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**The Preference of Athletic Trainers' Gender Among Collegiate Athletes and Athletic Directors**

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BARRY UNIVERSITY  
SCHOOL OF HUMAN PERFORMANCE AND LEISURE SCIENCES

THE PREFERENCE OF ATHLETIC TRAINERS' GENDER AMONG COLLEGIATE  
ATHLETES AND ATHLETIC DIRECTORS

BY

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ABSTRACT

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and Athletic Directors

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Degree of Master of Science in Movement Science with a specialization in  
Injury and Sport Biomechanics  
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Women have been underrepresented in the sports world since the beginning of time. Comfort issues regarding sex of athletes and their medical staff has been a concern since Title IX because both the number of female athletes and female athletic trainers started to increase during this time period. The significance of this study arises from the concerns of female athletic trainers regarding their status in the athletic training profession. The purpose of this study was to determine if a difference in gender acceptance of athletic trainers exists between collegiate athletes and athletic directors. An anonymous survey was distributed to athletes and athletic directors from 20 Division II institutions in the southeast United States. The surveys addressed the comfort levels of student athletes and the confidence levels athletic directors have with both male and female athletic trainers. Comfort levels and confidence levels were rated using a Likert Scale of 1 – 5; 5 representing very comfortable or very confident. A Repeated Measures ANOVA was used to determine any interaction between genders of the student athletes and compare the results for male and female athletes regarding an athletic trainer of the same and opposite sex. The final results consisted of responses from 87 student athletes, 45 female and 42 male, and 14 athletic directors, 12 male and 2 female. The results

indicated that student athletes feel very comfortable (Likert Scale average score of 4.5) receiving treatment from an athletic trainer of either the same or the opposite sex.

Discussing injuries involving the genitalia was the only condition where the athletes expressed discomfort. All athletes report feeling significantly less comfortable ( $p < .001$ ) when discussing injuries of private nature to an athlete trainer opposite sex. Athletic directors demonstrate various confident levels with athletic trainers of both sexes.

Confidence level was determined by an individual athletic trainer's education and experience rather than his or her gender. The overall results show no specific gender preference for either a male or female athletic trainer; although, athletic directors believe that athletes feel more comfortable with an athletic trainer of the same sex and this is taken into consideration when selecting athletic trainers for their institutions.

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## Chapter 1

### Introduction

Sport has always been a place where beliefs about gender differences and masculine characteristics were preserved. As the field of athletic training started to evolve, gender ideologies were also linked to athletic trainers because the career involves working with sports (Coakley, 2009). Our society has associated sport with providing support for male bonding, learning to be an authoritative man, and skills structured around masculinity. More currently sport serves as an opportunity to challenge and revise existing views about what constitutes femininity and masculinity. The ideologies about women in our world's societies have greatly affected the participation, equity, and opportunities for females in the world of athletic training. These ideologies about females and sports have held back a lot of women who had a lot of potential to make a significant impact on the field of athletic training (Coakley, 2009).

The women's rights movement is responsible for the increase in opportunities and independence for women. The movement became official in 1920 along with the establishment of the Women's Bureau of the Department of Labor. The bureau investigated the facts behind the current work conditions of women, worked towards making improvements where they were needed, and fought for the creation of laws to protect women workers (Eisenberg, 1998). The movement continued through the 1960s with major social changes that allowed women to be more than housewives and have careers (Davis, 1999). The hard work of the women activists during this time helped launch the passing of the Equal Rights Amendment (ERA) in 1972. This amendment was simple, yet extremely important. It states that by law, equal rights cannot be withheld

from anyone on the basis on sex (Eisenberg, 1998). The Women's Health Movement also started in the early 1970s in conjunction with the establishment of a group called the National Women's Health Network (NWHN). This group worked to promote equal medical rights for women. NWHN also helped eliminate the idea that a woman's body is only meant for childbirth and that physical activity can be harmful to a woman's body (Davis, 1999).

The Health and Fitness Movement was a period of time during the 1970s when Americans started to realize the importance of implementing a healthy diet and regular exercise. This movement provided research that increased the awareness of the benefits of physical activity, including specific benefits for women. As this era progressed, people started to look beyond the idea of physical activity as simply a means to a healthy lifestyle and started to become more involved in sport and recreation (McKenzie, 2005). The new ideologies that arose with the health and fitness movement helped to increase acceptance and opportunities for women in the world of athletics. Up until this movement, people believed that it was unsafe for women to participate in high intensity activities, for example, long-distance running. At one time it was believed that physical activity could harm the reproductive system of females (McKenzie, 2005). During the Health and Fitness Movement these theories became obsolete and women were encouraged to seek means to gain competence in physical and mental strength. The emergence of the Health and Fitness Movement encouraged families to include health and physical activity into their core values. Therefore, parents started enthusiastically supporting sports participation of their children, including their daughters (Coakley, 2009).

Title IX was also established in the early 1970s. While the Health and Fitness Movement increased activity for both sexes, Title IX required that both males and females receive equity under any federally funded educational program. When Title IX was first implemented in 1972, most schools offered only two female athletic teams per every existing institution (Acosta & Carpenter, 2004). The laws associated with Title IX became mandatory in 1978 which increased the number of female sports per school to 5.61. Title IX continued to increase opportunities for female athletes by increasing the number of female sports per school to 8.32 in 2004 (Acosta & Carpenter, 2004). As of 2006, female athletes have 41% of athletic opportunities available to them at the high school level and 43% of athletic opportunity positions available at an NCAA institution (Women's Sport Foundation, 2008).

The equity explained in the legislation of Title IX has been interpreted as equity within school sanctioned sports; however, the legislation of Title IX extends to all aspects of education. Title IX supports equity to both sexes when it comes to accessing resources to obtain higher education, promoting a healthy learning environment, education for pregnant women and students with children, career opportunities and employment. Title IX also has ordinances regarding sexual harassment (NWLC, 2010). The fact that women did not have personal competitive sport experience at one time was used as a logical explanation for not hiring females for important positions in athletic programs. This popular excuse was more or less eliminated with the evolution of Title IX and women's athletics; however, other excuses are being constructed to support the underrepresentation of women in athletic training.

*Statement of the Problem*

Women have been underrepresented in the sports world since the beginning of time. According to Straurowski (1998) and Drummond et. al. (2007), in 1974 out of 1,000 National Athletic Training Association (NATA) members only 16 members were female athletic trainers. In 1996, the female sports programs in Division I NCAA only had 18% women leaders of all the programs. By 1997, the NATA's population increased to 6,049 certified females. Today, the NATA has as many as 18,908 female members and 17,149 male members (NATA, 2010). According to Acosta and Carpenter (2004), 23% of athletic programs do not have any females working in administration and only 17.8% of women's athletic programs have a female director. In total, women only hold 34% of all administrative job positions in college athletics. On the average, Division II and III schools have less than one female administrator per program. Division III programs are more likely than Division I and II combined to have a female as the head of administration. This statistic stands closely related to those of female head athletic trainers with Division III having 34.5% head female athletic trainers (Acosta & Carpenter, 2004). In the year 2000, 899 college athletic programs had head athletic trainers and only 25% of them were females (Acosta & Carpenter, 2004). In 2004, Division I as having only 17.6% and Division II as having only 24.1% female head athletic trainers (Acosta & Carpenter, 2004)..

The percentage of women in professional leagues such as Major League Baseball, the National Basketball Association, and the National Football League, is even more dramatic. Women hold less than 7% of managerial job positions in these leagues (Moore, 1999).

According to the most current statistics on male and female representation in specific job settings for athletic trainers, females are not underrepresented across all settings. As of 2010, the male to female ratios for colleges is 3,474 male and 3,095 female which is not a significant difference (NATA, 2010). According to the NATA there are actually more women working in clinics (3,994) than males (3,762) (NATA, 2010). The statistics are close to equal representation in other settings such as hospitals, secondary schools, and recreational sports; however, the under representation of female athletic trainers stands true in higher profile job positions such as head athletic trainer positions at universities and in professional sports (NATA, 2010).

Out of 300,000 certified female athletic trainers in the field in 2003, only 62 worked in professional sports. In 2003, Ariko Iso, athletic trainer for the Pittsburgh Steelers, was the first full-time employed female athletic trainer in the NFL and the only full-time female athletic trainer in MLB, the NHL, and the NFL (Baranick, 2003). According to the NATA, 795 males can be accounted for as paid athletic trainers in professional sports while there are only 69 female athletic trainers working at the professional level (NATA, 2010).

### *Purpose*

Most athletic trainers report that they feel comfortable and confident providing treatment to athletes of both sexes (Drummond, 2007). Athletic trainers have expressed unease with a few reported gender specific injuries; however, they were able to disregard the feeling of discomfort and would still treat each situation professionally. Comfort issues regarding sex of athletes and their medical staff has been a concern since Title IX because both the number of female athletes and female athletic trainers started to increase

during this time period. The purpose of this study is to determine if a difference in gender acceptance of athletic trainers exists among collegiate athletes and athletic directors. Women currently make up more than half of all certified athletic trainers (Shingles, 2000). Since there is an abundance of certified females, it is important to establish if there are feelings of discomfort with the idea of females working on athletes. A survey will be taken of athletes and athletic directors from Division II institutions in the southeast United States. Comfort levels of athletes and athletic directors with athletic trainers of both sexes will be analyzed and the research will attempt to determine if there is a presence of gender discrimination towards female athletic trainers.

This study will explore whether athletes identify athletic trainers of both sexes with having the skills necessary to deal with all their medical needs. The ultimate goal of this study is to investigate if athletes show discomfort towards a female athletic trainer and if those involved in the hiring process show a preference towards male ATCs.

#### *Research Questions*

- Do athletes feel more comfortable receiving treatment from an athletic trainer of the same or opposite sex?
- Do athletes expect a different degree of social support from female and male athletic trainers?
- Do athletic directors have a different degree of confidence in female and male athletic trainers?
- Do athletic directors feel it is important to have both genders represented as staff in the athletic training room?

*Definition of Terms*

- **Emotional Support:** when comfort and care is perceived as being provided by another individual (Barefeld, 1997).
- **Equity:** The state of being impartial, just, and fair (Coakley, 2009).
- **Gender Bias:** unfair treatment / actions / expectations of an individual or group of individuals based on attitudes towards the individual's sex (Coakley, 2009).
- **Health and Fitness Movement:** a focus on increased awareness and practice of physical fitness and a healthy diet (Coakley, 2009).
- **Human Resource Management Systems:** an organization within an institution that works on the recruitment, hiring, and management (Dickens, 1998).
- **Listening Support:** occurs when the speaker feels the other is listening without being judgmental or without the need to give advice (Barefeld, 1997).
- **Masculinity:** a characteristic/quality related to males (Coakley, 2009).
- **Motivational Support:** when an individual challenges another to be more creative, more excited, and more involved in an activity (Barefeld, 1997).
- **NATA:** National Athletic Trainer's Association, est. in 1950 (Shingles, 2000).
- **NCAA:** National Collegiate Athletics Association.
- **Professional Experience:** referring to the amount of time spent working hands on in the field as a certified Athletic Trainer.
- **Social Support:** emotional and physical comfort given from one individual to another. This includes: listening support, emotional support, motivational support, and appreciation (Barefeld, 1997).



