ABSTRACT

O’CONNOR, CAITLIN. NCAA Division I Football Players’ Perceptions of Females in the Athletic Training Room. (Under the direction of Dr. Judy Peel.)

Previous research (Drummond, Hostetter, Laguna, Gillentine & Del Rossi, 2007) concluded that male and female athletes feel more comfortable with treatment by a same gender athletic trainer for gender-specific injuries and illnesses. This study utilized social role and social role congruity theory as the guiding theoretical framework. Male athletes, specifically football players, were asked about their comfort level with male and female athletic trainers for gender and non-gender specific injuries and illnesses. An existing methodology and survey (Drummond et al.) was used to determine male athletes comfort level. An open-ended question was also included to provide insight into male football players’ perceptions of female athletic trainers.

Results indicated that male football players are more comfortable with treatment by a male athletic trainer for gender-specific injuries and illnesses. Interestingly, males were more comfortable with treatment by female athletic trainers for psychological conditions, and were equally comfortable for injuries and illnesses to other parts of the body that were not gender-specific. Qualitative data (45%) revealed a theme of viewing male and female athletic trainers as being equal in the athletic training room. However, 33% of male football players utilized stereotypical feminine characteristics to describe female athletic trainers. Discussion is provided on these results.
NCAA Division I Football Players’ Perceptions of Females in the Athletic Training Room

by
Caitlin O’Connor

A thesis submitted to the Graduate Faculty of North Carolina State University in partial fulfillment of the requirements for the Degree of Master of Science

Parks, Recreation, and Tourism Management
Raleigh, North Carolina
2008

APPROVED BY:

_______________________________                        ______________________________
Dr. Heidi Grappendorf                                                  Dr. Edwin Lindsay

_______________________________
Dr. Judy Peel
Chair of Advisory Committee
BIOGRAPHY

Caitlin O’Connor was born in Meriden, Connecticut. She attended the University of Connecticut, and in 2006 received her bachelor’s degree in Athletic Training, from the Kinesiology Department. Upon completion of that degree, she completed the requirements to become a certified athletic trainer in 2007. From there, she decided to move to North Carolina and attend North Carolina State University to pursue a Master’s degree in Sports Management. During her undergraduate years, she was involved in and president of the UCONN Student Athletic Training Club, and served on the Connecticut Committee on Revenue as a student representative. She was also involved in and published for three research studies on heat and hydration for adolescent athletes. During her graduate career, she was a graduate athletic trainer for the NC State football and men’s and women’s tennis teams.
# TABLE OF CONTENTS

List of Tables................................................................................................................. iv

Chapter I ....................................................................................................................... 1
  Introduction ....................................................................................................... 1
  Statement of Purpose ......................................................................................... 2
  Research Questions ............................................................................................ 2
  Delimitations ...................................................................................................... 2
  Limitations ......................................................................................................... 2
  Definitions ......................................................................................................... 3

Chapter II ..................................................................................................................... 4
  Literature Review............................................................................................... 4

Chapter III..................................................................................................................... 19
  Research Design................................................................................................. 19
  Sample ............................................................................................................... 19
  Instrumentation .................................................................................................. 19
  Procedure .......................................................................................................... 21
  Analysis ............................................................................................................. 22

Chapter IV .................................................................................................................... 24
  Results ............................................................................................................... 24

Chapter V...................................................................................................................... 32
  Discussion.......................................................................................................... 32

References..................................................................................................................... 39

Appendices .................................................................................................................... 43
  Permission to adapt and use survey ................................................................. 44
  Gender comfort with athletic trainer questionnaire....................................... 45
  Table 1, Frequency distributions of athlete classification in school (southeast) .... 57
  Table 2, Frequency distributions of athlete classification in school (northeast) .... 58
  Table 3, Frequency distributions of athlete race/ethnicity (southeast) ............... 59
  Table 4, Frequency distributions of athlete race/ethnicity (northeast) ............... 60
  Table 5, Comfort reported by football players with female and male athletic trainer injury/illness scenarios ................................................................. 61
  Table 6, Frequency distributions of open-ended responses ............................. 64
LIST OF TABLES

Table 1, Frequency distributions of athlete classification in school (southeast) ............... 57
Table 2, Frequency distributions of athlete classification in school (northeast) ............... 58
Table 3, Frequency distributions of athlete race/ethnicity (southeast) .......................... 59
Table 4, Frequency distributions of athlete race/ethnicity (northeast) .......................... 60
Table 5, Comfort reported by football players with female and male athletic trainer injury/illness scenarios ............................................................. 61
Table 6, Frequency distributions of open-ended responses ......................................... 64
Chapter I

INTRODUCTION

Sports originated with the goal of creating an atmosphere for males to learn the proper qualities that were deemed necessary in society (Bryson, 1987). Specifically, football was, and still is no exception to this viewpoint. The focus is on aggression, domination, competition, ignoring pain, and the discipline that is involved with following orders; all qualities commonly associated with males (Bryson). Since the passage of Title IX legislation, more opportunities have been allotted to females in sport, with female team participation increasing from only 16,000 female college athletes in 1968, to over 180,000 female intercollegiate athletes in 2008 (Acosta & Carpenter, 2008). Though the number of female sport participants has increased, men still dominate the ranks of athletic administration (Acosta & Carpenter).

Although some women have acquired positions in some Division II and III athletic programs, women in full-time athletic training positions at Division I and professional programs, are for the most part, non-existent. Football is among only a few high-profile sports, including basketball and baseball that have maintained their reputations as a good “ol boy” network, where women’s access into the athletic training room has been limited (Anderson, 1992). Women continue to struggle to break into the upper ranking positions within sport; and athletic training is no exception. Specifically, as football has been noted as one of the last male preserves, the lack of women in football athletic training rooms is even more prominent (Anderson).
Statement of Purpose

The purposes of this study were to (1) determine if NCAA Division I male football players were more comfortable with treatment from either a female or male athletic trainer with gender and non-gender specific injuries, and (2) to determine what are NCAA Division I male football players’ perceptions of female athletic trainers in the athletic training room.

Research questions

RQ I: Are male football players more comfortable with male athletic trainers than female athletic trainers?

RQ II: Are male football players more uncomfortable with dealing with female athletic trainers than male athletic trainers with gender-specific injuries/illnesses?

RQ III: What are the male football players’ perceptions of females in the athletic training room?

Delimitations

1. This study was limited to NCAA Division I.

2. This study was limited to football players, and therefore limited to only males.

3. This study was limited to two specific universities (northeast and southeast).

Limitations

1. The sample size of this study is limited.

2. The findings do not determine preference, just comfort level.
Definitions

1. Gender specific injuries: injuries that are exclusive to one gender and not the other.

2. Non-gender specific injuries: injuries that could occur to either gender, in other words, they are not exclusive to one gender.
Chapter II
LITERATURE REVIEW

The profession of athletic training was developed to aid in the healthcare of athletes, specializing in preventing, recognizing, managing, and rehabilitating athletic injuries. Many healthcare professionals share the responsibility of caring for the athletes and form a sports medicine team, but the athletic trainer is the initial individual to respond to the situation, evaluate the injury, and determine the next step in care (National Athletic Trainers’ Association [NATA], 2008c). Each athletic trainer is required to attend an accredited four-year bachelor’s program, where they take the appropriate anatomy and physiology, biomechanics, and injury treatment classes, while also experiencing the clinical aspect. After the completion of the program, the athletic training student must sit for and pass the Board of Certification exam. Once recognized as an allied health professional, the certified athletic trainer must expand their knowledge with continuing education units every three years (NATA, 2008a).

Athletic training is a unique medical field, in that it is not involved with the mainstream public. While some careers have branched into atypical settings for athletic trainers, the essence of the profession is in sports, whether recreational leagues, or Division I collegiate athletics (NATA, 2008a). Because of the close proximity to sports and athletes, and the daily exposure to their lives, the athletic trainer is given a rare look inside a once closed domain to the public eye. Due to the privacy that is commonly found in athletics, and dominance of
males in sport, females have struggled to become a part of this type of club. Females, who wish to pursue athletic training, are limited in their choices of sports that they can work, due to their gender and the yearning to keep them out of the male locker room (Hosick, 2006).

Many reasons have been listed for why female athletic trainers should not be allowed to work with male sports, and furthermore, should not be in-charge of male sports. The reason that is most commonly cited is that the males will feel uncomfortable having a person of a different gender working with them, especially if the situation, or injury, is gender-specific (Drummond, Hostetter, Laguna, Gillentine, & Del Rossi, 2007). If the male feels uncomfortable, then he may not pursue the treatment, and then his career, activity, and his living will suffer. This point may be especially poignant when dealing with football athletes, in that there are generally only males around or in the facility, while females are not a commonly seen. Being that a Division I athlete is unable to choose their healthcare provider, it may be difficult for the athletes to discuss feeling embarrassed with certain injuries/illnesses. If there is discomfort in presenting certain injuries or illnesses to the athletic trainer, there is the chance that these issues may not be presented and could potentially worsen (Drummond et al.).

It has been found that in general healthcare, patients typically prefer care by a physician that is the same gender as them. Two studies have indicated that about 80% of male patients prefer a male physician (Fennema, Meyer, & Owen, 1990). This issue is brought up repeatedly in the literature about choice and treatment by other healthcare professions, but research on athletic trainers and their care is limited. Therefore, the purpose(s) of this study
were to focus on the comfort level of male football players with female athletic trainers, and examine the perceptions male football players have of female athletic trainers.

**Women in Athletic Training**

To establish a more credible profession and create a basis for a successful profession in the future, the National Athletic Trainers’ Association was founded in 1950. The first NATA meeting included 200 athletic trainers’ from around the nation, and now has expanded to approximately 30,000 members (NATA, 2008b). As a governing body, the NATA has created a mission to advance the standards that are set for athletic trainers, and assist with the education, certification, and research that is involved with the profession. The NATA membership represents the largest percentage of athletic trainers practicing in the United States, at around 85% (NATAb).

