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The Effects of Objectification on Varsity Athletes: A Comparison of Its Consequences in Sports with Revealing and Non-Revealing Uniforms

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The College of Wooster

The Effects of Objectification on Varsity Athletes: A Comparison of Its Consequences in Sports
with Revealing and Non-Revealing Uniforms

by

Maggie Collins Layde

Presented in Partial Fulfillment of the
Requirements of Independent Study Thesis Research

Supervised by

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Abstract

To examine the influence of revealing and non-revealing uniforms on body image and appearance, restrictive dieting and compulsive exercise behaviors, and objectified body consciousness, this study involved the participation of 108 College of Wooster students, 83 of which were College of Wooster student athletes between the ages of 18 and 22. The study was directed towards determining whether the type of uniform (revealing or non-revealing) had an influence on male and female athletes and their feelings towards their body and appearance, compulsive exercise behaviors, restrictive dieting behaviors, and level of objectified body consciousness. A pilot study was run to determine which sports had revealing and non-revealing uniforms. These sports were used in the experimental study. Participants answered 4 questionnaires to examine the impact on uniforms on the various consequences. Results of this study suggested that there was a significant difference between males and females in restrictive dieting behaviors, but there were not any significant differences between type of uniform for restrictive dieting. Results also indicated that there were not differences between gender or type of uniform in compulsive exercise behaviors, dissatisfaction about one's body and appearance, and level of objectified body consciousness. Research in this area should be continued as there are still many things to be learned about the influence of various types of uniforms on one's body image, body change behaviors, and level of objectified body consciousness.

Introduction

Competing in a sport in college is a goal and dream that many individuals have. As athletes continue to compete and become more competitive, such as competing at the college level, there is a growing interest in one's image towards their body and appearance. The prevalence of the media in today's society, has shown to have a negative impact on how athletes view themselves and suggest that the media could have negative effects on both male and female athletes (Linder & Daniels, 2018). Recently, along with studying the impact of media, researchers have shown an interest in examining the relationship between college students and their athletic participation and their risk of developing an eating disorder and feeling dissatisfied with their bodies (Blair et al., 2017). It is critical that researchers continue to study college athletes and their feelings towards their body size and appearance, as well as their vulnerability to development of an eating disorder and other body change behaviors.

Objectification theory advocates that Western culture socializes and portrays both women and men in ways that lead them to internalize an observer's perspective that is objectifying to their own bodies (Johnson, Lennon, & Rudd, 2014; Fredrickson & Roberts, 1997). Objectification affects athletes similarly to its effects on the general population. As athletes feel dissatisfied with their bodies, the likelihood of negative body image and unhealthy eating behaviors increases (Krane, Waldron, Michalenok, Stiles-Shipley, 2001). Uniforms have been shown to be a common factor that have connections with the athletic body image and greater levels of body dissatisfaction and body change behaviors (Greenleaf, 2002). Little is known about the effects that uniforms have on the amount of self-objectification and its consequences: compulsive exercise, restrictive dieting, and greater levels of body image dissatisfaction. Therefore, the present study will examine whether participating in a sport with a revealing

uniform will have a greater effect on self-objectification and its consequences. An investigation into the affects that male and female varsity athletes participating in sports with revealing and nonrevealing uniforms will be studied.

Theories Related to Body Image

Objectification Theory. Social and cultural contexts shape the way bodies are viewed. Objectification theory is defined as a theoretical framework in which female bodies are placed into a sociocultural context (Fredrickson & Roberts, 1997). When women are objectified they are treated as bodies. More specifically, they are treated as bodies that exist for others to use and receive pleasure from. Studies have shown that women are gazed at, experience more shame, and experience appearance anxiety more frequently than men. A woman's life can be greatly influenced by how her body appears to others (Fredrickson & Roberts, 1997). Individuals tend to focus on a woman's physical attributes and neglect an individual's psychological attributes, such as personality or intellect (Nezlek, Krohn, Wilson, & Maruskin, 2015). Young girls and women begin to be targeted for sexual objectification during their years of reproductive development (Fredrickson, Roberts, Noll, Quinn & Twenge, 1998).

In regard to objectification theory in Western cultures, women are sexually objectified. Sexual objectification places value on one's beauty and attractiveness and occurs interpersonally through various social interactions and media representations of female bodies that compare them to the standard of body shape and size set by society (Dakanalis et al., 2015). Objectification theory does not strive to explain why the sexualization of women is so omnipresent in our culture. Its goal is to amplify the components by which sexual objectification and physical attractiveness ideals impact women during and throughout their lifetime (Miner-Rubino, Twenge, & Fredrickson, 2002).

Moradi and Huang (2008) note that objectification theory has many constructs. An important aspect of objectification theory is sexual objectification. Sexual objectification occurs when women's sexual body parts are separated from her intelligence and personality. These sexual objectification experiences promote self-objectification, which is manifested as body surveillance or the monitoring of one's body (refer to Figure 1 below). Overall, objectification theory suggests that our culture socializes girls and women to internalize an observer's perspective that is objectifying on their own bodies. This leads young girls and women to become engrossed with their own physical appearance and obtain a desire to achieve the appearance that fits the societal ideals, which is known as self-objectification (Fredrickson & Roberts, 1997).

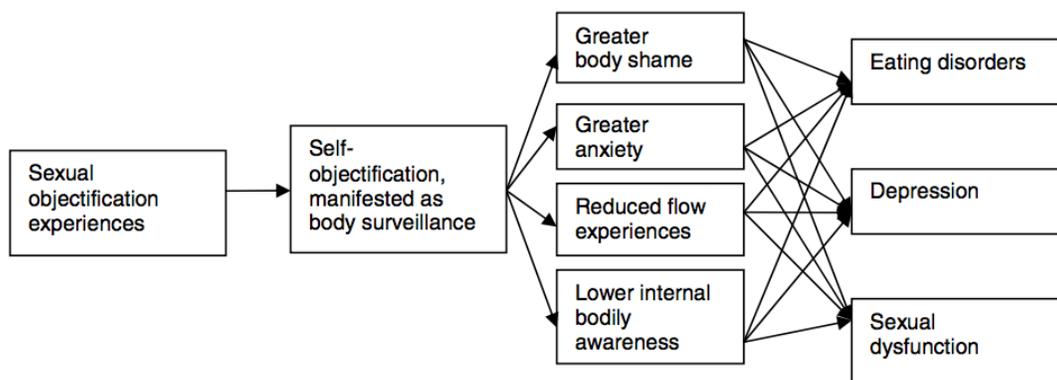


Figure 1. Objectification theory framework (Moradi & Huang, 2008)

Moradi & Huang presented the above framework to layout objectification theory and its main elements. A female's objectification experience begins with sexual objectification in which they are viewed as objects and evaluated against their outward, physical appearance. The internalization of another individual's evaluation on one's physical appearance leads an individual to self-objectify or participate in the act of "habitual monitoring of the body's outward appearance" (Fredrickson & Roberts, 1997, p. 180). Body shame, anxiety, decrease flow experiences, and lower internal bodily awareness are developed through self-objectification and

increased body surveillance. Ultimately, this progression of these relations confers women's risk of depression, eating disorders, and sexual dysfunction (Moradi & Huang, 2008).

Self-Objectification. Self-objectification is defined as the tendency of an individual to perceive and value their bodies through a third-person lens by emphasizing physical and observable characteristics (Nezlek et al., 2015). Self-objectification has been shown to lead to greater levels of body shame and anxiety. Self-objectification has also been shown to have a decrease in internal bodily awareness. Women are highly objectified through the treatment as bodies alone and are evaluated based on their outward, physical appearance. Self-objectification upholds an increased risk of eating disorders, depression, and sexual dysfunction (Moradi & Huang, 2008).

There are two types of self-objectification: trait self-objectification and state self-objectification. Trait self-objectification embodies individual differences that are stable in long-lasting preoccupation with one's appearance. In context to objectification theory, an example of trait self-objectification occurs when a woman internalizes the dehumanizing messages of sexual-objectification portrayed in societal messages. These messages increase the likelihood that women will self-objectify and experience the consequences of self-objectification (Miner-Rubino et al., 2002). State self-objectification can be prompted by certain situations. Researchers argue that individuals would be more likely to self-objectify in situations that put an emphasis on their awareness of observer's perceptions of their bodies (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998).

According to objectification theory, objectification can occur through two ways: visual mass media or within interpersonal encounters. Through these means of objectification, self-objectification can become a consequence. A study was conducted by Moradi & Huang (2008) to

evaluate links between self-objectification and the potential consequences on an individual's body image and negative behaviors related to eating. This study consisted of manipulating the prominence of self-objectification by having women try on a swimsuit (experimental group with heightened self-objectification) and other women try on a sweater (control group with decreased self-objectification). The researchers found that women who experienced a heightened level of self-objectification showed increased levels of body shame, general shame, and body-related thoughts. They also concluded that body shame and reported level of self-objectification were associated with restrained eating of sugary foods, specifically cookies and chocolate (Moradi & Huang, 2008).