- **Title IX:** a federal law prohibiting any gender discrimination in a federally funded education institution or activity, such as intercollegiate sports (Coakley, 2009).
- **WATC:** Women in Athletic Training Committee; investigates professional concerns regarding leadership and professional development of the athletic training profession and relays this information to NATA members for the purpose of improving the quality of the profession (Shingles, 2000).
- **Women's Rights Movement:** a period in history that focused on entitlement and freedom for females (Coakley, 2009).

### *Significance of this Study*

The significance of this study arises from the concerns of female athletic trainers regarding their status in the athletic training profession. Even though great improvements regarding the acceptance of women in health professions, including athletic training, have been made, many discrepancies still exist. A study done in 1997, by Kerssens et. al., claims patient preference regarding instrumental type job positions such as surgeons rarely show sex discrimination. As expected, patients showed a gender preference when the health conditions involved pathologies of an intimate nature. Some gender requests were also present when patients encountered psychosocial issues. When gender preferences were made, the participants' reasoning did not point towards gender discrimination. Comfort level during examination and ease of communication with a particular sex was the basis of reasoning for those participants who did request a specific gender (Kerssens et. al, 1997).

## Chapter 2

### Review of Literature

#### *Representation of Women in Athletic Careers*

The increase of female activity in sport has created a new generation of active women in the athletic training world. Even though the women's rights movement disproved the idea that a female's body was anatomically deficient for involvement in athletics, many still perceived women as physically inferior to men and this affected many opportunities for women in athletic training (Lopiano, 2000). Medical professionals today, unlike physicians in past decades, are paying attention to women's sports injuries since the increase of female involvement in sports. Orthopedists have realized that there are differences between the injuries that occur in men and women (Lopiano, 2000).

Despite this realization, the equal representation of women in the allied health professions is still limited. According to Arnold et. al., as of 1994, females only held 38% of athletic training job positions in high schools, 32% of clinical positions and 48% intercollegiate athletic training positions. The NATA's records show that the number of male and female athletic trainers working at secondary schools, hospitals, clinics, and recreational and youth sports were relatively equal in 2010; however, males still dominate job positions in professional sports, college sports, military, law enforcement, government and corporate settings. Out of 1,053 certified athletic trainers who were unemployed in 2010, females made up more than 70% of this population (NATA, 2010). The number of women pharmacists has shown only an 18% increase between 1985 and 2005. In 1985 women only made up 30% of all registered pharmacists (U.S. Department of Labor, Bureau of Labor Statistics, 2006). Today females still make up less than half of

all pharmacists. In 2005, females only made up 32% of all physicians and surgeons (U.S. Department of Labor, Bureau of Labor Statistics, 2006). While the physical therapy field is composed of 70 % licensed females, these women struggle with acquiring prestigious job positions and inequities in pay compared to males (American Physical Therapy Association, 2010). So far, the allied health profession to have the highest female population is registered nurses. Females made up 92% of all registered nurses in 2005 (U.S. Department of Labor, Bureau of Labor Statistics, 2006).

The inequity of assigning male athletic trainers to female sports teams is considered one of many underlying contributions to the abundance of female athlete injuries (Lopiano, 2000). A number of other factors, such as the failure to hire high-quality coaches for girls' teams, limited access to weight rooms and a decreased quality of athletic facilities provided to girls' teams contribute to athletic injuries among females as well. According to Acosta & Carpenter (2004), over half of women's sports teams had a male as a head coach. Out of all 8,402 head coaching positions in the NCAA, women only occupied 3,704 of these positions (Acosta & Carpenter, 2004). Even though this number increased since 2002 by 127 positions, women still hold a very small proportion of head coaching jobs at the intercollegiate level. Women are most likely to obtain a job as an assistant coach for NCAA women's athletics. As of 2004, women held 57.2% of paid assistant coaching positions for female sports in all divisions of the NCAA. However, women also hold 52.9% of unpaid assistant coaching jobs and this number has been increasing since 2002 (Acosta & Carpenter, 2004).

The outcome of female athletic injuries can be attributed to the quality of work provided by the athletic trainer hired (Lopiano, 2000). Hiring of the athletic trainers is not

always based on the quality of the athletic trainers applying for the position. Studies have shown that there are many athletic programs around the country that are gender biased toward male athletic trainers even if the female applicant can prove to be better equipped for the job (Lopiano, 2000). In Division I institutions, only 20.3% of head athletic trainers are females. Out of all full time head athletic trainers in NCAA, only 30% are females (Acosta & Carpenter, 2004). Athletic trainers are expected to ignore their own personal gender prejudices and treat any athlete that walks into the athletic training room the same; athletes should exemplify the same respect and so should organizations who hire athletic trainers. Gender ideologies should be put aside and each individual applying should be critiqued based on what they have to offer to an athletic program (Calabash, 2008).

By looking at the history of the National Athletic Training Association (NATA) alone we can see how women have been underrepresented from the beginning. There have been many strong women in our society who have been brave enough to go against the norms of society and create opportunities for all women; however, we still have not reached complete equality. The NATA was established in 1950. It wasn't until a long twenty years later on April 4, 1970 that the first woman, Doris Wickel, became certified by NATA. This was not because she was the first woman to try to become certified. Before this date NATA had grandfathered in a few women into the association but they were not allowed to have the title of certified at the time; instead they were simply recognized as members of the organization. This was the start of many inequalities in the athletic training world (Shingles, 2000).

*Concerns of Women in Athletic Training*

Katie Grove Ph, D., ATC/L challenged the inequities and personal issues with women in athletic training to disappear through the creation of the Women in Athletic Training Committee (WATC) Task Force. This committee had many missions, all working towards bringing members of NATA together to create a mutual perception of the needs within the profession. This group researched all the issues that concerned female members of the NATA. The WATC Task Force wanted to get a realistic idea about the concerns of women in athletic training so they conducted a survey. The survey results showed that 28% of women were frustrated with the lack of opportunities for certified women so the task force worked to create more employment positions. The survey also showed that females in athletic training feel the oppression of gender discrimination on a daily basis. Twenty-six percent of women were concerned with sex specific issues that come along with common gender ideologies. Twenty-four percent reported that men tend to stick together and network between each other. This leaves women out of the network and since athletic training is a field where who you know is sometimes more effective than what you know, this may cause many problems for women. Nineteen percent of women reported they were concerned with the salary differences between men and women. At the time of this study women were receiving \$10,000 less each year compared to their male counterparts (Staurowsky and Scriber, 1998). Overall women felt female athletic trainers are not viewed as having equal credibility in the profession even though they undergo the same education pathway (Shingles, 2000).

Later in 1997, the same WATC Task Force survey was distributed to NATA men. Their results were quite different, yet still supported that oppression is felt more prominently among the female athletic training population. The top concern of men had to do with quotas and affirmative action. Only 15% of men had concerns about their salaries and only 12% were concerned with a lack of job positions. These conditions were of much higher concern to women. Some men were concerned with lack of available job positions in the field, while women were concerned with their opportunity to receive placement in the available job openings while male applicants also existed (Shingles, 2000).

A survey conducted in 2002 by Fortune Magazine revealed that the concerns of female members of the NATA are similar to females who work as executives in other professions (Perez, 2002). For example, male physical therapists show higher expectations regarding their careers than their female counterparts. In a study performed by Johanson in 2007, it was determined that more male physical therapy students expect to get job positions over their female competitors. Male physical therapy students also expect to own a private office, become a manager, and receive a higher salary over other female applicants (Johanson, 2007).

### *The Progress of the WATC Task Force*

In an attempt to relieve NATA women of some of their concerns, the WATC Task Force worked to increase women's participation in all the job settings governed by NATA. The Task Force also worked towards providing better educational resources for all its members. This education included expression of the capabilities of females and

support for their equality in the profession. The task force provided a strong network of support to all women members of NATA (Shingles 2000). The WATC Task Force helped make the achievements of female athletic trainers today possible. In 2006, District IX of NATA elected its second female president, MaryBeth Horodyski. As of 2008, the University of Central Florida is one of the few universities to have a female head athletic who also oversees the football athletes (McLendon, 2008). Without the WATC's efforts, many of the aforementioned achievements may have never occurred. WATC Task force takes time every year to formally recognize women who are fighting gender discrimination in athletic training and becoming head athletic trainers of universities, becoming directors of athletic training educational programs, winning national awards, and getting inducted into the NATA Hall of Fame (McLendon, 2008).

### *Salary Inequity*

There are positive associations between highest degree earned, work setting and salary for both genders. Each year since 1982, women have been earning more bachelor's and master's degrees than men; however, males are making more money and they possess a majority of the job positions (National Center for Education Statistics, 2006). On the average, women with a bachelor's or master's degree receive almost 32% - 36% less per year than males with a degree of equal value (U.S. Department of Commerce, Census Bureau, 2004). Of all athletic training settings, more women are found in the high school setting. A study by Arnold et. al. (1994) unveiled that high school athletic trainers had the lowest salaries of all athletic training settings. According to Staurowsky and Scriber (1998), salaries of male and female athletic trainers in equal job positions

show a contrast with females receiving a significantly lower salary than males. In 1998, the average salary across all job settings for male athletic trainers was \$44,030 while females were only making an average of \$33,790. Even as raises were awarded for years of experience and loyalty to an institution, the salary gap between male and females is still present.

These salary differences are present among other professions as well; as a matter of fact they occur in almost every occupational category (Institute for Women's Policy Research, 2006). When median weekly earnings for all professions of both males and females were compared in 2004, the results showed that women were only earning 80.4% as much as males (U.S. Department of Labor, 2005). Athletic Training is not the only allied health profession to have salary differences between sexes. As of 2004, female registered nurses were making 8% less than male registered nurses. Nursing is a unique profession because females make up 91.6% of the total registered nurse population; however, these women are still receiving lower wages than the few males in the profession. Female physicians and surgeons suffer from even greater salary differences than nurses; females in these professions earn up to 39% less than their male colleagues (Institute for Women's Policy Research, 2006). Even women working in emergency medicine were making up to 14.4% less than their male co-workers in 2001 (Kristal, Randall-Kristal, & Thompson, 2002).

#### *The Effects of the Current Structure of Human Resource Management*

According to Moore (1999), the blame for gender inequities at the managerial level of sport organizations can be placed on the structure of the human resource management (HRM) systems. Documentation has shown that the traditional practices of



HRM support gender inequalities. Although the number of women possessing sport-employment positions has increased greatly, the sport industry is still dominated by white male leaders between the ages of 30 and 45 who continue to place females in subordinate job positions with low paying salaries and little opportunity for promotions (Delpy, 1998). Dickens (1998) brought attention to the fact that a majority of surveys administered to employees by HRM systems regarding workplace relations rarely address issues of gender equality; therefore, any problems involving gender segregation remain hidden. The manner in which HRM implements their policies actually helps support the trend of gender inequality rather than confronts it (Dickens, 1998).

