A DEEPER UNDERSTANDING OF FEMALE ATHLETE BODY IMAGE

A Paper Submitted to the Graduate Faculty of the North Dakota State University of Agriculture and Applied Science

By

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In Partial Fulfillment for the Degree of MASTER OF SCIENCE

Major Program: Health, Nutrition, and Exercise Sciences

May 2013

Fargo, North Dakota

North Dakota State University Graduate School

Title

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for the degree of		
MASTER OF SCIENCE		
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ABSTRACT

The purpose of this paper is to gain a better understanding of how body image can impact the self-esteem and confidence of female athletes. As the media and public image of professional female athletes becomes increasingly more sexualized, the pressure continues to rise for youth and collegiate female athletes to not only to excel at the sports they participate in, but also be what society deems attractive. These demands lead to harmful behaviors such as disordered eating, over-exercising, and certain drug abuse which, in turn, can result in serious health issues or even death. Continuous study and exploration of female body image – especially in the case of athletes – can aid those involved in battling above mentioned behaviors resulting from poor body image.

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CHAPTER 1. INTRODUCTION

Since the inception of Title IX in 1972, female participation in collegiate athletics has been on the rise; in the decade from 1995 to 2005, women's participation numbers increased by over 18,000. After its passing, the amount of scholarship opportunity for women in collegiate sports increased significantly as well (Cheslock, 2007). However, even though the opportunity to take part in competitive collegiate athletics has opened many doors for females, one cannot ignore the physical and mental risks that high levels of competition can cause, such as poor body image satisfaction.

The purpose of this research paper is to examine current research and studies of female athlete body image and how it affects self-esteem, health, and athletic performance. This research aims to demonstrate to coaches, athletes, parents, administration, and other entities the signs of poor body image satisfaction and combat the dangerous and harmful habits that often spawn from those attitudes.

Naomi Wolf states in her work, The Beauty Myth (1991), the "contemporary ideal of beauty encouraged conformity to a virtually unattainable, unhealthy, and unnatural standard of thinness and beauty." Krane, Stiles-Shipley, Waldron, and Michalenok (2002), described women struggling with their weight and body shape to conform to the ideals of society in their study of body satisfaction, social physique anxiety, and eating behaviors in female athletes.

Markula (1995) stated that the ideal female physique is defined to be, "firm but shapely, fit but sexy, strong but thin," – a body type that is difficult and sometimes even impossible for women to obtain. Researchers and authors have been exploring and researching the standard women are expected to attain to be considered "beautiful"; a standard which seems to be almost as mythical as a unicorn.

The motivation behind researching body image more thoroughly stems from a study done by Vocks, Hechler, Rohrig, and Legenbauer (2009), which explored the effects of exercise on body image. It was found discontent with ones' body decreased after only one hour of exercise. According to the NCAA 2011-2012 Division 1 Manual, individual collegiate athletes are allowed to train four hours per day, six days per week for a total of twenty hours per week during their competitive season; which on average lasts four months. Coaches will typically aim their training schedules to reach this twenty hour limit to achieve the maximum amount of tactical, technical, and weight training. With these facts in mind, one would think an athlete's body image and satisfaction would be higher than that of a non-athlete.

While health and sport performance are reasons for exercise, it can be assumed that obtaining the photo-shopped body shape women commonly see on the covers of fashion magazines is also an influence. In addition, coaches and athletes have been shaped to believe certain body types are ideal for prime athletic performance (Krane, Stiles-Shipley, Waldron, & Michalenok, 2002). This trend of training to achieve a specific body type can potentially lead to harmful and deadly consequences like the Female Triad, a condition characterized by disordered eating, amenorrhea, and osteoporosis (West, 1998).

The pressure to compete at the highest athletic levels combined with the aforementioned demand to also conform to society's definition of "attractive" poses two independent goals of exercise and training. This, in turn, could lead to over exercising and disordered eating; which in tandem – as previously mentioned - have the potential to not only end the athletic careers of these athletes, but cause life-threatening medical conditions.

This research paper will examine previous studies to explore the history of female participation in athletics, the body-image of female athletes, and how the interaction of participation and body image affects eating patterns in these athletes.

CHAPTER 2. METHOD

While exploring previous studies and investigations for this project, the researcher relied on the EBSCOHost database search program provided by the North Dakota State University Libraries. Databases selected to search were Academic Search Premiere and SPORTDiscus. Additional sources were taken from the references from selected articles from base searches.

The advanced search option was decided to be the most practical way to narrow down results of such an expansive search topic. Reading titles and abstracts of articles in search results helped to narrow the selection of articles down even further. Individual search terms and combinations the author used in her research were as follows:

- Female Athletes, Body Image
- Female Athletes, Body Image, Collegiate
- Female Athletes, Body Image, Youth
- Female Athletes, Body Image, Eating Disorders
- Female Athletes, Body Image, Exercise
- Female Athletes, Body Image, Coaches
- Female Athletes, Body Image, Body Dysmorphic Disorder
- Female Athletes, Exercise
- Female Athletes, Body Dissatisfaction
- Female Athletes, Body Dissatisfaction, Peers
- Female Athletes, Body Dissatisfaction, Coaches
- Female Athletes, Body Dissatisfaction, Exercise
- Female Athletes, Body Dissatisfaction, Eating Disorders
- Female Athletes, Body Dissatisfaction, Measures

- Female Athletes, Body Dissatisfaction, Tools
- Female Athletes, Body Dissatisfaction, Measures, Behaviors
- Female Athletes, Sexualization
- Female Athletes, Sexualization, Media
- Women's Athletics, History
- Women's Athletics, Title IX
- Women's Athletics, Association for Intercollegiate Athletics for Women
- Women's Athletics, National Colligate Athletics Association
- Women's Athletics, AIAW
- Women's Athletics, NCAA
- Eating Disorders
- Eating Disorders, Body Image
- Eating Disorders, Body Dysmorphic Disorder
- Body Dysmorphic Disorder
- Body Dysmorphic Disorder, Body Image

These search terms yielded 29 opportunities using two search engines to find suitable articles as well as exhaust the subject matter available.