Another study, by Tiggemann & Slater (2001), examined the predictors and consequences of self-objectification in adolescent girls, specifically looking at their dieting behaviors and depressive symptoms. There were two samples of women, former students of classical ballet and undergraduate psychology students. The researchers hypothesized that the former classical ballet dancers would report higher levels of self-objectification, self-monitoring, and disordered eating. The participants completed questionnaires regarding the following measures: self-objectification, self-monitoring, body shame, appearance anxiety, and disordered eating. Results of the study showed that the former classical ballet dancers had reported significantly higher levels of disordered eating compared to the non-dancers. As the researchers predicted, the former dancers had increased levels of self-objectification and body-monitoring than non-dancers.

Body Shame. Fredrickson et al. (1998) have noted a plethora of consequences following sexual objectification experiences. These experiences lead to self-objectification which is associated with having unconscious feelings about an individual's outward appearance. Self-

objectification produces an increase in body shame within an individual. Body shame occurs when individuals evaluate themselves against societal ideals and believe that they have failed to meet these ideals. In western culture, these ideals are based upon an ultra-thin body, that is nearly impossible for women to achieve (Noll & Fredrickson, 1998). Shame motivates individuals to change facets of their bodies that are internalized or are framed by societal ideals that they have failed to achieve. One way that individuals change their bodies is through dieting and disordered eating behaviors (Noll & Fredrickson, 1998).

The study by Noll and Fredrickson (1998) evaluated the mediational model of disordered eating based on objectification theory. They hypothesized that body shame partially mediates the relationship between disordered-eating outcomes and self-objectification. College students were sampled and asked to answer several self-reported measures that included: Revised Bulimia Test, Eating Attitudes Test, Revised Restraint Scale, Self-Objectification Questionnaire, and a Body Shame Questionnaire. The results indicated that there were mediational effects of body shame on disordered eating and self-objectification. Self-objectification was also found to influence disordered eating behaviors. This study demonstrated that societal practices of sexually objectifying women can lead to negative consequences and emotional experiences.

A study by Schaefer et al. (2018) examined body shame as a mediator in the association between self-surveillance and disordered eating within White, Hispanic, and Black women. Participants ranged from 19 to 55 years old and answered surveys about self-surveillance, body shame, and eating disorder symptomatology. The results of the study indicated that for White and Hispanic women, body shame did serve as a mediating factor between self-surveillance and disordered eating. This finding was not true for Black women. Schaefer et al. (2018) expressed that prior research has shown that Black women tend to have different and flexible

interpretations of what being attractive looks like and are more likely to be accepting of all body shapes and sizes compared to White and Hispanic women. This study shows that the impact of self-objectification is currently still a driving force in the relationship between body shame and disordered eating behaviors for women today.

Objectification in Males. Most of the research that has been conducted regarding objectification theory has focused on women's experiences of sexual objectification, however, in the past decade there has been an increased interest in body image disturbances in males (Heath, Tod, Dymand & Lovell, 2016; Michaels, Parent, & Moradi, 2013). Objectification theory was originally proposed to evaluate the objectification of females; however, it has been extended and studied in males (Johnson et al., 2014). Individuals living in and experiencing Western culture are highly exposed to media messages that illustrate a muscular body build that exceed the average proportions of the male figure. Research has indicated that male bodies portrayed in the media have become more muscular over the past several decades. The increasing trend of muscularity has suggested a potential increase in self-evaluation and fortifies self-objectification in males (Heath et al., 2016).

To examine self-evaluation and self-objectification in males, Heath et al. (2016) performed a study to evaluate the role of objectification theory in males and how it leads to body image concerns, particularly their experiences with muscular dysmorphia. Males with muscle dysmorphia are consumed by the appearance of their entire body; they are concerned that they are not muscular or large enough, which leads to an obsession with weightlifting and dieting (Pope, Gruber, Choi, Olivardia, & Phillips, 1997). Heath et al. (2016) found that self-objectification mediated the relationship of internalization of muscular ideals in males and suggests that males who accept ideals shaped by society are more likely to view themselves as

objects to be evaluated by others. Overall, this study indicated that males are susceptible to self-objectification relative to what Western culture has portrayed to society.

Males are affected by media messages that portray thin, fit, attractive, buff, and muscular men (Johnson et al., 2014). A study by Elliot & Elliot (2005) conducted a study to evaluate the extent to which men may be similarly and negatively affected by idealized representations of male bodies as they do in women. The participants were shown advertisements as stimulus material. The stimulus material portrayed various male body types (e.g., men portrayed in a naked or sexual stance). The advertisements were then evaluated by participants. Through this evaluation, researchers found that the majority of images in male magazines displayed mesomorphic, muscular, strong, and hyper-masculine bodies. Researchers also concluded that men do see their gender being objectified in advertisements. Other research has also discussed how images of men that are objectifying may impact the likelihood of a male to develop muscle dysmorphia, a state in which a male is highly obsessed with accomplishing a muscular body ideal (Leit, Pope, & Gray, 2001).

The recent evidence suggests that self-objectification affects not just females, but also affects males. The majority of research that has investigated self-objectification has found that men and boys report reduced levels of self-objectification, body surveillance, and body shame in comparison to women and girls (Moradi and Huang, 2008). A study by Hebl, King, & Lin (2004) looked at the effects of trait and situation induced self-objectification in men and women of different ethnicities. The participants were placed in a condition that induced self-objectification (e.g., wearing a Speedo swimsuit) or in a condition that served as the control (e.g., wearing a sweater). Results showed that in an induced self-objectifying situation (wearing a swimsuit), men and women of every ethnicity experienced negative results on a cognitive performance task (e.g.,

math test), similar to results that have been already shown for Caucasian women. In conclusion, body shame, body surveillance, and self-objectification have been associated with having a negative impact on men's body and self-esteem (Michaels et al., 2013).

Social Comparison Theory. Social comparison is a process that emerges during adolescence and continues throughout one's life (Grogan, 2010). Research has shown that social comparison regarding appearance has been associated with disturbances in body image (Ridolfi, Myers, Crowther, & Ciesla, 2011). Social comparison theory holds that: 1) individuals have a drive within to evaluate opinions and abilities; 2) individuals compare their opinions and abilities to others; and 3) social comparisons are made with individuals who are similar to themselves (Morrison, Kalin, & Morrison, 2004). Social comparison also involves some aspect of self-objectification or viewing of the self as an object of appearance. Social comparison has been found to predict eating and other body change behaviors, and is correlated with body image in adolescents, women, and men (Grogan, 2010). Researchers suggest that an individual's exposure to the sociocultural thin and muscular ideals may lead to an increased level of body dissatisfaction through the process of social comparison (Cattarin, Thompson, Thomas, & Williams, 2000).

Leon Festinger developed Social Comparison Theory during the 1950s. He evaluated and provided some reasoning for the underlying basic need and drive for self-evaluation. Festinger argued that individuals compare themselves to those that are like them and are attractive and that it is an unacquired human tendency to evaluate themselves through the comparisons of individual's around them (Holmstrom, 2004). Holmstrom (2004) states that this theory is meant to motivate individuals to improve themselves if they find themselves lacking. However, researchers have found that when they use social comparison theory as a context for studies

examining media and body image, they find that such comparisons may have potential negative effects on individuals.

There are two major types of social comparison theory: downward social comparison and upward social comparison (Cattarin et al., 2000). Upward social comparisons are generally understood to mean that individuals strive to be more capable or superior than their current level of performance or more capable of the individuals with whom they compare themselves to. Individual's that make upward comparisons are usually more prone to becoming depressed, angry, and have decreased levels of self-esteem (Cattarin et al., 2000). Downward comparisons are made by individuals that compare themselves to those that are less fortunate than their own current state, which deems the conclusion they are better-off in comparison to an individual that is worse-off (Taylor & Lobel, 1989). Downward comparisons may be related to increases in an individual's self-esteem as well as positive affect towards themselves (Cattarin et al., 2000).

Body dissatisfaction is one of many consequences that can arise from social comparisons (Myers & Crowther, 2009). A study conducted by Myers & Crowther (2009) used a meta-analysis to investigate the relationship between social comparison and body dissatisfaction. The findings of the meta-analysis were that social comparison and body satisfaction had a highly significant relationship with each other. As hypothesized, results indicated that women showed a stronger relationship between social comparison and body dissatisfaction compared to men. The researchers implied that there was a stronger relationship for women because women are more susceptible to making upward comparisons than men. Although the relationship is stronger for women, Myers & Crowther discussed that there was a negative relationship between social comparison and body dissatisfaction, however, the direction of their comparisons may differentiate from women (2009).