A majority of business managers are men. HR literature recognizes that these men have assumptions regarding expectations of their workers which often include gender stereotypes (Dickens, 1998). Dickens (1998) demonstrated concern with the idea that male managers view women as having “lower organizational commitment because of their experiences as women” and how that this assumption comes into play during hiring and evaluation processes of employees. Commitment is often defined or measured by visible work hours and volunteered overtime. Those women who are mothers have responsibilities aside from work that take up to 70% of their time away from the office. This alone makes it more difficult for women to keep up with the traditional definitions of commitment which leaves women appearing less devoted compared to men (Dickens, 1998). Even though the government is working hard to pass and enforce legislation that forbids inequality for women in the work force, evidence shows that the HRM systems are working to keep the tradition of their companies and are winning against the legislation (Moore, 1999).

*Hiring Attributes Preferred by Employers*

A study done by Kahanov (2001) discovered that 48% of the individuals responsible for recruitment and hiring of athletic trainers are not certified athletic trainers themselves. It is common that athletic trainers' job positions are often decided by administrative professionals who do not have a complete understanding of the responsibilities necessary to work as an athletic trainer. For this reason they tend to value different hiring characteristics than those employers who are certified athletic trainers. In general when it comes to hiring any allied health professional, the applicant's behavioral habits are valued more than the technical skills they possess. The theory is that it is easier to teach an educated professional how to perform a new skill while it is often more difficult to teach behaviors such as cooperation and enthusiasm (RadSciences Group, 2007). According to the survey regarding allied health professional recruitment administered by the RadScience Group in 2007, managers have admitted to hiring a new employee based on that candidate's availability instead of comparing the actual quality of the candidates interviewed.

In a survey conducted by Kahanov and Andrews (2001), four primary hiring characteristics preferred by athletic training employers were assembled: educational and professional experience, work related attributes and personal characteristics. Employers consider many qualities when hiring including: an applicant's computer skills, master's degree, ability to acknowledge ones' limitations, professional membership, salary requirements, and quantitative skills. Despite all these criteria, personal attributes are still weighted the most; personal attributes were weighted at 25% of employer's total hiring criteria for all work settings. Personal characteristics include qualities such as self

confidence, interpersonal skills, assertiveness, maturity, ambition, communication, and leadership skills. Three out of the four main attributes examined by employers are unrelated to gender, however the most highly weighted hiring factor that institutions paid attention to was personal characteristics, which includes gender. These are all important qualities for an athletic trainer to have, however this personal category often also takes into account the applicant's gender (Kahanov & Andrews, 2001).

Seventy percent of other allied health professions from the hospital setting rated behavior as the most important hiring attribute (RadScience Group, 2007). According to RadScience Group's survey (2007), an applicant's personality and professional skills were only assessed during the interview process 7% - 8% of the time.

When Kahanov and Andrews (2001) looked at the different hiring attributes between work settings, the only setting to show any major difference in their strategy was professional sports; the major difference being that professional sports were the only setting that did not list problem solving skills and acknowledgement of one's limitations as important. This is also the work setting where most gender inequities are present. Out of 300,000 certified female athletic trainers in the field in 2003, only 62 worked in professional sports (Baranick, 2003). One of the contributors to this statistic is that personal attributes such as appearance and gender are of higher importance in professional sports (Kahanov & Andrews, 2001). Interview performance is also rated as highly important, but since gender bias still exists; therefore, females have to work harder to prove they are worthy of securing a position. Via Article VII of the Civil Rights Act of 1964, our society has recognized that it is illegal to include appearance and gender as criteria for employment; conversely, these personal characteristics are still being rated as

important by the employers of this study. The results of this study by Kahanov and Andrews (2001) provided useful information for athletic trainers to market themselves after graduation; however, the study also revealed that there are personal attributes that one has no control over, such as gender, which hold strong consideration during the hiring process.

### *Female Athletic Trainers and Professional Sports*

In 2008, out of a total of 18,700 NATA members, 44 percent of the members were female (Curran, 2008). Today, more than half of NATA's members are women, (NATA, 2010). It has become more common to see women as health care professionals in high school and college level sports but many women feel that it takes years of hard work and proving themselves before they gain even a slight chance to work in professional male sports. Professional sports tend to do most of their hiring based on connections or "who you know" according to a statement from Kim Cunningham, Head Athletic Trainer of the New York Saints of the Major Indoor Lacrosse League (Curran, 2008). American football, major league baseball, basketball and hockey are considered the United States' four main male-dominated professional sports. Even those who work for these programs admit that it is going to be tough for women to make a breakthrough because the males have created barriers based around traditional gender ideologies (Curran, 2008).

The head athletic trainer of the Dallas Cowboys stated for Curran (2008) that he does not doubt that women are qualified to work as athletic trainers in the pros but feels that there are three important factors that should be considered: facility floor plans, player's wives, and scared owners. Most professional teams have facilities with a

combined setting for their locker rooms, weight rooms, and medical facilities without the consideration of privacy. This is because they were not designed with the thought of a woman's presence. The issue between players' wives and a feminine distraction in the workplace arises from the intimate nature of the athletic training profession. Owners of professional teams play a role in preventing women to work in their sports because they fear taking the risk of bringing a female into their program. Owners justify their fear by claiming millions of dollars are at stake; they don't think bringing a woman in to simply increase their exposure to the professional world is worth the possible controversies that could arise (Curran, 2008).

The collegiate level has become very accepting of female athletic trainers; while only few efforts have been shown at the professional level. Professional baseball showed slight efforts when they hired a female orthopedic surgeon for the Baltimore Orioles. This woman, Michelle Andrews, M.D., became the very first woman to work for the Major League Baseball league as a health care professional. The Washington Capitals hockey team hired a female nutritionist over 5 year ago. Members of the team's staff reported that it took some time but she has now earned their trust and respect. When most men are hired, they usually have the staff and player's trust almost immediately. The Major Indoor Lacrosse League (MILL) has shown more extensive efforts by hiring 5 female athletic trainers to work on their team. The attitude of the MILL is they see female athletic trainers simply as professionals, and as professionals the MILL expects women to avoid any potential problems in the work place (Curran, 2008).

Drummond, et. al. (2007) determined the perception of unease towards female athletic trainers is most likely culturally based. Underlying cultural beliefs regarding

gender can lead to discomfort during treatment of intimate injuries such as those to the genital areas. Gender discrimination often becomes culturally, socially, and intellectually embedded into people's minds; this makes it hard to reform these thoughts (Drummond, 2007)

#### *Athlete Comfort Levels with Athletic Trainers*

Athletes have expressed the importance of maintaining a level of comfort between themselves and athletic trainers. In a study done by Drummond, et. al. in 2007, athletes reported feeling more comfortable with an athletic trainer of the same sex when receiving treatment for general medical conditions, injuries to the trunk, and gender-specific injuries. Discomfort was reported due to a feeling of embarrassment when discussing intimate conditions with an athletic trainer of the opposite sex. In the case of psychological care and injuries pertaining to the lower and upper extremities, only female athletes demonstrated a preference for an athletic trainer of the same sex, while the male athletes did not show any gender preference. These injuries are reported as less intimate so they pose less of a threat to athletes' comfort. Males who showed a gender preference when receiving psychological counseling usually preferred a female because they did not want to appear less masculine or get criticized as weak in the eyes of another male. Since injuries to the upper and lower extremities are most common in athletics, according to the results of Drummond's study, having a female as an athletic trainer would not disrupt the comfort levels of both male and female athletes most of the time. Even though female athletes seem to request female athletic trainers, males are still getting hired more often to work with female sports than female athletic trainers (Drummond, et. al., 2007).

Due to the regular interaction between athletic trainers and their athletes, an

athletic training room tends to become a relaxed social environment for all involved. Athletes and the sports medicine staff interact on almost a daily basis. Athletic trainers know they have the potential to encourage athletes and boost their self-esteem, and therefore agree it is important to build a rapport with their athletes so they can effectively prevent and treat injuries (Robbins & Rosenfeld, 2001). According to 89% of athletes, it is agreed this rapport is vital for an athlete to comply fully with their rehabilitation program (Drummond, Hostetter, & Ploeger, 2008).

The most recent president of the NATA is a woman, Marjorie J. Albohm, MS, ATC. Also, all national committees of the NATA have representation by at least one female (Shingles, 2000). Despite fluctuating feelings of discomfort in certain situations, the results of Drummond, et. al. unveiled that as a whole male and female athletes testify to having some degree of comfort with care provided by an athletic trainer of either sex. Athletes seem to consider their athletic trainer's years of experience and expertise as the most important characteristics that make them feel comfortable with an athletic trainer. Sex of an athletic trainer does not appear to affect an athlete's confidence with an athletic trainer (Drummond, et. al., 2007).

### *Social Support as a Domain of Athletic Training*

The time period between an initial injury and return to play can consist of many doctor appointments, medical testing, operations, and rehabilitation. Since athletic trainers are an athlete's most immediate access to health care, they often try to be friendly with their athletes in hope of illustrating to athletes that they are easily approachable. Athletic trainers also behave in this manner to create a social support system in the

athletic training room. According to Barefield and McCallister (1997), social support is defined as an interaction between individuals that leads to an enhancement of the overall well-being of the addressee. This social support consists of listening, emotional support, emotional challenge, confirming reality, appreciating the athlete's efforts, challenging the athlete with new activities, and personal services. Social support can be easily measured by the amount of quality individuals a person can rely on during a phase of distress (Yang, et. al., 2010). Studies have proven that this social support is necessary for successful recovery from health problems because it has the ability to decrease stress and motivate an athlete through out the rehabilitation process (Yang, et. al., 2010). Without this social support athletes have reported to have a poor recovery and difficulties managing stress (Barefield and McCallister, 1997). The results of Robbins' and Rosenfeld's (2001) study supports that those athletes who have experienced rehabilitating an injury, claim social support from an athletic trainer is capable of contributing to their well-being more than support from any other member of a collegiate institution. However, in order for a support system to be most effective there must be a match between an athlete's needs and what the athletic trainer is willing to provide.

It is important to recognize that males and females react differently to injury and expect different types of social support during recovery process. In a study done by Yang, et. al. (2010), the social support preferences of male and female athletes was examined. The results of the study revealed that females actually rely heavily on social support from their friends pre- and post-injury but expected to receive more support from athletic trainers and coaches post-injury. Males relied more on social support from athletic trainers and coaches as opposed to their peers while coping with an injury. Male athletes



showed an increase in satisfaction with their athletic trainer's support after an injury; however, altogether males were less satisfied with the support they received from athletic trainers when compared to female athletes. Males appear to gain more support from their coaches post injury than their female counterparts. This study closely examined the difference sources of social support for athletes when dealing with an injury and none of the results revealed any preference in the sex of the athletic trainer, coach, physician, friend or family member (Yang, et. al., 2010).