CHAPTER 3. BRIEF HISTORY OF FEMALE ATHLETIC PARTICIPATION

While there is evidence of women engaging in athletic activities as far back as 800 B.C., a competitive sporting atmosphere for women did not truly come to fruition until the late 1800s (Bell, 2007). Society in this era did not believe women should participate in such activities. The energy needed to compete in athletics was seen as far too strenuous for women; especially if they happened to be menstruating as they were supposed to be in a weakened state during this time (Clarke, 1874).

Despite this canon, women began to organize their own intramural athletic clubs. While they were also allowed to participate in select activities in men's associations, they were never granted full membership. Most historians do not even recognize women's collegiate sports in the early 1900s as they were kept to an intramural level - competition between students of the same college/university - rather than expanding to an extramural level - competition between institutions (Bell, 2007).

Many associations and organizations were developed and founded in the early 1900s in an effort to increase awareness and opportunity for women's athletics in an educational environment; the Committee on Women's Athletics (CWA), the American Physical Education Association (APEA), and the Women's Division-National Amateur Athletic Federation to name just a few. Although these groups worked hard to increase opportunities for women's competitive athletics, support from the public was lacking (Bell, 2007).

One organization pivotal in the fight for women's participation in competitive collegiate athletics was the Intercollegiate Athletics for Women (AIAW). The AIAW was founded in 1971 as an affiliate of AAHPER and NAGWS but severed these relationships in 1979. When formed,

the AIAW sought to promote women's athletics with a strong emphasis on students and education. At their core, they wished to avoid the commercialism and abuse the men's side of collegiate athletics suffered from – specifically, the NCAA (Hult, 1989).

Although Title XI was crucial to the growth of women's athletics, the passage of the monumental legislation created quite a battle for the AIAW to fight. The implementation of financial aid and monies allocated to women's athletics as a result of the Title XI caused concern for contradiction in the AIAW's mission for an educational-centered system. Although talks of merging with the NCAA began in 1979, neither organization would meet the other in vision; the NCAA did not see the AIAW as an equal and the AIAW refused to deal with the NCAA unless they were acknowledged as such (Hult, 1989).

A financially strapped AIAW eventually folded under the pressure of the older and more established NCAA by the end of the 1970s; a lawsuit was even filed by the AIAW against the NCAA alleging the, "NCAA unlawfully used its monopoly power in men's college sports to facilitate its entry into women's college sports and to force AIAW out of existence" (AIAW v. NCAA, 1984). Regardless of their demised, the AIAW was integral in the growth of women's athletics.

The Women's Suffrage Movement, as well as World War II, brought forth a surge of awareness for women's freedom and abilities. As women found firm footing in the workplace as the men went to war and they began fighting for the right to vote, they found momentum to fight for more opportunities like competitive athletics. The first professional women's athletic team, The All-American Girls Baseball League, was formed in 1943 in an attempt to replace Major League Baseball which was canceled due to men being away at war. The league led to an

increase in prospects for women's athletics at the end of the war (Bell, 2007). From there, women's collegiate athletics has developed in to the world we see it as today.

Amy Ruley, currently a member of the administrative staff of North Dakota State University, experienced many of the changes brought forth by Title IX herself. Attending high school in Lowel, Indiana in the early 1970s, she remembers bringing her own uniform for basketball games. Once the administration finally bought the team official uniforms, they were shared between the volleyball and basketball teams (Hamnik, 2012).

Ruley attended Purdue University in 1975 and played for the institution's first women's varsity team - the basketball team. Her freshmen year the team was coached by staff from the physical education department, but by her sophomore year the university hired new staff specifically to coach the team. Ruley remembers the excitement of her team hearing the news, "We were like, 'Woo hoo! These are real coaches!" (personal communication, February 13, 2013).

By Ruley's junior year, the women were finally given tuition assistance like their male counterparts. She remembers how grateful she was for the opportunity to have her education financed while getting to play the sport she loved. "It was crazy going from just hoping you'd make the team to getting... practice gear and uniforms and [everything that came with it.]" (personal communication, February 13, 2013).

After Ruley graduated with her Bachelor's degree in Physical Education from Purdue in 1978, she began her over three decade career with the North Dakota State University Bison as the first, full-time basketball coach for the women's program. She was at the forefront of the AIAW vs. NCAA battle for power in collegiate athletics. Internal scuffles were also fought with

the men's basketball program at NDSU; both teams fought for facility use and funds as well as buses for travel and support staff.

Ruley recalls the men's staff not fully understanding their own privilege of being backed by the NCAA and having perks such as financial assistance and preferential treatment within the department. When discussing scholarship funds, the men's staff told her, "You guys are crazy! Don't go down that road! You guys have it perfect now! Women pick their schools based on their education and the people; it's not about money." (personal communication, February 13, 2013). When in actuality, money was exactly what it was about. Having the opportunity to provide scholarship dollars to potential athletes gave the men's teams around the country a competitive edge to attract talented and driven athletes. This opportunity was something the women's staff and athletes wanted to experience as well.