In 1950, when the NATA was founded, there were no recorded female members, and the first woman certified, Doris Wickel, was not until 10 years later. Between 1974 and 1977, female membership increased from only 16 to 88 members of the NATA, and in 1997, women held approximately 44% of the membership, or 6049 members (Women in Athletic Training Committee [WATC], 2000). Two important steps that really began to pave the way for women occurred in 2000, when Julie Max was elected the first woman president of the NATA, and in 2002, when Ariko Iso became the first full-time woman staff athletic trainer in the National Football League (WATC). In 2001, the National Athletic Training Association (NATA) reported that 46% of its’ membership of certified athletic trainers were female. When athletic training students involved in athletic training accredited undergraduate programs were
included, the female percentage increased even more (NATA, 2001a). Julie Max, now the head athletic trainer at California State University, Fullerton, feels that this increase in female membership has been due to the overall increase of females interested in sport, and wanting to combine that entertainment and curiosity with their everyday life. According to Hosick (2006), it has become more accepting for females to be involved in sport, and now new job opportunities must follow.

While the membership numbers for females has increased, the profession of athletic training is lacking females in upper-level positions. A concern in athletic training is that females are not advancing into the higher profile and higher paying jobs. Few athletic trainers are involved with high revenue sports, professional sports, or male sports in general (Baranack, 2003). According to NATA, only 63 female athletic trainers of the 30,000 members hold positions in professional sports; only two females in men’s professional sports (the NFL’s Pittsburgh Steelers had one female assistant athletic trainer, as well as the NBA’s Houston Rockets) (Baranack). Recently, the first female was hired to work in healthcare in major league baseball: Michelle Andrews, M.D., a physician and orthopedic surgeon, hired by the Baltimore Orioles (Curran, 2008).

Acosta and Carpenter (2008) determined in their longitudinal update that almost all schools in all divisions of college athletics have an athletic trainer, but less than one-third of these schools have a female as a head athletic trainer. Division III schools had the highest percentage of females as head athletic trainers, with 36.8%, and these numbers decreased to Division I as low as 15.2% (Acosta & Carpenter). A concern with the profession of athletic
training, is the fact that less than 1% of the 46% of women in the NATA have held executive leadership positions, and 60.9% men believe that women have few opportunities to attain these leadership roles (Perez, Cleary, & Hibbler, 2004). This provides evidence for the idea that the higher ranking the job, the less likely to find a female employed in that position.

**Women in Athletic Administration**

Athletic administration is a male dominated area where women have been striving to get involved beyond participation and into areas of administration. The numbers of women in the upper levels of athletic training are similar to those in other areas of athletic administration. Prior to female participation in the National Collegiate Athletic Association (NCAA), 280 schools formed the Association of Intercollegiate Athletics for Women (AIAW), which governed women’s sports until the NCAA took over the AIAW in 1982 (Horrow, 2001). Before the NCAA takeover, the AIAW was instrumental in helping getting Title IX passed. Title IX was an educational amendment in 1972, which called for the increase in opportunities for females in all categories; which includes sports and labor. It mandated for there to be an equal opportunity for females to be involved in sports as for males, and also that females not be passed over for a job based on their gender (http://www.dol.gov/oasam/regs/statutes/titleix.htm, 2008). After Title IX was passed, the number of female teams per collegiate schools in all divisions more than doubled by 1978; the date for schools to comply (Acosta & Carpenter, 2008).

Prior to the enactment of Title IX, women were extremely involved with female athletics, but were still struggling to become an accepted part of male athletics or
administrative roles in female athletics (Whisenant, 2003). While Title IX has provided the opportunity for more females to participate in athletics, with an increase from 74,239 in 1981 to 150,916 in 2001 over all three NCAA divisions, there has been an obvious backlash effect for females who wish to pursue administrative roles (Acosta & Carpenter, 2008). The number of women serving as athletic directors decreased significantly, and to this day has still not recovered. While the percentage of Division I female athletic directors has increased from 18.6% in 2006, to 21.3% in 2008, this number is much lower than the 90% of athletic directors of women’s programs that were female before Title IX (Acosta & Carpenter, 2008). The percentage of women managing female programs has decreased to only 21.3% of females acting as athletic directors for female programs, for all divisions, with only 9.3% in Division I programs (Acosta, & Carpenter). Another interesting variable, is that there are 11.6% of schools in all three NCAA divisions, and 3.7% in NCAA Division I that lack any female administrator anywhere in the system (Acosta, & Carpenter). Similar to the numbers of athletic training, Division III has the highest number of female athletic directors at 142, while Division I, the largest and most prestigious, has only 29 females (Acosta & Carpenter).

**Barriers to Females in Athletic Training**

Female athletic trainers may face discrimination as they try to progress up the ranks in athletic training. One ongoing issue that plagues women trying to advance in male sports is the belief that male athletes would feel uncomfortable dealing with a female athletic trainer every day (Drummond, Hostetter, Laguna, Gillentine, & Del Rossi, 2007). An aspect of this is facility set-up, where athletic training rooms may be located in the close vicinity of the locker
room and at some older facilities, actually inside the locker room. This can create an environment that is uncomfortable for the athlete and the female athletic trainer (Curran, 2008).

As a result of females’ lack of access during their undergraduate clinical experience, their job opportunities upon graduation may be limited. The NATA has created standards that require an individual to get experience in over 25% of their clinical hours with women and men’s high-risk sports, with football experience highly recommended. Many job vacancy notices require football coverage as criteria for hiring (Anderson, 1992). This consequently puts females at a disadvantage in obtaining jobs in football.

Women go through the same accredited programs as males; they take the same classes, spend the same time in clinical hours, earn the same degrees, and take the same certification examination. There has been a focus on an increase in education and curriculum to maintain the status of an allied healthcare profession, with the added requirement of attending an accredited undergraduate program. With this cancellation of internships as a route to a collegiate job, and the installment of a certification process for everyone, women are able to get the same education and obtain the same qualifications, with men (Hosick, 2006). In a survey conducted by the Women in Athletic Training Committee (1997), 88.8% of men believed that women have the same education, while 100% believed that women have the necessary knowledge to be successful trainers. Additionally, 99.5% of men believed that women have the requisite skills, and 96% of men believed women have the management skills to succeed (NATA, 1997).
Due to the demands of athletics, and the nature of the profession being a 24 hour a day, 7 days a week job, women may feel more pressure balancing work, family, and life. In particular this may be salient for women who want to start families, or already have children. These issues could create a view that women are unable to stay involved in the profession, and would need more time off due to maternity leave and family issues. Being an athletic trainer in any collegiate setting has hours that make it difficult for a woman to maintain her career and raise a family (Hosick, 2006). Notably, in the same survey previously mentioned, statistics indicated that 83.2% of men said women have fewer opportunities for professional advancement, stating that a family and personal life was the largest conflict (NATA, 1997).

The lack of women in elite leadership roles is due to many issues, with a main concern being family responsibilities (Eagly & Karau, 2002). Robin Gibson, associate director of sports medicine at Florida State, explains that while the profession is time consuming and difficult for everyone, a female has a much larger challenge, and must be better than a male to succeed (Hosick).

Many professions make the necessary arrangements for women to take the appropriate time off for maternity leave and to establish a family. In a survey of physicians in the *Clinical Journal of Sports Medicine* by Pana (2001), it was reported that the top three responses for why they chose their present job, were “type of practice, location, and family issues” (p. 97). For those companies who do not make arrangements for maternity leave and family care, women generally have to make decisions, such as changing or ending careers; a scenario that is rarely experienced by a male. Many professions have begun to put an emphasis on increased
hours and time devoted to the job, as well as traveling, which can lead to increased pressure. This has proven difficult for females acting as mothers, especially in fields that are increasingly and historically have been dominated by males (Bruening & Dixon, 2008). Women, in many cases, have suffered a career loss, or have experienced marital difficulties due to this dilemma (Bruening & Dixon).

Another barrier that receives attention due to the inherent nature of athletic training, and is an important issue to highlight is the concern with sexual harassment. The sexual harassment policy of the NATA states that an employer is not only held responsible and liable for the act if they are part of it, but also if they do not do what is necessary to report the act or punish it (NATA, 2001b). In many medical fields, including athletic training, sexual harassment has become a prevalent problem. In a survey performed by the *New England Journal of Medicine*, it was determined that 73% of women had experienced sexual harassment at least once during their training in a medical field (Komaromy, Bindman, Haber, & Sande, 1993). Among 24 women, 3 women reported that the sexual harassment had interfered with their ability to work (Komaromy et al.). Many men of authority, and even males on the sports teams, have the access and opportunity to threaten female athletic trainers physically and sexually. Athletics creates an atmosphere that is prime for sexual harassment, with the innate focus on a close relationship with the athlete, the obsession with athletes’ bodies, and the natural physicality of sports (Hogshead-Makar & Steinbach, 2003).

Many barriers exist for females in the athletic training profession; including discrepancies that have to do with coach and manager preferences, tradition in the sport, and
the lack of education of the coaches and higher levels of administration (Curran, 2008). These issues, among those previously discussed, all add to the difficulty for females to be hired in the Division I collegiate football setting. Despite the struggles that may be associated with trying to become a successful female in a male dominated arena, many females state that it is important for woman to take that chance to advance their careers. This will provide help for other females in the industry and those in the future (Hosick, 2006).