Both male and female athletes expect their athletic trainer to provide them with emotional and listening support. According the results of Barefield and McCallister's study in 1997, age, professional experience and gender of an athletic trainer does not impact the type or quality of social support they expect to receive. Robbins and Rosenfeld (2001) also concluded that athletes received social support from all of the eight categories regardless of the sex of the athletic trainer. In the case of Robbins and Rosenfeld (2001), satisfaction between coaches and athletic trainers from pre-injury and rehabilitation were measured. Athletes suggested that they receive more support from athletic trainers than their coaches with no regard to gender. Athletes also stated they feel receiving this support is most important during rehabilitation rather than pre-injury; however, in both studies, athletes claimed to not have a preference as to where this support came from as long as they were receiving it.

*Athletes' Perceived Quality of Care*

Drummond, Hostetter, and Ploeger (2008) explored athletes' influence of gender on the perceived quality of care received by an athletic trainer. Responses supported that neither the sex of athletic trainer nor the athlete was a contributor to the quality of care. Athletes still reported a level of discomfort when discussing gender specific injuries with an athletic trainer of the opposite sex, but this discomfort did not alter their perception of the quality of treatment. According to the results of this study, athletes remain neutral with regards to gender preference for the discussion of injuries. The athletic trainer's career experience still remained a main contributor in athletes' confidence (Drummond, Hostetter, & Ploeger, 2008).

*Athlete Satisfaction*

A study performed by Unruh, et. al. (2005) investigated the satisfaction of intercollegiate student athletes with their athletic trainers. Unruh, et. al.(2005) proved that the competitive level of athletes does not effect the outcome of their satisfaction in the athletic training room. Athletes competing in different collegiate divisions showed similar satisfaction with their athletic trainers. According to athletes, the quality of treatment received by athletic trainers was affected more by the profile level of the sport they worked with rather than the sex of the athletic trainer. This study showed that athletic trainers of both sexes are providing more attention to athletes in high profile sports than those in other sports. Athletes in high profile sports such as football, baseball, and men's and women's basketball, had more satisfaction than those athletes in lower profile sports (Unruh, et. al., 2005). The credentials for hiring in high profile sports are

stricter than those of low profile sports. Aside from profile level, female athletes from all sports demonstrated more satisfaction than male athletes. The ultimate outcome of Unruh's investigation was that female athletes in high profile sports reported the highest satisfaction scores of all athletes, while males in low profile sports had the lowest satisfaction of all the athletes questioned (Unruh, et. al., 2005). This continues to align with the theory that traditional gender ideologies are affecting athletic trainers. In this case, female athletes are more accepting of their athletic trainer than males and this may impact hiring practices.

### *Sexual Harassment*

Sexual harassment occurs in all professions. The personal nature between co-workers and between the professional and its patients makes sexual harassment an issue in health care. Although most complaints of sexual harassment in all professions are reported by females; complaints by males still make up 10% of all sexual harassment cases (Fiedler & Hamby, 2000). Medical students are also exposed to sexual harassment during their clinical clerkship hours. According to Rademakers et. al. (2008), 25% of female students studying medicine report experiencing at least one incident of sexual harassment through out their experience as a student. About 7% of these female students claimed to experience sexual harassment at least 3 or more times. In this study, male patients were doing the offending in 66% of the cases, while the remaining 34% of the cases were the fault of male doctors, mentors and residents. Only one case from this study reported a female offender (Rademakers et. al., 2008). These results compare to those of other studies that conclude that a majority of sexual harassment cases reported

involve males offending females.

Currently, nursing maintains the highest rate of reported sexual harassment cases (Madison & Minichiello, 2001). In a study performed by Bronner, Peretz, and Ehrenfeld in 2003, 90% of the nurses they surveyed reported exposure to at least one type of sexual harassment during their career as a registered nurse.

Sexual harassment has also been reported in the field of physical therapy. McComas et. al. questioned physical therapists and physical therapy students regarding sexual harassment. The results of this study depicted that some form of unwanted sexual behavior is imposed upon 80% of female physical therapists and physical therapy students (McComas et. al., 1993).

The issue of sexual harassment is also a major concern of women in athletic training. There was a poll taken in 1994 by the NATA Women in Athletic Training Committee. This study focused strictly on sexual harassment cases in the field of athletic training. The results showed, out of a group of one thousand female certified athletic trainers in the U.S., 37% reported they have been a victim of sexual harassment while at work. The Women in Athletic Training Committee (WATC) and NATA have been working toward prevention of sexual harassment in the field. The WATC has printed an educational brochure to increase awareness of the seriousness of sexual harassment. The National Athletic Training Association released a position statement that stresses equal opportunity and zero tolerance for sexual discrimination and/or sexual harassment (Calabash, 2008).

Traditional ideologies about gender still exist in athletics. Currently masculinity is associated with aggression, physical domination, risking the safety of yourself and others,

and breaking norms in order to succeed in life (Coakley, 2009). If the definition of masculinity was based on inclusion, integrity, empathy, and forming relationships then women might have a better chance at being accepted into the sports world as athletic trainers. The view of femininity is that women are fragile and need protecting (Coakley, 2009). If this definition was altered to express that women are strong in their own form then women may have better opportunities to explore their range of physical abilities and make great accomplishments in the world of sport and in athletic training.

The significance of this study arises from the concerns of female athletic trainers regarding their status in the work place. The ultimate goal of this study is to increase awareness of discrimination towards female athletic trainers, to promote gender equality in the field of athletic training and to promote an acceptance of females as athletic trainers.

## Chapter 3

### Methods

#### *Participants*

There were two groups of participants in this study; student athletes and athletic directors. Both male and female student athletes were selected from 20 Division II collegiate institutions from the southeast United States. All institutions from the Sun Conference and the Sunshine State Conference were invited to participate. An institution's participation was dependent on the willingness of the athletic trainers to distribute the surveys to their student athletes. All athletic directors and assistant athletic directors (total: 25) from the Division II institutions of the Sunshine State and the Sun Conference were invited to participate in this study.

#### *Instrumentation*

Survey monkey was used to send an e-mail to the athletic directors to request their participation to fill the survey. Packets with the surveys for the student athletes were mailed to the athletic trainers of the participating institutions from the Sunshine State conference and the Sun conference. A list of current athletic trainers and athletic directors are posted in the athletics' staff directories for all institutions. The e-mail addresses of all athletic trainers and athletic directors can be accessed by the public on every institution's website; the researcher accessed the e-mail addresses from the appropriate public websites.

Complete packets with surveys, cover letters, and blank envelopes were mailed to the athletic trainers. The athletes were given 1 survey, 1 cover letter and 1 envelope. The athletes placed completed surveys in a sealed envelope and placed their envelope in a

larger shipping envelope that was pre-addressed to the researcher. This envelope acted as a drop box for the student athlete surveys. Once all surveys were returned, a student athlete was instructed to seal the mailing envelope and return it to the athletic trainer. About 200 surveys were distributed to student athletes with hopes of having a 50% return rate.

Each survey for both groups included a cover letter that assured the participants that their identity will remain anonymous and that there is no harm whether they accepted or declined the invitation to participate in this study.

### *Procedures*

Two separate, but similar, questionnaires were developed, one for student athletes and one for athletic directors. The questionnaire for student athletes measured comfort levels with same sex and opposite sex athletic trainers. The questionnaire also proposed situations related to common athletic injuries, sex specific conditions, and emergency scenarios. Questions regarding athletes' expectations of an athletic trainer's skills regarding social support were also included. The questionnaire designed for athletic directors was comprised of scenarios that commonly arise in athletic training. The athletic directors were asked to express their comfort levels and gender preference in these situations. The questions were hypothetical / general scenarios. No specific details that could possibly identify an employee or employer were included in the questionnaire for athletic directors.

A pilot study was performed to examine the validity of the contents of the questionnaire. The pilot study was completed by distributing both questionnaires to athletic directors and student athletes from colleges and universities with in Miami-Dade

County. To ensure that the athletes participating had valid experience to answer the questions, the first item on the questionnaire was: “During your college athletic career, have you sustained an injury requiring the services of an athletic trainer?”

### *Design and Analysis*

Two separate, but similar, questionnaires were developed, one for student athletes and one for athletic directors. All questions on the student athlete survey had two parts. The first response to each question was answered using a 5-point Likert Scale; the second part of each question used a multiple choice response to define a reason for the initial response. A matrix design was used to group questions into categories of comfort level and social support expectations. Comfort level questions were rated on a scale of 1 – 5 with 1 being very uncomfortable and 5 very comfortable. Social support was also given a score of 1 – 5 with 1 representing very little support expected and 5 representing a great deal of support expected. A response of 3 represented a neutral position in all cases. Responses for part II of each question were divided into categories pertaining to gender, confidence in the athletic trainer’s skills, and years of experience of the athletic trainer. Means and standard deviations were calculated for each individual item on the questionnaires to estimate an idea of how athletes feel about each situation in question. The means and standard deviations of all the questions combined were calculated to estimate average expectation of social support and average comfort levels of athletes with athletic trainers.

The questionnaire for athletic directors was also divided into two parts. The first part was constructed of scenarios that commonly arise in athletic training. Athletic directors were asked to report their level of confidence with an athletic trainer of both



sexes in each situation. The second part of the questionnaire for athletic directors was composed of questions related to gender preference.

All questions on the athletic director survey also had two parts. Just like the student athlete survey, the first response for each question was answered using a 5-point Likert Scale; while the second part used a multiple choice response to define a reason for the respondent's initial answer. The matrix design was maintained; however, the questions were grouped into categories of confidence level and importance of gender selection of athletic trainers under certain scenarios. Confidence level questions were rated on a scale of 1 – 5 with 1 being very unconfident and 5 very confident. Gender specific importance was given a score of 1 – 5 with 1 representing very little importance and 5 representing a great deal of importance. Reason responses were divided into categories pertaining to perceived athlete comfort levels with the gender of his or her athletic trainer, different physical abilities between different sex athletic trainers, differences between males' and females' ability to provide social support and years of experience of the athletic trainer.

### *Statistical Analysis*

Means and standard deviations were calculated for each individual item on the questionnaires to estimate an idea of how athletes and athletic directors feel about each separate situation in question. An overall mean for each entire survey was also calculated to understand the general acceptance of female athletic trainers among athletic directors and student athletes.

## Chapter 4

## Results

The purpose of this study was to investigate if there was a difference in gender acceptance of an athletic trainer between student athletes and athletic directors. This study had a 44% return rate, with 87 completed surveys out of the 200 distributed to student athletes. Out of these 87 student athletes, 45 were female and 42 were male. A Repeated Measures ANOVA was used to determine any interaction between genders of the student athletes and compare the results for male and female athletes regarding an athletic trainer of the same and opposite sex. The results indicated that student athletes feel very comfortable receiving treatment from an athletic trainer of either the same or the opposite sex. Discussing injuries involving the genitalia was the only condition where the athletes expressed discomfort (See Table 1).