Some have described Ruley as a pioneer of women's athletics. She has found herself as the most winningest coach in NDSU Women's Basketball history as well as a recipient of several awards including the 1997 WBCA Carol Eckman Award and both 1986 and 1991 AWSF Coach of the Year Award. In addition, she was induced in to both the Women's Basketball and Purdue University Athletic Hall of Fames. After her coaching career ended in 2007, she stayed with the NDSU athletic department and became an Associate Athletic Director of Development at NDSU. While her background and accolades would seem to support the designation as a pioneer of women's athletic progress, she humbly refers to herself as a "benefactor" (Hamnik, 2012).

As demonstrated, Title IX greatly influenced Amy Ruley's career and perspective of sports as she grew up and to become a successful female athletic figure. With the popularity of

participation in women's sports in our society continuing to grow, this same potential for selfperspective transformation reaches more and more young women. It is not surprising that a combination of the confusing hormonal and physical changes associated with puberty with the pressures of conforming to feminine expectations of society and athletic prowess could negatively affect how a female collegiate athlete identifies with her own body.

Greenleaf, Boyer, and Petrie (2009), conducted their research in an effort to find a correlation between high school athletic participation and the continuance of atheltic participation in college. They surveyed 260 female, first year students ranging in age from 18 to 25. Several tools were used to gather data including: a demographic questionnaire, Body Parts Satisfaction Scale-Revised, Body Shape Questionnaire-Revised, Physical Self-Description Questionnaire, Instrumentality Scale, Personal Attributes Questionnaire-Short Form, Self-Esteem Scale, Satisfaction with Life Scale, and Aerobics Center Longitudinal Student Physical Activity Questionnaire.

Greenleaf, Boyer, and Petrie (2009) were attempting to test the following hypothesis, "when girls develop positive body image, feelings of physical competence, and perceptions of instrumentality through high school sport, these factors would be related positively to their continued involvement in physical activity and their psychological well-being in college" (p. 723). The results of the study did not prove the hypothesis to be true, but it did demonstrate a correlation between women who felt physically skilled at their sport and a positive body-image. In short, the researchers found that participation in sport itself was not the direct result of positive self-image, but the increase of skill and talent in sport through participation was. The researchers concluded that, "the importance of physical competence and instrumentality as potential mechanisms through which positive body image can be developed" (p. 723).

While the rise of participation and competition in women's athletics is certainly a great step for society, there still remains the question of the risks surrounding poor body image in athletes. The next section will provide an overview of previous research surrounding the correlation between participation in athletics and body image in female athletes will be outlined.

CHAPTER 4. REVIEW OF LITERATURE

A considerable amount of research has been conducted to explore body-image perception in female (and male) athletes in the past. However, most studies were designed to link body-image to the prevalence in eating disorders. It is commonly accepted among the general public that poor body-image is a problem among women – and athletes - in our society, the research is inconsistent about whether female athletes are more or less at risk for the problem.

One such study by Robinson and Ferraro (2004), posed the questions, "Does athletic involvement by young women put them at risk for eating disorders brought on by pressures to excel at their sports? Do some sports pose a greater threat than others to a woman's body image and eating disorders?" (p. 116). The researchers set out to discover (a) whether or not participation in athletics caused more dissatisfied body image problems than those who did not participate in athletics and (b) if there is a difference between those who participate in speed-focused versus technique-focused sports.

Surveys completed by 55 non-athletes and 53 athletes enrolled in a university with a Division I athletic program measured numerous variables including; Drive for Thinness, Interceptive Awareness, Bulimia, Body Dissatisfaction, Ineffectiveness, Maturity Fears, Perfectionism, and Interpersonal Distrust. The researchers predicted those who participated in sports would have higher levels of body dissatisfaction and tendencies toward disordered eating. The results showed that, contrary to this hypothesis, the women who were identified as non-athletes had higher rates of body dissatisfaction and lower tendencies toward disordered eating. A second hypothesis predicted those women who participated in speed-focused competition would have higher rates of body dissatisfaction; the results showed no significant differences in the scores of the two types of athletes (Robinson & Ferraro, 2004).

A study conducted by Berry and Howe (2000), found the opposite. This study explored the idea that athletic participation can be a factor in eating disorders among female athletes. The researchers surveyed 46 female athletes (ages 17-24) after measuring their Body Mass Index (BMI), skin fold measurements, and percent body fat. The athletes participated in field hockey, swimming, soccer, rowing, or basketball. The questionnaires were aimed to measure self-esteem, body image, competition anxiety, social influence, and eating disorder symptoms. The results of the study reflected a very strong correlation with body image and disordered eating.

While little research was devoted to the role coaches and peers play in eating disorders, Berry and Howe's (2000) study showed they may play a significant role. Most athletes who were dieting to lose weight were told to do so by their coaches. The results of the study reflected the social pressures from coaches and peers as well as body image struggles deemed as forecasters for disordered eating habits (Berry & Howe, 2000).

With research supporting both correlation and no correlation between body image and eating disorders, it is important that further research explore the issue to uncover a definitive answer. In 2009, a study conducted by Swami, Steadman, and Toveé (2009) set out to do just that. In their study, 132 women between the ages of 16 and 61 were surveyed. The women were classified as either track athletes (who were suggested to have higher rates of body dissatisfaction due to the active promotion of a lean physique in their sport), martial artists (chosen due to the lack of a preferred body type in their competition), and non-athletes (deemed the control group). The researchers utilized a Photographic Figure Rating Scale (PFRS) of their own development to determine ideal and perceived body image. They also used a Sociocultural Attitudes Toward Sport Appearance Questionnaire (SATAQ) to determine the influence of media on the athletes' body image (Swami, Steadman, and Toveé, 2009).