**Social and Gender Theories**

Social and gender theories define human action and behavior in society. Many people find themselves following a distinct pattern set for them by past stereotypes and perceptions of male and female roles in society, specifically in the workplace (Eagly & Wood, 1999). Gender theory addresses this, as it is associated with the labeling of specific tasks to a specific gender. Because characteristics of women and men are naturally different, men and women also differ psychologically and therefore adapt different social roles accordingly. Many believe that these gender differences in behavior are accommodations to restrictions and opportunities that society and culture have placed on the specific gender (Eagly & Wood).

Gender theory defined by Spence (1984) suggests gender identity is the “fundamental, existential sense of one’s maleness or femaleness rooted in cultural understandings of what it means to be masculine or feminine” (p. 2). At an early age, children can define stereotypes of their own sex and the opposite sex, and will continue on in life operating under those guidelines. As an individual begins to develop, their culture impacts their gender roles. Spence (1984) defines these gender roles as the behaviors and activities that one associates
with male and female due to norms that society has created and therefore are adopted to fit this norm (Spence, 1984). These are the ideas that limit women in the workplace, and create an atmosphere where men can continually advance beyond females at the same level.

Eagly, Wood, and Diekman (2000) defined social role theory, as established beliefs by society of the appropriate roles that males and females must employ. Due to this, gender differences in social behavior have been created. In other words, men are expected to aspire to participate in a male-dominated occupation, which require masculine personal qualities, and women are expected to aspire to female-dominated occupations, which require feminine qualities. Masculine qualities are linked to spending time away from the home for long periods of time, and portraying the dominant figure. Females are generally categorized as responsible for any activity that pertains to childbearing and household responsibilities, unable to venture far from the household for extended time (Harrison, 2005).

Social role theory can be seen in the traditional roles of males and females at home. In the past, it has been the norm for the female to stay at home and raise the family, a job with female qualities, while the male goes to work everyday to provide for the family. To extend beyond that, females have traditionally been seen as the “weaker” sex, and the males are more dominant (Harrison, 2005). Sex is the one characteristic that is most dominant in determining proper actions and categorizing into certain social roles (Eagly & Karau, 2002). These stereotypes are perpetuated because people begin to look at others to determine the correct behavior. Individuals in society see certain gender roles that people occupy, and therefore attribute personal qualities that they feel correspond with that role and are required to fulfill
the role correctly (Eagly & Karau). It is not always that case, that deviating from the norms deemed by society will result in lack of social acceptance by society, but it does result in feelings of surprise or possible alienation and isolation (Harrison). Many who try to develop careers or identities outside of this pre-made mold often face negative attitudes from others who may believe in these gender norms (Eagly & Karau). While women may gain employment, they are limited in advancement, in earnings, and by perceptions of others.

When trying to establish a career in an uncharacteristic field for a woman, negative views can be portrayed and therefore many stay in the “appropriate” fields. In a survey of physicians, 14.6% of males surveyed were classified as leaders, as compared to only 5.1% of females. The largest percentages of females (32%) were employed in what are considered female dominant occupations, such as gynecology, or general medicine. The lowest percentages were with the fields of neurology and surgery (2%), typically male dominated fields (Kvaerner, Aasland & Botten, 1999).

Gender role congruity theory pertains to the congruity between an individual’s gender and their roles, including leadership roles. According to role congruity theory, the more the role women take on varying from their perceived gender role, the greater the amount of incongruity that is exhibited. Since women traditionally are seen as giving support, caring for others, or involved with any activity that develops human interaction; they are not categorized with the characteristics that are seen with a leader (Garcia-Retamero, & Lopez-Zafra, 2006). Women are generally viewed in society as filling what is termed a communal role. The communal role involves characteristics such as being kind, thoughtful, and sensitive to other
peoples’ feelings (Rudman & Glick, 2001). It has been perceived that females are naturally
too kind to operate in a different or more masculine role. Men occupy the agentic role, which
are the characteristics that fill more of a leadership criterion, such as a desire to bypass others
in the hierarchy, not influenced by who’s toes they step on as they progress (Rudman &
Glick).

Leadership has historically been viewed as a male role in military, science, and other
areas of community (Eagly & Karau, 2002). There is a prejudice against females in leadership
roles, since it is deemed unfavorable for women to be in these roles, and the behavior is
criticized when enacted by a female (Eagly & Karau). This inconsistency that is perceived to
exist lowers the evaluation and perception of the occupant of that role by that group member
(Eagly & Karau). Women, who demonstrate agentic characteristics tend to be viewed as
extremely competent, but are also criticized for not filling their typical role, and may suffer a
backlash effect through social repercussions (Rudman & Glick, 2001). It can be said that a
man or woman’s success in a role is basically due to the context of the situation. The
perceived prejudice restrict the women’s access in the first place, but has potential to limit
how effective the women are in these roles (Eagly & Carli, 2003).

Women’s role in society has evolved, with more opportunities to receive an education,
leave the household, and become more involved in the workplace. There has been an increase
in the availability of occupations for women in more male dominant fields, as well as an
increase of females in administrative fields. The effect of having females in administrative or
high-powered roles may also decrease the perception that it is not feasible to make it into the
upper ranks. This creates an atmosphere where perceived barriers may no longer exist and
influence the aspirations for females to advance in their various fields (Powell & Butterfield,
2003). Despite the many advances that have taken place for women, there are still many
limitations, based on social role theory and role congruity theory that exist in modern society
(Garcia-Retamero & Lopez-Zafra, 2006).

**Male Athletes’ Perception of Female ATC’s**

Franks and Bertakis (2003) conducted research studying patients and their preference
and perception of same-gender and opposite-gender physicians. This study found that patients
do not have a preference either way, but tend to pick a same-gender physician because they
feel more comfortable if a gender-specific injury or illness arises. This does not mean that they
do not feel that the opposite-gender physician does not have the appropriate training or could
not handle the issue; it is that they have the idea that it would be more comfortable, and they
have more experience with gender-specific issues (Franks & Bertakis). Female patients
typically choose a female physician for gender-specific issues, as well as males, but as females
tend to get older, they request male physicians (Fang, McCarthy & Singer, 2004). In a similar
study by Kelly (1983), it was found that “patients in general felt that technical competence
was neutral with regard to sex of physician” (p. 478).

According to research done by Drummond, Hostetter, Laguna, Gellentine and Del
Rossi (2007), when surveying male and female college athletes of no particular sport, they
determined that both sexes believed that females had the same level of education and
background as male athletic trainers. When the issue was what they termed “sex-related” or
“gender-specific,” the athletes tended to choose an athletic trainer of the same sex. When the injury was not gender-specific, there was no preference either way (Drummond et al.). It was determined that males were equally as comfortable with male and female athletic trainers when dealing with psychological conditions. A large percentage of men (76.6-89.9%) stated that their discomfort with all three gender-specific issues was gender-related, and not in dealing with lack of experience, or any other issue. It was hypothesized that this may be due to a culturally embedded perception (Drummond, et al.) where athletes tended to be comfortable and confident in the experience that their athletic trainers had and rarely stated any other reason for discomfort in treatment (Drummond, et al.). An important finding was that care and treatment of these injuries deemed gender-specific may not be reported or care may not be sought after due to the discomfort of the athlete with an athletic trainer of the opposite sex. It was determined that both athletes and athletic trainers should knowledgeable of the fact that discomfort is felt (Drummond, et al.).

No research has been done pertaining specifically to Division I football players, and their perceptions of female certified athletic trainers working with them in the athletic training room. Thus, this study sought to examine not just comfort level, but what is male football players’ perceptions’ of female athletic trainers in the athletic training room. Ultimately, this research could potentially benefit those females aspiring to higher profile and paying athletic training jobs.
Chapter III

RESEARCH DESIGN

Sample

This study includes two National Collegiate Athletic Association (NCAA) Division I university football programs. These two programs were chosen based on their different geographical locations (northeast, and southeast). The population sampled included all male players listed on the rosters of each university’s program. Non-probability sampling was used to represent the population; due to the limitation that random selection was not feasible or sensible in this case (Trochim, 2005). All players on the roster were asked to participate unless under the age of 18; minors were not included in the sample. Participation was voluntary.

Instrumentation

The instrument used for this study was a pre-existing survey entitled Gender Comfort with Athletic Trainer Questionnaire, developed by Drummond, Hostetter, Laguna, Gillentine, & Del Rossi (2007), at the University of Tulsa. Permission was obtained from the authors to utilize and modify their questionnaire (see Appendix A). This questionnaire consisted of two parts, one related to the male athlete and one to the female athlete. For the purpose of this study, only the part related to the male athlete was used (see Appendix B). This part has four distinct sections: 1) a demographic section, 2) a section with 10 general comfort questions, 3) a section with 20 scenarios to base comfort with a male athletic trainer, and 4) a final section
with 20 scenarios to base comfort with a female athletic trainer. Additionally, an open-ended question, “Please indicate how you would describe a female athletic trainer (i.e. characteristics, attributes, perceptions)” was added at the end of the survey.

Each comfort question is answered based on a 5 point Likert-scale: with 1 as very uncomfortable to 5 as very comfortable. (Clear instructions at the beginning of each section on how to proceed were provided.) After each scenario on the comfort scale, the athlete was asked to pick a reason for discomfort if their initial answer was either a 1 or 2 (very uncomfortable or uncomfortable). The reasons for discomfort provided were gender related, level of confidence in athletic trainer, level of experience of athletic trainer, and other. If the category of other was chosen, the athlete was asked to specify the issue that had given them the discomfort.