Part I	Gender of Athletic Trainer	Male	Female	All Athletes
Upper Extremity	Opposite	4.71 (.602)	4.64 (.532)	4.67 (.565)
	Same	4.76 (.538)	4.73 (.499)	4.74 (.515)
Lower Extremity	Opposite	4.76 (.538)	4.64 (.613)	4.69 (.578)
	Same	4.63 (.799)	4.66 (.645)	4.65 (.719)
General Medical	Opposite	4.68 (.567)	4.60 (.728)	4.64 (.652)
	Same	4.71 (.559)	4.74 (.539)	4.73 (.546)
Life Threatening	Opposite	4.54 (.711)	4.66 (.680)	4.60 (.694)
	Same	4.59 (.670)	4.61 (.722)	4.60 (.694)
Genitalia	Opposite	*3.59 (1.224)	*2.50 (1.303)	*3.02 (1.371)
	Same	*3.73 (1.141)	*3.70 (1.424)	*3.72 (1.287)
<b>Part II</b>				
Listening Support	Opposite	4.31 (.975)	3.98 (1.089)	4.14 (1.042)
	Same	4.36 (.821)	4.16 (1.077)	4.26 (.960)
Emotional Support	Opposite	4.07 (.921)	3.48 (1.248)	3.77 (1.134)
	Same	4.00 (.988)	4.00 (1.201)	4.00 (1.095)
Appreciation	Opposite	4.29 (.805)	3.82 (1.187)	4.05 (1.039)
	Same	4.29 (.805)	3.86 (1.173)	4.07 (1.027)
Motivational Support	Opposite	4.36 (.906)	3.95 (1.140)	4.15 (1.046)
	Same	4.38 (.795)	4.00 (1.100)	4.19 (.976)

Table 1: Mean (Standard Deviations) for each question on the student athlete surveys determined by Likert Scale ratings: 1 = very uncomfortable; 5 = very comfortable.

\*NOTE: Injuries to the genitalia were the only condition where athletes expressed feelings of discomfort.

Male and female athletes feel very comfortable with an athletic trainer of either sex when it comes to receiving treatment for an injury to the upper (ie. elbow or shoulder) and lower extremity (ie. knee or ankle). There was no significant interaction between genders of student athletes and no significant difference between an athletic trainer of the same or opposite sex (See Table 1).

When it comes to discussing general medical conditions, such as a cold or flu, with an athletic trainer, athletes felt comfortable with same and opposite sex athletic trainers, but had higher levels of comfort ( $F(1, 82) = 4.562; p < .05$ ) with an athletic trainer of the same sex. There was no significant interaction between the genders of student athletes (See Table 1).

Even in the case of a life threatening situation athletes did not show a preference towards a specific gender of athletic trainer and there was no interaction between the male and female student athletes and their comfort levels with same or opposite sex athletic trainers. Both male and female athletes reported being very comfortable receiving treatment for a life threatening situation from an athletic trainer of both the same and the opposite sex (See Table 1).

The only situation where athletes reported any discomfort was with receiving treatment or discussing injuries to the genitalia. There was a significant interaction between the genders of student athletes and the sex of the athletic trainers ( $F(1, 83) = 12.786; p < .001$ ). Male athletes report feeling more comfortable than female athletes with an athletic trainer of the opposite sex; however, regardless of the sex of the athletic trainer, female athletes feel less comfortable than male athletes when receiving treatment for an injury to the genitalia ( $F(1, 83) = 5.590; p < .05$ ). There was also a main effect for

all athletes for an athletic trainer of the same and opposite sex. Overall, all athletes feel less comfortable discussing injuries to the genitalia with an athletic trainer of the opposite sex ( $F(1, 83) = 20.836; p < .001$ ). Male athletes defended their responses by explaining that they prefer to not have to discuss these types of injuries at all but if it becomes necessary they do not necessarily have a preference toward a specific gender. Some female athletes explained that their discomfort was directly related to the gender of the athletic trainer, in general they prefer discussing these issues with an athletic trainer of the same sex.

When it comes to social support student athletes expect a great deal of support from their athletic trainer without regard to gender. There was no significant interaction between male and female athletes and the gender of the athletic trainer in regards to the degree of non-judgmental listening support they expect to receive from athletic trainers and there was no main effect for an athletic trainer of the same or opposite sex for listening support. There were also no significant main effects for gender of athlete or gender of athletic trainer.

Athletes' expectations of caring emotional support from their athletic trainers showed a significant interaction ( $F(1, 84) = 9.404; p < .01$ ) between male and female athletes (See Figure 1). Male athletes rated athletic trainers of the opposite sex significantly higher on caring and emotional support than female athletes rated athletic trainers of the opposite sex. Although male athletes rated the same sex athletic trainer with lower expectations than the opposite sex, both sexes of athletes rated a same sex athletic trainer with equal expectations. There was also a significant main effect ( $F(1, 84) = 5.425; p < .05$ ) for opposite and same sex athletic trainers. It appears that all athletes

expect more emotional support from a female athletic trainer (See Figure 1).

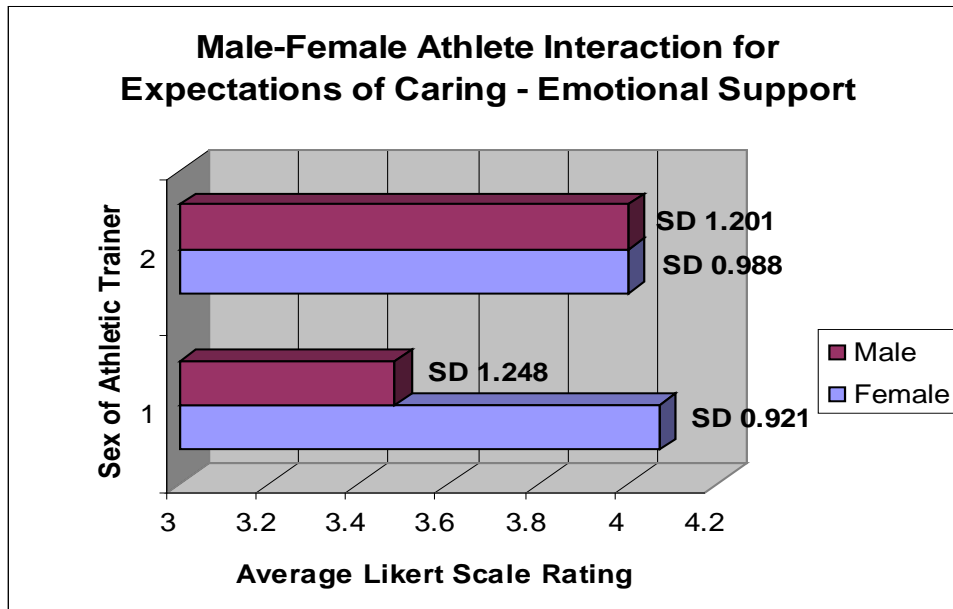


Figure 1: Male-Female athlete interaction for expectations of athletic trainers regarding caring emotional support.

Student athletes showed no interaction between the gender of athletes and the gender of athletic trainers and no significant differences between opposite and same sex athletic trainers for their expectations regarding appreciation for athletes' hard work in the athletic training room. Although women do feel significantly less appreciated overall ( $F(1, 84) = 4.179; p < .05$ ) for their hard work regardless of the sex of their athletic trainer. There was no significant interaction and no significant difference for expectations of motivational support between gender of athletes and sex of athletic trainers.

Of the 25 athletic directors from the Sun Conference and Sunshine State Conference, a total of 12, 10 male and 2 female, were willing to participate in this study. All the athletic directors reported actively taking part in the interviewing and hiring process of the athletic trainers at their institution. In the past 10 years, a total of 71 athletic trainers have been hired by the 12 participating institutions and 48% of these

hired athletic trainers were female. Overall, athletic directors appear to have a great deal of confidence in both male and female athletic trainers. One athletic director expressed more confidence in a male athletic trainer for the rehabilitation of injuries, although they still expressed a great deal of confidence in female athletic trainers. Athletic directors also report feeling more confident in female athletic trainers for demonstrating leadership skills in the athletic training room, but in general athletic directors still feel confident in both sexes to act as leaders (See Figure 2). Athletic directors feel slightly less confident in both sexes displaying motivational support (See Figure 3) and non-judgmental listening support (See Figure 4). Athletic directors expressed that they feel the ability to provide appropriate levels of support is dependent on an individual’s personality and experience in the field.

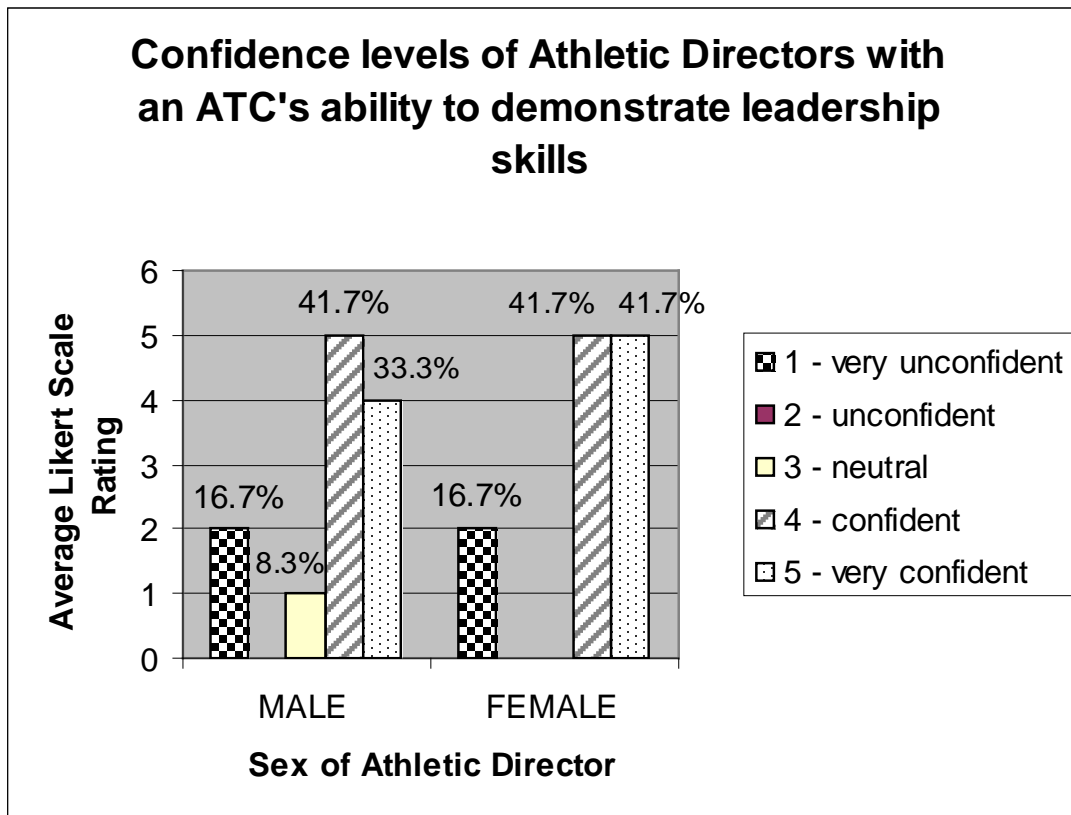


Figure 2: Athletic Directors’ confidence levels with athletic trainer’s ability to demonstrate leadership skills.