The results confirmed the hypothesis, with data showing the non-athletes and martial artists reflecting lower body dissatisfaction (BD) scores than the track athletes. These findings are interesting in that track athletes had significantly lower Body Mass Index scores than martial artists, yet chose an underweight body type as the ideal. The non-athletes and martial artists felt physiques resembling track athletes were preferable, yet the athletes with these physiques were unhappy with their body-image. The results did not show the media having much influence in the BD scores (Swami, Steadman, & Toveé, 2009).

Achieving the ideal body type to excel in competition can be difficult in and of itself. Not all track athletes can be agile and thin nor can all volleyball athletes be tall and muscular. The problem for female athletes is the addition of further pressure to fit in to the mold of what society has deemed "attractive".

Daniels (2009), considered how adolescent girls and college women view themselves in relation to athlete and model representation in the media. That study utilized four experimental conditions and correlating photographic tools: sexualized athletes, performance athletes, sexualized models, and nonsexualized models. The author chose this study based on the thought that, "Images of women athletes engaged in sport may prompt girls and women to think about what their bodies are capable of rather than what they look like. In contrast, sexualized images of women athletes may send a message to girls and women that their bodies are valued as sexual objects rather than athletic forces" (p. 405).

A total of 350 girls (ages 13-18) and 225 college women (ages 18-22) participated in Daniels' study. They were asked to view five photographs the assigned experimental condition and participate in writing exercises after each photo (Daniels, 2009).

Daniels tested 6 hypotheses: (a) participants who view the performance athlete photos would describe themselves using more physicality statements than the other three sets of participants (b) participants in both sexualized groups will describe themselves using more beauty-like statements than the other participants (c) participants viewing the performance photos will use more physicality statements compared to beauty statements (d) participants who are not viewing the performance athlete will use more beauty statements than physicality statements (e) participants viewing the performance photo will use more non-body statements. (f) athletes who view the performance photo will describe themselves with more physicality statements than athletes in the other three groups and non-athletes (Daniels, 2009).

The results of the study confirmed the first five of these hypotheses – thus indicating the sexualization of women can permeate the body image of athletes and non-athletes alike. This study will be discussed further in Chapter 5 of this paper.

Tests and surveys involving photographs and physical images of athletes have been used to measure body satisfaction and perceptions in the past. Researchers Urdapillta, Aspavlo, Masse, and Docteur (2010) set out to determine the perceptive (how the participant saw themselves) and subjective (the participant's ideal) body image and stoutness of male and female athletes; specifically swimmers. Several different computerized photographic tools had been used in the past; some would distort specific portions of the body while others distorted the entire body. Also, some tools used photographs of the participants or photographs of other people. The tool they opted to utilize for their research took a photograph of the participating athletes and distorted the entire body rather than just portions of it. The athletes were then asked to "fix" the photo to fit their perceived body image as well as their ideal body image (Urdapillta, Aspavlo, Masse, & Docteur, 2010).

The pool of participants consisted of 42 volunteers (21 males and 21 females). All were competitive French swimmers. Each participant was photographed, after which the photograph was distorted. Each athlete was then informed the photo was distorted and instructed to adjust their photographs to reflect reality as well as to reflect how they wish they looked (Urdapillta, Aspavlo, Masse, & Docteur, 2010).

The two modes of measurement were developed by Urdaptilla in 2010 called "Body Corpulence Indexes. These measurement tools were used by Urdapillta, Aspavlo, Masse, and Docteur (2010) in this study as well. They measured the BMI (Body Mass Index) and BPI (Body Perceptual Index) of each participant. Multi-variant analysis of variance (MANOVA) was also used to differentiate between genders (Urdapillta, Aspavlo, Masse, & Docteur, 2010). The results of the study found the female swimmer's ideal body stoutness to be the same as their real body stoutness, but different from their perceived body stoutness. In essence, the women want to be the size they really are, but perceive themselves to be a different size (Urdapillta, Aspavlo, Masse, & Docteur, 2010).

While the research is not in agreement in determining whether or not female athletes are truly at greater risk for poor body image and satisfaction, there is evidence of a greater frequency of disordered eating in these athletes. Muscat and Long (2008) realized there was an indication that athletes are less likely to suffer from disordered eating, but there are also statistics that prove there is "a greater frequency of disordered eating among female athletes compared with non-athletes" (p. 2). The researchers attribute this to the arguments found in Fredrickson and Roberts' objectification theory (1997). According to this theory, "women raised in a culture that objectifies the female body and sexualizes women objectify themselves" (p. 2). Women will

objectify themselves as society does, thus increasing the likelihood of fulfilling the objectification of their bodies utilizing harmful methods (ie – eating disorders).

One main component of objectification theory stems from critical comments of the body by peers and superiors, such as teammates and coaches. Muscat and Long (2008) stated, "Specifically within the sports environment, social pressures from coaches, judges, and trainers have been identified as factors leading to stringent dieting that may escalate in to disordered eating behaviors among athletes" (p. 3). The need to perform at their highest level in addition to the pressure to impress their superiors (coaches, judges, parents, etc.) has the potential to perpetuate the anxiety these athletes already feel from the objectification of their bodies in the media.