This questionnaire went through an initial pilot study. A pilot study is a preliminary test or investigation to determine whether or not the instrument in question can be used for a larger study (Trochim, 2005). The pilot study in this case distributed the questionnaire to 30 National Collegiate Athletic Association Division I athletes (15 men and 15 women; the women were included in the initial pilot study, due to the original purpose of the questionnaire to study female comfort levels as well as male) to estimate internal consistency and to determine if certain items that did not correlate needed to be removed. Cronbach’s alpha is a calculation used to determine internal consistency or reliability of a measurement; this is the measurements repeatability or consistency (Trochim). A Cronbach’s alpha of .95 is considered to be high reliability and internal consistency (Trochim). Cronbach’s alpha was .93 for the
female athletic trainer scenario and .95 for the male athletic trainer scenario; thus, no questions were removed. Face validity is a value that states that the questionnaire measures what it is originally intended to measure. This is a subjective measurement and is best tested by experts in the field related to the study (Trochim). Face validity in this case was confirmed by 3 people considered experts in athletic training and Division I athletics (one athletic training program director, one head athletic trainer, and one athletic training graduate student).

**Procedure**

Both programs head athletic trainers were contacted via telephone and email, and agreed to distribute the survey to their athletes during a designated team meeting, or appropriate free time. The Gender Comfort with Athletic Trainer Questionnaire was given to both universities’ head athletic trainers (one sent through the mail, and the other delivered) and distributed during team meetings. Each school was given approximately 3 weeks to distribute and collect all of the questionnaires. Each athletic trainer was instructed as to how the questionnaire should be administered. It was distributed to a total of 140 scholarship and walk-on football players of various years of eligibility, all over the age of 18.

Each questionnaire had a cover page explaining the study process, the confidentiality of the study, and the time commitment. The goal of the study and the research questions were not included, so as to not produce a bias for the participants. Each athlete was handed a questionnaire when they entered the athletic training room, and upon finishing were asked to place the questionnaire in a sealed box provided. Any athlete who refused to participate in the
questionnaire was excused, and “refused” was written on the first page. The questionnaire was placed in the box with the other completed surveys in order to be included in the sample numbers. The questionnaires were then returned via mail or delivery. The institutional review board at North Carolina State University approved the study.

**Analysis**

To analyze the quantitative data, the survey questions were divided in the same way as the previous study performed by Drummond, et al (2007). The 17 non-gender specific items were combined into 5 different categorized injuries and illnesses, pertaining to the different area of the body they related to. These categories were analyzed together and individually. The 3 gender-specific injuries/illnesses were combined into one category. Responses from the participating university in the northeast were kept separate from the responses from the university in the southeast.

A paired sample $t$-test was conducted to examine if there was a significant difference present between the responses for the care given by a male athletic trainer, and a female athletic trainer. This test was done for all scenarios of injuries/illnesses. Frequencies were examined to look at the reason for discomfort for all injuries/illnesses at both universities. All quantitative data analyses were performed with the SPSS statistical software package (version 13.0).

The qualitative data acquired from the one open-ended question at the end of the survey questioned the respondents descriptions of female athletic trainers, specifically characteristics, attributes, and perceptions. The data was analyzed and coded by two coder’s
independent from each other, to assure the validity of the categories. The coding was done in a process called content analysis. This process involves taking a look at the answers given, devising topics for each, and then narrowing them down to create a small amount of categories that can summarize the overall opinion. The purpose of this process is to simplify the complex statements into manageable themes (Patton, 1987). All answers were compiled into a list, and were separated into various categories based on the focus or perceived intention of the answer, and to insure repeatability. Initially, 10 categories were found by one coder, and 6 were found by the other; the discrepancies in categories were discussed to determine similar categories and agreement. This process was completed until six distinct categories were determined that summarized all views expressed by the sample. (1) females equal to males, (2) females equal to males except with gender-specific injuries, (3) stereotypical feminine characteristics, (4) females unequal to males, (5) physical appearance, and (6) other.
Chapter IV
RESULTS

Overall, 104 total surveys were returned out of the 140 originally sent to the participating Division I universities, for a 74.3% response rate (Northeast = 57 athletes, Southeast = 47 athletes). Eight surveys were considered incomplete and not used in the data analysis process (Northeast = five surveys, Southeast = three surveys). Of the 104 surveys received, 33 of them were returned with the open-ended question unanswered, for a 68.2% response rate. Athlete classifications by year in school and race/ethnicity are presented in Tables 1 through 4. Participants ranged in age from 18 to 24 years (Northeast, $M = 18.75$, $SD = 1.46$ years, Southeast, $M = 19.8$, $SD = 1.35$ years). Means and standard deviations for each condition category are found in Table 5.

Paired samples $t$-tests were performed on all categories, comparing treatment by a male athletic trainer, with treatment by a female athletic trainer. Data from the northeast university and southeast university were kept separate for each data analysis. Each injury/illness was analyzed to see if there was a significant difference between comfort level, and gender of the athletic trainer. The alpha level was set at .05. A significant difference is determined if there is a resulting value less than .05 (Trochim, 2005).

The category entitled “general medical conditions” contained the scenarios related to hypertension, gastrointestinal injuries/illnesses, urinary tract infections, and sexually transmitted infections. For the category “general medical conditions,” the male athletes
surveyed from the northeast and southeast, felt more comfortable with treatment by a male athletic trainer (northeast, $M = 3.65$, $SD = 1.11$, southeast, $M = 3.6$, $SD = 1.14$), than a female athletic trainer (northeast, $M = 3.42$, $SD = .84$, southeast, $M = 3.45$, $SD = 1.1$). For the southeast sample, paired samples $t$-test revealed a significant difference ($M = .205$, $SD = .668$, $t(43) = -2.033$, $p < .05$) in increased comfort level when treated by a female athletic trainer than male athletic trainer for hypertension, but no significant difference in comfort level for other injuries/illnesses in this category. No significant difference was found in comfort level in the northeast sample, except for injuries/illnesses related to sexually transmitted infections ($M = .776$, $SD = 1.388$, $t(49) = 3.910$, $p < .05$), with increased comfort with care by male athletic trainers, than female athletic trainers.

The category entitled “psychological conditions” contained the scenarios related to depression, addictions, and eating disorders. For the category “psychological conditions,” the male athletes from the northeast and southeast, felt more comfortable with treatment by a female athletic trainer (northeast, $M = 3.71$, $SD = .95$, southeast, $M = 3.67$, $SD = 1.04$), than a male athletic trainer (northeast, $M = 3.63$, $SD = 1.05$, southeast, $M = 3.57$, $SD = 1.08$). For the southeast sample, a paired samples $t$-test showed no significant difference found in comfort level in any injuries/illnesses in this category. For the northeast sample, a significant difference ($M = 2.73$, $SD = 1.020$, $t(43) = -1.774$, $p < .05$) was found with an increase in comfort level for treatment of depression by a female athletic trainer, than a male athletic trainer.
The category entitled “injuries to upper body” contained the scenarios related to head/neck injuries, shoulder injuries, breast/chest injuries, and rib injuries. For the category “injuries to upper body,” the male athletes surveyed from the northeast felt more comfortable with treatment by a female athletic trainer \( M = 3.91, SD = .91 \) than a male athletic trainer \( M = 3.88, SD = 1.06 \). The difference between these means is not large enough to determine significance between comfort level. Male athletes from the southeast felt equally comfortable receiving treatment by a male or female athletic trainer \( M = 3.93, SD = 1.04 \). For the southeast and northeast samples, a paired samples \( t \)-test showed no significant difference in comfort level for treatment of any injuries/illnesses in this category.

The category entitled “injuries to the mid-body” contained the scenarios related to hip injuries, groin injuries, abdominal injuries, and back injuries. For the category “injuries to the mid-body,” the male athletes from the northeast and southeast felt more comfortable with treatment by a male athletic trainer (northeast, \( M = 3.89, SD = 1.01 \), southeast, \( M = 3.93, SD = 1.07 \)) than a female athletic trainer (northeast, \( M = 3.78, SD = 1.01 \), southeast, \( M = 3.92, SD = .98 \)). Both means for the treatment by the male athletic trainer show more comfort than the female, but the means of treatment by a female athletic trainer are above neutral, showing slight comfort. For the northeast and southeast samples, a paired samples \( t \)-test showed no significant difference in comfort level for treatment of any injuries/illnesses in this category.

The category entitled “injuries to the lower body” contained the scenarios related to ankle injuries, and knee injuries. For the category “injuries to the lower body,” the male athletes from the northeast were more comfortable receiving treatment by a male athletic
trainer ($M = 3.98, SD = .95$) than a female athletic trainer ($M = 3.95, SD = .94$). The male athletes from the southeast were more comfortable receiving treatment by a female athletic trainer ($M = 4.06, SD = .9$) than a male athletic trainer ($M = 4.04, SD = 1.05$). The means for this category show no strong preference for comfort for either gender. For the northeast and southeast samples, a paired samples $t$-test showed no significant difference in comfort level for treatment of any injuries/illnesses in this category.

The category entitled “gender-specific injuries and conditions” contained the scenarios related to penis injuries/illnesses, testicle injuries/illnesses, and scrotum injuries/illnesses. For the category “gender-specific injuries and conditions,” the male athletes from the northeast and southeast were more comfortable receiving treatment by a male athletic trainer (northeast, $M = 3.67, SD = 1.11$, southeast, $M = 3.57, SD = 1.28$), than a female athletic trainer (northeast, $M = 2.83, SD = 1.2$, southeast, $M = 2.81, SD = 1.34$). For the northeast and southeast samples, a paired samples $t$-test showed a significant difference in increased comfort level when receiving care from a male athletic trainer for penis (northeast, $M = .814, SD = 1.749, t(43) = 3.051, p < .05$, southeast, $M = .880, SD = 1.547, t(43) = 4.022, p < .05$), testicle (northeast, $M = .721, SD = 1.777, t(43) = 2.660, p < .05$, southeast, $M = .843, SD = 1.488, t(51) = 4.046, p < .05$), and scrotum (northeast, $M = .721, SD = 1.723, t(43) = 2.744, p < .05$, southeast, $M = .824, SD = 1.571, t(51) = 3.743, p < .05$) injuries.

