Author: **Dittberner, Sarah A.**
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STUDENT:

NAME: Sarah A. Dittberner **DATE:**

ADVISOR: (Committee Chair if MS Plan A or EdS Thesis or Field Project/Problem):

NAME: Christine Peterson **DATE:**

This section for MS Plan A Thesis or EdS Thesis/Field Project papers only
Committee members (other than your advisor who is listed in the section above)

1. CMTE MEMBER'S NAME: Carol Johnson **DATE:**

2. CMTE MEMBER'S NAME: Kelly Lamon **DATE:**

3. CMTE MEMBER'S NAME: John Klem **DATE:**

This section to be completed by the Graduate School
This final research report has been approved by the Graduate School.

Director, Office of Graduate Studies: **DATE:**

Dittberner, Sarah A. ***Female Adolescent Athletes: The Impact of Body Image and Participating in Sports and Physical Activity***

Abstract

The influence of the media on young females is a consistent problem: drive for thinness, unrealistic body expectations, and pressure to become something unattainable. Athletic involvement can produce overwhelmingly positive outcomes, countering negative influential media messages. This research was conducted to expand upon the importance of sport participation using a survey. Twenty-six female student athletes from Minnesota participated, all 13-17 years old. Results revealed that athletes did not feel pressured by the media to change their bodies. Athletes are able to challenge the negative impacts of the media and, instead, are discovering what their bodies are capable of doing. Conversely, they generally rated themselves as overweight on a Likert scale, despite the majority of participants (68%) being classified as normal or underweight according to their body mass index. Although sport participation poses numerous benefits (fewer mental health problems, strong academic achievement, and increased chances of staying active in adulthood), the underlying concern of the media's voice on body image still exists. Fortunately, females are becoming more involved in athletics: 69% of participants were involved in more than one sport and 61% were involved in sports 10-12 months of the year. Overall, sports provide valuable, healthy, and long-term opportunities for athletes.

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Chapter I: Introduction

In today's society, being physically attractive is associated with being very thin. The ideal shape in the media has changed from a curvaceous, healthy shape in the 1900s to a noticeably leaner and thinner figure today (Lawrie, Sullivan, Davies, & Hill, 2006). The media glorifies the thin standard of attractiveness (Berg, 2001). Many females, including adolescents and children, see the new standard, a leaner and thinner figure, and feel the need to measure themselves against it and try to emulate it. They want to be what they are not, and in many cases cannot be.

Body dissatisfaction and wishing to be thinner has been found in girls as young as six years old according to Clark and Tiggemann (2006). Children are targets of mass marketing and have access to a wide range of media. We are living in a world saturated with advertising and media overexposure filled with unhealthy and unrealistic images that young children have difficulty processing. Children are now beginning to adapt the cultural criterion used by adults for judging physical attractiveness on their own developing bodies (Rogers, 1999). Seeing the shocking thin media images can greatly damage one's self-esteem, resulting in low body image satisfaction (Berg, 2001). Young girls face serious situations when they have internalized the reinforcement that their bodies are imperfect.

Despite the innumerable negative impacts the media can have on the female body, athletics and sport participation have been proven to counter those harmful facts. Fortunately, female sport participation has increased dramatically in the last 40 years. In 1971, there were 294,015 females participating in high school sports in the U.S., compared to 3,222,723 in 2013 (National Federation of State High School Associations, 2013). During the 2012 Summer Olympics, women represented the majority of the U.S. team and won nearly twice as many

medals as their male counterparts (Pfohl, 2012). Shellie Pfohl (2012), Executive Director of the President's Council on Fitness, Sports and Nutrition, strongly stated:

> Coupled with the increased level of opportunities, the benefits of sports participation can also be seen both on and off the field. Sports are vital to encourage success in school, at work, and at play. Female athletes perform better academically and demonstrate higher rates of graduation than non-athletes. Additionally, female athletes are less likely to smoke, use drugs and alcohol, or become pregnant in high school. (p. 2)

Pfohl (2012) also pointed out that even though there have been incredible advancements, there is still a lot to be accomplished to get female athletes on a level playing field with males. Unfortunately, girls are more likely to engage in insufficient physical activity than boys (Robinson & Ferraro, 2004). Niven, Fawkner, Knowles, Henretty, and Stephenson (2009) stated that research has shown that girls become less and less active from early to late adolescence and these levels of activity often do not rebound into adulthood.

Many researchers have tackled this issue and have found benefits and positive outcomes of sport participation. Findlay and Bowker (2009) concluded that sports participation at any level is related to overall positive psychological well being. Dorak's (2011) study found higher levels of self-esteem and body image of athletic girls than non-athletic girls. Hausenblas and Fallon (2006) examined 121 studies and found that, in general, exercise resulted in improved body image across all ages and exercisers. Kololo, Guszkowska, Mazur, and Dzielska (2012) discovered that negative body image or negative perceptions of one's own body weight were found among adolescents who engaged in insufficient levels of physical activity. Lastly, Robinson and Ferraro (2004) established that women not involved in sports of any kind are much more vulnerable to unhealthy dieting and weight concerns.

While there are so many benefits to sports participation and exercise, some women become more focused on the beauty advantages, rather than the health advantages of exercise (Mutrie & Choi, cited in Krane, Waldron, Michalenok, & Stiles-Shipley, 2001), and they get trapped trying to find a balance between culturally constructed feminine contradictions: "firm but shapely, fit but sexy, strong but thin" (Markula, cited in Krane, Waldron, Michalenok, & Stiles-Shipley, 2001, p. 2). Sports are still generally associated with masculinity and some girls may feel they have to overcompensate and over-conform to feminine stereotypes to offset that association (Crissey & Crissey Honea, 2006); they exaggerate their femininity in order to counteract the non-feminine stereotypes of participating in sports (Malcolm, 2003).

The media is still ever present in the athletic world and, much like the general media, is unequal in the representation of women and men. Much more attention is devoted to female athletes who conform to the beauty ideal model than to those who do not (Connell, 1987). More recently noted, female athletes' appearances are frequently the main focus, while their athletic achievements are often trivialized. Their sexuality rather than their athleticism is often emphasized (Kim, Sagas, & Walker, 2010), as well as their personal lives, physical appearance, emotionality, or other non-athletic themes, suggesting that their athleticism is unimportant or nonexistent (Jones & Greer, 2011). Krane, Waldron, Michalenok, and Stiles-Shipley (2001) even found that physically active and very fit women continually compare themselves to an unrealistic cultural ideal. They scrutinize their bodies for their flaws and always feel that something needs to be improved upon; their image of the ideal body makes them feel that they should not be satisfied.

There are numerous damaging outcomes young girls may encounter as they judge themselves through the eyes of the media. Several authors reported that body image

dissatisfaction was found to be associated with problems such as depression, anxiety, hopelessness, low self-esteem, social isolation, parent neglect, and eating disorders (Erermis, Cetin, Tamar, Bukusoglu, Akdeniz, & Goksen, 2004; Johnson & Wardle, 2005; Kostanski & Gullone, 1998; Whetstone, Morrissey, & Cummings, 2007). Additionally, Yanover and Thompson (2008) found that higher levels of eating disturbance and body dissatisfaction were significantly linked to academic achievement interference. These are all serious issues that can easily lead to lasting, detrimental effects in adolescence and adulthood.

On the contrary, sports participation has been empirically linked to many positive outcomes for girls, which challenges the negative impacts of the media. Sports emphasize what the body can do, as opposed to simply its appearance (Smolak, Murnen, & Ruble, 2000). Biddle and Asare (2011) found that those who are physically active appear less likely to suffer from mental health problems (anxiety, depression, self-esteem). Academically, London and Castrechini (2011) discovered that the achievement gap between physically fit and physically unfit elementary age children persisted through their educational career.

Sports participation alone does not lead women to feel more positively about their bodies. Sports and activities provide opportunities for mental and physical skill building, independence, and the ability to acquire leadership and life skills. Overwhelmingly, physical activity and sports participation have been shown, in the studies reported above, to reap immediate and long-term benefits. Participation in sports should be encouraged so girls and women avoid poor self image, health problems, or mental health issues.

Statement of the Problem

The influence of the media on young girls, adolescents, and women is a consistent problem: emphasis on thinness, unrealistic body expectations, unhealthy dieting, and pressure to

become what is unattainable. Overexposure to these harmful messages leads girls to believe that their bodies are imperfect and in need of change, which ultimately can lead to poor body image, low self-esteem, mental health issues, unhealthy lifestyles, and academic underachievement. Fortunately, athletic involvement by females has significantly increased in the last 40 years and has been shown to produce overwhelmingly positive benefits, countering the negative influential media messages. There is a small, but growing body of literature devoted to researching the impact sports has on girls' body image, attitudes, school success, and life choices. This research was conducted to investigate the importance of physical activity and sport participation of female athletes.

Purpose of the Study

The purpose of this study is to determine if athletes internalize media messages, if athletes feel pressure from the media to change their bodies, how athletes perceive their own body weight, and how actively involved they are in organized athletics. A comprehensive literature review and survey was conducted between the Spring 2013 and the Spring 2014 semesters.

Research Questions

The following research questions will be addressed and explored further throughout this research paper.

1. How do female student athletes perceive media messages concerning the female body (general messages versus athletic-specific messages)?

2. Do female student athletes feel pressure from the media to diet or change their bodies?

3. What are female student athletes' perceptions of their weight compared with their actual body mass index?

4. How many sports are female student athletes actively engaged in during the year and what is their frequency of participation?

Definition of Terms

The following are terms that will be used regularly throughout this thesis and need to be defined to help readers develop an understanding of their intended use.

Adolescence. The period of life from puberty to maturity, specifically during the teenage years.