Muscat and Long (2008) surveyed 223 volunteer female athletes to determine levels of depression, eating disorder continuum, critical comments and emotional response, and severity of critical comments. The researchers then divided the group between sport participants (recreational level) and athletes (competitive involvement). The study found that 58% of all subjects surveyed remembered receiving a critical comment about their body shape or weight. Between 63% and 68% of the athletes received critical comments while only 40% of the sport participants received them. The majority of these comments came from parents (42%) and friends (33%). Only a quarter of the comments came from coaches (Muscat & Long, 2008).

As previous studies have demonstrated, there is certainly an issue with body image dissatisfaction within the female athletic population. It fails to be a black and white issue that is easily resolved, and the lack of consistent research findings only further complicates the issue. This paper will expand even more on these studies in an attempt to flesh out additional information concerning the attitudes of female athletes towards their bodies.

CHAPTER 5. ARTICLE 1: MEDIA EXPOSURE AND INFLUENCE OF FEMALE ATHLETE BODY IMAGE

Introduction

In today's developed society, it is almost impossible not to be exposed to some form of media: television, radio, print, the internet, and the ever expanding medium of social media – it is all around. Along with this exposure comes the consumption of the messages it is aiming to communicate. These messages can range anywhere from a benign sales ad to deeper subliminal messages of socially acceptable behavior.

Historically, it has been taught in developed society that boys and men are expected to take part in physical activities such as sports. However, once a girl or woman expresses interest in those same masculine activities, they are type casted as being lesbians or tomboys (Harrison & Secarea, 2010). To combat the stereotype and often negative connotations of being homosexual, most female athletes try to "emphasize [their] feminine characteristics, their sexuality, and to highlight their heterosexuality" (Harrison & Secarea, 2010). One example of such an athlete is track star Lolo Jones, who is well known for being very attractive while also being vocal about her virginity and vow to remain so until she is married. Jones is well known in the track and field world and her failure to complete her heat of the hurdles competition in the 2008 Beijing Olympics was well covered in the 2012 London Olympics. Despite her being seen as a sexually attractive female athlete, her athletic prowess is still paramount in the media's coverage.

So why does this matter? The potential to be labeled as a lesbian because of athletic involvement and the expectations to be seen as a heterosexual sex object has created a dichotomy for female athletes. Being in the public eye through various forms of media – magazine covers, advertisements, television coverage of sport, etc. – takes this dichotomy and forces these female

athletes to prove their worth, femininity, and heterosexuality to the entire world. In fact, many female sports stars, in their quest to be both marketable and feminine, have begun to lose their credibility as athletes. Harrison and Secarea (2010), found their college coed study participants were likely to see sexualized athletes to be homosexual, but also perceived them to be of "lower status," or less accomplished. An example is NASCAR driver Danica Patrick. Her sexual depictions in popular GoDaddy.com advertisements have established her as a definite heterosexual woman, but she is also perceived as a mediocre and sub-par driver. As Ryan Rudnansky wrote in a piece from BleacherReport.com (2011), Patrick's association with GoDaddy.com, "impedes her progress in gaining respect and mars her reputation." It seems as though no matter how successful she may be on the track, the public cannot look past her sexualized image.

By being portrayed as sexual objects in an attempt to confirm their reputation as a heterosexual woman has in turn hurt their reputation as a professional and accomplished athlete: "...findings indicate that tawdry sexualizations increase the likelihood women athletes will be perceived as gender normative, and decrease the likelihood that they will be respected as athletes" (Harrison & Secarea, 2010). When this dichotomy is presented to young, promising female athletes who wish to pursue opportunities, they are forced to decide between whole-hearted pursuit of athletic goals and the pressure to remain sexual and feminine. It is very uncommon for men in athletics to have to prove their heterosexual maleness; while it is almost essential for women to do so.

Daniels (2009) explored how the media's portrayal of professional female athletes impacted adolescent female athletes. She based her study on two theoretical frameworks: sociocultural theory and objectification theory. Sociocultural theory, "holds that societal factors strongly influence the development and maintenance of body image through the construction of an appearance-oriented culture that values, emphasizes, and displays cultural ideals of beauty and body shape" (p. 400). Rather than encouraging individuals to embrace their appearance for its own uniqueness and exclusivity, cultural ideals push those same persons to become a copy of an unrealistic model of beauty and perfection. Objectification theory holds that a women's view of herself has a tendency to manifest as a view from the outside. That is, women will view their bodies from a third-party perspective (Daniels, 2009). Feminist theory typically refers to this as the "male gaze" in media representation. Stemming from this is the theory of self-objectification; conceptualized by both trait self-objectification (chronic focus on how the body looks) and state self-objectification (a temporary focus on how the body looks) (Daniels, 2009).

In the case of athletes, sociocultural theory is demonstrated in the coverage of female sports in the media. Much controversy surrounded the coverage of women's beach volleyball in the 2008 Beijing Olympic Games. The typical uniform for the sport is a bikini-styled top and bottom which leaves most of the athlete's body exposed. Of course, these women are typically in peak physical shape with defined musculature and very little body fat. Much debate circulates about whether the athletic prowess or physical appearance of these women is more celebrated in the media. Several independent bloggers explored the photographic files stored by Getty Images of women's beach volleyball which were generally of the athletes' rear ends. In turn, these bloggers replicated this photographic style using male athletes titling their work, "What if men's

sports were photographed like women's beach volleyball?" The results were shocking, humorous, and even slightly uncomfortable. It is amazing how the media has normalized the sexuality associated with live action photographs of women, while sexualized live-action photographs of men are not normalized.