For the northeast sample, 17 responded as feeling uncomfortable with care by a female athletic trainer for penis injuries, 94% ($n = 16$) said it was due to gender, and 6% ($n = 1$) said it had to do with level of experience. For testicle injuries, 19 responded as feeling
uncomfortable with a female athletic trainer providing care, 84.2% \( (n = 16) \) said it was due to gender, 10.5% \( (n = 2) \) said it was due to level of experience, and 5.2% \( (n = 1) \) said it was due to level of confidence of athletic trainer. For scrotum injuries, 93.7% \( (n = 15) \) responded as uncomfortable due to gender. For all gender-related scenarios, 5 respondents said they felt uncomfortable with treatment by a male athletic trainer as well. For the southeast sample, 14 responded that they felt uncomfortable with treatment by a female athletic trainer for penis injuries, 71.4% \( (n = 10) \) said this was gender related, 7.1% \( (n = 2) \) said it was level of experience of athletic trainer, 14.3% \( (n = 3) \) said it was level of confidence of athletic trainer, 7.1% \( (n = 2) \) said other. For testicle injuries, 15 said they felt uncomfortable, 66.7% \( (n = 10) \) was gender related, 26.7% \( (n = 4) \) was due to level of confidence of athletic trainer, and 6.6 \( (n = 1) \) said other. For scrotum injuries, 64.3% \( (n = 9) \) were uncomfortable due to gender, 6.7% \( (n = 1) \) due to level of experience of athletic trainer, 21.4% \( (n = 3) \) was due to level of confidence of athletic trainer, 6.7% \( (n = 1) \) was other. For treatment by a male athletic trainer, 6 respondents said they felt uncomfortable with gender-specific injuries; reasoning for decreased comfort level for all was gender related.

To analyze questions (1) and (2) of Part II of the survey, which used a Likert scale to respond to the question, “I feel more comfortable receiving athletic training services from a female than male athletic trainer,” and vice versa respectively, means of both demographics sampled were found. For the southeast sample, the question (1), which states more comfort with treatment from a female athletic trainer rather than a male, had a mean close to the response value for disagree \( (M = 2.82, SD = .495) \). For this question, 79.5% said they were
neutral, one respondent said they agreed, and 18.2% said they disagreed. For question (2), which states more comfort with treatment from a male athletic trainer than a female athletic trainer, the mean was slightly over the response neutral ($M = 3.16$, $SD = .645$). For this question, 77.3% responded they were neutral, 7% disagreed, and 15.9% agreed. For the northeast sample, both questions had a mean around the response neutral (question 1, $M = 2.92$, $SD = .813$, question 2, $M = 3.13$, $SD = .886$). For question (1), more comfort with female athletic trainers, 69.2% responded they were neutral, 17.3% disagreed, and 13.4% said they agreed. For question (2), more comfort with male athletic trainers, 67.3% said they were neutral, 11.6% disagreed, and 21.1% responded that they agreed.

To analyze the qualitative data, a content analysis coding process was utilized. For the coding process of the open-ended question, subjects were asked to record a description of female athletic trainers, specifically characteristics, attributes and perceptions. The responses were coded as: (1) females equal to males, (2) females equal to males except with gender-specific injuries (3) stereotypical feminine characteristics, (4) females unequal to males, (5) physical appearance, and (6) other. Of all the surveys completed (N = 104), 68.2% $n = 71$ were returned with the open-ended question completed (see Table 6). Of the responses, 45% ($n = 32$) indicated a response that was coded as “females equal to males.” One respondent indicated “I don’t have a gender bias when it comes to female verse male athletic trainers. They are just as capable and knowledgeable.” Equality was based on knowledge and education, but also on general comfort level of athletic trainers of different genders, “I feel that I am extremely comfortable with a female athletic trainer. It really does
not matter to me at all if it’s a female or male”, “The same as any other athletic trainer. Gender should have no impact on performance of the attributes of an athletic trainer.” Another comment included that females might even be better than male athletic trainers in certain situations, “They are just like a male trainer, they do the same job…Some females could be better than men at their job.” Many answers related to no preference with genders, as long as the athletic trainer was qualified and educated; “No difference than a male trainer. Would prefer if better.” Additionally, one stated, “As long as they are trained, they are good athletic trainers.”

Of all the responses returned, 8.5% (n = 6) of statements were coded in the category relating to equality of females and males, except for gender-specific issues. “No difference, except awkwardness with showing male parts/problems.” Another subject stated, “Female athletic trainers might carry a confidence around but couldn’t deliver on certain needs for certain sports. An athletic trainer should be able to relate to sport, females can’t do for all sports.” A few responses agreed that athletic trainers of both genders have the same education, but still cannot work with the opposite gender, “The same knowledge, difficult to get used to if for a male sport.”

Of the respondents, 33.8% (n = 24) indicated stereotypical feminine characteristics in describing female athletic trainers. These responses contained descriptions of females in a stereotypical female gender role. The majority of statements reflected these characteristics as positives, “smart, open-minded, friendly”, “nice, gentle, caring, organized”, and “easy to work with, very respected.” Many answers referred to female athletic trainers as fulfilling the
“mother-like” role: “more sympathetic towards situations, will treat right away instead of telling me to fight through, more easily persuaded.”

The category entitled females unequal to males contained 2.8% \( (n = 2) \) of the total responses, i.e. “Seem to be weaker and can’t do as much.” The category coded as physical appearance contained 5.6% \( (n = 4) \) of the responses. One response pertained to females involved with football needing to be more athletic physically, “I would say that a female athletic trainer be an athlete…sort of a tomboy. A little rough.” The three other responses described specific females, and one response was a picture of a stick figure woman with large breasts.
Chapter V
DISCUSSION

The goal of this study was to determine male football players’ comfort level with female athletic trainers when dealing with treatment and care of injuries/illnesses; specifically gender-specific injuries/illnesses. Overall, male football players felt more comfortable with male athletic trainers dealing with treatment for gender-specific injuries. The reason most commonly stated for feeling discomfort was that the injury was gender related. Some respondents did feel just as uncomfortable with male athletic trainers as they did with female athletic trainers for these injuries, which potentially could be the general embarrassment felt with injuries that can be considered intimate. This also may lead to research, which addresses if the discomfort that is felt with females is increased due to the view that it is socially unacceptable.

While there were differences in the means for other categories of injuries, with most stating they were more comfortable with male athletic trainers providing treatment, there were not significant differences. This reveals that for injuries/illnesses that are not gender related, there is no drastic discomfort with care by female athletic trainers, and many may actually have no preference in treatment either way. Scenarios that related to gender-specific injuries were the only sections that had means that indicated statistically significance. This indicates that male athletes were significantly more comfortable receiving treatment by a male athletic trainer than a female athletic trainer for these injuries/illnesses. This is very similar to the results found in the Drummond et al. (2007) study that determined that there is a degree of
discomfort when the injury or illness is gender-specific and cared for by a member of the opposite gender. It has been reported that most males and females prefer healthcare by a physician that is of the same gender, if the injury/illness is considered more intimate (Franks & Bertakis, 2003).

For injuries in the category “psychological conditions,” males from both samples felt more comfortable with treatment by a female athletic trainer than a male athletic trainer. The fact they are equally comfortably potentially could be related to the traditional gender role where females tend to be viewed as sensitive, caring, and understanding. This also would support role congruity theory. This also relates back to the findings by Rudman and Glick (2001) that assert women in the communal role of being caring and sensitive, and therefore less judgmental. This is contrary to the findings in the Drummond et al. study, where they found that the male athletes were equally comfortable with care from either gender in this category. The most commonly reported reason for discomfort with opposite sex treatment for all injuries was gender-related; this is the same results as the Drummond et al study. Further research, including focus groups, could be done to provide more insight into this area.

Few respondents labeled their discomfort with certain injuries/illnesses as having to do with the level of experience or level of confidence of the athletic trainer. This was found for treatment by either male or female athletic trainers. This is consistent with the findings of the Drummond et al. study. This could be viewed as a positive finding that many athletes feel comfortable with the knowledge of athletic trainers and have confidence in their athletic trainers despite their gender. This is reassuring that if a female was hired in an athletic training
room that is predominantly or only male athletes, most males would feel that their athletic trainer, despite gender, was competent.

For the two questions in Part II of the survey that dealt with whether or not the male athlete agreed or disagreed with the statement that they felt more comfortable with treatment from either a female or a male and vice versa, the results were very similar. In response to whether male athletes were more comfortable with treatment by a male athletic trainer, 77.3% said they were neutral. For the statement that male athletes were more comfortable with treatment by a female athletic trainer, 79.5% said they were neutral. These results were for both samples. One can conclude from these results, that male athletes do feel comfortable with treatment of general injuries/illnesses by either gender. This question, however, does not address what scenario the male athletes feel uncomfortable or comfortable with. It seemed rather surprising that the majority of respondents had no strong feelings either way, and felt generally comfortable with treatment from both genders.

The results of the qualitative analysis demonstrated that many of the male athletes have a positive perception of female athletic trainers’ attitudes, characteristics, and attributes. It was surprising that the most common responses related to equality among female and male athletic trainers in the athletic training room. From the northeast sample, 53% of the responses indicated that they felt male and female athletic trainers were equal, while 45.8% of the southeast sample indicated they felt they were equal. These responses may demonstrate a line of thinking amongst this generation where females and males in the athletic training room are viewed as being equal. It may be that as more athletes have positive experiences with female
athletic trainers that their competence level supercedes their gender. One cannot determine solely if this is a result of being a part of a more accepting generation or society, or if this is unique to the sample that is being tested, further research would need to be done to determine

Most references made by the male athletes about female athletic trainers were describing characteristics of them being nurturing, caring, and possessing a sensitive nature, relating the female athletic trainer to more of a “mothering” role. This seemed very interesting in that male athletes from both samples may relate the female athletic trainer to the stereotypical gender role of a female, even in a male environment. Only two responses in total labeled the female athletic trainers as unequal to male athletic trainers, and only four responses made reference to the appearance of the female athletic trainer. The results indicate that a majority of the male athletes do not feel as though female athletic trainers do not belong in the football athletic training room. They do feel as though females may offer a different type of care, or bring a different dimension of care to the athletic training room. This can be seen in the many responses that labeled a female as providing care that was more nurturing and attentive than a male. One response indicated that female athletic trainers were “more easily persuaded” than male athletic trainers. It is not known whether this was due to a specific incident that occurred to this athlete, or if this is a general perception. One response indicated that they felt that female athletic trainers might be “better” than males in certain situations, for example, psychological injuries/illnesses. These responses related most to the studies and work by Harrison (2005) and Greendorfer (1993), that found that it is very natural for
individuals to label others with social stereotypes and place them in their natural social or gender role.