Anorexia nervosa. The refusal to maintain a minimally normal body weight, intense fear of gaining weight, and significant disturbance in the perception of the shape or size of his or her body (American Psychiatric Association, 2000).

Anxiety. Excessive worry or distress and difficulty controlling worry, usually accompanied by restlessness, fatigue, lack of concentration, irritability, muscle tension, or disturbed sleep (American Psychiatric Association, 2000).

Athlete. A person who is involved in and proficient in sports and other forms of physical exercise.

Barbie doll. The best selling children's fashion doll in the world and cultural icon of female beauty, whose body proportions have proven to be unrealistic, unattainable, and unhealthy (Dittmar, Halliwell, & Ive, 2006).

Body image/body satisfaction. The way people think about their body and how it looks to others (National Cancer Institute, 2010), regardless of how closely their actual figure matches their perceptions, and directly affects self-esteem, eating and exercise patterns, and relationships

with others (Barke, n.d.). For example, body dissatisfaction is unhappiness with one's own body with respect to body shape and weight.

Body mass index. A measure for human body shape based on an individual's weight and height.

Bulimia nervosa. Binge eating and inappropriate compensatory methods to prevent weight gain and distorted body shape and weight self-evaluation (American Psychiatric Association, 2000).

Depression. Loss of interest or pleasure in nearly all activities, usually accompanied with changes in appetite, weight, or sleep, decreased energy, feelings of worthlessness or guilt, difficulty thinking or concentrating, or recurrent thoughts of death or suicide. (American Psychiatric Association, 2000).

Eating disorder. Any of a range of psychological disorders characterized by abnormal or disturbed eating habits.

Elementary age children. Preadolescent girls in kindergarten through sixth grade.

Non-athlete. A person who does not participate in a competitive sport (Findlay & Bowker, 2009).

Self-esteem. The expression of approval or disapproval, indicating the extent to which a person believes himself or herself competent, successful, significant, and worthy (Coopersmith, 1981).

Student athlete. Participant in an organized competitive sport sponsored by an educational institution in which he or she is enrolled.

Assumptions of the Study

It is assumed that the information, discussion, and conclusions presented on media influences on body image, the influence and effect of physical activity, and outcomes of body dissatisfaction are based on validated research from professional sources, including a rigorous peer review and inclusion criteria. It was assumed that the survey would be an accurate measure of students' perceptions of the media and sport media and their perceptions of their bodies. It is also assumed that students completing the survey answered honestly and were truthful about their demographic information.

Limitations of the Study

A limitation to this study included the narrow focus of much of the research presented. Regarding the survey sampling, data was collected from only three urban areas, of varying sizes, in Minnesota, which limits the generalizable information concluded from the study. Additionally, a small sample size was obtained also limiting generalizability. Since all participants in the study were minors, only those students whose parents completed and returned the consent form were allowed to participate; therefore, the data collected was limited. With any self-report instrument, such as the survey in this study, the researcher assumes that the participants completing the survey to be completely truthful regarding their responses. Although respondents were instructed to give their most honest responses to all questions and were informed on the confidentiality and anonymity of the documents, responses are still prone to distortion by social desirability concerns. All efforts to minimize the impact of these limitations were used.

Methodology

Chapter II is a review of the literature, including the development of body image through the sources of the media, the influence of physical activity or sport participation on girls' weight, self-perceptions, mental health, and the long-term outcomes and implications of body dissatisfaction in regard to physical activity or sport participation. Chapter III addresses the information related to the methodology of the quantitative study. Chapter IV examines the results from the survey research conducted, and Chapter V provides a discussion of the results, conclusions and recommendations for further research.

Chapter II: Literature Review

This chapter includes the following topics: 1) the development of body image through the source of the media, 2) the influence of physical activity or sport participation on girls' weight, self-perceptions, and mental health, and 3) the long-term outcomes and implications of body dissatisfaction and physical activity or sport participation.

Overwhelmingly, the research points to physical activity and sport participation as positive influences on girls' weight management, feelings and perceptions toward self, and mental health stability. There are, of course, opposing findings in some studies. Both sides will be analyzed and discussed. Media influences, both general body image media messages and athlete-specific media messages, as well as long-term outcomes of physical activity will also be explored.

Development of Body Image

Overwhelmingly, the various facets of the media have an incredible influence in the development of body image in young girls during their transition into adolescence. Cultural studies analyze the social practices of individuals and groups. Culture is a system of beliefs and values that are meaningful to those who are part of that culture and it encompasses anything from eating to clothes to conversations to daily life activities (Sardar & Van Loon, 1997). Ultimately, cultural influences and practiced social patterns impact individual behavior (Nelson, Treichler, & Grossberg, cited in Krane, Waldron, Michalenok, & Stiles-Shipley, 2001). Feminist cultural studies target the relationship between gender and culture, and for the purposes of this research paper, on women's sport and exercise experiences and how they relate to body image. The media is one major force in how these cultural beliefs and standards are formed and internalized.

Culture and society play a major role in the construction of body image (Clark & Tiggemann, 2006). Young girls today are very susceptible to body images and conversations around them. They are at a very vulnerable age where so much around them is absorbed whether they know the meaning of it or not. Youth are constantly bombarded with media exposure through television, magazines, radio, newspapers, movies, and the Internet (Lawrie, Sullivan, Davies, & Hill, 2006). Children now live in a culture where the media is a significant source of appearance information (Dohnt & Tiggemann, 2006b). The mass media are saturated with numerous, overlapping, and harmful messages about the ideal body size and shape in relation to attractiveness, self-control, food, weight management, and diets for weight loss (Neumark-Sztainer, Paxton, Hannan, Haines, & Story, 2006). Adams, Katz, Beauchamp, Cohen, and Zavis (1993) stated "societal standards that place great importance on body size as a determinant of female beauty encourage all females to be extremely attentive to the appearance of their bodies" (p. 38). Images of women displayed in the media today are thinner than the images of men, thinner than media images of women in the past, thinner than the actual female population, and thinner even than the criteria for anorexia (Schooler, Ward, Merriwether, & Caruthers, 2004). The media guides society on what is acceptable and normal. Hammer (2009) added that the media's aim is to maintain power and control, especially over women. Additionally, mass media images consistently associate thinness and attractiveness to happiness, desirability, and status (Tiggemann, cited in Clark & Tiggemann, 2007). Botta (1999) identified the media as the strongest predictor of body dissatisfaction, drive for thinness, and behaviors associated with eating disorders. Garner (1997) declared that to be valued in our society one must look like the thin, beautiful ideal, as well as be unassertive and dependent on others, particularly men. It is no

wonder that most women are dissatisfied with their bodies after being exposed to such messages for so many years.

Polivy and Herman (cited in Dohnt & Tiggemann, 2006a) acknowledged that body image dissatisfaction is a persistent problem for a significant portion of society. A particular desire for thinness in women has become so prevalent that it has been identified by Rodin, Silberstein, and Streigel-Moore (1985, p. 271) as a "normative discontent." It is becoming evident that children as young as six years old, especially girls, are experiencing body dissatisfaction because of the increased exposure to the influence of the mass media. When girls are exposed to such extreme messages at an early age, those messages may become engrained in their minds and eventually have unfortunate consequences.

One of the most powerful and enduring media images to target young girls is the Barbie doll. Barbie is one of the most influential feminine images in the world. She has been a virtual staple of young American girls' lives for over 50 years, and her exposure and influence has grown internationally. According to Mattel (cited in Dittmar, Halliwell, & Ive, 2006), she is the top-selling fashion doll in the world, accounting for annual sales of $1.5 billion. In the United States, the average three-to-ten year old girl owns eight Barbie dolls. Barbie dolls are aspirational role models for young children according to Gleason, Sebanc, and Hartup (2000). Her body proportions, however, are unrealistic, unattainable, and unhealthy. According to Rintala and Mustajoki (1992), if Barbie were real, her waist would be 39% smaller than an anorexic patient. Dittmar, Halliwell, and Ive (2006) discussed that Barbie serves as a new perspective for children to see their own physical selves as who they want to be. They quickly come to understand the meaning of beauty and perfection through Barbie, who is a representation of the culturally constructed ideal of the female body. Thoughts of those aspects

are then internalized into their ideal self-image. The question and focus becomes, 'If Barbie represents perfection, how can I be like Barbie?'

Additionally, more and more television is being watched by children today. According to Levine and Smolak (cited in Clark & Tiggemann, 2006), children spend more time, on average, watching television than any other activity outside of sleeping. This consistent and frequent exposure to media images has a significant impact on body image (Sinton & Birch, 2006). Dohnt and Tiggemann (2006b) found that girls who watch television shows with an emphasis on appearances (e.g. *Friends* and *Rage*) were less satisfied with their own appearance. Shows that present women as thin and attractive (e.g. soap operas and music television) correlated with body dissatisfaction and eating disorders.

Herbozo, Tantleff-Dunn, Gokee-LaRose, and Thompson (2004) used content analysis to identify body image-related messages in 25 popular children's movies (e.g. *Aladdin*, *Beauty and the Beast*, *Cinderella*, *Peter Pan*, and *The Little Mermaid*). They found that there were an average of 8.7 body image-related messages in these movies and 11 of the 25 movies analyzed had more than 10 body image-related messages in them. In 60% of the movies, a character's love for another depended on their physical appearance and 72% placed importance on physical attractiveness. Overall, female physical attractiveness represented in the children's movies was associated with sociability, kindness, happiness, or success, while obesity was associated with evil, unattractiveness, unfriendliness, and cruelty. These findings suggest that physical appearance, specifically thin females, takes priority over other character attributes. These portrayals of thin and obese characters imply that the cultural standards of physical attractiveness are also present in media targeted to young children.