Social comparison theory has close ties with the framework of objectification theory, especially as it relates to body shame and disordered eating behaviors. Hesse-Biber, Leavy, Quinn, & Zoino (2006) imply that social comparison theory and objectification theory are part of a “nexus of influence” and should be integrated to gather a better understanding of negative body image and disordered eating patterns in women. The same evidence reviewed in the above paragraphs suggest that the same concerns could apply to men.

Sociocultural Theory. The mass media’s portrayal of an ultra-thin body ideal for women and a lean-muscular body ideal for men is thought to be one of the main drivers behind feelings of body dissatisfaction and eating pathology (Dakanalis et al., 2015). The social discourse of celebrating thinness and having negative feelings towards obesity have shaped the development of body image and eating disorders through sociocultural theory (Rodgers, 2016). Rodgers (2016) describes a Healthy Weight Discourse Model. Although the model has not been empirically tested, existing evidence suggests relationships between its main elements of sociocultural messages regarding weight control and maintaining a “Healthy Weight”, internalization of anti-fat attitudes, the need to control weight, beliefs in controlling weight through diet and exercise, as well as body image and eating concerns. This current model specifically considers the effects of the obsession on diet and exercise to obtain a healthy weight on decreased body image, disordered eating and excessive exercise.

Various sociocultural theories, including the dual-pathway model, the tripartite influence model, and objectification theory all play a role in the influence society has on body image. These theories share two common ideas: 1) the beginning constructs in all three of the models involve sociocultural influences; and 2) sociocultural influences are the primary components through which body dissatisfaction prompts body change behaviors (Karazsia, Murnen, & Tylka,

2017). Sociocultural influences are tentative and change over time. Researchers have hypothesized that as sociocultural influences change so do the body ideals of an individual (Karazsia et al., 2017). Garner, Garfinkel, Schwartz, & Thompson (1980) have discussed how there was a decrease in body weights over the preceding 20 years in women who competed in Miss America Pageants. These results suggested that there has been a change in the culture's ideal body shape for women over the past two decades. Currently, recent studies have shown a shift in the societal ideal of physical attractiveness and beauty in women. Studies have indicated that women have moved towards achieving an athletic body ideal. An athletic body ideal is defined as being thin and visibly toned (Robinson et al., 2017). This shift towards an athletic body ideal is driven by a social media advancement widely known as "fitspiration" and has allowed women to easily access information regarding exercises and the most recent dieting trends (Robinson et al., 2017).

In regard to athletes, the two environments where there is pressure to conform to a specific body type are aerobic exercise classes and competitive sports settings. In these environments, women feel pressure to maintain a thin, fit, and toned appearance. Athletes and coaches within these athletic environments believe that in order to have optimal athletic performance, one must maintain a certain body shape or weight. Leanness is thought to enhance athletic performance, and excess weight is thought to decrease endurance, speed, and agility (Krane et al., 2001).

Thin-Body Ideal. Adolescent girls and women are exposed to the thin-body ideal primarily through mass media sources, as well as feedback from peers on images that portray thin-bodies (Veldhuis, Konijn, & Seidell, 2014). The thin-body ideal is illustrated and fortified by numerous social influences such as family, athletics, peers, schools, doctors, and other health care

professionals. However, the greatest social influence behind the thin-body ideal is the mass media (Groesz, Levine, & Murnen, 2002). Depictions of female bodies in the media tend to be unattainable and unrealistically thin (Veldhuis et al., 2014). Actresses on television and magazine models are significantly less curvaceous and have become too thin over time (McCreary & Sasse, 2000). Many studies have shown that the depiction of the thin-body ideal in the media provokes body dissatisfaction as well as other consequences, including: objectified body consciousness, negative feelings about one's body, and induced eating disorders (Veldhuis et al., 2014).

A study conducted by Wiseman, Gray, Mosimann, & Ahrens (1992) evaluated the representation of the ideal female body through the lens of the American culture. The researchers studied body measurements including: age, weight, bust size, hip size and height of *Playboy* magazine centerfolds and contestants in Miss America Pageants. Results of this study indicated that there has been a greater decrease in weights and body size among Miss America contestants and has leveled off at an extremely low weight and body size for *Playboy* centerfolds. Wiseman, et al. (1992) also studied various magazines to investigate the number of articles published regarding dieting for weight loss, exercise, and diet and exercise together. Results indicated that there has been an overall increase in the emphasis on weight loss articles over time. More specifically, results showed an increase in the proportion of diet, exercise, and the combination of diet and exercise articles present in magazines that were studied. The prevalence of weight-control and weight loss in magazines may lead to increased body dissatisfaction and negative feelings towards one's body.

Internalization of the thin-body ideal correlates with key facets of objectification theory such as body surveillance and body dissatisfaction (Morrison & Sheahan, 2009). Internalization

of the thin-body ideal for women has been associated with dietary restraints that may anticipate eating disorders (Guðnadóttir & Garðarsdóttir, 2014). Harper & Tiggemann (2008) evaluated whether media images would increase self-objectification, body dissatisfaction, and negative feelings. The results of this study indicated that women who viewed thin-idealized body images reported higher levels of self-objectification, weight related anxiety, negative mood, and body dissatisfaction compared to women who viewed control images. Morrison & Sheahan (2009) found that internalization of the thin-body ideal and predictors of disordered eating behaviors and body dissatisfaction were mediated by gender related discourses such as objectification, anger suppression, and self-silencing. Appearance-esteem and weight-esteem in part mediated the relationships between disordered eating and internalization of the thin-body ideal (Flament, Hill, Buchholz, Henderson, Tasca, & Goldfield, 2012).

Beckner & Record (2016) studied Division 1 college female varsity athletes. The researchers assigned participants to an interview time and had the participants complete a short demographic questionnaire. To examine the athletes personal feelings towards their body image and the pressures of the thin-body ideal and being an athlete, participants were asked questions regarding body weight and its importance in their sport. The results showed that professional and college female athletes are a unique subgroup of women who are receptive to the thin-body ideal in ways contrary to women who are not athletes. Not only do female athletes feel pressure to conform to the feminine, thin-body ideal that is prevalent in our society today, they feel pressure to be fit and lean enough in order to achieve a level of optimal performance that is competitive. This provokes female athletes to be at greater risk for body dissatisfaction and unhealthy behaviors as they strive to conform to the thin-body ideal (Beckner & Record, 2016).

Muscular- Body Ideal. One potential explanation of the drive for muscularity in men may be objectification theory. Western culture puts an emphasis on muscular mesomorph for men, by reinforcing the connection between muscularity and masculinity (McCreary & Sasse, 2000). Men are similarly exposed to images and are encouraged to achieve the body ideals valued by Western culture (Daniel, Bridges, & Martens, 2014). College males have reported that the ideal body type for men is muscular, lean, and tall. This body type appears to be analogous to a V-shape, having a large upper body and a small waist. Important body areas noted by these men were having cut and grained abdominal muscles, large biceps, and a toned chest. Sociocultural pressures to desire and put an effort towards obtaining the muscular-body ideal has often led men to become dissatisfied with their body image (Galli, Petrie, Reel, Chatterton, & Baghurst, 2014).

Compared to females, males are at a lower risk of developing an eating disorder, however, 30 % of male's report feelings of body dissatisfaction, which suggests that the drive for muscularity is increasing in males (Flament et al., 2012). Other studies have indicated that young men see themselves as less muscular and thinner than they really are, and in one study, between 28% and 68% of normal-weight boys reported trying to gain weight (McCreary & Sasse, 2000). A shift towards models demonstrating leaner and more muscular bodies occurred in the 1990s and is still prevalent throughout society today (Lanzieri & Cook, 2013). Studies have demonstrated the prevalence of the muscular-body ideal in action toys and *Playgirl* centerfold male models (Pope, Jr., Olivardia, Gruber, & Borowiecki, 1999; Leit et al., 2001). This indicates that modern society praises a fit, lean, and muscular male body ideal (Leit et al., 2001).

Over the last two decades, men have become more anxious about their physical appearance. Compared to women who regularly face pressure to lose weight and to be thin from society, men also experience pressure from society to have a body that is lean and muscular

(Galli et al., 2014). Internalization of the muscular-body ideal is related with numerous strategies to increase muscle mass. Excessive muscle building behaviors is often a precursor for steroid use and muscle dysmorphia in males (Guðnadóttir & Garðarsdóttir, 2014). Western culture may contribute to lower body satisfaction and self-esteem in males who are striving to achieve the muscular-body ideal portrayed throughout society and the media (Leit et al., 2001).

Body Change Behaviors in Athletes

According to objectification theory, self-objectification leads to an increased level of body shame. An increased level of body shame results in greater levels of body dissatisfaction, compulsive exercise, and disordered eating behaviors. As athletes feel dissatisfied with their bodies, the likelihood of negative body image and unhealthy eating behaviors increases (Krane et al., 2001). Unhealthy body change behaviors are specified as body image disturbances. Body image disturbances are comprised of a disturbance in one or more of the body image related components: distortion of one's appearance, body avoidance and/or body change behaviors (e.g., compulsive exercise, abnormal diet restriction, avoiding anxiety provoking arrays of one's body, and/or dissatisfaction with one's appearance) (Daniel et al., 2014).