Billings, Angelini, and Duke (2010), studied how the coverage of women's sports differed from men's sports during the 2008 Beijing Olympics. In the authors' review of literature, they pointed out previous studies results showing sports broadcasters utilized less empowering descriptions of female athletes (see Billings, 2008) and separated genders by separating "the powerful from the pretty" (see Jones, Murrel, & Jackson, 1999). In the authors' research, they analyzed how NBC employees described the successes, failures, and appearance of female and male athletes (Billings, Angelini, & Duke, 2010). Using 16 classification categories, the researchers analyzed and coded all 74.5 hours of coverage NBC aired of the 2008 Beijing Olympics.

The difference of clock time allotted to each group was significant; over 4 hours of additional coverage was given to men's sports. The research acknowledged this could be due to the "Phelps factor" as the now legendary swimmer was aiming to achieve the most Olympic gold medals of any athlete of all time. However, other female-oriented stories were also significant that year. Such stories included the women's beach volleyball duo of May-Treanor and Walsh and their 101 match and 18 tournament winning streak as well as the possible scandal of underaged girls on the Chinese women gymnastics team (Billings, Angelini, & Duke, 2010). Even though there were noteworthy stories for both men's and women's teams, the men's sports received more coverage than the women's sports.

The first hypothesis of the study stated broadcasters would use different descriptors for men and women when describing performance and failures of the athletes. The second hypothesis stated broadcasters would use different descriptors when describing appearance and personalities of male and female athletes. It was found male athletes received more comments regarding their strength and innate ability, women receive comments about experience. Men also received comments about the size of specific portions and their body as a whole. What was most interesting about the latter finding was how those comments were often tied to "notions of perfection and innate physical abilities" (p. 18). Women received many more comments concerning concentration than men while receiving significantly fewer comments regarding intelligence and consonance (Billings, Angelini, & Duke, 2010).

The fact that women athletes received fewer comments about their strength, intelligence, and consonance while receiving a significantly increased number of comments regarding experience and concentration seems to insinuate a female athlete can practice and compete just as much as or longer than male counterparts, but will never be as strong, smart, or poised. While one could argue this discrepancy could be used as fuel for success, it could also cause female athletes witnessing the broadcast to doubt their abilities.

This brings us back to Daniels (2009) and the second theoretical framework employed by her study: objectification theory. This theory translates to athletics in the form of athletes concentrating more on the physique of their bodies and less on performing their athletic talents to the best of their ability. The drive to be attractive may overcome their own health, safety, and even success as an elite talent in their field.

Self-objectification theory states women's bodies begin to be subject to sexual objectification as they begin to develop and change as a result of puberty. As they develop and

mature, their bodies are increasingly looked at, commented on and evaluated. This increases tenfold when these young women are competing in front of spectators. In the London Olympics of 2012, many of the female athletes were ridiculed as being too "fat," despite their performance in their fields. Even all-around gold medalist gymnast, Gabby Douglas, was scorned for her "nappy hair" by spectators. The perceived and socially accepted attractiveness of these athletes superseded their accomplishments in the field of athletics.

Daniels' (2009) study aimed to discover how media representations of female athletes impacted both female athletes and non-athletes. She used photographs of sexualized athletes, performing athletes, sexualized models, and non-sexualized models to gather her data. It was found that women who viewed the sexualized athlete, sexualized model, and non-sexualized model photographs would describe themselves with more beauty statements while those who viewed the performance athlete used more physicality statements to describe themselves (Daniels, 2009). Her study also found the physicality statements were more emotional and positive in tone while the beauty statements were negative (p. 415).

This study is important in understanding the dynamics of female body image as it demonstrates how media representations of athletes can influence the self-objectification of an individual, even if the exposure is minimal. Daniels (2009) quotes previous researchers stating, "the sexualization of women athletes in mass media serves to reinforce patriarchal power and devalue women's athleticism" (p. 402). Exposing women to viewing their own bodies as sexual objects rather than athletic powerhouses allows those in power – generally, men – to keep the power. The less women think of themselves, the less they will try to exceed expectations.

Limiting the depictions and images of both athletes and women in sexualized ways would be immeasurably beneficial to the confidence and self-esteem of women in terms of their body shape and size. Allowing women to see other women in more powerful and active ways would break the cycle of poor body image and sexualization of female athletics.

Carty (2005), in a piece titled, "Textual Portrayals of Female Athletes: Liberation or Nuanced Forms of Patriarchy?" explored the bodies of female athletes and the contradicting messages they send to young women. Carty specifically questions how much ground female athletes can truly say they have gained when their bodies are not solely praised for strength and ability, but sexual attractiveness. The author questioned how current depictions of athletes in the media reflect the success of women's athletics in the wake of Title IX. Through radical feminist and postfeminist theoretical frameworks, the author analyzed television and print advertisements in which female athletes were represented.

Carty (2005) explains the different perspectives both radical feminists and postfeminists have regarding female athletes posing nude. Postfeminists argue posing nude is a form of empowerment and liberation for female athletes. It allows them to redefine their bodies on their own terms. They no longer are objects of sexual desire, but objects of power in their own right. Radical feminists disagree that posing nude is to be perceived as personal accomplishment for female athletes. They argue that while the athlete may perceive their body and depiction as that of power and liberation, that same image must be approved by men as acceptable first; thus feeding the patriarchal notion that women's bodies are meant for men's sexual desires.

Those athletes who have posed nude typically justify their actions by claiming they are not doing so to be sexual, but in actuality wish to showcase their strength and athleticism (Carty, 2005). The inherent problem with this attitude lies with the fact these spreads were photographed and featured by magazines that have a predominantly male fan base. As Carty states, "Though

nudity may be empowering for [female athletes] as individuals, this type of pose is situated perfectly within the confines of what the male gaze deems as 'appropriately feminine'."