In addition to these messages that are elicited from TV and movies, the actual sedentary behavior of TV and movie watching is another area of concern. Biddle & Asare (2011) reviewed several studies and found that TV viewing remains the most prevalent sedentary behavior for youth and is growing with the increased availability of mobile electronic entertainment. Results showed that there were consistent negative associations with mental health and sedentary behavior, as well as increased odds of depression. Ultimately, youth are spending a greater amount of time in front of the screen, which is inundated with negative appearance messages, and additionally are more susceptible to mental health issues and weight concerns due to increasingly inactive behavior.

Much of the recent research has been focused on young children and their over-exposure to media messages and what they are unknowingly internalizing as they transition into adolescence, a complex stage in any youths' life. Adolescence is the transition period that is characterized by increased demands for managing social, biological, and psychological changes, as well as building a foundation for adulthood (Ongen, cited in Dorak, 2011). There is typically a dramatic decrease in self-esteem during early adolescence (American Association of University Women, cited in Dorak, 2011). Body image is established during childhood, but is consciously formed within the self during adolescence when much more challenging physiological, psychological, and social changes occur (Pektekin, cited in Dorak, 2011). During adolescence, self-esteem is considered to be a key indicator of mental health. Social adjustment and body image are very important influences on one's self-esteem (Dorak, 2011). Unfortunately, adolescents put a lot of trust in the media messages including weight control, exercise, and other appearance-related messages (Pajaujiene & Jankauskiene, 2012). Girls also become more concerned about real or perceived evaluations of their bodies as they mature and get older

(Niven, Fawkner, Knowles, Henretty, & Stephenson, 2009). According to the report of The President's Council on Physical Fitness and Sports (cited in Dorak, 2011), "sports and physical activity can provide adolescent girls with a positive body image, improved self-esteem, tangible experiences of competency and success, and increased self-confidence. Participating in sports can also have a positive impact on the mental health of girls" (p. 554).

Sport Participation and Physical Activity

Although a variety of pressures, including the media, are the catalyst for girls' desires to conform to unrealistic body shape standards, body image management is a strong motivator for physical activity participation (McDonald & Thompson, 1992). In Dorak's (2011) study analyzing self-esteem and body image of adolescent female athletes and non-athletes, it was found that there was a positive correlation between self-esteem and body image. He also found that the measured self-esteem and body image of athletic girls were both higher than nonathletic girls. In his literature review, he cited other studies that found self-esteem and body image generally decreased with age; however, it was found to stabilize at about the age of 13 and even slightly increased after that age (Ozsaker, cited in Dorak, 2011). Additionally, a decrease in self-esteem and body image were due to unbalanced nutritional habits and scarcity of physical activity causing increases in depression and body dissatisfaction (Korugan, Damci, Ozbey, & Ozer, cited in Dorak, 2011). Overall, Dorak's study has proven that sport participation is helpful to offset the decrease in self-esteem commonly occurring in adolescent girls. Harter (1999) stated that it is somewhat unclear whether physical appearance determines one's self-worth or if self-worth provides the foundation for satisfaction of one's own physical appearance.

Feminist cultural studies is the basis for examining the paradox of the physically active female body. "On the one hand, sport and exercise can be a very empowering means by which

women challenge themselves, gain a sense of identity, and learn their physical capabilities. Yet at the same time, sport and exercise can be repressive, as women use exercise as a means to attain the ideal feminine body" (Cole, cited in Krane, Waldron, Michalenok, & Stiles-Shipley, 2001, p. 2). Women tend to focus on the beauty advantages, rather than the health advantages to exercising (Mutrie & Choi, cited in Krane, Waldron, Michalenok, & Stiles-Shipley, 2001). They get trapped in finding the balance in many contradictions that the culturally ideal feminine body prescribes: "firm but shapely, fit but sexy, strong but thin" (Markula, cited in Krane, Waldron, Michalenok, & Stiles-Shipley, 2001, p. 2).

In the first study reviewed, Krane, Waldron, Michalenok, and Stiles-Shipley (2001) found many significant findings worth noting. This study was structured as focus group interviews to analyze the dynamic dialogue of college athletes and female exercisers. Most of the women were physically active and fit and acknowledged a general comfort and satisfaction with their bodies. One of the themes, however, that emerged was that of discontent.

> Women continually compare themselves to an unrealistic cultural ideal and constantly scrutinize their bodies for their flaws; thus, regardless of their fitness level, there is always something that needs to be improved. It was almost as if the women in our study were comfortable with what they looked and felt like, but then their image of the cultural ideal body made them feel that they should not be satisfied. (p. 9)

Most women expressed that they wanted to be toned, but not too muscular. Although the definition of those two terms was never explicitly stated, all women seemed to have a similar understanding of what they meant, in other words, an unwritten, culturally defined rule. Overall, the athletes interviewed expressed pride and satisfaction with their bodies as a result of their hard work to become strong, powerful, and skilled athletes.

In another study by Pajaujiene and Jankauskiene (2012) found that adolescent athletes rated their physical appearance higher than non-athletes on the Body Areas Satisfaction Subscale. This was reported due to the fact that athletes are generally much more aware of their body's functioning and appearance. What was interesting in this study was that both athletes and non-athletes (all with a mean age of 17.23) reported an internalization of the sociocultural body ideal, but athletes tended to internalize the sport physique, while non-athletes tended to internalize more general body ideals from the media. Overall, the stronger the internalization of body ideals, the higher body dissatisfaction that was reported. Additionally, it was found that almost half of the adolescents reported a desire to lose weight.

A literature review by Hausenblas and Fallon (2006) examined 121 studies and found that exercise resulted in improved body image across all ages and exercisers and, in general, those that exercised possessed a more positive body image than non-exercisers. Similarly, another study using a questionnaire, discovered that negative body image or negative perceptions of one's own body weight were found among adolescents who engaged in insufficient levels of physical activity (Kololo, Guszkowska, Mazur & Dzielska, 2012). Another noteworthy finding was that girls are more likely to engage in insufficient physical activity than boys. Niven, Fawkner, Knowles, Henretty, and Stephenson (2009) also indicated research shows that girls become less and less active from early to late adolescence and those levels of activity do not rebound into adulthood. These conclusions indicate the need for more physical activity for girls, adolescents, and women.

Using the Beck Depression Inventory-II, Eating Disorder Inventory, and personal, demographic information, Robinson and Ferraro (2004) found that non-athletes scored higher in the areas of body dissatisfaction, drive for thinness, and perceived differences between current

and ideal body type than any of the athletes assessed. Ultimately, women not involved in sports of any kind are much more vulnerable to unhealthy dieting and weight preoccupations.

In yet another example, athleticism significantly predicted general self-esteem, physical self-esteem, and appearance self-concept, regardless of the level of activity, competitive or elite (Findlay & Bowker, 2009). They came to the conclusion that participation in sports at any level is related to overall positive psychological well being.

Few examples indicated there could be negative implications from participating in sports are when specific sport types are analyzed and compared. One theory is the apologetic defense. Crissey and Crissey Honea (2006) explain the apologetic defense examines the potential that sport participation could actually enhance body dissatisfaction, in contrast to sports having a positive effect on body image. Because sports are generally associated with masculinity, girls may feel they have to overcompensate and over-conform to feminine stereotypes for their shortcomings. In other words, girls or women exaggerate their femininity in order to counteract the nonfeminine stereotypes of participating in sports (Malcolm, 2003). The conclusion of Crissey and Crissey Honea's (2006) study found that playing sports does not always lead to consistent benefits and that, although athletes have thinner bodies on average that does not necessarily translate into positive perceptions of their own body size. Participating in stereotypically feminine sports (cheerleading, dance team, swimming, tennis, and volleyball) was associated with an increased risk for believing they are overweight, trying to lose weight, and using multiple methods to lose weight, as opposed to stereotypically masculine (basketball, field hockey, football, ice hockey, soccer, track and field, and wrestling) or other/neutral (softball and baseball) sports. Sports that are classified as feminine are more likely to reflect the stereotypical beauty ideals. "Sports that emphasize thinness and femininity are not likely to be beneficial to

women already likely candidates for body image and weight control problems. Rather, it is likely that participation would exacerbate these problems" (p. 267). Although Crissey and Crissey Honea's (2006) findings found some negative implications for sport participation, their final statements were positioned at the overall benefit of sport participation and that the fight to expand opportunities for women should continue.

Parsons and Betz (2001) had a similar study that included a questionnaire, the Objectified Body Consciousness Scale, which measured body shame. Women involved in sports that tend to objectify the female body were more likely to rate themselves higher on the body shame scale, meaning they potentially felt shame if they did not fulfill the cultural expectations for the female body. They found that there is a concern over failing to meet the cultural standards for female beauty and, subsequently, there is a higher level of participation in sports, especially those emphasizing female body and femininity (dance, cheerleading, synchronized swimming, and gymnastics), in order to overcome those perceived failures.

Another dimension of sport participation is to explore the influence of female athletes in sport media. As stated by Connell (1987), female athletes tend to emphasize their femininity publicly or to the mass media much more than men because female athleticism challenges femininity. The media devote much more attention to female athletes who conform to the beauty ideal model than to those who do not.

Kim, Sagas, and Walker (2010) focused on the *Sports Illustrated* magazine, and in particular the swimsuit issues, and found that gender differences continue to exist. In the magazines, female athletes' appearances were the main focus, while their athletic achievements were often trivialized. Additionally, the most physically attractive athletes were the ones most frequently chosen as subjects for photography. Their sexuality rather than athleticism is often

emphasized which, unfortunately, makes them more marketable in sport media. Jones and Greer (2011) added that the focus is on females' personal lives, physical appearance, emotionality, or any non-athletic themes, suggesting that their athleticism is unimportant or nonexistent.