The majority of athletes who wish to lose weight fall into two categories: 1) athletes who are overfat or obese based on amount of body fat and 2) athletes who are already lean but are motivated to lose body fat. Some of these athletes fall into sports that are weight-sensitive (e.g., endurance athletes), weight-class (e.g., wrestling), or aesthetically judged (e.g., figure skaters) sports (Manore, 2015). Athletes who participate in endurance sports such as running, cycling, or swimming, and those who participate in sports with weight classes for competition, such as rowing or wrestling combat with weight related issues. These issues have the potential to

increase the risk of participating in disordered eating behaviors in athletes who participate in these sports (Melin, Torstveit, Burke, Marks, & Sundgot-Borgen, 2014).

In comparison to male athletes, female athletes are more likely to partake in compulsive exercise patterns and alleviating weight loss methods in an effort to reach an exceptional level of physical fitness. These methods of weight loss include: abuse of laxatives and diet pills, self-provoked vomiting, and fasting (Kong & Harris, 2015). Western culture puts pressure on male and female athletes to achieve certain body ideals. This increases the risk of individuals engaging in body change behaviors such as compulsive exercise and restrictive dieting patterns (Bell, Donovan, & Ramme, 2016). Researchers have found that 28% of adolescent males and 68% of college males consider themselves to be underweight and are obsessed with dieting and strength training in order to gain more muscle mass although they are considered to be in range of a normal weight (Daniel et al., 2014).

A study conducted by Plateau et al. (2014) examined the relationship between eating psychopathology and compulsive exercise. Competitive athletes were recruited for the study and took The Compulsive Exercise Test and The Eating Disorders Examination Questionnaire 6.0. The results from the scores indicated that eating psychopathology and compulsive exercise are significantly and positively correlated with each other. This study also demonstrated that exercising for reasons such as weight control is an essential factor in the development and the maintenance of eating psychopathology (Plateau et al., 2014)

Compulsive Exercise Behaviors in Athletes. Athletes follow a strict practice regimen that requires them to put in many hours of physical work. Some athletes feel the need to dedicate additional practice and work-out hours outside of scheduled practice time. By setting aside supplementary hours, it increases the athlete's performance and allows athletes to be more

competitive in their sport. These athletes are known to have a high athletic identity. A high athletic identity is thought to increase the susceptibility to compulsive exercise, disordered eating behaviors, lower self-esteem, and bring about weight gain concerns. The increased prevalence of eating disorders in athletes has been influenced by various factors including sporting type (Turton, Goodwin, & Meyer, 2017).

Having a high athletic identity is thought to increase one's vulnerability to participate in compulsive exercise. Athletic identity is defined as the "degree to which an individual identifies with the athlete role" (Brewer, Van Raalte, & Linder, 1993, p. 237). Compulsive exercise is a multidimensional construct, in which various items can be measured such as avoidance and rule driven behavior such as weight control, exercise rigidity, mood improvement, and compulsivity to exercise despite a lack of enjoyment (Plateau et al., 2014). Athletes participate in compulsive exercise to diminish feelings of extreme guilt when unable to exercise and to avoid the perceived negative consequences of stopping exercise (Turton et al., 2017). Turton et al. (2017) found that athletes that hold a high athletic identity are more likely to engage in compulsive exercise behaviors.

Western society leans towards cultural ideals that put pressure on women to achieve a slender and thin body type and on men to achieve a muscular body type. Although women have a desire to be thin, recent studies conducted on female body image have indicated a shift in the societal ideal from slender and thin to a more "athletic ideal" that is characterized by a firmer lower body, muscular upper body, and a toned abdomen (Bell et al., 2015). Bell et al. (2015) conducted a study to investigate whether female athletes had greater internalization of the athletic-body ideal is related to having greater body dissatisfaction, dieting and bulimic symptoms, and compulsive exercise. The study measured athletic-ideal internalization, body

dissatisfaction, compulsive exercise, bulimic symptoms, and dieting. Through bivariate correlations, Bell et al. (2015) found that athletic-ideal internalization was not associated with body dissatisfaction. However, internalization of athletic-ideal internalization was found to predict compulsive exercise patterns and dieting. This study also indicated that internalization of an athletic body ideal is an unrealistic goal for females to strive towards and produces negative consequences (e.g., dieting behaviors and patterns of compulsive exercise) (Bell et al., 2015).

Plateau et al. (2014) used The Compulsive Exercise Test to explore the relationship between compulsive exercise and eating behaviors in athletes. The Compulsive Exercise Test was developed based on a multidimensional model of compulsive exercise. The CET has five subscales: avoidance and rule driven behavior, weight control exercise, mood improvement, lack of exercise enjoyment, and exercise rigidity. The results of the study indicated that there is a strong relationship between exercising for weight control and mood regulation with eating behaviors. Compulsive exercise in this study was found to be a strategy for regulation of an individual's mood. Results also indicated that the level of exercise rigidity and lack of exercise enjoyment may be less relevant subscales to athletes compared to weight control exercise, mood improvement, and avoidance and rule driven behavior.

Restrictive Dieting Behaviors in Athletes. Many eating disorders and disordered eating behaviors are asserted to be driven by external pressures, such as Western culture in order for individuals to carry out the drive for thinness in women and a drive for muscularity in men. Robbeson, Kruger, and Wright (2015) define disordered eating behaviors as irregular eating behaviors that may fulfill some of the diagnostic criteria of clinical eating disorders. Disordered eating is placed on a continuum and starts with appropriate eating and exercise behaviors. These behaviors include intermittent dieting or occasional use of more extreme weight loss methods

(Melin et al., 2014). Robbeson et al. (2015) also defines body weight control behaviors as insufficient energy intake, bingeing, and the use of laxatives, diuretics, and diet pills. Melin et al. (2014) found that female athletes, as well as male athletes participating in lean sports, such as aquatic sports, are at an increased risk for becoming more susceptible to disordered eating behaviors and have attitudes towards wanting to lose weight and be thin compared to athletes in non-lean sports.

In many sports, weight as well as one's body appearance becomes an essential factor that may define an athlete's performance. Studies have found that female NCAA Division 1 athletes manifested behaviors and attitudes that were unhealthy related to their own eating and weight (Beckner & Record, 2016). To reach new heights of athletic performance, athletes may engage in restrictive dieting or disordered eating behaviors. Continued restrictive intake of calories and the presence of very little to no energy available for the body to use affects the metabolism and the function of both male and female athletes (Beckner & Record, 2016).

Individuals who participate in sports such as diving, gymnastics, and synchronized swimming are at an increased risk of developing an eating disorder. One possible explanation to this is that these athletes are judged based on their performance and desire to achieve the ideal body type for their specific sport (Melin et al., 2014). Results from another study indicated that 22% of adolescent female athletes participating in aesthetic sports, such as synchronized swimming, responded to having some intention to use restrictive dieting behaviors to lose weight (Laramée et al., 2017).

Participation in sports that require a low body fat percentage is one risk factor of engaging in disordered eating behaviors. Disordered eating behaviors introduces a vast spectrum of unhealthy eating behaviors in which individuals strive to lose weight and/or achieve a lean

appearance (Laramée et al., 2017). Leanness is essential for optimal performance in sports that are divided into weight classes and in sports that are judged. In a study by Goltz, Stenzel, & Schneider (2013), body dissatisfaction scores were associated with disordered eating behaviors. Results also indicated that athletes with a higher percentage of body fat reported higher levels of body dissatisfaction compared to athletes that were satisfied with their body image.

There is a substantial amount of research that has been conducted on the relationship between being an athlete and acquiring problems with eating (Smolak, Murnen, & Ruble, 2000). A study conducted by Morissette et al. (2015) investigated the prevalence of weight concerns and of intention to adopt restrictive dieting behaviors. Researchers sampled high-school female athletes and non-athletes (control). Researchers predicted that high school female athletes were more likely to be concerned regarding their body weight and would have greater intentions to adopt restrictive dieting behaviors compared to the females in the control group. Results of this study showed that there was greater dissatisfaction in the body weights among the athletes that were cheerleaders, swimmers, and divers compared to female athletes participating in other sports. These results also demonstrated that the intention to use dietary restriction behaviors was more prevalent over the intention to lose weight by using restrictive dieting strategies in both athletes and the control group. Results from this study also suggested that athletes participating in aesthetic sports, could be more dissatisfied with their body weight, leading to restrictive dieting behaviors.