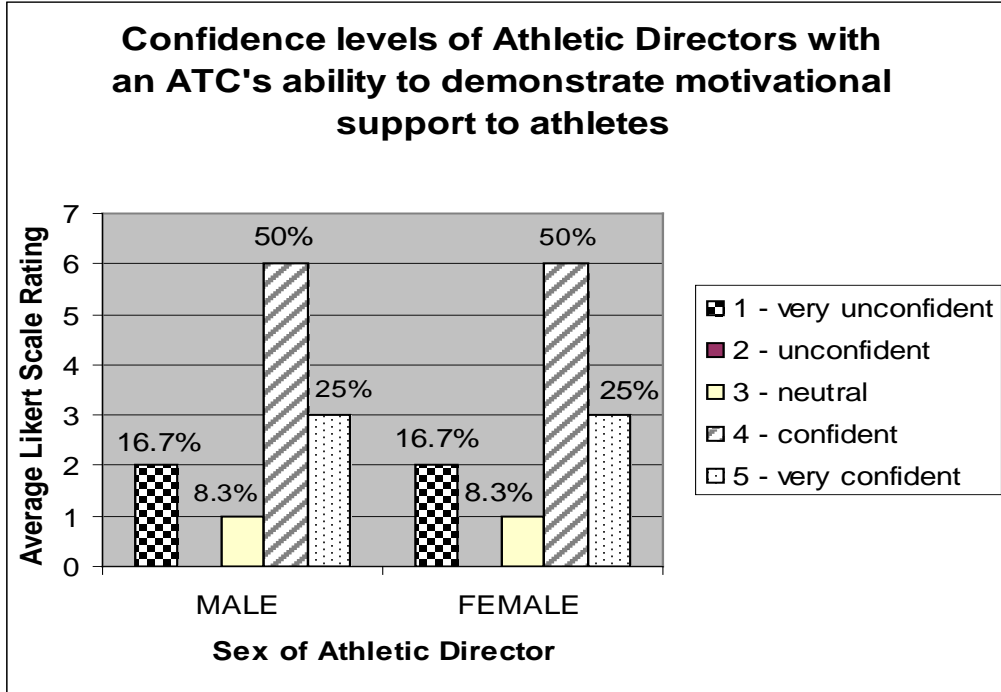


Figure 3: Athletic Director’s confidence levels with athletic trainer’s ability to demonstrate motivation support.

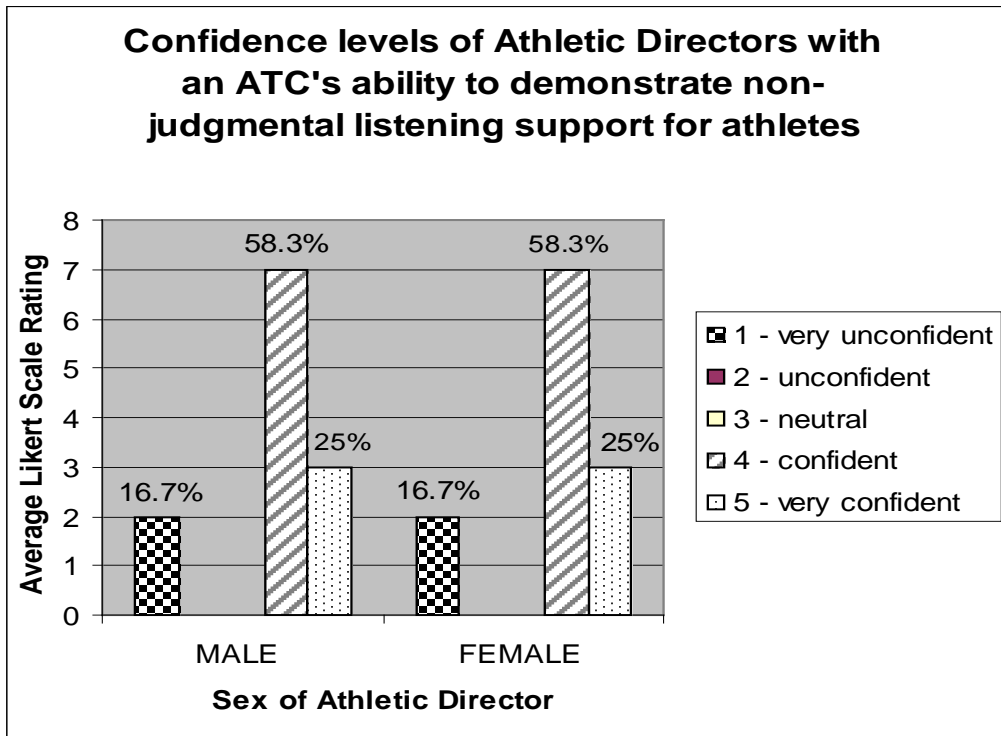


Figure 4: Athletic Director’s confidence levels with athletic trainer’s ability to Demonstrate non-judgmental listening support.

Forty-one percent of athletic directors feel that it is only somewhat important to have the head and assistant athletic trainers at their institution be of the opposite sex (See Figure 5). They explained that they do not feel gender defines competence so it is not very important to have both a male and female in order for the athletic training room to function properly, but some athletic directors feel that having a representation of both sexes on staff can help keep balance in the athletic training room and help support athletes comfort levels because some athletes relate better to one sex over another. Forty-one percent of athletic directors do not feel it is important to have a male athletic trainer to male sports teams (See Figure 6); however, they do feel it is somewhat important to have a female athletic trainer assigned to their female sport teams (See Figure 7). Some athletic directors reported that having a same sex athletic trainer can help head off potential problems with traveling and athlete comfort levels during treatments.

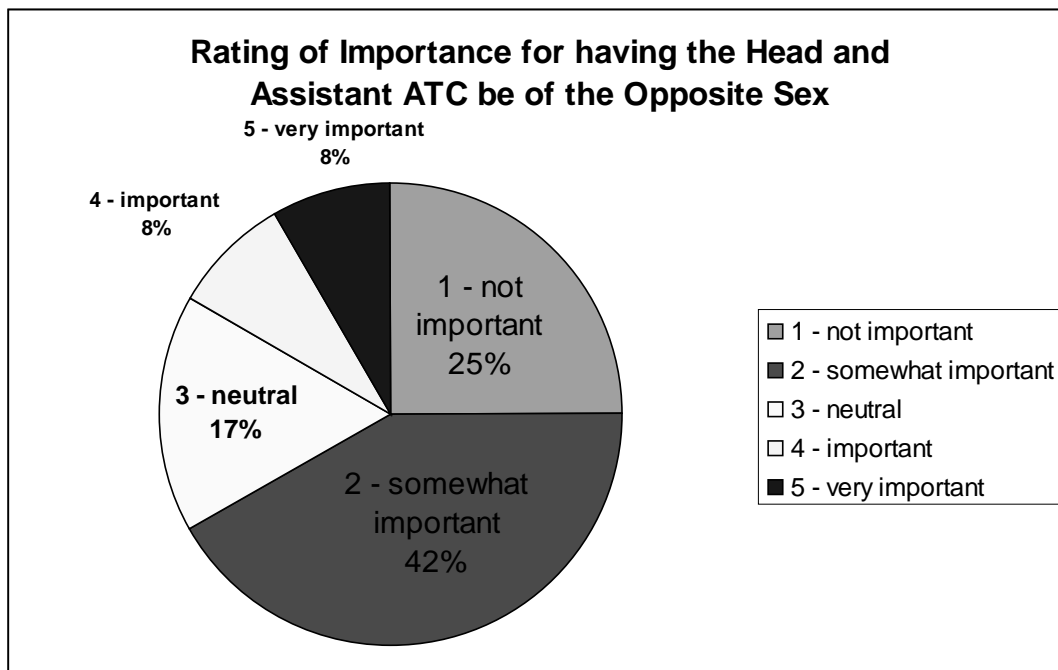


Figure 5: Athletic directors' response to have both sexes represented on their athletic training staff.



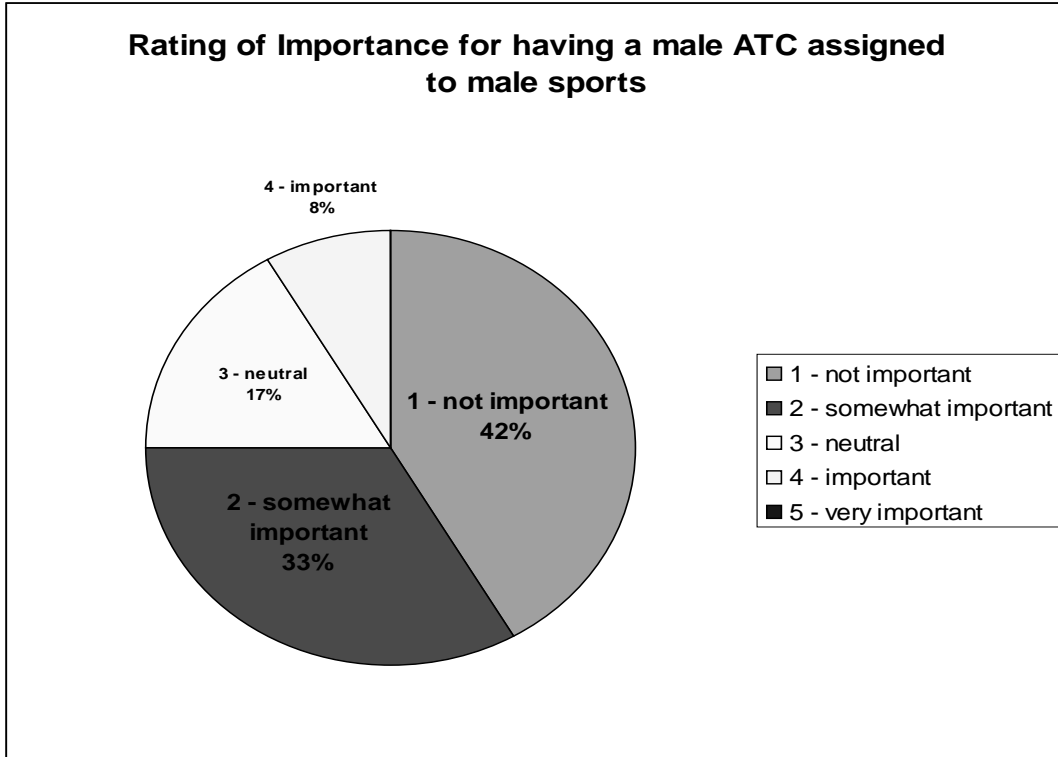


Figure 6: Athletic directors' response to importance of assigning a male ATC to their male sports.