In another example, Knight and Giuliano (2001) conducted a study involving participants reading various profiles of athletes. They found that when attractiveness was the main focus of an article for female athletes, in the picture accompanying it, the woman was perceived as more physically attractive than when the article focused on the woman's athletic accomplishments (the same photograph was used). Thus, for women, being an athlete contradicts the conventional female role and the media tend to represent female athletes as women first and athletes second (Boutilier & SanGiovanni, 1983).

Effects of Body Dissatisfaction and Physical Activity

Misperceptions and inaccurate evaluations of one's own body can lead to unhealthy behaviors, adjustment problems, or psychological distress. Girls in particular, place more importance on their bodies when forming self-perceptions and they feel that physical attractiveness is more important than boys do (Guiney & Furlong, 2000).

There is ample evidence that highlights the rising concern of girls' mental health and harmful behaviors. Negative body image is a key predictor of a variety of health problems such as depression, obesity, body dysmorphic disorder, and eating disorders (American Psychological Association, 1994). Several authors reported similar findings that body image dissatisfaction was found to be associated with problems such as depression, anxiety, hopelessness, low self-esteem, social isolation, parent neglect, and eating disorders (Erermis, Cetin, Tamar, Bukusoglu, Akdeniz, & Goksen, 2004; Johnson & Wardle, 2005; Kostanski & Gullone, 1998; Whetstone,

Morrissey, & Cummings, 2007). These are all serious issues that can easily lead to lasting, detrimental effects in adolescence and adulthood.

Body image disturbance has overwhelmingly been identified as a precursor to the onset of eating disorders; a risk factor for several psychopathological conditions such as anorexia nervosa, bulimia nervosa, and body dysmorphic disorder, a disorder where one is excessively concerned with perceived defects in their physical appearance (Albertini & Phillips, 1999). Girls as young as 10 years old have indicated being on a diet to try to lose weight, as reported by McVey, Tweed, and Blackmore (2004). These dieting patterns tend to carry over into adulthood that eventually manifest into eating disorders.

In the most extreme cases, suicidal ideation and suicide have been associated with negative body image and self-perception. In Whetstone, Morrissey, and Cummings' (2007) survey, perceiving oneself to be overweight was significantly related to suicidal thoughts in middle school girls. Using the Youth Risk Behavior Survey, Gruanbaum, Kann, Kinchen, Lowry, Kolbe, Williams, and Ross (2002) indicated that more females than males thought about, planned, or attempted suicide. On top of that, Pompili, Mancinelli, Girardi, Ruberto, and Tatarelli (2004) showed that suicide is more frequent among adolescents and young adults with anorexia than the general population. Other research has revealed that females with anorexia nervosa showed suicidal tendencies comparable to those in psychiatric patients (Stein, Orbach, Shani-Sela, Har-Evan, Yaruslasky, & Roth, 2003).

In addition to the psychological and physical dysfunction consequences, academics have also been shown to be negatively impacted by body dissatisfaction and eating disturbances. Yanover and Thompson (2008) measured how eating problems and body image concerns may be interfering with academic performance using the Eating and Body Image Disturbances Academic

Interference Scale. Higher levels of eating disturbance and body dissatisfaction, in women and men, was linked to academic achievement interference. This relationship was significant and some of the possible underlying factors that cause this are fatigue from purging, absenteeism due to social anxiety, and the need for perfection. Taras and Potts-Datema (2005) also concluded that negative self-esteem, one of the resulting problems of body dissatisfaction, is correlated to poor school performance.

As stated above, there are numerous outcomes young girls can face as they judge themselves through the eyes of the media and their peers. Addressing body image concerns early on is critical in preventing co-morbid conditions and negative outcomes later in their lives. "Individuals who view their bodies negatively are likely, in their own minds, to minimize their good qualities" (Kelly, 2000, p. 2).

Contrary to the negative effects of poor body image and body dissatisfaction, sport participation has been empirically linked to many positive outcomes for girls, which challenges the negative impacts of the media. Several researchers proclaim the benefits of sport participation and physical activity. Encouraging athletic participation can counter the cultural emphasis on women's physical appearance. Sports can emphasize what the body can do, as opposed to simply its appearance (Smolak, Murnen, & Ruble, 2000). Physical activity can provide girls the opportunities to learn to be assertive, independent, and in control of themselves, manifesting into an overall greater well being (Greenleaf, Boyer, & Petrie, 2009).

> Involvement in sports not only has the immediate effect of developing positive psychological states (e.g., body image, instrumentality), but the potential long-term benefit of increasing the likelihood of staying physically active in adulthood. By developing such characteristics during adolescence, young women acquire the skills

> (both physical and mental) to continue to be physically active, which can lead to a life-time of health benefits and the reduction of overweight and obesity. (Blair et al., cited in Greenleaf, Boyer, & Petrie, 2009, p. 723)

Biddle and Asare (2011) conducted a review and found that those who are physically active appear less likely to suffer from mental health problems (anxiety, depression, self-esteem) and may even have enhanced cognitive functioning. Cognitive functioning was defined as a combination of the ability to reason, concentrate, pay attention, and maintain academic achievement. It was reported by Blakemore (cited in Biddle & Asare, 2011) "that the brain is activated during physical activity by increasing blood flow to essential areas that may stimulate learning" (p. 889).

In terms of body weight, 30.1% of children aged 2 to 19 have a body mass index that classify them as overweight, 15.5% are classified as obese, and 10.9% are severely obese (Ogden, Carroll, & Flegal, 2008). Adolescents with a higher body mass index are more likely to experience depression and low-self esteem; however, increasing physical activity can abate these problems (Strong et al., cited in London & Castrechini, 2011).

Academically, fitness has been found to be strongly and significantly related to academic achievement. Van Dusen, Kelder, Kohl, Ranjit, and Perry (2011) found that there was a positive linear association between academic test scores obtained on the Texas Assessment of Knowledge and Skills and all five fitness tests on the FITNESSGRAM test measuring aerobic capacity, abdominal strength and endurance, trunk extensor strength, upper body strength and endurance, and flexibility. The strongest predictor of higher academic achievement was cardiovascular (aerobic) fitness. Van Dusen, et al. further found that cardiovascular fitness, body mass index, and muscle strength all strongly correlated to academic achievement (Castelli, Hillman, Buck, &

Erwin, 2007; Eveland-Sayers, Farley, Fuller, Morgan, & Caputo, 2009, cited in Van Dusen, Kelder, Kohl, Ranjit, & Perry, 2011). This team also stated that no known studies of this nature have failed to show at least some relationship between fitness and academic achievement. In many schools, the strongest physical education requirements are in elementary school; however, results of these studies suggest that the strongest associations between fitness and academic performance occur in middle and high school students. Shockingly, the number of students participating in physical education daily dropped from 42% to 28% between 1991 and 2003 (Burton & VanHeest, 2007). Therefore, efforts should be made to maintain physical education curriculums, especially during adolescence, and should stress cardiovascular fitness and strength over body composition (Van Dusen, Kelder, Kohl, Ranjit, & Perry, 2011).

London and Castrechini (2011) discovered that the achievement gap between the physically fit and physically unfit children begins as early as fourth grade, and those disparities persisted through their educational career. In their study, identifying associations between a combination of physical fitness tests and standardized test scores found that there was a modest association between improved fitness and academic achievement over time. Their recommendation, similarly, called for a shift in focus from obesity to fitness. Their study noted that the combination of several fitness tests are much more predictive than any one single test, particularly body mass index. Researchers from Louisiana (Praphul, Howat, & Bryan, 2011) also found a significant relationship between a student's overall fitness score on the FITNESSGRAM and their math and reading performance on the Louisiana Education Assessment Program. Like other studies, aerobics was the strongest predictor of academic performance; therefore, schools should focus on aerobic activities to boost academic success.

Most researchers emphasized the importance of physical activity in schools and hope their findings provide a body of evidence to law makers and school administrators to make changes, or at the very least, to sustain existing physical activity programs. "Schools are in a position to promote proper nutrition, appropriate physical activity, and other healthy choices through school nutrition programs, physical and health education, recess, nursing services and even in the regular classroom" (Joshi, Howat, & Bryan, 2011, p. 381).

It is important to note that sport involvement alone does not lead women to feel more positive about their bodies. "Rather, sport provides the opportunity for girls to refine their physical skills, develop strength and muscle tone, improve coordination, and to develop leadership skills, engage in decision making and become more assertive and independent" (Greenleaf, Boyer, & Petrie, 2009, p. 723). Given the overwhelmingly positive outcomes of physical activity and sport participation, girls should be encouraged to get involved in sports during their high school years to reap the immediate and long-term benefits (Greenleaf, Boyer, & Petrie, 2009).

Chapter III: Methodology

This research study was conducted to determine 1) how female student athletes perceive media messages concerning the female body (general messages and athletic-specific messages), 2) if female student athletes feel pressure from the media to diet or change their bodies, 3) what female student athletes' perceptions of their weight is compared to their actual body mass index, and 4) how many different sports female student athletes participate in and their frequency of participation. This chapter will discuss the participants, survey, procedures, and methods of data analyses utilized in this study. This chapter will conclude with known methodological limitations.

Subject Selection and Description

The selection of subjects began in the spring of 2013 when the Consent to Participate in UW-Stout Approved Research (Appendix A), along with the Media Perceptions, Body Image, and Sport Participation Questionnaire (Appendix B) and Resources (Appendix C) were given to 68 female student athletes and their parents in the Rochester Public Schools in Minnesota, the Forest Lake Area Fastpitch Association in Minnesota, and the Grand Rapids School District in Minnesota. The parents and their daughters reviewed the consent form, marked the "I grant permission" statement, both signed and dated, and returned the consent form to the researcher, along with the completed survey.