In a study of nationally ranked female and male figure skaters, researchers found that 72% of the female figure skaters had a desire to lose weight. Furthermore, they found that dieting was the most prevalent weight loss strategy (Greenleaf, 2004). Another study investigated the relationship between dieting behavior and body image in female athletes. There were three

groups studied: 1) elite gymnasts, 2) non-elite gymnasts, and 3) schoolgirls (control). The participants were asked to submit their weight and answer several questionnaires regarding: dieting behaviors, body image, weight-related attributions, and pressure received from coaches. The researchers hypothesized that dieting behaviors would be more common in the gymnasts compared to the control group. Results indicated that although the gymnasts had a lower BMI compared to the control group and they desired to lose weight just as much as the control group. Results also demonstrated that the elite gymnasts dieted often even though they reported being relatively satisfied with their body. This may reveal that these female athletes are still feeling pressure to achieve a body that fits within the cultural body-ideals (de Bruin, Oudejans, Bakker, & Woertman, 2011).

Body Image Disturbance in Athletes

Body image is a multidimensional construct. It is composed of perceptual, behavioral, and attitudinal factors. These factors include: the way individuals perceive the appearance of their body, the behaviors individual participate in related to the appearance of their body, and the extent to which one is satisfied with their body (Daniel et al., 2014). Within an athletic context, “athletic body image” is defined as the internal image one has of his or her body and the assessment of that image within an athletic context. Athletic body image is how an athlete perceives their body as an athlete. There are various factors that play a role in the body image of athletes. Some of these factors are similar to those that have an impact on general body image. Although there are similarities, there are exclusive factors—such as uniforms—that have connections with athletic body image (Greenleaf, 2002).

Researchers have implied that sport type influences the experience of body image and concerns with weight. Research has also noted that body image disturbances seem to be a

contributing factor to patterns of eating problems in athletes (de Bruin et al., 2011). Female athletes that participate in aesthetic, lean, and judged sports tend to experience body image and weight concerns. Body image and weight concerns may potentially lead to disordered eating and exercise behaviors (Greenleaf, 2004). Male athletes have also been found to be subjected to pressures to modify their body weight, shape, or size, that are unique to the environment of the sport (e.g., expectations of performance, weight or strength concerns from coaches, or uniforms) (Galli et al., 2014). Other moderating factors such as level of competition (e.g., high school, college, elite), age, body composition, sport type (e.g., basketball, gymnastics), as well as race and ethnicity may lead to body image disturbances (Hausenblas & Downs, 2001).

Body Dissatisfaction. Body dissatisfaction is a component of the multidimensional construct of body image. Body dissatisfaction refers to the to the depreciation of physical appearance and body weight (Fortes, Neves, Filgueiras, Almeida, & Ferreira, 2013). Body dissatisfaction has been found to be correlated with negative emotions such as shame, guilt, and sadness. Body dissatisfaction may decrease one's quality of life and may lead to a greater risk of an eating disorder (Ridolfi et al., 2011). Along with a greater risk of developing an eating disorder as a consequence to unhealthy eating behaviors, body dissatisfaction is associated with low self-esteem and depression (Forbes et al., 2005; Krane et al., 2001). Body dissatisfaction can have serious consequences for men and women, which includes the potential for developing weight change behaviors such as excessive exercise, use of illicit substances, and even the development of disordered eating patterns (Galli et al., 2014).

Body dissatisfaction occurs when there is a mismatch between an individual's image of his or her own body and is associated with the drive for thinness (Kong & Harris, 2015). Kong & Harris (2015) conducted a study with female athletes in leanness focused sports and non-

leanness focused sports to examine the pressures to conform to social and sporting norms regarding body weight. The study used a 2 (sport type: leanness focused (e.g., dance, performance sports, or gymnastics); non-leanness focused (e.g., ball sports)) x 3 (sport level: elite; recreational; non-competitive) between subjects design. According to prior research, the researchers hypothesized that female athletes participating in leanness focused sports and athletes at the elite level would report higher body dissatisfaction. The participants answered the Eating Attitudes Test and the Figure Rating Scale. Leanness-focused sports scored higher in the Eating Attitudes Test than the non-leanness focused athletes. For the Figure Rating Scale, leanness focused athletes reported a preference for leaner figures compared to non-leanness athletes. The findings of this study indicated that athletes competing in sports at the elite level experience higher levels of body dissatisfaction compared to those who compete at a recreational level.

Sundgot-Borgen (1994) conducted a study indicating that female athletes participating in lean sports (e.g., dancing gymnastics, cheerleading, ice skating, swimming, diving) were at an increased risk to be preoccupied with their body weight and/or report body dissatisfaction compared to female athletes in non-lean sports (e.g., soccer, softball, basketball, tennis, or non-athletes). Sundgot-Borgen (1994) also found that male athletes who participated in lean sports reported higher scores on behavioral and attitudinal measures (e.g., drive for thinness, bulimia, body dissatisfaction) and higher on psychological trait measures (e.g., perfectionism, interpersonal distrust, maturity fears) compared to female athletes in non-lean sports and non-athletes.

Uniforms as an Interacting Factor. The relationship between uniforms and body image can be examined through the lens of objectification theory (Fredrickson & Roberts, 1997).

Limited research has examined uniform's effects on body image. Although there is limited research, prior research does propose that uniforms may provide a rare source of stress and can have an impact on body satisfaction within the athletic environment of female athletes (Steinfeldt, Zakrajek, Bodey, Middendorf, & Martin, 2013). Some scholars even contest that female athletes are highly sexualized because they are required to wear uniforms that are revealing, emphasizing their sex appeal above athletic performance (Beaver, 2016).

Steinfeldt et al. (2013) conducted a study with 9 female college athletes who played NCAA Division 1 volleyball. Based on objectification theory and the presumption that female student athletes often display and expose parts of their bodies in front of an audience, the researchers aimed to evaluate whether volleyball uniforms are a potential source of stress. Stress of one's uniform may contribute to concerns regarding body image. The research was conducted through an interview process which asked questions regarding: expectations of volleyball body/uniform, uniform distraction/affirmation, perceptions of others' comments, and social comparison. The interviews were then analyzed using consensual qualitative research methodology. Results of the study suggested that the volleyball players perceptions of their uniforms influenced their body image in a negative way, and the tight fitting spandex uniforms had an impact on their performance. Participants also described the amount of time they allocated towards adjusting their uniforms and worrying about how they looked in their revealing uniform.

Previous research has classified various sources of weight pressure in aesthetic and judged sports. These sources include: attire or team uniforms, judges, teammates, coaches, and self-pressures as well (Greenleaf, 2004). In a study with collegiate swimmers, Reel & Gill (2001) used The Weight Pressures in Swimming inventory in order to label the most frequently reported

weight pressures in swimmers, to investigate the preponderance of weight concerns in female swimmers, and to identify whether concerns in swimming related to one's body is associated with social physique anxiety. The researchers found that pressures with weight included feelings that their swimsuits were revealing, believing that a lower body weight heightens performance, perceiving that their bodies are being assessed by spectators, and that weight loss is noticed by teammates. Greenleaf (2004) discussed the importance of future work in the investigation of the potential influence of uniforms on body image.

Athletes feel weight pressures from the revealing nature and form-fitting feel of their athletic uniforms. These weight pressures to look and feel good in their athletic uniforms may increase an athlete's risk of becoming dissatisfied with their bodies and lead them to participate in body change behaviors (Galli et al., 2014). There is research that suggests that revealing sports uniforms and participation in leanness-demanding sports contributes to an unhealthy body image and dieting behaviors, which allows unhealthy body comparisons to become easier and more common in athletes (Melin et al., 2014). Melin et al. (2014) also discussed special risk factors in the development of unhealthy body image and dieting for example, aquatic sports, wearing skimpy and tight-fitting bathing suits.

The Present Study

The present, theory-driven, empirically-based study was designed to examine the relationship between self-objectification and its consequences of compulsive exercise, restrictive dieting, and greater levels of body dissatisfaction in athletes who participate in both male and female college varsity sports with revealing and non-revealing uniforms. The current study is different from prior research because it specifically examines the effect that uniforms, as an interacting variable, will have on the consequences of self-objectification: compulsive exercise,

restrictive dieting, and body dissatisfaction. Prior research has not looked at the effect that uniforms have related to objectification theory and self-objectification and the negative consequences such as compulsive exercise, restrictive dieting, and body dissatisfaction.

Examining both males and females would allow for a comparison between the genders regarding the negative consequences that may emerge as a result of self-objectification.

The current study would test the following specific hypotheses:

Hypothesis 1. Athletes wearing revealing uniforms were predicted to score higher on the Objectified Body Conscious Scale and the College Oriented Eating Disorders Screen, would partake in compulsive exercise more, and would report greater negative feelings towards their body image and appearance than athletes who wear non-revealing uniforms.