Some athletes have perpetuated their sexual depictions to a point where they overshadow their athletic accomplishments. Carty uses Anna Kournikova - a well-known professional tennis player - as an example, "She is worth over ten million dollars in endorsements, though she has never won a major tournament. And she aggressively accentuates her sex appeal over her athletic ability" (Carty, 2005).

Between the example of Kournikova using her sexuality to advance her athletic career and Carty's explanations of accomplished female athletes' bodies being seen as objects of sexual desire regardless of intentions, what sort of messages are young female athletes receiving from their supposed role models in the media? Be a great athlete, but made sure you are attractive while doing so? These sorts of statements cannot and do not condone a healthy body image for up and coming female athletes. Even the "strong" women like soccer stars Brandi Chastain and Hope Solo are presented as attractive, sexual beings. If a young woman does not have the same body type as these athletes, she could find herself questioning her worth as not only an athlete, but a woman as well. Rather than gauging success on her ability, athleticism, and accomplishments on the court or field, she may gauge it based upon how marketable her body is to the general public; thus perpetuating a negative body image.

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CHAPTER 6. ARTICLE 2: BODY IMAGE AND EATING DISORDERS, OVER-EXERCISING, BODY DYSMORPHIC DISORDER AND OTHER HEALTH CONCERNS Introduction

Much of data recovered from previous body image and eating disorder studies is inconsistent concerning the risk being higher or lower for athletes. Higher risk is argued when athletes are trying to attain an incorrect physique for athletic success all the while trying to perform at their best. Lower risk is argued for when activity and competition help foster higher levels of self-esteem and body image. Regardless of the contradiction, the dangers posed to an athlete suffering from an eating disorder and/or over exercising are certainly cause for concern.

Before previous studies are discussed, further explanations and definitions of eating disorders should be outlined. The two most commonly known eating disorders are Anorexia Nervosa and Bulimia Nervosa. A third disorder, Binge Eating Disorder – which is the consumption of an unusually large amount of food in one sitting on a normal basis – sits at the other end of eating disorder spectrum. These three examples are clinically diagnosed and treated with extensive therapy.

Anorexia nervosa is characterized by an obsession with one's weight; typically those suffering from anorexia keep their weight well below what is average and healthy for their height and age. To continue losing weight, those with the condition will commonly starve themselves or exercise excessively. (MayoClinic.com, 2012).

Bulimia nervosa is similar to anorexia nervosa in that those who suffer from either are obsessive about their weight. However, rather than abstaining from foods as an anorexic would, bulimics will binge eat and then attempt to purge the calories in an unhealthy manner. One method of purging is to induce vomiting or misuse laxatives. The second method is to employ

strict dieting rules, fasting, or excessive exercising to rid the body of calories. No matter the method, bulimia is an extremely unsafe form of weight control that can lead to many health risks (MayoClinic.com, 2012).

Whether a person suffers from anorexia or bulimia, the damage can be outstanding. Malnutrition can cause electrolyte imbalances which could cause sudden death. Another symptom of both conditions is cardiac arrhythmia; typically once the body can no longer sustain itself on fat stores, it will begin to draw energy from muscles in the body. Essentially, the body begins to eat away at the heart, thus weakening it. Osteoporosis (the deterioration of bone matter) is another effect eating disorders can have on one's body. (MayoClinic.com, 2012). The impact these symptoms could have are even more concerning when athletes – individuals who consistently push their bodies to the limits of exhaustion and physicality - are the ones suffering. *Eating Disorders and Over-Exercising*

Greenleaf, Petrie, Carter, and Reel (2009) state that female athletes, "not only face the typical social pressures to be thin, but they are also immersed in a social context that focuses on their bodies' appearance and performance" (p. 498). The researchers surveyed 204 female athletes in Division I athletic programs. The surveys collected self-reported information regarding weight, height, and eating habits. The data reflected that over half of the participants were dissatisfied with their current weight and wished to lose weight. Also, over 25% of their sample population displayed symptomatic disordered eating. While this number certainly seems to be low, it was stated to be higher than previous research (p. 492).

Greenleaf, Petrie, Carter, and Reel's (2009) study also tracked the pathogenic eating and weight control prevalence in their participants. Over 22% of the athletes considered themselves to be binge eaters, but in reality barely 8% could be clinically diagnosed as such (p. 493). It was

also found that 15% of participants employed vigorous exercise to combat the caloric intake of their "binge sessions" and 16% of participants would restrict their food intake. Considering most of those participants were not even truly binge eating, and the fact that athletes need to consume more calories than the average person for energy to train and compete, the actions they took to expel the calories were exceedingly excessive and unnecessary. Restrictive dieting, over-exercising, and purging can all lead to health conditions which could be significantly more harmful to athletes and even life-threatening.

Krane, Stiles-Shipley, Waldron, and Michalenok (2002) explore the idea that most women exercise not primarily for health reasons, but to obtain an unrealistic body shape society has deemed the "perfect woman." In addition, coaches and athletes have been fashioned to believe certain body types are ideal for prime athletic performance. These two pressures built upon each other might lead to disordered eating in female athletes. In this study, the researchers examined levels of body satisfaction, uniform style, and associated concerns with diet and exercise in female athletes.

A total of 402 women participated in the study; 198 of them aerobic exercisers and 204 of them collegiate athletes. They further divided the participants by uniform type: (a) revealing, (b) baggy, and (c) mixed. The instruments of measure they utilized consisted of the Eating Disorders Inventory (EDI) and Social Physique Anxiety Scale (SPAS).