Instrumentation

The survey used to collect data for this research was compiled by the researcher, utilizing components of previously created surveys and cited those sources. The survey was used to examine female student athletes and their perception of media messages, people portrayed in the

media, and their perceptions of their appearance and body as they see it, as they feel others see it, and how they compare themselves to others.

The survey developed for this study consisted of three sections: demographic information, the Sociocultural Attitudes Towards Appearance Scale-3 (SATAQ-3) (Thompson, Van der Berg, Roehrig, Guarda, & Heinberg, 2004), and the Contextual Body Image Questionnaire for Athletes (CBIQA) (De Bruin, Oudejans, Bakker, & Woertman, 2011). Incorporating these different areas into one survey allowed the researcher to encompass all domains of research interest. The demographic section asked basic questions including age, height, weight, how many organized sports they were actively involved in, which sports, and how many months per year they participated in those sports. The SATAQ-3 measures internalization (general and athletic), pressure, general information, and awareness of media messages through TV, movies, and magazines. Participants were asked to rate each of the 30 statements reflecting their agreement on a one to five Likert scale. In the CBIQA section, participants were given 15 questions and, again using a Likert scale from one to seven, were asked to rate how they perceived themselves, how they perceived themselves compared to others, and how others perceived them in the areas of appearance, body shape, muscularity, body weight, and fat percentage. The resource page was a tool given to all 68 intended participants that included website information and contact information for school counselors, school social workers, and school psychologists (this contact information was removed when given to students outside of the Rochester Public Schools) should they have any questions regarding eating disorders, weight, body image, or any other concerns on this topic.

Data Collection Procedures

Consent forms, surveys, and resource pages were distributed during the spring of 2013 in person and by e-mail. Students and parents were asked to review the consent form together, mark the "I grant permission" statement, both sign and date, and return the consent form to the researcher, along with the completed survey, either in person or by mail (they were given an addressed and stamped envelope for that option).

Data Analysis

Survey response information was entered into Microsoft Excel 2010. Data were analyzed using frequencies with descriptive statistics, one-sample t-tests, and cross tabulations.

Limitations

There were a few methodological limitations to this study regarding the sample techniques and data collection. Concerning sampling, data was collected from only three urban areas, of varying sizes, in Minnesota, which limited the generalizable information concluded from the study. Additionally, a small sample size was obtained also limiting the generalizability considerably. Since all participants in the study were minors, only those students whose parents completed and returned the consent form were allowed to participate; therefore, the data collected may be limited. With any self-report instrument, such as the survey in this study, the researcher assumes that the participants completing the survey to be completely truthful regarding their responses. Although respondents were instructed to give their most honest responses to all questions and were reinforced on the confidentiality and anonymity of the documents, responses were still prone to distortion by social desirability concerns.

Chapter IV: Results

The survey research was conducted to determine 1) how female student athletes perceive media messages concerning the female body (general messages and athletic-specific messages), 2) if female student athletes feel pressure from the media to diet or change their bodies, 3) what female student athletes' perceptions of their weight is compared to their actual body mass index, and 4) how many sports during the year female student athletes participate in sports and their frequency of participation. Results from the female student-athletes' self-reported survey will be described and examined.

Item Analysis

To gain a better understanding of the survey sample, several survey questions addressed demographic information. There were 68 consent forms and surveys given out to students in the Rochester, Forest Lake, and Grand Rapids areas in Minnesota. Twenty-six consent forms and surveys were returned. This constitutes a 38.2% return rate. Participants' age ranged from 13 to 17, they were all female, and they were all involved in at least one organized sport. Four participants (15%) were 13 years old, three participants (12%) were 14 years old, five participants (19%) were 15 years old, 13 participants (50%) were 16 years old, and one participant (4%) was 17 years old. The types of sports played by the participants included: softball, volleyball, basketball, hockey, soccer, tennis, and dance line. To accurately analyze the survey responses, each research question will be addressed separately.

Research Questions

1. How do female student athletes perceive media messages concerning the female body (general messages versus athletic-specific messages)? On the SATAQ-3 portion of the survey, items #3, #4, #7, #8, #11, #12, #15, #16, and #27 (internalization-general) and items #19,

#20, #23, #24, and #30 (internalization-athlete) pertained to the first research question. First, a one-sample t-test was performed on the general items to identify whether there was statistically significant difference between the general item and scale means. The responses of those nine items were averaged for each participant and compared to the average of the one to five Likert scale (M=3). The overall average of all the participant's scores on the general items was 2.95, slightly below the mean. Using a one-tailed t-test, it was found that there was not a statistically significant difference between the means (t=-0.28; t critical=1.71).

Next, a one-sample t-test was performed on the athlete items to identify whether there was a statistically significant difference between the athletic item and scale means. The responses of those five items were averaged for each participant and compared to the average of the one to five Likert scale (M=3). The overall average of all the participants' scores on the athlete items was 3.78, above the mean. Using a one-tailed t-test, it was found that there was a statistically significant difference between the means at the less than .001 level of significance (t=5.26; t critical=1.71).

Lastly, a paired-sample t-test was performed on the general and athlete items to identify whether there was a statistically significant difference between the means of those item responses. Using a one-tailed t-test, it was found that there was a statistically significant difference between the means at the less than .001 level of significance (t=5.2; t critical=1.71).

In a simple side-by-side comparison between the overall means of the general (M=2.95) and athlete (M=3.78) item responses, it is seen that respondents were more likely to agree or identify with the athlete-specific media message items, compared to the general media message items.

2. Do female student athletes feel pressure from the media to diet or change their bodies? On the SATAQ-3 portion of the survey, items #2, #6, #10, #14, #18, #22, and #26 (pressure) pertained to the second research question. For this question, a one-sample t-test was performed to identify whether there was a statistically significant difference between the pressure item and scale means. The responses of those seven items were averaged for each participant and compared to the average of the one to five Likert scale (M=3). The overall average of all the participants' scores on the pressure items was 2.83 (below the mean). Using a one-tailed t-test, it was found that there was not a statistically significant difference between the means (t=-0.79; t critical=1.71).

When looking at the overall mean of the pressure item responses (M=2.83), it is seen that respondent's tended to disagree or not identify with questions pertaining to pressures from the media.

3. What are female student athletes' perceptions of their weight compared with their actual body mass index? On the CBIQA portion of the survey, body weight items A, B, and C and respondents' calculated body mass index (BMI), based on their height and weight, pertained to the third research question. First, a one-sample t-test was performed to identify whether there was a statistically significant difference between perceived body weight and actual BMI. One participant did not share their height or weight for their BMI to be calculated; therefore, her response will not be included in this data analysis (n=25). BMI was calculated for each respondent and was classified into respective categories (underweight, normal, overweight). Two of the participants were classified as underweight (8%), 15 of the participants were classified as normal (60%), and eight participants were classified as overweight (32%). Because only two participants were classified as underweight, they were combined with the normal

classification group so two groups could be compared (underweight/normal and overweight). Using a one-tailed t-test, it was found that there was a statistically significant difference between perceived body weight and actual BMI at the less than .001 level of significance (t=16.92; t critical=1.69).

Next, a one-sample t-test was performed to identify whether there was a statistically significant difference between the body weight item and scale means. The responses of those three items were averaged for each participant and compared to the average of the one to seven Likert scale (M=4). Using a one-tailed t-test, it was found that there was a statistically significant difference between the means at the less than .001 level of significance (t=3.16; t critical=1.71).

When looking at the overall mean of the body weight item responses (M=4.5), it is seen that respondents were more likely to rate themselves as being overweight.

4. How many sports are female student athletes actively engaged in during the year and what is the frequency of their participation? Several questions in the demographic information portion of the survey pertained to this research question. Basic statistics were reported and a cross-tabulation was performed between the number of sports played and number of months a year girls were playing those sports. It was reported that eight girls (31%) were involved in one sport, 15 girls (58%) were involved in two sports, and three girls (11%) were involved in three sports. It was also reported that 16 girls (61%) played sports 10, 11, or 12 months out of the year (12 girls or 46% played sports all 12 months of the year). Four months was the least amount of time girls spent playing sports during the year. The most frequently reported combination was nine girls (35%) playing two sports for all 12 months of the year.

Chapter V: Discussion

This chapter will summarize the general findings of this research project, which surveyed 1) how female student athletes perceive media messages about the female body (general messages and athletic-specific messages), 2) if female student athletes feel pressure from the media to diet or change their bodies, 3) what female student athletes' perceptions of their weight is compared to their actual body mass index, and 4) how many sports during the year female student athletes participate in and their frequency of participation. This chapter will also discuss significant findings from the research on the development of body image through the media. It was also focus on the influence of physical activity or sport participation on girls' weight, self-perceptions, mental health, as well as the long-term outcomes and implications of body dissatisfaction and physical activity or sport participation.

Discussion

Four research questions were proposed in the introduction and were analyzed in Chapter IV. The first research question and statistical analysis, as reported in Chapter IV, found that participants generally did not agree with the general internalization statements (i.e. I compare my body to the bodies of people who are on TV and I would like my body to look like the models who appear in magazines). On the other hand, they were more likely to agree or identify with the athletic internalization statements (i.e. I compare my body to that of the people in good shape and I wish I looked as athletic as sports stars). The first finding somewhat contradicts what was discussed in the literature review in that the media is seen as the strongest predictor of body dissatisfaction and drive for thinness (Botta, 1999). Many adolescents and children see the standard, a lean and thin figure, and feel the need to measure themselves against it and try to emulate it (Berg, 2001); they put a lot of trust into the media messages they are exposed to

involving weight control and any appearance-related messages (Pajaujiene & Jankauskiene, 2012). However, because all the participants were athletes who, generally, display higher self-esteem and better body image than non-athletes (Dorak, 2011), the results were not surprising. This first research question found almost identical conclusions to the study performed by Pajaujiene and Jankauskiene in 2012: both athletes and non-athletes alike reported internalization of the body ideal, but athletes tended to internalize the sport ideal, while non-athletes tended to internalize more general body ideals from the media.