Hypothesis 2. Females wearing revealing uniforms were predicted to score higher on the Objectified Body Conscious Scale and the College Oriented Eating Disorders Screen, would partake in compulsive exercise more, and would report greater negative feelings towards their body image and appearance than female athletes who wear non-revealing uniforms.

Hypothesis 3. Females wearing both revealing uniforms and non-revealing uniforms were predicted to score higher on the Objectified Body Conscious Scale and the College Oriented Eating Disorders Screen, would partake in compulsive exercise more, and would report greater negative feelings towards their body image and appearance than male athletes who wear both revealing uniforms and non-revealing uniforms.

Method

Participants

The Pilot study sample consisted of 25 College of Wooster students who were non-athletes and were between the ages of 18 and 22. The Experimental study sample consisted of 83 College of Wooster varsity athletes that were between the ages of 18 and 22. For males, the non-

revealing sports that were examined included athletes in the following sports: golf, baseball, and football and the revealing sports that were examined included: swimming, cross country, and track and field. For females, the non-revealing sports that were examined included: basketball, field hockey, soccer, and softball, and the revealing sports that were examined included: swimming, cross country, track and field, and volleyball. There were 19 male athletes in the non-revealing uniform group, 18 male athletes in the revealing uniform group, 21 female athletes in the non-revealing uniform group, and 25 female athletes in the revealing uniform group. The total number of participants that participated in this study was 108.

Materials

Contextual Body Image Questionnaire for Athletes. The CBIQA was created by De Bruin et al. (2007), McCreare and Sasse (2000), Ricciardelli and McCabe (2000), and Richards and Marsh (2006). The CBIQA aims to evaluate various aspects of body image. These body image aspects include body shape, weight, appearance, fat percentage and muscularity. This questionnaire consists of 30 questions in which individuals self-report the body image aspects listed above in two aspects: one for daily life (15 items) and one pertaining to their sport (15 items). These two aspects were used to provide internal validity of the CBIQA. A 7-point Likert-Scale was used for participants to rate their responses ranging from 1 (lower rating of body image aspect) to 7 (greater rating of body image aspect). Each of the responses to the items on the CBIQA were measured with three items: (In daily life/ concerning my sport), 1.) 'I think my [body image aspect] is...'; 2.) 'I think my [body image aspect] compared to others is...'; and 3.) 'Others think my [body image aspect] is...'. In the study conducted by de Bruin et al. (2007), indicated satisfactory levels of internal validity and reliability ranging from, ($\alpha = 0.83$ to $\alpha = 0.95$) for the CBIQA.

Compulsive Exercise Test. The CET was designed by Taranis, Touyz, & Meyer (2011) to evaluate compulsive exercise in the domain of eating disorders. The measure consists of a 24 self-report items with five subscales: avoidance and rule driven behavior, weight control exercise, mood improvement, lack of exercise enjoyment, and exercise rigidity. A 6-point scale ranging from 0 (never true) to 5 (always true) is used to record responses of the items. The intermediate responses consist of 1 (rarely true), 2 (sometimes true), 3 (often true), and 4 (usually true). An example item is “If I cannot exercise, I worry that I will gain weight”. Higher scores from the CET indicate more compulsive feelings and actions towards exercise. Previous research has indicated that this scale has shown good internal consistency, as seen in the Cronbach’s alpha from individual subscales (0.71) and a global score of (0.85) (Plateau et al., 2014).

College Oriented Eating Disorders Screen. The COEDS was designed by Nowak, Roberson-Nay, Strong, Bucciari, & Lejuez (2003). It investigates preoccupation with body image and concerns with weight in college students. COEDS was also developed to identify individuals that may show sub-clinical eating disorder pathology and is not used as a diagnostic measure. The measure consists of a seven-item self-reported questionnaire. An example item is “I compare my body to other women’s/men’s bodies when I go to a social gathering”. A 5- point scale ranging from 1 (never) to 5 (always) is used to rate the responses; intermediate responses consist of 2 (sometimes), 3 (half the time), and 4 (often). Internal consistency was reported to be excellent with Cronbach’s alpha of (0.92) (Nowak et al., 2003). A prior study supported the use of COEDS as a measure for testing individuals that may engage in behaviors and hold beliefs that put them at risk for potentially developing an eating disorder that can be diagnosed (Bucciari, Roberson-Nay, Strong, Nowak, & Lejuez 2005).

Objectified Body Consciousness Scale. The OBC Scale was developed by McKinley and Hyde (1996). The scale is used to measure three components of objectified body consciousness in undergraduate students and adults. The components of the OBC Scale consists of 1.) body surveillance—viewing the body as an outside observer; 2.) body shame—feeling shame when your body type does not conform to the societal norm; and 3.) appearance control beliefs. Participants rated each of the 24 items using a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). An example item from the Surveillance Scale is “I rarely think about how I look”; Body Shame Scale is “I would be ashamed for people to know what I really weigh”; and Appearance Control Scale is “I really don’t think I have much control over how my body looks”. The OBC Scale has been shown as a valid and reliable measure in undergraduate men and women as well as middle-aged women (Lindberg, Hyde, & McKinley, 2006). McKinley and Hyde (1996) reported moderate to high internal consistency values of the OBC Scale: Surveillance Scale ($\alpha= 0.89$), Body Shame Scale ($\alpha= 0.75$), and Appearance Control Belief Scale ($\alpha=0.72$).

Procedure

Recruitment for the questionnaire occurred through The College of Wooster Athletic Department. Coaches from the sports teams that were chosen through the Pilot study were contacted by email. The email included the link to access the questionnaire, and it asked the coaching staff to send forward the email to their athletes. The final questionnaire was made available through Qualtrics. The link was:

https://wooster.col.qualtrics.com/jfe/form/SV_cOAO7uw5qd6nzv

When the participants clicked on the link to the survey they were given a brief welcome. The informed consent form was directly under the welcome message. Participants read through

the consent form and clicked to agree to participation or clicked to not participate in the study. If the participant gave consent, they were asked to rate items from the following questionnaires, in this order: The Contextual Body Image Questionnaire for Athletes (CBIQA), the Compulsive Exercise Test (CET), the College Oriented Eating Disorders Screen (COEDS), and the Objectified Body Consciousness Scale (OBC). The titles of all the questionnaires were removed on the survey, but instructions such as, "Please rate each item about your feelings towards physical exercise. When answering, do not think too long about your responses, and do not skip any items" were given. Following all the questionnaires was a debriefing form and a thank you note for participation in the study from the researcher. Participants' identity remained anonymous throughout the study. All procedures and materials were approved by the College's ethics committee, the HSRC.

Results

Hypothesis 1 stated that athletes wearing revealing uniforms would score higher on the Objectified Body Conscious Scale and the College Oriented Eating Disorders Screen, would partake in compulsive exercise more, and would report greater negative feelings towards their body image and appearance compared to athletes who wear non-revealing uniforms. Hypothesis 2 stated that female athletes wearing revealing uniforms would score higher on the dependent measures listed above compared to females who wear non-revealing uniforms. Hypothesis 3 stated that female athletes wearing both revealing uniforms and non-revealing uniforms would score higher on the above dependent measures compared to males who wear both revealing uniforms and non-revealing uniforms. To test these hypothesis, 4 2x2 between-subject's ANOVA's were conducted.

Table 1 below illustrates the means and standard deviations of the analysis for the *Contextual Body Image Questionnaire for Athletes (CBIQA)*. A 2X2 ANOVA was conducted to examine if there was a difference in males and females wearing revealing or non-revealing uniforms in their feelings towards their body image and appearance. There were two independent variables, each with two levels, Gender (Male and Female) and Type of Uniform (Revealing and Non-Revealing). The dependent variable was examined using the totals of a 15-item raking *CBIQA* questionnaire from a 7-point Likert-scale with anchored answering categories.

Table 1

Means, Standard Deviation, and Main Effects for total items on CBIQA

Type of Uniform	Male		Female		Total	
	<i>n</i>	<i>M(SD)</i>	<i>n</i>	<i>M(SD)</i>	<i>n</i>	<i>M(SD)</i>
Least Revealing	19	4.08 (0.87)	21	4.24 (0.45)	40	4.17 (0.68)
Most Revealing	18	4.13 (0.53)	25	4.28 (0.50)	43	4.22 (0.51)
Total	37	4.10 (0.71)	46	4.26 (0.48)		

Note: Items were measured on a 7-point scale.

There was not a significant interaction effect between gender and type of uniform $F(1,79) = 0.001, p = 0.982 (\eta^2 = 0.00)$. There was not a significant main effect for gender $F(1,79) = 1.284, p = 0.261 (\eta^2 = 0.016)$. This indicates that there was not a significant difference between males and females in their body image and appearance. There was not a significant main effect for type of uniform $F(1,79) = 0.101, p = 0.751 (\eta^2 = 0.001)$. This indicates that athletes wearing revealing and non-revealing uniforms did not show significant differences in their body image and appearance.