Many respondents stated equality among genders of athletic trainers, but if a situation was gender related, then there was mention of discomfort or awkwardness. Five responses stated that female athletic trainers worked well in football, but not if there was situation that was gender specific because they would feel uncomfortable. Of the responses that said that females would not work well in football, it was because of their gender, and assumed lack of strength and gender issues. This finding relates to the findings of the Drummond et al. study, and other studies related to physician choice, that most patients choose a physician or caregiver that is the same-sex to feel more comfortable. Additionally, these statements support the findings in the quantitative section.

It was surprising to find very few responses that dealt with the outward appearance of the female athletic trainer. Only four responses mentioned appearance. These responses stated that appearance was the only difference that these athletes saw in the different genders of athletic trainers. Two responses stated that the female athletic trainer must be “in-shape” to work with football, and one mentioned that the female “may or may not be pleasing to the eyes.” The male athletes did not commonly make comments that emphasize the sexuality of female athletic trainers. This is a positive finding in that ability and competence were viewed above female athletic trainers being viewed as sex objects.

The results of this study show that males are generally comfortable with treatment from either gender of athletic trainer, as long as the injuries/illnesses are not gender-specific or
psychological in nature. Athletes are comfortable with the experience of each athletic trainer and with the confidence of each athletic trainer; regardless of gender. While many stated they were uncomfortable with discussing gender-specific issues with female athletic trainers, there were still 79.5% that responded they were neutral in their comfort level for all injuries. Eight of the male athletes stated in their open-ended responses that they had no preference for gender, just wanted an athletic trainer that could help them and get them back on the field. It seemed apparent that the athlete could get past the hesitation of treatment based on gender of the athletic trainer, and do what is necessary to continue play and take care of themselves.

There are limitations that exist in this study. The small sample size does not make it feasible to generalize these results to a larger population. The results of this study cannot be used to indicate a preference for gender of athletic trainer, just the comfort level of the male athletes.

Recommendations for future research would be to look more in-depth into if male athletes are less likely to report injuries/illnesses due to discomfort with opposite gender athletic trainers. It is ultimately important to determine if athlete care may be insufficient due to treatment and care with opposite genders, and the hesitation by athletes to inform opposite gender athletic trainers about gender-specific injuries/illnesses. This study could also be performed to analyze comfort level of female athletes that are being treated by male athletic trainers. Additionally, further research could also be done to look at attitudes and perceptions of the football coaches and administrative staff to see if their perceptions are limiting female opportunities in male sports.
From this study it appears the attitudes and perceptions of athletes are that in which they view female athletic trainers as equal. However, if this is true, the lack of females is still not being seen in head athletic trainer positions. Thus, examining the preferences and attitudes of coaches and athletic directors may provide some insight into hiring practices. Lastly, it would be beneficial to develop a study that was done across more schools and with a larger sample to see if these results are common or limited to the areas currently studied.

While it does appear that male football players generally are comfortable with treatment from an athletic trainer of the opposite gender, it is still apparent that in situations that are gender specific, male athletes would prefer a male athletic trainer. This does not mean, however, that female athletic trainers should not be hired for football positions, it may be that females are not able to be the sole athletic trainer in the facility. Many of the respondents in this survey made it apparent that female athletic trainers are equal, and in some situations may be better, than their male counterparts. It is the administration and coaches’ responsibility to integrate females into their department, at all levels, to foster an opportunity for female athletic trainers.
REFERENCES


Whisenant, W. A. (2003) How women have fared as Interscholastic Athletic Administrators since the passage of Title IX. *Sex Roles*, 49, 179-184.


APPENDICES
April 21, 2008

Ms. Caitlin O’Connor
3111 Walnut Creek Parkway
Apt C
Raleigh, NC 27606

Dear Ms. O’Connor:

I am very pleased regarding your interest in gender comfort of athletes with athletic training care. I just presented my recent paper in the Research Consortium at the American Alliance for Health, Physical Education, Recreation, and Dance. There appeared to be great interest in this topic.

This letter is to grant you permission to use the Gender Comfort with Athletic Trainer Questionnaire and to adapt the questionnaire in any way that you deem appropriate. If I can be of further assistance to you, please don’t hesitate to let me know.

Sincerely,

[Signature]

Jan L. Drummond, Ed.D.
Associate Professor of Athletic Training
Exercise and Sports Science
918.631.2931
Appendix B.

GENDER COMFORT WITH ATHLETIC TRAINER QUESTIONNAIRE – MALE ATHLETE

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

1. Present Age:_________ __________

2. Classification: (1) Freshman
(2) Sophomore
(3) Junior
(4) Senior
(5) Graduate

3. Race/Ethnic Background: (1) White
(2) African American
(3) Hispanic
(4) Asian
(5) Native American
(6) Other ________________________

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

5. I have received athletic training services from more female than male athletic trainers:
(1) Agree
(2) Disagree
(3) Not Sure

6. I have received athletic training services from more male than female athletic trainers:
(1) Agree
(2) Disagree
(3) Not Sure

7. Were athletic training services provided during your high school athletics?
(1) Yes
(2) No
(3) Not Sure
If yes, were athletic training services provided by:
(1) A male athletic trainer
(2) A female athletic trainer
(3) Both male and female athletic trainers

8. Are athletic training services provided for your intercollegiate sport?
(1) Yes
(2) No
(3) Not Sure

If yes, are athletic training services provided by:
(1) A male athletic trainer
(2) A female athletic trainer
(3) Both male and female athletic trainers

**PART II:** It is important that you read each statement carefully. Then, next to each statement, please circle the response that is *most true for you* by using the following scale:

(1) Strongly disagree   (2) Disagree   (3) Neutral   (4) Agree   (5) Strongly agree

1. I feel more comfortable receiving athletic training services from female 1 2 3 4 5
than male athletic trainers.

2. I feel more comfortable receiving athletic training services from male 1 2 3 4 5
than female athletic trainers.

3. I feel more comfortable receiving athletic training services from certified 1 2 3 4 5
athletic trainers than athletic training students.

4. I feel that my gender influences the quality of athletic training services 1 2 3 4 5
I receive.

5. I feel that the gender of the athletic trainer influences the quality of athletic 1 2 3 4 5
training services I receive.

6. I feel more comfortable discussing injuries or conditions with the athletic 1 2 3 4 5
trainer assigned to my sport than an athletic trainer not assigned to my sport.
7. I feel more comfortable discussing injuries or conditions with a certified athletic trainer than my coach. 1 2 3 4 5

8. I feel more comfortable discussing injuries or conditions with an athletic training student than my coach. 1 2 3 4 5

9. I feel more comfortable discussing injuries or conditions with a female coach than a male coach. 1 2 3 4 5

10. I feel more comfortable discussing injuries or conditions with a male coach than a female coach. 1 2 3 4 5

PART III: RECEIVING CARE FROM A MALE ATHLETIC TRAINER

The following is a list of 20 injuries or conditions you may experience during sport participation. Relate each of these to your comfort level in receiving care from a MALE ATHLETIC TRAINER using the following scale:

(1) Very uncomfortable  (2) Uncomfortable  (3) Neutral  (4) Comfortable  (5) Very comfortable

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

1. Hypertension (High Blood Pressure) 1 2 3 4 5
   If you circled (1) or (2), please circle ONE reason for your discomfort.
   (1) Gender related
   (2) Level of confidence in athletic trainer
   (3) Level of experience of athletic trainer
   (4) Other (Please specify): ________________

2. Head/Neck injuries 1 2 3 4 5
   If you circled (1) or (2), please circle ONE reason for your discomfort.
   (1) Gender related
   (2) Level of confidence in athletic trainer
   (3) Level of experience of athletic trainer
<table>
<thead>
<tr>
<th>3. Depression</th>
<th>If you circled (1) or (2), please circle ONE reason for your discomfort.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(1) Gender related</td>
<td></td>
</tr>
<tr>
<td>(2) Level of confidence in athletic trainer</td>
<td></td>
</tr>
<tr>
<td>(3) Level of experience of athletic trainer</td>
<td></td>
</tr>
<tr>
<td>(4) Other (Please specify): ____________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Urinary tract infections</th>
<th>If you circled (1) or (2), please circle ONE reason for your discomfort.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(1) Gender related</td>
<td></td>
</tr>
<tr>
<td>(2) Level of confidence in athletic trainer</td>
<td></td>
</tr>
<tr>
<td>(3) Level of experience of athletic trainer</td>
<td></td>
</tr>
<tr>
<td>(4) Other (Please specify): ____________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Gastrointestinal disorders</th>
<th>If you circled (1) or (2), please circle ONE reason for your discomfort.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(1) Gender related</td>
<td></td>
</tr>
<tr>
<td>(2) Level of confidence in athletic trainer</td>
<td></td>
</tr>
<tr>
<td>(3) Level of experience of athletic trainer</td>
<td></td>
</tr>
<tr>
<td>(4) Other (Please specify): ____________</td>
<td></td>
</tr>
</tbody>
</table>