The second research question and statistical analysis, as reported in Chapter IV, found that participants generally did not agree with the pressure statements (i.e. I've felt pressure from TV or magazines to lose weight and I've felt pressure from TV or magazines to diet). The athletes overall disagreed that they are pressured by the media to change their bodies. This survey result further supports the first research question and it can be inferred that adolescents involved in athletics or rigorous physical activity are able to challenge the negative impacts of the media and counter the cultural emphasis on women's physical appearance; these adolescents are discovering what their bodies are capable of doing, as opposed to just its appearance (Smolak, Murnen, & Ruble, 2000).

The third research question and statistical analysis, as reported in Chapter IV, first found that participants generally rated themselves as overweight on a scale ranging from having a "much too low" body weight to having a "much too high" body weight, even though 17 of the participants (68%) were classified as underweight or normal weight according to their calculated BMI. It was also found that the athletes tended to respond to the body weight statements contradictory to their calculated BMI. In other words, they rated themselves higher on the scale than their actual weight would indicate. This research finding points out that although sport

participation and physical activity pose numerous benefits, including fewer mental health problems (Biddle & Asare, 2011), strong academic achievement (Van Dusen, Kelder, Kohl, Ranjit, & Perry, 2011), assertiveness, independence, control, greater well being, and increased likelihood of staying active in adulthood (Greenleaf, Boyer, & Petrie, 2009), the underlying concern of the media's voice on body image still exists and is unavoidable. The mass media are saturated with numerous, harmful messages about the ideal body size and shape in relation to attractiveness, self-control, weight management, and diets (Neumark-Sztainer, Paxton, Hannan, Haines, & Story, 2006). Youth are constantly bombarded with media exposure and those messages through television, magazines, radio, newspapers, movies, and the Internet (Lawrie, Sullivan, Davies, & Hill, 2006). The study by Krane, Waldron, Michalenok, and Stiles-Shipley (2001) summarized the problem concisely: physically active and very fit women continually compare themselves to an unrealistic cultural ideal. They scrutinize their bodies for their flaws and always feel that something needs to be improved upon; their image of the ideal body makes them feel that they should not be satisfied. While this is true, it is important to remember that those involved in sports may not be as susceptible to the perils of the media influence as those who do not participate. Sports or activity involvement are thought to provide a protective factor in this regard.

The fourth and final research question and statistical analysis, as reported in Chapter IV, found that, of the athletes surveyed, the majority (69%) were involved in more than one sport and the majority of the athletes surveyed (61%) were also involved in organized sports 10, 11, or 12 months out of the year. There are now currently over three million female high school sport participants in the U.S., which is a dramatic increase from less than 300,000 forty years ago (National Federation of State High School Associations, 2013). These simple findings show that

females are becoming more active and highly engaged in athletics. As stated previously, these are incredible advancements, but there is still room for improvement. Research has shown that girls become less and less active from early to late adolescence and these levels of activity do not often rebound into adulthood (Niven, Fawkner, Knowles, Henretty, & Stephenson, 2009). Sport participation is increasing, but physical education requirements and funding in schools, especially in middle and high schools, is decreasing (Burton, & VanHeest, 2007). There are overwhelmingly positive outcomes to sport participation and physical activity as opposed to inactivity or sedentary behavior, which cannot be ignored; girls need to continue to be encouraged to get involved in order to acquire those immediate and long-term benefits.

Conclusion

The presence and influence of the media is a consistent problem and one that cannot be entirely avoided. Unfortunately, the increase in technology and the number of media outlets available to children, adolescents, and young adults is concerning. Their overexposure to harmful, exaggerated, and generally untruthful messages are damaging and sometimes irreversible. What we can do as a society is not to eliminate the beast, but to confront it and challenge it by providing more opportunities for healthy living, mentally and physically, beginning at a young age and promoting those opportunities through adulthood. The health and well being of the future of our nation depends on it.

The more involved students become, the better they are likely to do academically. They may begin to develop lifelong skills such as teamwork, independence, leadership, responsibility, motivation, passion, positive attitudes, work ethic, and the drive to stay physically fit. They can discover what they are capable of, instead of focusing on how they look in the mirror, and strive for more. There is a sense of accomplishment and pride people feel when they are physically

healthy knowing they worked for it and earned it. Providing a variety of opportunities for youth early on may open many more doors for them in the future that extend beyond athletics, whether it be extracurricular activities or clubs, new hobbies and interests, post-secondary educational options, or a career.

Recommendations

A number of recommendations can be made from the literature review and survey results. It is recommended that future research explores more of the differences in body image, mental health, and long-term outcomes between athletes and non-athletes and exercisers and non-exercisers. This study did not focus on males and the impact the media ultimately has on everyone. Future research could be dedicated to the effects on males versus females.

Our country is rapidly increasing in diversity. Research focused on various racial, ethnic, or socioeconomic backgrounds could give us an understanding of cultural implications and differences in America. Additional research could also determine how much influence the media, parents, peers, and educators play in the development of a sense of self in young children and if or how they interact with each other.

There are many programs and initiatives being implemented in the U.S. to encourage physical activity and fitness, especially at a young age. Research on these programs' validity and long-term outcomes would be very beneficial. Different age groups, different sport types, and differing levels of competition could also be examined to pinpoint specific differences, rather than generalizing findings to all ages and sports. Research should continue to examine other potential protective factors that may minimize the negative influence that the media has on the portrayal of body image.

Future research should be dedicated to the importance of athletes finding their own strengths, talents, passions, or niches beyond their sport. Athletics can be a significant, positive, and important part of a person's life, but with age generally comes diminishing participation. As a result, involvement in physical activity and/or organized athletics in the formative years can set young girls on path toward more healthy and productive lives. It is imperative that teachers, coaches, and parents foster that development and counter balance the negative messages of the media.

References

Adams, P.J., Katz, R.C., Beauchamp, K., Cohen, E., & Zavis, D. (1993). Body dissatisfaction, eating disorders, and depression: A developmental perspective. *Journal of Child and Family Studies, 2*(1), 37-46.

Albertini, R.S., & Phillips, K.A. (1999). Thirty-three cases of body dysmorphic disorder in children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 38*(4), 453-459.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th edition, text revision). Washington, DC: Author.

American Psychological Association (1994). Diagnostic and statistical manual and mental disorders (4th edition). Washington, DC: Author.

Barke, S. (n.d.). Body image. *Student Nutrition (& Body Image) Action Committee*. Retrieved from www.snac.ucla.edu/pages/Body_Image/Body_Image.htm

Berg, F.M. (2001). *Children and teens afraid to eat*. Hettinger, ND: Healthy Weight Publishing Network.

Biddle, S.J.H., & Asare, M. (2011). Physical activity and mental health in children and adolescents: A review of reviews. *British Journal of Sports Medicine, 45*, 886-895.

Botta, R. (1999). Television images and adolescent girls' body image disturbance. J*ournal of Communication, 49*(2), 22-41.

Boutilier, M.A., & SanGiovanni, L. (1983). *The sporting woman*. Champaign, IL: Human Kinetics.

Burton, L.J., & VanHeest J.L. (2007). The importance of physical activity in closing the achievement gap. *Quest, 59*, 212-218.

Clark, L., & Tiggemann, M. (2006). Appearance culture in nine- to 12-year-old girls: Media and peer influences on body dissatisfaction. *Social Development, 15*(4), 628-643.

Clark, L., & Tiggemann, M. (2007). Sociocultural influences and body image in 9- to 12-year-old girls: The role of appearance schemas. *Journal of Clinical Child and Adolescent Psychology, 36*(1), 76-86.

Connell, R.W. (1987). *Gender and power: Society, the person, and sexual politics*. Stanford, CA: Stanford University Press.

Coopersmith, S. (1981). *Self-esteem inventories.* Palo Alto, CA: Consulting Psychologists Press.

Crissey, S.R., & Crissey Honea, J. (2006). The relationship between athletic participation and perceptions of body size and weight control in adolescent girls: The role of sport type. *Sociology of Sport Journal, 23*, 248-272.

De Bruin, A.P., Oudejans, R.R.D., Bakker, F.C., & Woertman, L. (2011). Contextual body image and athletes' disordered eating: The contribution of athletic body image to disordered eating in high performance women athletes. *European Eating Disorders Review, 19*, 201-215.

Dittmar, H., Halliwell, E., & Ive, S. (2006). Does Barbie make girls want to be thin? The effect of experimental exposure to images of dolls on the body image of 5- to 8-year-old girls. *Developmental Psychology, 42*(2), 283-292.

Dohnt, H., & Tiggemann, M. (2006a). Body image concerns in young girls: The role of peers and media prior to adolescence. *Journal of Youth and Adolescence, 35*(2), 141-151.

Dohnt, H., & Tiggemann, M. (2006b). The contribution of peer and media influences to the development of body satisfaction and self-esteem in young girls: A prospective study. *Developmental Psychology, 42*(5), 929-936.

Dorak, F. (2011). Self-esteem and body image of Turkish adolescent girls. S*ocial Behavior and Personality, 39*(4), 553-562.

Erermis, S., Cetin, N., Tamar, M., Bukusoglu, N., Akdeniz, F., & Goksen, D. (2004). Is obesity a risk factor for psychopathology among adolescents? *Pediatrics International, 46*(3), 296-301.

Findlay, L.C., & Bowker, A. (2009). The link between competitive sport participation and self-concept in early adolescence: A consideration of gender and sport orientation. *Journal of Youth and Adolescence, 38*, 29-40.

Garner, D. (1997). The 1997 body image survey results. *Psychology Today, 3036*, 38-40, 42-44, 75-76, 78, 84.