Contrary to Greenleaf, Petrie, Carter, and Reel's (2009) study, Krane, Stiles-Shipley, Waldron, and Michalenok (2002) did not relay the need for any real concern with the participants in their study in terms of eating disorders or SPA (Social Physique Anxiety). Ultimately, the drive for perfectionism was a leading factor in body dissatisfaction. However, the researchers did concede their sample size was already accustomed to group exercise and therefore would not be

within the SPA population. They discovered uniform type did nothing to determine body satisfaction in athletes (Krane, Stiles-Shipley, Waldron, & Michalenok, 2002).

While the two studies contradicted each other in terms of risk factors of eating disorders in female athletes, Krane, Stiles-Shipley, Waldron, and Michalenok's finding of perfectionism being a leading factor in body disaffection should not be ignored. The Mayo Clinic website (2012) states those suffering from anorexia, "may have an extreme drive for perfectionism, which means they may never think they're thin enough." The researchers' main influence of body dissatisfaction is, in fact, a clinically approved risk factor for eating disorders as well.

One particular condition female athletes are at risk for is the Female Athlete Triad (West, 1998). The condition is characterized by amenorrhea, osteoporosis, and disordered eating. The combination of these three circumstances can lead to possible career ending injuries and death.

Disordered eating is the abnormal behavioral eating patterns of an individual. This term is actually preferred over "eating disorder" as it covers a wide spectrum of abnormal eating habits with Anorexia Nervosa, Bulimia Nervosa, and Binge-Eating Disorder being the clinically diagnosable extremes. Regardless of where an athlete may fall on the spectrum, any decrease in caloric intake and electrolyte imbalances resulting from lack of nutrition can lead to serious health concerns, including the Triad (West, 1998).

Amenorrhea is defined as the absence of menstrual bleeding and is commonly caused by hormone imbalances from over-exercising. It is categorized as primary (no menstruation by the age of 16) or secondary (has previously menstruated, but has now been absent for six or more months). Amenorrhea can lead to osteoporosis; the deterioration and lack of bone growth in an individual (West, 1998). Osteoporosis is especially harmful in athletes as the weakened bone is at an increased risk for breakage or fractures. With poor nutrition and a weakened skeletal

system, these fractures and breaks take much longer to heal than your typical athlete and could lead to more serious injuries.

Treating any eating disorder as well as the Female Athlete Triad are long, hard processes and treatment is not always effective. The best way to treat any of the conditions is, in fact, preventing them from happening at all. Exploring and learning to recognize the risk factors for over exercising and disordered eating – such as poor body image – is essential to heading off these harmful and often deadly consequences.

Body Dysmorphic Disorder

The desire to achieve a specific body type is often incorporated in to what is called Body Dysmorphic Disorder; also known as Body Image Disorder (Segura-Garcia, Ammendolia, Procopio, Papaianni, Sinopoli, Bianco, De Fazio, & Capranica, 2010). In their research studying the dependency on exercise and dieting habits of individuals as it relates to body dysmorphia (BD) and eating disorders (ED), the researchers studied four different groups of exercisers in a public gym to analyze how BD and ED relate to each population; Group A were men who wanted to gain weight, Group B were men who wanted to lose weight, Group C were women who wanted to lose weight, and Group D were women with eating disorders.

Groups A and C were found to have normal and healthy Body Mass Indexes although both wished to achieve different body types; Group A wished to be larger and Group C wished to be smaller. The research suggests this stems from the social expectations of men to be big and brawny while women are to be thin and small (Segura-Garcia et al., 2010). This data enforces the theory of Body Dysmorphic Disorder – a disorder in which an individual is overly preoccupied with minor or imagined flaws within their appearance.

The preoccupation Group C had with becoming smaller than their current body size has potential to be damaging to an athlete. Muscle mass is important in many sports for peak competition performance; female athletes wishing to be smaller due to a body dysmorphic idea that their muscles make them look too large could lead to over-exercising and disordered eating in an attempt to remedy the problem.

Stellefson, Wang, and Klein (2006) conducted a study researching the effect cognitive dissonance has on eating and exercise habits in college students. Their study looked at the effects that both healthy behavior related dissonance and appearance related dissonance has on perceived levels of risk and intention to change behavior. The authors stated most research showed people will change their diets and exercise regimens to change their physical appearance in order to be more attractive and therefore, desirable. It is perceived those who are attractive are, "more sociable, warm, intelligent, and socially skilled" (Stellefson, Wang, & Klein, 2006). In essence, the more attractive you are, the more successful you are. As female athletes are commonly presented with the dichotomy of being attractive as well as being successful in their sport; the idea of being attractive will make them more marketable and therefore more successful despite their athletic achievements.

Stellefson, Wang, and Klein (2006) found that although risk and worry correlations between both health and appearance dissonance were high, the risk and worry correlation with diminished appearance was significantly higher. Risk of diminished appearance also had a higher effect on intent to change diet and exercise habits than risk of diminished health (Stellefson, Wang, & Klein, 2006). Thus, an improved appearance is a driving factor in exercise and physical activity.

The authors suggested those involved in diet and physical activity interventions for college students use this research to their advantage and try to make the target audience, "aware of the negative appearance repercussions," of unhealthy eating and exercise habits (Stellefson, Wang, & Klein, 2006). However, this approach may unintentionally promote disordered eating and over-exercising if not done carefully; the line between promoting healthy eating and exercise habits and "fat-shaming" is thin and must be addressed with care.

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