**MALE ATHLETIC TRAINER Scenario Continued:**

(1) Very uncomfortable  (2) Uncomfortable  (3) Neutral  (4) Comfortable  (5) Very comfortable

<table>
<thead>
<tr>
<th>6. Ankle injuries</th>
<th>If you circled (1) or (2), please circle ONE reason for your discomfort.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(1) Gender related</td>
<td></td>
</tr>
<tr>
<td>(2) Level of confidence in athletic trainer</td>
<td></td>
</tr>
<tr>
<td>(3) Level of experience of athletic trainer</td>
<td></td>
</tr>
<tr>
<td>(4) Other (Please specify): ____________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Back injuries</th>
<th>If you circled (1) or (2), please circle ONE reason for your discomfort.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(1) Gender related</td>
<td></td>
</tr>
<tr>
<td>(2) Level of confidence in athletic trainer</td>
<td></td>
</tr>
<tr>
<td>(3) Level of experience of athletic trainer</td>
<td></td>
</tr>
</tbody>
</table>
(4) Other (Please specify): ____________

8. Knee injuries

If you circled (1) or (2), please circle ONE reason for your discomfort.
(1) Gender related
(2) Level of confidence in athletic trainer
(3) Level of experience of athletic trainer
(4) Other (Please specify): ____________

9. Groin injuries

If you circled (1) or (2), please circle ONE reason for your discomfort.
(1) Gender related
(2) Level of confidence in athletic trainer
(3) Level of experience of athletic trainer
(4) Other (Please specify): ____________

10. Shoulder injuries

If you circled (1) or (2), please circle ONE reason for your discomfort.
(1) Gender related
(2) Level of confidence in athletic trainer
(3) Level of experience of athletic trainer
(4) Other (Please specify): ____________

11. Rib injuries

If you circled (1) or (2), please circle ONE reason for your discomfort.
(1) Gender related
(2) Level of confidence in athletic trainer
(3) Level of experience of athletic trainer
(4) Other (Please specify): ____________

MALE ATHLETIC TRAINER Scenario Continued:
(1) Very uncomfortable (2) Uncomfortable (3) Neutral (4) Comfortable (5) Very comfortable

12. Sexually transmitted infections

If you circled (1) or (2), please circle ONE reason for your discomfort.
(1) Gender related
13. Addictions (e.g., drugs, alcohol) 1 2 3 4 5

If you circled (1) or (2), please circle ONE reason for your discomfort.
(1) Gender related
(2) Level of confidence in athletic trainer
(3) Level of experience of athletic trainer
(4) Other (Please specify): ____________

14. Abdominal injuries 1 2 3 4 5

If you circled (1) or (2), please circle ONE reason for your discomfort.
(1) Gender related
(2) Level of confidence in athletic trainer
(3) Level of experience of athletic trainer
(4) Other (Please specify): ____________

15. Breast/Chest injuries 1 2 3 4 5

If you circled (1) or (2), please circle ONE reason for your discomfort.
(1) Gender related
(2) Level of confidence in athletic trainer
(3) Level of experience of athletic trainer
(4) Other (Please specify): ____________

16. Eating disorders 1 2 3 4 5

If you circled (1) or (2), please circle ONE reason for your discomfort.
(1) Gender related
(2) Level of confidence in athletic trainer
(3) Level of experience of athletic trainer
(4) Other (Please specify): ____________

17. Hip injuries 1 2 3 4 5

If you circled (1) or (2), please circle ONE reason for your discomfort.
(1) Gender related
(2) Level of confidence in athletic trainer
(3) Level of experience of athletic trainer
(4) Other (Please specify): ____________
MALE ATHLETIC TRAINER Scenario Continued:
(1) Very uncomfortable (2) Uncomfortable (3) Neutral (4) Comfortable (5) Very comfortable

18. Testicle injuries/conditions 1 2 3 4 5
If you circled (1) or (2), please circle ONE reason for your discomfort.
(1) Gender related
(2) Level of confidence in athletic trainer
(3) Level of experience of athletic trainer
(4) Other (Please specify):

19. Penis injuries 1 2 3 4 5
If you circled (1) or (2), please circle ONE reason for your discomfort.
(1) Gender related
(2) Level of confidence in athletic trainer
(3) Level of experience of athletic trainer
(4) Other (Please specify):

20. Scrotum injuries/conditions 1 2 3 4 5
If you circled (1) or (2), please circle ONE reason for your discomfort.
(1) Gender related
(2) Level of confidence in athletic trainer
(3) Level of experience of athletic trainer
(4) Other (Please specify):

PART IV: RECEIVING CARE FROM A FEMALE ATHLETIC TRAINER

The following is a list of 20 injuries or conditions you may experience during sport participation. Relate each of these to your comfort level in receiving care from a FEMALE ATHLETIC TRAINER using the following scale:

(1) Very uncomfortable (2) Uncomfortable (3) Neutral (4) Comfortable (5) Very comfortable

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

1. Hypertension (High Blood Pressure) 1 2 3 4 5
If you circled (1) or (2), please circle ONE reason for your discomfort.
(1) Gender related
(2) Level of confidence in athletic trainer
(3) Level of experience of athletic trainer
(4) Other (Please specify): __________

2. Head/Neck injuries

   1  2  3  4  5

   If you circled (1) or (2), please circle ONE reason for your discomfort.
   (1) Gender related
   (2) Level of confidence in athletic trainer
   (3) Level of experience of athletic trainer
   (4) Other (Please specify): __________

FEMALE ATHLETIC TRAINER Scenario Continued:

(1) Very uncomfortable  (2) Uncomfortable  (3) Neutral  (4) Comfortable  (5) Very comfortable

3. Depression

   1  2  3  4  5

   If you circled (1) or (2), please circle ONE reason for your discomfort.
   (1) Gender related
   (2) Level of confidence in athletic trainer
   (3) Level of experience of athletic trainer
   (4) Other (Please specify): __________

4. Urinary tract infections

   1  2  3  4  5

   If you circled (1) or (2), please circle ONE reason for your discomfort.
   (1) Gender related
   (2) Level of confidence in athletic trainer
   (3) Level of experience of athletic trainer
   (4) Other (Please specify): __________

5. Gastrointestinal disorders

   1  2  3  4  5

   If you circled (1) or (2), please circle ONE reason for your discomfort.
   (1) Gender related
   (2) Level of confidence in athletic trainer
   (3) Level of experience of athletic trainer
   (4) Other (Please specify): __________
6. **Ankle injuries**

   If you circled (1) or (2), please circle ONE reason for your discomfort.
   (1) Gender related
   (2) Level of confidence in athletic trainer
   (3) Level of experience of athletic trainer
   (4) Other (Please specify): _____________

7. **Back injuries**

   If you circled (1) or (2), please circle ONE reason for your discomfort.
   (1) Gender related
   (2) Level of confidence in athletic trainer
   (3) Level of experience of athletic trainer
   (4) Other (Please specify): _____________

8. **Knee injuries**

   If you circled (1) or (2), please circle ONE reason for your discomfort.
   (1) Gender related
   (2) Level of confidence in athletic trainer
   (3) Level of experience of athletic trainer
   (4) Other (Please specify): _____________

9. **Groin injuries**

   If you circled (1) or (2), please circle ONE reason for your discomfort.
   (1) Gender related
   (2) Level of confidence in athletic trainer
   (3) Level of experience of athletic trainer
   (4) Other (Please specify): _____________

10. **Shoulder injuries**

    If you circled (1) or (2), please circle ONE reason for your discomfort.
    (1) Gender related
    (2) Level of confidence in athletic trainer
(3) Level of experience of athletic trainer
(4) Other (Please specify): ________________

11. Rib injuries

1  2  3  4  5

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

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

12. Sexually transmitted infections

1  2  3  4  5

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

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

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

1  2  3  4  5

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

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

14. Abdominal injuries

1  2  3  4  5

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

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

FEMALE ATHLETIC TRAINER Scenario Continued:

(1) Very uncomfortable (2) Uncomfortable (3) Neutral (4) Comfortable (5) Very comfortable
<table>
<thead>
<tr>
<th>15.</th>
<th>Breast/Chest injuries</th>
<th>1 2 3 4 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If you circled (1) or (2), please circle ONE reason for your discomfort.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) Gender related</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) Level of confidence in athletic trainer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3) Level of experience of athletic trainer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4) Other (Please specify): _____________________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>16.</th>
<th>Eating disorders</th>
<th>1 2 3 4 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If you circled (1) or (2), please circle ONE reason for your discomfort.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) Gender related</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) Level of confidence in athletic trainer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3) Level of experience of athletic trainer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4) Other (Please specify): _____________________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>17.</th>
<th>Hip injuries</th>
<th>1 2 3 4 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If you circled (1) or (2), please circle ONE reason for your discomfort.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) Gender related</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) Level of confidence in athletic trainer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3) Level of experience of athletic trainer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4) Other (Please specify): _____________________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>18.</th>
<th>Testicle injuries/conditions</th>
<th>1 2 3 4 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If you circled (1) or (2), please circle ONE reason for your discomfort.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) Gender related</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) Level of confidence in athletic trainer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3) Level of experience of athletic trainer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4) Other (Please specify): _____________________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>19.</th>
<th>Penis injuries</th>
<th>1 2 3 4 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If you circled (1) or (2), please circle ONE reason for your discomfort.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) Gender related</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) Level of confidence in athletic trainer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3) Level of experience of athletic trainer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4) Other (Please specify): _____________________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>20.</th>
<th>Scrotum injuries/conditions</th>
<th>1 2 3 4 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If you circled (1) or (2), please circle ONE reason for your discomfort.</td>
<td></td>
</tr>
</tbody>
</table>
THANK YOU FOR YOUR PARTICIPATION!!!
Table 1.