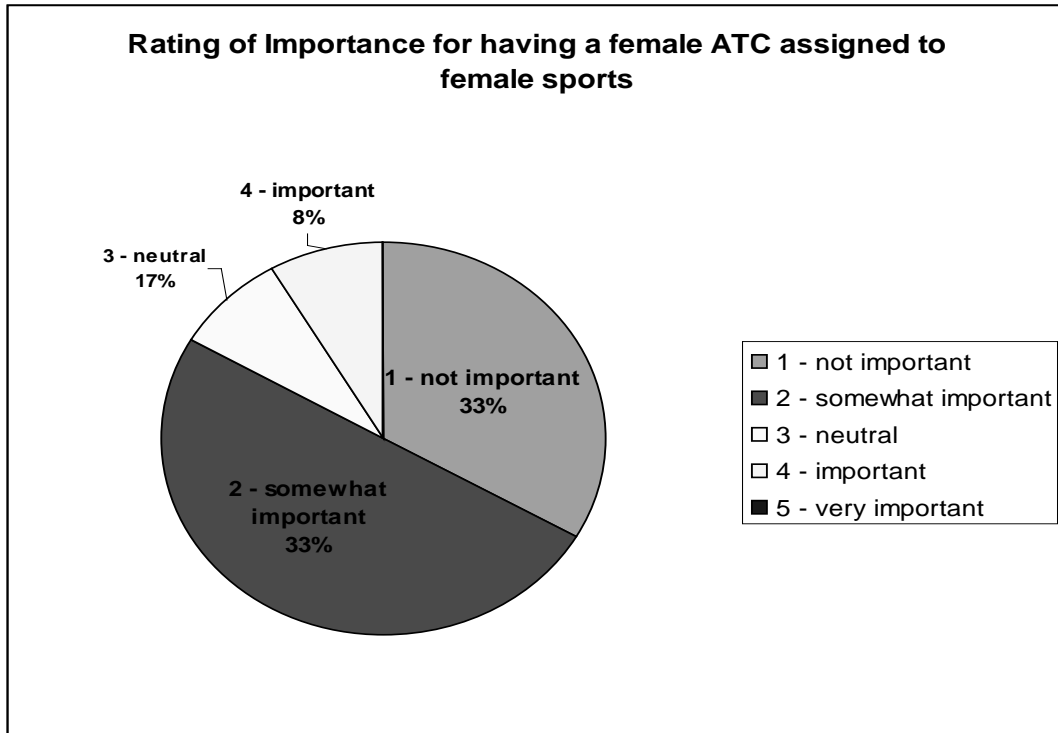


Figure 7: Athletic directors' response to importance of assigning a female ATC to female sports teams.

Overall, the results of this study indicate that student athletes do not demonstrate a preference towards an athletic trainer of the same or opposite sex except for when receiving treatment for an injury to the genitalia in which case most athletes feel more comfortable with an athletic trainer of the same sex. It appears that athletic directors feel relatively confident with both male and female athletic trainers working at their institution. Although athletic directors don't seem to consider having both a male and female athletic trainer on staff very important, they do feel it could be somewhat beneficial to have a same sex athletic trainer assigned to their sports teams because they feel student athletes could be more comfortable under these conditions.

## Chapter 5

### Discussion

The results of this study show that athletes feel very comfortable with an athletic trainer of either sex and athletic directors express strong confident levels with both male and female athletic trainers. According to the results of this study, athletic directors do not know that their student athletes feel very comfortable with both sex athletic trainers a majority of the time. Although athletic directors did not report that they feel it is extremely important to have both sexes represented on the athletic training staff, they explained verbally that having both sexes on staff can keep a neutral balance between the sexes within the athletic training room. Athletic directors feel certain athletes relate better and feel more comfortable with one sex over the other and therefore feel having both sexes on staff could be beneficial. Although, from this study, it can not be determined which institutions hired both male and female athletic trainers in the past 10 years; the surveys show that 48% of all athletic trainers hired by the participating institutions were female. This could suggest that athletic directors are trying to keep a near 50/50 balance of both genders in their athletic training rooms. It could have been more beneficial to investigate the hiring histories of each institution more in depth. Even though the representation of both gender athletic trainers is almost equal overall at the intercollegiate level, it would be interesting to see if there are specific institutions that have been hiring a majority of males or a majority of females and see if there is reasoning behind it since athletic directors appear to be confident with both males and females as athletic trainers.

Some responses by athletic directors indicated that they don't fully understand all the competencies athletic trainers are educated in their accredited programs. For example,

athletic directors have confidence with athletic trainers of either gender discussing with student athletes general medical conditions such as the common cold; however, some athletic directors expressed that they felt the treatment of these conditions is the responsibility of the school nurse and not the athletic training staff. It is important that athletic directors understand that even though a school nurse is available to all students, athletic trainers are the most convenient, immediate line of medical services for student athletes. According to our surveys, athletes feel very comfortable with athletic trainers treating general medical conditions and therefore will most likely approach their athletic trainer first with any questions regarding illness. It is important that athletic directors understand that athletic trainers are educated in identification and basic treatment of general medical conditions and are also educated on how to recognize when a condition may require a referral to another medical professional.

A significant element in the purpose of this study was to help ease the concerns of current female athletic trainers in the workplace. It is important to note that the representation of female athletic trainers in Division II institutions within the Southeast United States showed an increase of 24.9% since the study done by Acosta and Carpenter in 2004. At the time of their study, Division II institutions across the nation had only 24.1% female head athletic trainers. Even though the results of this study did not define the hiring statistics for head and assistant athletic trainers, the results of the survey do show that female athletic trainers represent approximately 48% of all athletic trainers hired in the past 10 years at the Division II intercollegiate level which is still a great improvement from the results of Acosta and Carpenter (2004).

Another important element in the purpose of this study was to identify the current

student athlete comfort levels with female athletic trainers. The results show that over the years athletes have become more comfortable with athletic trainers of both the same and opposite sex. In a study conducted by Drummond, et. al. in 2007, athletes reported feeling more comfortable with an athletic trainer of the same sex when receiving treatment for general medical conditions, injuries to the trunk, and gender-specific injuries. In this research study, the female athletes still reported feeling more comfortable receiving treatment with an athletic trainer of the same sex and that male athletes prefer to not discuss injuries involving the genitalia with an athletic trainer of either sex. This could indicate that it is simply the private nature of these injuries that makes athletes express no particular preference in the sex of their athletic trainer because in all other categories athletes do not demonstrate any feelings of discomfort with any other medical condition.

These results differed from Drummond et. al.'s (2007) study in a number of other ways. In this study, the athletes surveyed felt comfortable with either sex athletic trainer when discussing general medical conditions while the athletes who reported for Drummond, et. al. (2007) claimed to feel more comfortable with an athletic trainer of the same sex. Also, female athletes in the study by Drummond et. al. demonstrated a preference for an athletic trainer of the same sex for treatment of injuries pertaining to the lower and upper extremities; while all the student athletes in this current study expressed feeling very comfortable with an athletic trainer of either sex. Just like the results from Drummond, Hostetter, & Ploeger (2008), the athletic trainer's career experience remained a main contributor to an athlete's confidence level with their athletic trainer. Gender did not play a role in athletes' comfort levels with an athletic trainer. According

to the results of this study, having a female as an athletic trainer in the collegiate setting would not disrupt the comfort levels of either male or female athletes.

The purpose of questioning athletes about their expectations with different aspects of social support was to get a general idea of how socially comfortable athletes feel with athletic trainers of both sexes. Overall athletes feel confident with either a male or female athletic trainer providing social support. Some athletes reported that they didn't feel that emotional and motivational support was the responsibility of the athletic trainer; however, this is actually an important domain of athletic training. Previous studies have proven that proper social support is necessary for a successful recovery from health issues because it has the ability to decrease stress and motivate an athlete through out the rehabilitation process (Yang, et. al., 2010). Athletic trainers are allied health professionals who are expected to do more than just treat the physical aspects of injury. Athletic trainers must be aware of the emotional stresses that an athlete can endure when they suffer from an injury. This response from student athletes may indicate that more could be done to educate athletes on the complete curriculum of an athletic trainer and the responsibilities they are trained to fulfill. The time period between an initial injury and return to play can consist of many doctor appointments, medical testing, operations, and rehabilitation. Since athletic trainers are an athlete's most immediate access to health care it is important that athletes put trust in their athletic trainer in order to facilitate the healing process. Understanding the full capabilities of their athletic trainer could aid in building trust between a student athlete and their athletic trainer.

In the study by Barefield and McCallister's in 1997, athletes said that age, professional experience and gender of an athletic trainer does not impact the type or

quality of social support they expect to receive. More currently, athletes have slightly different expectations between genders of athletic trainers that were fairly consistent with other studies regarding athletes' expectations of social support from athletic trainers. In the recent study by Yang (2010), females relied more on their friends for social support but still expected their athletic trainers to provide motivational support throughout the healing process, while male athletes rely more on athletic trainers for support during an injury. This study shows that male athletes don't only rely on athletic trainers for support, but they expect to receive more emotional and caring support from female athletic trainers. This study also found that females expect less appreciation and support overall from all athletic trainers compared to male athletes. This could indicate that female athletes simply prefer talking to their friends, family, and teammates about the emotional aspects of dealing with injury. Athletic trainers should keep this in mind when rehabilitating female athletes. In order to insure that female athletes are receiving proper social support during rehabilitation, athletic trainers should be supportive and promote the involvement of friends, family and teammates. When dealing with male athletes, male athletic trainers should understand that male athletes do not expect as much support from them and therefore they may need to work harder to prove to male athletes that they can be relied on. Although studies suggest that athletes expect athletic trainers to be willing to provide emotional support whenever necessary, it is important for athletic trainers to be aware that athletes do not expect to receive the same quality of support from athletic trainers of the opposite sex so these situations should be approached with caution and extra effort to relate to athletes of the opposite sex.

*Suggestions for Further Research*

This study could have better defined the overall comfort level of athletes if it had been conducted across all divisions of intercollegiate athletics and professional sports. Since higher profile sport leagues are where the majority of underrepresentation of female athletic trainers exists (Baranick, 2003), it could be beneficial to repeat this study within professional sports to examine the comfort levels of professional athletes. It would be interesting to see if there is a difference in comfort levels with female athletic trainers between professional and intercollegiate athletes. Since there are fewer women hired to work in professional leagues it is difficult not to assume that the hiring committees have a gender preference towards male athletic trainers (Baranick, 2003). Investigating gender preferences and confidence levels among the hiring committees of professional sports could possibly help explain why females are underrepresented as athletic trainers in professional sports.

It is possible a difference in comfort levels with female athletic trainers exists between Division I and Division II athletes. The competitive stress level may be less at the Division II level compared to Division I. It is possible that competitive stress levels among coaches and student athletes can be imposed on the athletic trainer as well. If the stress on athletic trainers is increased it could affect how they react socially in the athletic training room. A more relaxed relationship between coaches, athletic trainers, and student athletes can possibly lower stress levels on athletic trainers and could allow them to be more relaxed in the athletic training room and focus on proper patient care. Therefore, it could be interesting to follow up this study by researching comfort levels of Division I athletes with athletic trainers of both genders.