Table 2 below illustrates the means and standard deviations of the analysis for the *Compulsive Exercise Test (CET)*. A 2X2 ANOVA was conducted to examine if there was a difference in males and females wearing revealing or non-revealing uniforms participated in compulsive exercising patterns. There were two independent variables, each with two levels,

Gender (Male and Female) and Type of Uniform (Revealing and Non- Revealing). The dependent variable (*CET*) was examined using the totals of a 24-item questionnaire that scored responses from 0 (*never true*) to 5 (*always true*).

Table 2

Means, Standard Deviation, and Main Effects for total items on CET

Type of Uniform	Male		Female		Total	
	<i>n</i>	<i>M(SD)</i>	<i>n</i>	<i>M(SD)</i>	<i>n</i>	<i>M(SD)</i>
Least Revealing	19	3.82 (0.66)	21	3.86 (0.52)	40	3.84 (0.58)
Most Revealing	18	3.65 (0.66)	25	3.90 (0.58)	43	3.80 (0.62)
Total	37	3.73 (0.66)	46	3.88 (0.54)		

Note: Responses were scored on a 6-point scale from 0 (*never true*) to 5 (*always true*)

There was not a significant interaction effect between gender and type of uniform $F(1,79) = 0.62, p = 0.433 (\eta^2 = 0.008)$. There was not a significant main effect for gender $F(1,79) = 1.20, p = 0.277 (\eta^2 = 0.015)$. This indicates that there was not a significant difference between males and females in their exercise patterns. There was not a significant main effect for type of uniform $F(1,79) = 0.236, p = 0.628 (\eta^2 = 0.003)$. This indicates that athletes wearing revealing and non-revealing uniforms did not show significant differences in their exercising patterns.

Table 3 below illustrates the means and standard deviations of the analysis for the *College Oriented Eating Disorders Screen (COEDS)*. A 2X2 ANOVA was conducted to examine if there was a difference in males and females wearing revealing or non-revealing uniforms participated in disordered eating patterns. There were two independent variables, each with two levels, Gender (Male and Female) and Type of Uniform (Revealing and Non-Revealing). The dependent variable was examined using the totals of a seven-item raking *COEDS* questionnaire from 1 (*never*) to 5 (*always*).

Table 3

Means, Standard Deviation, and Main Effects for total items on COEDS

Type of Uniform	Male		Female		Total	
	<i>n</i>	<i>M(SD)</i>	<i>n</i>	<i>M(SD)</i>	<i>n</i>	<i>M(SD)</i>
Least Revealing	19	2.13 (1.10)	21	2.88 (1.11)	40	2.53 (1.15)
Most Revealing	18	1.97 (1.07)	25	2.83 (1.07)	43	2.47 (1.14)
Total	37	2.05 (1.07)	46	2.85 (1.07)		

Note: Totals are from a seven-item ranking from 1 (*never*) to 5 (*always*)

There was not a significant interaction effect between gender and type of uniform $F(1,79) = 0.05, p = 0.829 (\eta^2 = 0.001)$. There was a significant main effect for gender $F(1,79) = 11.34, p = 0.001 (\eta^2 = 0.126)$. This indicates that females ($M = 2.85, SD = 1.07$) reported higher levels of disordered eating compared to males ($M = 2.05, SD = 1.07$). There was not a significant main effect for type of uniform $F(1,79) = 0.20, p = 0.655 (\eta^2 = 0.003)$. This indicates that athletes wearing revealing and non-revealing uniforms did not show significant differences in their eating patterns.

Table 4 below illustrates the means and standard deviations of the analysis for the *Objectified Body Consciousness Scale (OBC)*. A 2X2 ANOVA was conducted to examine if there was a difference in males and females wearing revealing or non-revealing uniforms in their objectified body consciousness. There were two independent variables, each with two levels, Gender (Male and Female) and Type of Uniform (Revealing and Non-Revealing). The dependent variable was examined using the totals of a 24-item ranking *OBC* questionnaire from 1 (*strongly agree*) to 7 (*strongly disagree*).

Table 4

Means, Standard Deviation, and Main Effects for total items on OBC

Type of Uniform	Male		Female		Total	
	<i>n</i>	<i>M(SD)</i>	<i>n</i>	<i>M(SD)</i>	<i>n</i>	<i>M(SD)</i>
Least Revealing	19	4.59 (0.77)	21	4.32 (0.56)	40	4.44 (0.67)
Most Revealing	18	4.10 (0.62)	25	4.36 (0.70)	43	4.25 (0.67)
Total	37	4.35 (0.73)	46	4.34 (0.63)		

Note: Items were rated on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*)

There was not a significant interaction effect between gender and type of uniform $F(1,79) = 3.193, p = 0.078 (\eta^2 = 0.039)$. There was not a significant main effect for gender $F(1,79) = 0.001, p = 0.978 (\eta^2 = 0.000)$. This indicates that there was not a significant difference between males and females in their level of objectified body consciousness. There was not a significant main effect for type of uniform $F(1,79) = 2.231, p = 0.141 (\eta^2 = 0.027)$. This indicates that athletes wearing revealing and non-revealing uniforms did not show significant differences in their levels of objectified body consciousness.

Discussion

In the present study, we expected to find that all athletes wearing revealing uniforms compared to all athletes wearing non-revealing uniforms, females wearing both revealing and non-revealing uniforms compared to all male athletes, and females wearing revealing uniforms compared to females wearing non-revealing uniforms would report greater levels of body dissatisfaction, compulsive exercise, restrictive dieting, and objectified body consciousness. The review of the literature by Moradi and Huang (2008) discussed one study that examined athletes in lean and non-lean sports. The athletes who participated in lean sports were positively related with self-objectification and were good predictors of eating disorders, while athletes in non-lean sports were negatively related with self-objectification and poor predictors of eating disorders. In combination, the research discusses the relationship between self-objectification, eating

disorders, and feelings of body dissatisfaction. The results of the present study did show not show significance that has been previously shown to be significant in the scope of this literature.

Currently, no other study has examined the impact of wearing a revealing or non-revealing uniform has on both male and female athletes and their feelings towards their body and appearance, compulsive exercise behaviors, restrictive dieting behaviors, and objectified body consciousness. In the past, studies have looked at how objectification, and social comparison, as well as sociocultural ideals have influenced women and the consequences that arise when self-objectification occurs (Moradi & Huang, 2008). However, there has been a shift in the literature to include males in research studies regarding the impacts of self-objectification and its negative consequences. Slater and Tiggemann (2002) note that while objectification theory was cultivated to interpret the experiences of women and young girls, the sexual-objectification of male's bodies has been linked to increased levels of self-objectification and its potential negative consequences in boys and men. The current study examined both males and females in order to compare differences in feelings towards one's body and appearance, restrictive eating patterns, compulsive exercise patterns, and objectified body consciousness.

The current study ran four between-subjects 2x2 ANOVAs. The first dependent measure that was examined was the *Contextual Body Image for Athletes Questionnaire*. We expected to have stronger effects for athletes wearing revealing uniforms compared to athletes wearing non-revealing uniforms, females wearing revealing and non-revealing uniforms compared to males wearing revealing and non-revealing uniforms, and lastly, all females compared to all males. Results indicated that there were not significant differences between the main groups: athletes wearing revealing uniforms compared to athletes wearing non-revealing uniforms, and all female athletes compared to all male athletes had higher means. The means of female athletes wearing

revealing uniforms were the highest compared to all other groups (refer to Table 1). This finding demonstrates that female athletes wearing revealing uniforms reported the greatest levels of negative feelings towards their body and appearance, which was predicted.

Compulsive exercise patterns were examined in the current study. The *Compulsive Exercise Test* was used to examine the same hypotheses as stated above. Results demonstrated that there were not significant differences between the groups. Although there were not significant differences, female athletes had a greater mean compared to male athletes. Athletes wearing non-revealing uniforms had a greater mean compared to athletes wearing revealing uniforms, which is the opposite of what was predicated. Female athletes wearing revealing uniforms had the highest mean (refer to Table 2). This indicates that the results are going in the trend of the hypothesis that females wearing revealing uniforms and females compared to males reported greater levels of compulsive exercise, although the analysis did not reveal significant differences.

The *College Oriented Eating Disorders Screen* was used to examine the same hypotheses as reported above to examine which group reported greater levels of restrictive dieting behaviors and had increased vulnerability to developing a potential eating disorder. There was a significant effect for female athletes compared to male athletes. This indicates that females are more vulnerable and participate in restrictive dieting behaviors significantly more than males. A study conducted by Bucciari et al. (2005) also showed a significant difference between men and women, with women scoring higher than men. Interestingly, results went in the opposite direction than predicted, with females wearing non-revealing uniforms having a greater mean than females wearing revealing uniforms, and athletes wearing non-revealing uniforms having a greater mean compared to athletes wearing revealing uniforms (refer to Table 3).