Gleason, T.R., Sebanc, A.M., & Hartup, W.W. (2000). Imaginary companions of preschool children. *Developmental Psychology, 36*(4), 419-428.

Greenleaf, C., Boyer, E.M., & Petrie, T.A. (2009). High school sport participation and subsequent psychological well-being and physical activity: The mediating influences of body image, physical competence, and instrumentality. *Sex Roles, 61*, 714-726.

Gruanbaum, J.A., Kann, L., Kinchen, S.A., Lowry, R., Kolbe, L., Williams, B., & Ross, J.G. (2002). Youth risk behavioral surveillance – United States, 2001. *Journal of SchoolHealth, 72*(8), 313-328.

Guiney, K.M., & Furlong, N.E. (2000). Correlates of body satisfaction and self-concept in third- and sixth-graders. *Current Psychology, 18*(4), 353-367.

Hammer, T.R. (2009). Controlling images, media, and women's development: A review of the literature. *Journal of Creativity in Mental Health, 4*(3), 202-216.

Harter, S. (1999). The construction of the self: A developmental perspective. New York, NY: The Guilford Press.

Hausenblas, H.A., & Fallon, E.A. (2006). Exercise and body image: A meta-analysis. *Psychology and Health, 21*(1), 33-47.

Herbozo, S., Tantleff-Dunn, S., Gokee-LaRose, J., & Thompson, J.K. (2004). Beauty and thinness messages in children's media: A content analysis. *Eating Disorders, 12*(1), 21-34.

Johnson, F., & Wardle, J. (2005). Dietary restraint, body dissatisfaction, and psychological distress: A prospective analysis. *Journal of Abnormal Psychology, 114*(1), 119-125.

Jones, A., & Greer, J. (2011). You don't look like an athlete: The effects of feminine appearance on audience perceptions of female athletes and women's sports. *Journal of Sport Behavior, 34*(4), 358-377.

Joshi, P., Howat, H., & Bryan, C. (2011). Relationship between fitness levels and academic performance. *Journal of Physical Education and Sport, 11*(4), 376-382.

Kelly, S.A. (2000). *Amount of influence selected groups have on the perceived body image of fifth graders* (Master's thesis, University of Wisconsin-Stout, Menomonie, WI). Retrieved from www.uwstout.edu/lib/thesis/2000kellys.pdf

Kim, K., Sagas, M., & Walker, N.A. (2010). Replacing athleticism with sexuality: Athlete models in Sports Illustrated swimsuit issues. I*nternational Journal of Sport Communication, 3*, 148-162.

Knight, J.L., & Giuliano, T.A. (2001). He's a Laker; she's a "looker": The consequences of gender-stereotypical portrayals of male and female athletes by the print media. *Sex Roles, 45*(3/4), 217-229.

Kololo, H., Guszkowska, M., Mazur, J., & Dzielska, A. (2012). Self-efficacy, self-esteem and body image as psychological determinants of 15-year-old adolescents' physical activity levels. *Human Movement, 13*(3), 264-270.

Kostanski, M., & Gullone, E. (1998). Adolescent body image dissatisfaction: Relationships with self-esteem, anxiety, depression controlling for body mass. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 39*(8), 252-262.

Krane, V., Waldron, J., Michalenok, J., & Stiles-Shipley, J. (2001). Body image concerns in female exercisers and athletes: A feminist cultural studies perspective. *Women in Sport & Physical Activity Journal, 10*(1), 17-54.

Lawrie, Z., Sullivan, E.A., Davies, P.S.W., & Hill, R.J. (2006). Media influence on the body image of children and adolescents. *Eating Disorders, 14*(5), 355-364.

London, R.A., & Castrechini, S. (2011). A longitudinal examination of the link between youth physical fitness and academic achievement. *Journal of School Health, 81*(7), 400-408.

Malcolm, N.L. (2003). Constructing female athleticism: A study of girls' recreational softball. *American Behavioral Scientist, 46*, 1387-1404.

McDonald, K., & Thompson, K.J. (1992). Eating disturbances, body image dissatisfaction, and reasons for exercising: Gender differences and correlational findings. International *Journal of Eating Disorders, 11*, 289-292.

McVey, G., Tweed, S., & Blackmore, E. (2004). Dieting among preadolescent and young adolescent females. *Canadian Medical Association Journal, 170*(10), 1559-1561.

National Cancer Institute. (2010). *Body image*. Retrieved from www.cancer.gov

National Federation of State High School Associations (2013). *NFHS Handbook 2013-2014*. Indianapolis, IN. Retrieved from www.nfhs.org/content.aspx?id=6123

Neumark-Sztainer, D., Paxton, S.J., Hannan, P.J., Haines, J., & Story, M. (2006). Obesity, disordered eating, and eating disorders in a longitudinal study of adolescents: How do dieters fare five years later? *Journal of American Dietetic Association, 106*, 559-568.

Niven, A., Fawkner, S., Knowles, A., Henretty, J., & Stephenson, C. (2009). Social physique anxiety and physical activity in early adolescent girls: The influence of maturation and physical activity motives. *Journal of Sports Sciences, 27*(3), 299-305.

Ogden, C.L., Carroll, M.D., & Flegal, K.M. (2008). High body mass index for age among US children and adolescents. *Journal of American Medical Association, 299*(20), 2401-2405.

Pajaujiene, S., & Jankauskiene R. (2012). Sociocultural ideal internalization, body dissatisfaction and weight control behavior among adolescent athletes and non-athlete adolescents. Does that need education? *Socialiniai Mokslai, 2*(85), 40-47.

Parsons, E.M., & Betz, N.E. (2001). The relationship of participation in sports and physical activity to body objectification, instrumentality, and locus of control among young women. *Psychology of Women Quarterly, 25*, 209-222.

Pfohl, S.Y. (2012). 40th anniversary of title IX: Status of girls' and women's sport participation. *President's Council on Fitness, Sports & Nutrition: Research Digest, 13*(2), 1-2.

Pompili, M., Mancinelli, I., Girardi, P., Ruberto, A., & Tatarelli, R. (2004). Suicide in anorexia nervosa: A meta-analysis. *International Journal of Eating Disorders, 36*(1), 99-103.

Rintala, M., & Mustajoki, P. (1992). Could mannequins menstruate? *British Medical Journal, 305*(6868), 1575-1576.

Robinson, K., & Ferraro, F.R. (2004). The relationship between types of female athletic participation and female body type. *The Journal of Psychology, 138*(2), 115-128.

Rodin, J., Silberstein, L., & Striegel-Moore, R. (1985). Women and weight: A normative discontent. In T.B. Sondereregger (Ed.), *Psychology and gender* (pp. 267-307). Lincoln, NE: University of Nebraska Press.

Rogers, A. (1999). *Barbie culture*. Thousand Oaks, CA: Sage.

Sardar, Z., & Van Loon, B. (1997). Introducing cultural studies. New York, NY: Totem.

Schooler, D., Ward, L.M., Merriwether, A., & Caruthers, A. (2004). Who's that girl: Television's role in the body image development of young white and black women. *Psychology of Women Quarterly, 28*(1), 38-47.

Sinton, M.M., & Birch, L.L. (2006). Individual and sociocultural influences on pre-adolescent girls' appearance schemas and body dissatisfaction. *Journal of Youth and Adolescence, 35*(2), 165-175.

Smolak, L., Murnen, S.K., & Ruble, A.E. (2000). Female athletes and eating problems: A meta-analysis. *International Journal of Eating Disorders, 27*, 371-380.

Stein, D., Orbach, I., Shani-Sela, M., Har-Evan, D., Yaruslasky, A., & Roth, D. (2003). Suicidal tendencies and body image and experience in anorexia nervosa and suicidal female adolescent inpatients. *Psychotherapy and Psychosomatics, 72*(1), 16-25.

Taras, H., & Potts-Datema, W. (2005). Obesity and student performance at school. *Journal of School Health, 75*(8), 291-295.

Thompson, J.K., Van der Berg, P., Roehrig, M., Guarda, A.S., & Heinberg, L.J. (2004). The sociocultural attitudes towards appearance scale-3 (SATAQ-3): Development and validation. *International Journal of Eating Disorders, 35*, 293-304.

Van Dusen, D.P., Kelder, S.H., Kohl, III, H.W., Ranjit, N., & Perry, C.L. (2011). Associations of physical fitness and academic performance among schoolchildren. *Journal of School Health, 81*(12), 733-740.

Whetstone, L.M., Morrissey, S.L., & Cummings, D.M. (2007). Children at risk: The association between perceived weight status and suicidal thoughts and attempts in middle school youth. *Journal of School Health, 77*(2), 59-66.

Yanover, T., & Thompson, J.T. (2008). Eating problems, body image disturbances, and academic achievement: Preliminary evaluation of the Eating and Body Image Disturbances Academic Interference Scale. *International Journal of Eating Disorders, 41*(2), 184-187.

Appendix A: Consent to Participate in UW-Stout Approved Research

This research has been approved by the UW-Stout IRB as required by the Code of Federal Regulations Title 45 Part 46.

CONSENT TO PARTICIPATE IN UW-STOUT APPROVED RESEARCH

Title: Media Perceptions, Body Image, and Sport Participation
Researcher: Sarah Dittberner, M.S.Ed.
Research Adviser: Dr. Christine Peterson

Description: I request permission for your daughter to participate in a research study to be used for obtaining my Education Specialist (Ed.S.) degree in School Psychology. The purpose of this study is to learn how girls perceive people in the media (TV, movies, and magazines) compared to themselves, how satisfied they are with their bodies, how they feel others perceive their bodies, and how athletic participation has an effect on these factors.