Collecting data on the years of experience and level of education of athletic trainers working at Division I and Division II institutions could have added an additional aspect to consider in this study. Technically, athletic trainers are supposed to have a minimum of a Master's degree to work at a college or university. It would be interesting to know if athletes are aware of the educational level of their athletic trainers and if this truly contributes to athletes' comfort and confidence levels.

Overall, the results of this study show that student athletes have made progress in their acceptance of females as athletic trainers. It appears that student athletes feel comfortable with an athletic trainer of either gender as long as that athletic trainer demonstrates extensive knowledge and experience working in the field. Hopefully, results such as these will help increase the general public's acceptance of female athletic trainers and increase job opportunities for females in the field of athletic training.

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Appendix A

**STUDENT ATHLETE QUESTIONNAIRE**

DIRECTIONS: PLEASE CHECK ONE.

Sex: male  female

Sport: \_\_\_\_\_

During your college athletic career, have you sustained an injury requiring the services of an athletic trainer? YES  NO

**Part I** - For the following questions, express your level of comfort by circling

1 – very uncomfortable 2 – uncomfortable 3 – neutral 4 – comfortable 5 – very comfortable

If you answer 1 or 2, check a reason.

	1	2	3	4	5
a. How do you feel receiving treatment for injuries to the upper extremity (ie. shoulder, elbow) with an athletic trainer of the:					
..... opposite sex?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
..... same sex?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reason:  gender  confidence in athletic trainer  level of AT's experience  
 other \_\_\_\_\_

b. How do you feel receiving treatment for injuries to the lower extremity (ie. knee, ankle) with an athletic trainer of the:					
..... opposite sex?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
..... same sex?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reason:  gender  confidence in athletic trainer  level of AT's experience  
 other \_\_\_\_\_

c. How do you feel discussing general medical conditions (ie. cold/flu) with an athletic trainer of the:					
..... opposite sex?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
..... same sex?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reason:  gender  confidence in athletic trainer  level of AT's experience  
 other \_\_\_\_\_

d. In a life threatening situation, how do you feel receiving treatment with an athletic trainer of the:					
..... opposite sex?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
..... same sex?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reason:  gender  confidence in athletic trainer  level of AT's experience  
 other \_\_\_\_\_

e. How do you feel receiving treatment for injuries to the genitalia?					
..... opposite sex?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
..... same sex?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reason:  gender  confidence in athletic trainer  level of AT's experience  
 other \_\_\_\_\_

**Part II.** – For each item, select a level of support expected from an athletic trainer.

1 - very little support – 5 a great deal of support

If you answer 1 or 2, select a reason.

- |   |                     | 1                        | 2                        | 3                        | 4                        | 5                        |
|---|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a. To what degree do you expect non-judgmental listening support from an athletic trainer of the: | ..... opposite sex? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|   | ..... same sex?     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Reason:  gender  confidence in athletic trainer  level of AT's experience  
 other \_\_\_\_\_

- |   |                     |                          |                          |                          |                          |                          |
|---|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| b. To what degree do you expect caring emotional support from an athletic trainer of the: | ..... opposite sex? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|   | ..... same sex?     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Reason:  gender  confidence in athletic trainer  level of AT's experience  
 other \_\_\_\_\_

- |   |                     |                          |                          |                          |                          |                          |
|---|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| c. To what degree do you expect appreciation for the work you do in the athletic training room from an athletic trainer of the: | ..... opposite sex? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|   | ..... same sex?     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Reason:  gender  confidence in athletic trainer  level of AT's experience  
 other \_\_\_\_\_

- |   |                     |                          |                          |                          |                          |                          |
|---|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| d. To what degree do you expect motivational support from an athletic trainer of the: | ..... opposite sex? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|   | ..... same sex?     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Reason:  gender  confidence in athletic trainer  level of AT's experience  
 other \_\_\_\_\_



Appendix B

**QUESTIONNAIRE FOR ATHLETIC DIRECTORS**

DIRECTIONS: PLEASE CHECK ONE.

Sex: male  female  Job Title: \_\_\_\_\_

Do you actively take part in the interviewing and/or the hiring process of athletic trainers at your institution? YES  NO

**Part I** – In general, for the following questions express your level of confidence by circling

1 – very unconfident    2 – unconfident    3 – neutral    4 – confident    5 – very confident

If you answer 1 or 2 check a reason.

			1	2	3	4	5
a.	How confident are you with having an athletic trainer handle general medical conditions (ie. cold/flu)						

male athletic trainer?

female athletic trainer?

Reason:  gender     level of athletic trainer’s experience  
 other: \_\_\_\_\_

b. How confident are you with an athletic trainer’s ability to evaluate injuries:

male athletic trainer?

female athletic trainer?

Reason:  gender     level of athletic trainer’s experience  
 other: \_\_\_\_\_

c. How confident are you with an athletic trainer’s ability to rehab injuries:

male athletic trainer?

female athletic trainer?

Reason:  gender     level of athletic trainer’s experience  
 other: \_\_\_\_\_

d. How confident are you with an athletic trainer’s ability to demonstrate leadership skills..

male athletic trainer?

female athletic trainer?

Reason:  gender     level of athletic trainer’s experience  
 other: \_\_\_\_\_

e. How confident are you with an athletic trainer’s ability to demonstrate motivational support for athletes:

male athletic trainer?

female athletic trainer?

Reason:  athlete comfort levels with a specific gender of athletic trainer  
 gender specific characteristics that aid in providing social support  
 other: \_\_\_\_\_

f. How confident are you with an athletic trainer's ability to demonstrate non-judgmental listening support for athletes:

male athletic trainer?

female athletic trainer?

Reason:  athlete comfort levels with gender of athletic trainer  
 gender specific characteristics that aid in providing social support  
 other: \_\_\_\_\_

**Part II.** – Rank the importance of each item.

1- No importance – 5 a great deal of importance

If you answer 1 or 2, select a reason.

a. How important is it to have the head and assistant athletic trainer be of the opposite sex? 1   2   3   4   5

Reason:  athlete comfort levels with gender of athletic trainer  
 different physical abilities between genders of athletic trainers  
 differences between genders in abilities to provide social support  
 other: \_\_\_\_\_

b. How important is it to have a male athletic trainer assigned to your men's teams?

Reason:  athlete comfort levels with gender of athletic trainer  
 different physical abilities between genders of athletic trainers  
 differences between genders in abilities to provide social support  
 other: \_\_\_\_\_

c. How important is it to have a female athletic trainer assigned to your female's teams?

Reason:  athlete comfort levels with gender of athletic trainer  
 different physical abilities between genders of athletic trainers  
 different abilities in providing social support between genders  
 other: \_\_\_\_\_

In the past 10 years how many athletic trainers have been hired at your institution? \_\_\_\_\_

How many of the athletic trainers hired in the last 10 years have been female? \_\_\_\_\_

Appendix C  
**Barry University**  
**Cover Letter for the Student Athlete Questionnaire**

Dear Research Participant:

You are being requested to participate in a research project for a thesis for a masters degree. The title of the study is The Preference of Athletic Trainer Gender Among Collegiate Athletes and Athletic Directors. I am a student in the department of Human Performance and Leisure Sciences at Barry University. I am seeking information that will be useful to improve the field of athletic training.

Your participation simply requires filling out a survey that will take no more than 10 minutes of your time. Upon completion of the survey, place the completed survey in the blank envelope provided and seal the envelope. Your envelope can then be placed in the envelope prepared for mailing. The location of this envelope can be obtained from your athletic trainer. This envelope will act as a drop box so your identity can remain anonymous.

Your consent to be a research participant is strictly voluntary and should you decline to participate or should you choose to drop out at any time during the study, there will be no consequences.

Your identity will remain anonymous, that is, no names or other identifiers will be collected on any of the instruments used. There are no known risks to you if you choose to participate. There are no direct benefits to you; however, your participation may help improve the quality of the work place for athletic trainers.

If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Meredith Parry, at (305) 613 - 3534, the Faculty Sponsor, Dr. Sue Shapiro, at (305) 899-3574, or the Institutional Review Board point of contact, Barbara Cook, at (305) 899-3020.

Thank you for your participation.

Sincerely,

Meredith Parry, ATC/L

Appendix D  
**Barry University**  
**Cover Letter for Questionnaire for Athletic Directors**

The purpose of this research is to investigate confidence levels of athletic directors with both genders of athletic trainers and determine if a difference in gender acceptance of athletic trainers exists among collegiate athletes and athletic directors. Participation is entirely voluntary and you may at any time withdraw from participation. I am asking you to complete the attached electronic survey. More specifically, you will be asked to express your comfort levels with an athletic performing the different domains athletic training (ie. general medical care, injury evaluation, rehabilitation, leadership skills, and motivational and listening support). You will also be asked to rank the importance of having a representation of both genders as athletic trainers available to treat your student athletes.

The potential benefits of this study are not immediate to the participant; however, the results of this study should promote equality, better opportunities, and acceptance of female athletic trainers.

There are no risks associated with participating in this study; however, there can be no guarantee of absolute anonymity due to the medium of this second party –SurveyMonkey™. Nevertheless, SurveyMonkey™ emphatically declares “Our privacy policy states that we will not use your data for our own purposes.” In addition, I will request that SurveyMonkey™ “disable the SSL” before data collection thereby assuring the fact that the results I will receive will be truly anonymous and there will be no record kept of your IP address nor linkages I could utilize to identify you. It will take about 10 minutes to complete this survey. Your responses will be automatically compiled in a spreadsheet format and cannot be directly linked to you. All data will be stored in a password protected electronic format. In addition, SurveyMonkey™ employs multiple layers of security to ensure that my account and the data associated with the account are private and secure. In addition, a third-party security firm is consistently utilized by the survey tool administration (SurveyMonkey™) to conduct audits of security. The company asserts that the latest in firewall and intrusion prevention technology is employed. Hence, any concerns regarding potential invasion of your privacy and access to your responses other than I, the investigator should be allayed due to these protections. I trust you feel confident to answer the attached survey questions as honestly as you can.

“By clicking on the “I agree” button below and by submitting a completed survey, you are giving permission to use your data record in this study. Participant must click on either the “I agree” button or “I do not agree” button to confirm consent or refusal. Once the “I agree” button is clicked, participant is directly linked to the Survey. If you click on the “I do not agree” button, you will immediately exit this site.

Again, you are free to withdraw your participation at any time without penalty. Thank you for your participation in advance. If you have any questions, feel free to contact me, Meredith Parry, at [meredith.parry@mymail.barry.edu](mailto:meredith.parry@mymail.barry.edu) or (305) 613-3534, the Faculty Sponsor, Dr. Sue Shapiro, at (305) 899-3574 or the Institutional Review Board point of contact, Barbara Cook, at (305) 899-3020 or [bcook@mail.barry.edu](mailto:bcook@mail.barry.edu)

I Agree

I Do Not Agree