*Frequency distributions of athletes classification in school (Southeast)*

<table>
<thead>
<tr>
<th>Classification</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>15</td>
<td>34.1</td>
</tr>
<tr>
<td>Sophomore</td>
<td>12</td>
<td>27.3</td>
</tr>
<tr>
<td>Junior</td>
<td>12</td>
<td>27.3</td>
</tr>
<tr>
<td>Senior</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Graduate</td>
<td>3</td>
<td>6.8</td>
</tr>
<tr>
<td><strong>Total (N)</strong></td>
<td>44</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 2.

*Frequency distributions of athletes classification in school (Northeast)*
(*one respondent left this unanswered*)

<table>
<thead>
<tr>
<th>Classification</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>18</td>
<td>34.6</td>
</tr>
<tr>
<td>Sophomore</td>
<td>14</td>
<td>26.9</td>
</tr>
<tr>
<td>Junior</td>
<td>10</td>
<td>19.2</td>
</tr>
<tr>
<td>Senior</td>
<td>9</td>
<td>17.3</td>
</tr>
<tr>
<td>Graduate</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total (N)=</strong></td>
<td>52</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 3.

*Frequency distributions of athletes race/ethnicity (Southeast)*

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>17</td>
<td>38.6</td>
</tr>
<tr>
<td>African American</td>
<td>22</td>
<td>50</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Asian</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Native American</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>9.1</td>
</tr>
</tbody>
</table>
Table 4.

*Frequency distributions of athletes race/ethnicity (Northeast)*

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>19</td>
<td>36.5</td>
</tr>
<tr>
<td>African American</td>
<td>26</td>
<td>50</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>Asian</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Native American</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>7.7</td>
</tr>
</tbody>
</table>
Table 5. *Comfort reported by football players with female and male athletic trainer injury/illness scenarios*  
(Northeast = 52, Southeast = 44)

<table>
<thead>
<tr>
<th></th>
<th>Male Athletic Trainer</th>
<th>Female Athletic Trainer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean  SD</td>
<td>Mean  SD</td>
</tr>
<tr>
<td>General Medical Conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>3.65  1.11</td>
<td>3.42  0.84</td>
</tr>
<tr>
<td>Southeast</td>
<td>3.6  1.14</td>
<td>3.45  1.1</td>
</tr>
<tr>
<td>Hypertension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>3.78  1.14</td>
<td>3.94  0.09</td>
</tr>
<tr>
<td>Southeast</td>
<td>3.77  1.01</td>
<td>3.98*  0.88</td>
</tr>
<tr>
<td>Urinary Tract Infections</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>3.44  1.13</td>
<td>3.38  1.09</td>
</tr>
<tr>
<td>Southeast</td>
<td>3.52  1.25</td>
<td>3.23  1.14</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>3.67  1.13</td>
<td>3.47  1.07</td>
</tr>
<tr>
<td>Southeast</td>
<td>3.75  1.01</td>
<td>3.61  1.02</td>
</tr>
<tr>
<td>Sexually Transmitted Infections</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>3.71*  1.02</td>
<td>2.9  1.12</td>
</tr>
<tr>
<td>Southeast</td>
<td>3.35  1.27</td>
<td>2.98  1.36</td>
</tr>
<tr>
<td>Psychological Conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>3.63  1.05</td>
<td>3.71  0.95</td>
</tr>
<tr>
<td>Southeast</td>
<td>3.57  1.08</td>
<td>3.67  1.04</td>
</tr>
<tr>
<td>Depression</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>3.27  1.19</td>
<td>3.73*  1</td>
</tr>
<tr>
<td>Southeast</td>
<td>3.48  1.15</td>
<td>3.75  1.1</td>
</tr>
<tr>
<td>Addictions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>3.71  1.02</td>
<td>3.76  0.86</td>
</tr>
<tr>
<td>Southeast</td>
<td>3.49  1.08</td>
<td>3.58  0.96</td>
</tr>
<tr>
<td>Eating Disorders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>3.92  0.93</td>
<td>3.65  0.98</td>
</tr>
<tr>
<td>Southeast</td>
<td>3.73  1.02</td>
<td>3.68  1.05</td>
</tr>
<tr>
<td>Injuries to the Upper Body</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>3.88  1.06</td>
<td>3.91  0.91</td>
</tr>
<tr>
<td>Southeast</td>
<td>3.93  1.04</td>
<td>3.93  0.98</td>
</tr>
</tbody>
</table>
Table 5 (continued).

<table>
<thead>
<tr>
<th>Body Part</th>
<th>Northeast</th>
<th>Southeast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head/neck</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.73</td>
<td>3.84</td>
</tr>
<tr>
<td></td>
<td>1.19</td>
<td>1.03</td>
</tr>
<tr>
<td></td>
<td>3.84</td>
<td>4.05</td>
</tr>
<tr>
<td></td>
<td>0.97</td>
<td>0.88</td>
</tr>
<tr>
<td>Shoulder</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1.02</td>
<td>1.03</td>
</tr>
<tr>
<td></td>
<td>3.96</td>
<td>3.59</td>
</tr>
<tr>
<td></td>
<td>0.89</td>
<td>1.21</td>
</tr>
<tr>
<td>Breast/chest</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.94</td>
<td>3.98</td>
</tr>
<tr>
<td></td>
<td>0.97</td>
<td>1.05</td>
</tr>
<tr>
<td></td>
<td>3.92</td>
<td>4.07</td>
</tr>
<tr>
<td></td>
<td>0.85</td>
<td>0.85</td>
</tr>
<tr>
<td>Ribs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.84</td>
<td>3.91</td>
</tr>
<tr>
<td></td>
<td>1.04</td>
<td>1.05</td>
</tr>
<tr>
<td></td>
<td>3.9</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>0.92</td>
<td>0.96</td>
</tr>
<tr>
<td>Injuries to the Mid-Body</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>3.89</td>
<td>3.93</td>
</tr>
<tr>
<td></td>
<td>1.01</td>
<td>1.07</td>
</tr>
<tr>
<td></td>
<td>3.78</td>
<td>3.92</td>
</tr>
<tr>
<td></td>
<td>1.01</td>
<td>0.98</td>
</tr>
<tr>
<td>Hip</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.9</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1.02</td>
<td>1.06</td>
</tr>
<tr>
<td></td>
<td>3.82</td>
<td>4.02</td>
</tr>
<tr>
<td></td>
<td>0.99</td>
<td>0.88</td>
</tr>
<tr>
<td>Groin</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.69</td>
<td>3.86</td>
</tr>
<tr>
<td></td>
<td>1.09</td>
<td>1.15</td>
</tr>
<tr>
<td></td>
<td>3.47</td>
<td>3.59</td>
</tr>
<tr>
<td></td>
<td>1.16</td>
<td>1.21</td>
</tr>
<tr>
<td>Abdominal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.98</td>
<td>3.95</td>
</tr>
<tr>
<td></td>
<td>0.97</td>
<td>0.99</td>
</tr>
<tr>
<td></td>
<td>3.9</td>
<td>4.07</td>
</tr>
<tr>
<td></td>
<td>0.92</td>
<td>0.85</td>
</tr>
<tr>
<td>Back</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3.89</td>
</tr>
<tr>
<td></td>
<td>0.9</td>
<td>1.08</td>
</tr>
<tr>
<td></td>
<td>3.92</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>0.97</td>
<td>0.96</td>
</tr>
<tr>
<td>Injuries to the Lower Body</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>3.98</td>
<td>4.04</td>
</tr>
<tr>
<td></td>
<td>0.95</td>
<td>1.05</td>
</tr>
<tr>
<td></td>
<td>3.95</td>
<td>4.06</td>
</tr>
<tr>
<td></td>
<td>0.94</td>
<td>0.9</td>
</tr>
<tr>
<td>Ankle</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.03</td>
<td>4.07</td>
</tr>
<tr>
<td></td>
<td>0.98</td>
<td>0.99</td>
</tr>
<tr>
<td></td>
<td>3.88</td>
<td>4.09</td>
</tr>
<tr>
<td></td>
<td>0.91</td>
<td>0.86</td>
</tr>
</tbody>
</table>
Table 5 (continued).

<table>
<thead>
<tr>
<th>Gender-specific Injuries</th>
<th>Northeast</th>
<th>Southeast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knee</td>
<td>3.92</td>
<td>4.02</td>
</tr>
<tr>
<td>Gender-specific Injuries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>3.67</td>
<td>2.83</td>
</tr>
<tr>
<td>Southeast</td>
<td>3.57</td>
<td>2.81</td>
</tr>
<tr>
<td>Penis</td>
<td>3.66*</td>
<td>2.8</td>
</tr>
<tr>
<td>Testicle</td>
<td>3.67*</td>
<td>2.82</td>
</tr>
<tr>
<td>Scrotum</td>
<td>3.69*</td>
<td>2.86</td>
</tr>
<tr>
<td>Scrotum</td>
<td>3.51*</td>
<td>2.8</td>
</tr>
</tbody>
</table>
Table 6.

*Frequency distributions of open-ended question responses*

<table>
<thead>
<tr>
<th>Category</th>
<th>$n$</th>
<th>$%$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females equal to males</td>
<td>38</td>
<td>53.6</td>
</tr>
<tr>
<td>Stereotypical feminine characteristics</td>
<td>24</td>
<td>33.8</td>
</tr>
<tr>
<td>Females unequal to males</td>
<td>2</td>
<td>2.8</td>
</tr>
<tr>
<td>Physical appearance</td>
<td>4</td>
<td>5.6</td>
</tr>
<tr>
<td>other</td>
<td>3</td>
<td>4.2</td>
</tr>
<tr>
<td>Total ($N$) =</td>
<td>71</td>
<td>100</td>
</tr>
</tbody>
</table>