          3          4          5

**If you circled (1) or (2), please circle ONE reason for your discomfort**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

15. Breast/Chest injuries

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

16. Eating disorders

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

17. Hip injuries

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

18. Testicle/Vaginal injuries/conditions

1      2      3      4      5

**If you circled (1) or (2), please circle ONE reason for your discomfort.**

- (1) Gender related
- (2) Level of confidence in athletic trainer
- (3) Level of experience of athletic trainer
- (4) Other (Please specify): \_\_\_\_\_

**VITA**

Graduate School  
Southern Illinois University

Salvador Chavez

[salvadorchavez1992@yahoo.com](mailto:salvadorchavez1992@yahoo.com)

Southern Illinois University Carbondale  
Bachelor of Science, Athletic Training, May 2016

Research Paper Title:

Collegiate Student Athletes' Perceptions of Male and Female Athletic Trainers

Major Professor: Dr. Julie Partridge (Ph.D)