Risks and Benefits: There is a risk that she may find some of the questions about herself to be sensitive. I do not anticipate any other risks to her participating in this study. There are no direct benefits to you or your daughter, but I hope to learn more about how athletically involved girls perceive the media and their bodies. Her participation will contribute to a greater awareness of present day issues regarding the internalization of ideals presented in the media leading to body dissatisfaction.

Time Commitment: If you agree for your daughter to be in this study, she will be asked to take a brief questionnaire targeting the above mentioned issues. The questionnaire will include statements about height, weight, body shape, muscularity, overall appearance, athletic participation, and comparisons and feelings about people presented in the media. The questionnaire will take approximately 10-15 minutes to complete. She will be one of approximately 35 girls participating in this study.

Confidentiality: Your daughter's name will not be included on any documents; this is an anonymous study. We do not believe that she can be identified from any of this information. This consent form will not be kept with any of the other documents completed with this project.

Right to Withdraw: Your daughter's participation in this study is entirely voluntary. She may choose not to participate without any adverse consequences. Should she choose to participate and later wish to withdraw from the study, she may discontinue her participation at that time without incurring adverse consequences.

IRB Approval: This study has been reviewed and approved by The University of Wisconsin-Stout's Institutional Review Board (IRB). The IRB has determined that this study meets the ethical obligations required by federal law and University policies. If you have questions or concerns regarding this study please contact the Investigator or Advisor. If you have any questions, concerns, or reports regarding your daughter's rights as a research subject, please contact the IRB Administrator.

Keep this letter after reading and return the signature page to the investigator.

Investigator:
Sarah Dittberner, M.S.Ed.
Cell Phone: (651) 402-5436
dittberners@my.uwstout.edu

Adviser:
Dr. Christine Peterson
Director of UW-Stout School Psychology Program
Office Phone: (715) 425-3338
petersonchris@uwstout.edu

IRB Administrator:
Sue Foxwell, Director, Research Services
152 Vocational Rehabilitation Building
University of Wisconsin-Stout
Menomonie, WI 54751
Office Phone: (715) 232-2477
foxwells@uwstout.edu

This research has been approved by the UW-Stout IRB as required by the Code of Federal Regulations Title 45 Part 46.

CONSENT TO PARTICIPATE IN UW-STOUT APPROVED RESEARCH

Please indicate whether or not you wish to allow your daughter to participate in the study entitled Media Perceptions, Body Image, and Sport Participation by checking one of the statements below, signing your name, and returning it to Sarah Dittberner, Research Investigator.

_____ I grant permission for my daughter to participate in this study.

_____ I do not grant permission for my daughter to participate in this study.

_____
Signature of Participant Date

_____
Signature of Parent or Guardian Date

Appendix B: Media Perceptions, Body Image, and Sport Participation Questionnaire

This research has been approved by the UW-Stout IRB as required by the Code of Federal Regulations Title 45 Part 46.

MEDIA PERCEPTIONS, BODY IMAGE, AND SPORT PARTICIPATION QUESTIONNAIRE

PART I: DEMOGRAPHIC INFORMATION

Please complete the following questions about yourself.

Age: ______

Height: ______ feet ______ inches

Weight: ______ pounds

How many different, organized sports are you involved in? ______

Which sports? ____

Of the 12 months of the year, how many months are you actively participating in those organized sports? ________

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PART II: SOCIOCULTURAL ATTITUDES TOWARDS APPEARANCE SCALE - 3 (SATAQ-3)

(Thompson, Van der Berg, Roehrig, Guarda, & Heinberg, 2004)

1 = Definitely Disagree
2 = Mostly Disagree
3 = Neither Agree Nor Disagree
4 = Mostly Agree
5 = Definitely Agree

Please read each of the following items carefully and indicate the number that best reflects your agreement with the statement.

1. TV programs are an important source of information about fashion and "being attractive." ______
2. I've felt pressure from TV or magazines to lose weight. ______
3. I do not care if my body looks like the body of people who are on TV. ______
4. I compare my body to the bodies of people who are on TV. ______
5. TV commercials are an important source of information about fashion and "being attractive." ______
6. I do not feel pressure from TV or magazines to look pretty. ______
7. I would like my body to look like the models who appear in magazines. ______
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8. I compare my appearance to the appearance of TV and movie stars. _______

9. Music videos on TV are <u>not</u> an important source of information about fashion and "being attractive." _______

10. I've felt pressure from TV and magazines to be thin. _______

11. I would like my body to look like the people who are in the movies. _______

12. I <u>do not</u> compare my body to the bodies of the people who appear in magazines. _______

13. Magazine articles are <u>not</u> an important source of information about fashion and "being attractive." _______

14. I've felt pressure from TV or magazines to have a perfect body. _______

15. I wish I looked like the models in music videos. _______

16. I compare my appearance to the appearance of people in magazines. _______

17. Magazine advertisements are an important source of information about fashion and "being attractive." _______

18. I've felt pressure from TV or magazines to diet. _______

19. I <u>do not</u> wish to look as athletic as the people in magazines. _______

20. I compare my body to that of the people in "good shape." _______

21. Pictures in magazines are an important source of information about fashion and "being attractive." _______

22. I've felt pressure from TV or magazines to exercise. _______

23. I wish I looked as athletic as sports stars. _______

24. I compare my body to that of people who are athletic. _______

25. Movies are an important source of information about fashion and "being attractive." _______

26. I've felt pressure from TV or magazines to change my appearance. _______

27. I <u>do not</u> try to look like the people on TV. _______

28. Movie stars are <u>not</u> an important source of information about fashion and "being attractive." _______

29. Famous people are an important source of information about fashion and "being attractive." _______

30. I try to look like sports athletes. _______

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PART III: CONTEXTUAL BODY IMAGE QUESTIONNAIRE FOR ATHLETES (CBIQA)

(De Bruin, Oudejans, Bakker, & Woertman, 2011)

The next questions deal with how satisfied you are with your body and your appearance. There are no true or false answers. Do not think too long about your answers and do not skip any questions.
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In daily life or concerning my sport…	very ugly	ugly	somewhat ugly	neither ugly, nor beautiful	somewhat beautiful	beautiful	very beautiful
a. I think my appearance is:	1	2	3	4	5	6	7
b. I think my appearance compared to others is:	1	2	3	4	5	6	7
c. Others think my appearance is:	1	2	3	4	5	6	7

In daily life or concerning my sport…	much too thin	too thin	somewhat too thin	neither too thin, nor too fat	somewhat too fat	too fat	much too fat
a. I think my body shape is:	1	2	3	4	5	6	7
b. I think my body shape compared to others is:	1	2	3	4	5	6	7
c. Others think my body shape is:	1	2	3	4	5	6	7

In daily life or concerning my sport…	much too unmuscular	too unmuscular	somewhat too unmuscular	neither too unmuscular, nor too muscular	somewhat too muscular	too muscular	much too muscular
a. I think the muscularity of my body is:	1	2	3	4	5	6	7
b. I think the muscularity of my body compared to others is:	1	2	3	4	5	6	7
c. Others think the muscularity of my body is:	1	2	3	4	5	6	7

In daily life or concerning my sport:	much too low	too low	somewhat too low	neither too low, nor too high	somewhat too high	too high	much too high
a. I think my body weight is:	1	2	3	4	5	6	7
a. I think my fat percentage is:	1	2	3	4	5	6	7
b. I think my body weight compared to others is:	1	2	3	4	5	6	7
b. I think my fat percentage compared to others is:	1	2	3	4	5	6	7
c. Others think my body weight is:	1	2	3	4	5	6	7
c. Others think my fat percentage is:	1	2	3	4	5	6	7

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THANK YOU FOR YOUR PARTICIPATION.
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Appendix C: Resources

This research has been approved by the UW-Stout IRB as required by the Code of Federal Regulations Title 45 Part 46.

RESOURCES

Should you ever feel uncomfortable during the questionnaire or if you would just like to know more information about eating disorders, media influences, or body image, there are several resources listed below that are available.

Century High School

School Counselors

Julie Austinson
(507) 328-5004
juaustinson@rochester.k12.mn.us

Darren Couillard
(507) 328-5002
dacouillard@rochester.k12.mn.us

Eileen Strabala-Backus
(507) 328-5003
eistrabala-backus@rochester.k12.mn.us

School Social Workers

Lorrie Ufkin
loufkin@rochester.k12.mn.us

Sara Rich
sarich@rochester.k12.mn.us

Kellogg Middle School

School Counselors

Darlene DoBell
(507) 328-5811
dadobell@rochester.k12.mn.us

Klaudia Perry
(507) 328-5809
klperry@rochester.k12.mn.us

Sam Simmons
(507) 328-5808
sasimmons@rochester.k12.mn.us

School Social Workers

Lorrie Ufkin
(507) 328-5861
loufkin@rochester.k12.mn.us

Sara Rich
(507) 328-5861
sarich@rochester.k12.mn.us

School Psychologists

Sarah Dittberner
Willow Creek Middle School
(507) 328-5988
sadittberner@rochester.k12.mn.us

Scott Solheim
Kellogg Middle School
(507) 328-5830
scsolheim@rochester.k12.mn.us

Websites

Academy for Eating Disorders: www.aedweb.org
The Emily Program: www.emilyprogram.com
Council on Size and Weight Discrimination: www.cswd.org
Eating Disorders Anonymous: www.eatingdisordersanonymous.org
Love Your Body Project, NOW Foundation: http://loveyourbody.nowfoundation.org/
Media Influence on Body: www.about-face.org
National Association of Anorexia Nervosa and Associated Disorders: www.anad.org
National Eating Disorders Association: www.nationaleatingdisorders.org
Something Fishy: www.something-fishy.org
Band Back Together: http://bandbacktogether.com/teen-body-image-resources/
Teens Health: http://kidshealth.org/teen/your_mind/body_image/body_image.html
Body Positive: www.bodypositive.com