The *Objectified Body Consciousness Scale* was used to evaluate the same hypotheses noted above showed an increased tendency to self-objectify and view themselves as an object to be evaluated by others. There were not any significant effects shown in this analysis. Results indicated that athletes wearing non-revealing uniforms compared to athletes wearing revealing uniforms reported higher levels of objectified body consciousness. Male athletes reported greater levels of objectified body consciousness than female athletes. The only comparison to follow the predicted trend were female athletes wearing revealing uniforms who reported greater levels of objectified body consciousness compared to females wearing non-revealing uniforms (refer to Table 4).

It is surprising that there were not significant differences shown in level of objectified body consciousness, body image and appearance, and compulsive exercise between the four main groups. Regarding objectified body consciousness, McKinley & Hyde (1996) found that objectified body consciousness was found to be related to body esteem and eating patterns in young women and middle-aged women. In the current study, the means for males and females calculated for the *OBC* were equal (refer to Table 4). This contradicts Fredrickson & Roberts' (1997) definition that objectification theory is a framework used to evaluate and understand the consequences that women face by living in a society that sexually objectifies them, leading them to self-objectify. The current study indicated that males and females reported the same level of objectified body consciousness, concluding that males, do in fact, feel objectified, or at least that men and women in this study's sample feel equally objectified.

It is also remarkable that there were not significant differences shown in one's thoughts about their body and appearance between the four main groups. Regarding body image and appearance, Steinfeldt et al. (2013) found that volleyball players perception of their uniforms had

a negative influence on how they viewed their bodies. This is just one example of research that indicates the negative impact that uniforms have on one's body image and appearance. Prior research has also indicated that female athletes who participate in aesthetic, lean, and judged sports have concerns related to body image and weight (de Bruin, 2011). The current study showed that there were also not any significant differences in compulsive exercise between the four groups. This is interesting because there has been a shift towards in societal ideals from a thin-body ideal to an athletic-body ideal (Bell et al., 2015). Bell et al. (2015) reported that females internalization of the athletic-body ideal predicted compulsive exercise patterns and dieting.

Considering the study's new findings, the current study did have its limitations. Currently, there is little research that combines the effects of uniforms and gender on self-objectification, restrictive dieting, compulsive exercise, and feeling towards one's body and appearance. Other studies regarding body image and self-objectification looked at different ethnicities and the differences between them (Hebl et al., 2004). The sample size of this study was small, the study did not ask participants for the weights or BMI, and the sample recruited NCAA Division III athletes only. Although trends were in the right direction, the predicted hypotheses did not show significance, which could have been a result of the sample being small and only having NCAA Division III athletes participate. Another explanation of these results could have been impacted by the length of time the athlete may have been participating in the sport for.

There are multiple explanations as to why the results did not support all of the hypotheses. One, the participants of this study volunteered and chose to answer questions regarding to feelings towards body image, objectification, and body change behaviors. Since the

participants chose to participate they may have already had more positive feelings towards their bodies. Therefore, participants reported less compulsive exercise or dieting behaviors and were not conscious of body objectification that they may experience. Second, Wooster is a NCAA Division III, liberal arts college where there is a greater emphasis placed on academics over athletics. Unlike NCAA Division I and Division II athletic teams, Division III colleges do not grant athletic scholarships to students, ultimately, putting less pressure on athletes to perform and look the part. Third, research has indicated that females participating in lean sports (e.g., dancing, swimming, figure skating, gymnastics, and diving) are at an increased risk to be preoccupied with their body weight, shape, and size and report greater levels of body dissatisfaction (Sundgot-Borgen, 1994). This research may suggest that the effects of revealing uniforms are actually present, they are just being overshadowed by various expectations, pressures, and the objectification of their bodies. Objectification plays a huge role in lean sports and in athletes, consisting of mostly females, that wear revealing, tight, and skimpy uniforms.

Despite the limitations, the current study provides evidence of females being more vulnerable to developing an eating disorder compared to males. This study also showed trends heading in the right direction that previous literature has shown. Future studies may consider, recruiting more participants and recording actual weights or BMIs of the participants. De Bruin et al. (2011) gathered weights, fat percentage, and evaluations on body shape and fat percentage and were able to compare the participants actual recorded weights with the evaluations of their body image. Other future directions should include a sample from NCAA Division I and II athletes along with Division III athletes. Steinfeldt et al. (2013) suggests that revealing uniforms may not be the only negative influence on body image but pressure to perform, spectators,

teammates/competitors, and coaches may also have a negative impact on body image, leading to self-objectification.

Research examining body image and objectification of both males and females continues to be of tremendous importance. The impact that uniforms, both revealing and non-revealing, have on body image and appearance, compulsive exercise and dieting patterns, as well as objectified body consciousness is worth examining further. By examining the impact that different types of uniforms have on athletes, researchers will be able to offer an improved explanation as to why these negative consequences may occur in some athletes and not others, and possibly pose ways to neutralize these negative consequences.

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Appendix A

Pilot Study Recruitment Email

Hello,

My name is Maggie Layde. I am a senior psychology major at The College of Wooster. I am conducting research as part of my Independent Study Thesis. This study will ask you rate men's and women's varsity sports uniforms on a scale from 1 (least revealing) to 10 (most revealing).

If you would like to participate in my study, the link to access the survey is below. The survey should only take about 5 minutes. You may withdraw from the survey at any point.

https://wooster.co1.qualtrics.com/jfe/form/SV_bNQR2aG4bIUlyVD

Requirements for participation:

- At least 18 years old
- College of Wooster student, non-athlete

You may contact me, the principal investigator, or my advisor, Dr. Claudia Thompson, if you have any questions about the study.

Maggie Layde
mlayde19@wooster.edu

Claudia Thompson, Ph. D.
crt@wooster.edu

Appendix B

CONSENT TO PARTICIPATE IN A RESEARCH STUDY
THE COLLEGE OF WOOSTER

Ratings of College of Wooster Sports Uniforms

Principle investigator: Maggie C. Layde, Psychology Department

Purpose

You are being asked to rate men's and women's varsity sports uniforms.

Procedures

If you decide to volunteer, you will be asked to rate the men's and women's varsity sports uniforms from 1 (least revealing) to 10 (most revealing). This survey will take 5 minutes to complete.

Risks

There are no risks to participating in this study.

Benefits

There are no direct benefits to you for your participation in this study.

Confidentiality

Any information you give will be held confidential. All data will be anonymous during and after the conclusion of this study.

Costs

There is no cost to you beyond the time and effort required to complete the procedure described above.

Right to Refuse or Withdraw

You may refuse to participate in the study. If you choose to participate and change your mind you may withdraw from the study at any point without penalty.

Questions

If you have any questions, please contact me by email at mlayde19@wooster.edu. You may also contact my advisor, Dr. Claudia Thompson, at crt@wooster.edu.

Consent

Your signature below indicates that you have decided to volunteer for this study. By agreeing to take this survey, you are agreeing to and acknowledging that you understand and have read the above terms.

Appendix C

Pilot Study

Please think about the design of athletic uniforms that varsity athletes wear in competition. Then rate the Men's Varsity Sports Uniforms at The College of Wooster on a Likert Scale from 1 (least revealing) to 10 (most revealing)

1. Baseball
2. Basketball
3. Cross Country
4. Football
5. Golf
6. Lacrosse
7. Soccer
8. Swimming & Diving
9. Tennis
10. Track & Field

Please think about the design of athletic uniforms that varsity athletes wear in competition. Then rate the Women's Varsity Sports Uniforms at The College of Wooster on a Likert Scale from 1 (least revealing) to 10 (most revealing)

1. Basketball
2. Cross Country
3. Field Hockey
4. Golf
5. Lacrosse
6. Soccer
7. Softball
8. Swimming & Diving
9. Tennis
10. Track & Field
11. Volleyball

Appendix D

Research Participant Debriefing Form-Pilot Study

Objective

The general objective of this study is to obtain a consensus about which men's and women's varsity sports uniforms are the least revealing and which sports have the most revealing uniforms.

Questions

I, Maggie C. Layde senior psychology major, am performing this research. If you have any questions or concerns you can contact me via email at mlayde19@wooster.edu. My advisor, Dr. Claudia Thompson also can be contacted via email at crt@wooster.edu.

Thank you for your participation in this study. Please do not discuss this experiment with other students, as it may jeopardize the results of this research.

Appendix E

Experimental Study Recruitment Email

Hello,

My name is Maggie Layde. I am a senior psychology major at The College of Wooster. I am conducting research as part of my Independent Study Thesis regarding body image perceptions in varsity athletes of various sports, primarily focusing on body satisfaction. This study also considers eating behaviors and level of physical activity.

If you would like to participate in my study, the link to access the survey is below. The survey should only take about 25 minutes. You may withdraw from the survey at any point.

https://wooster.co1.qualtrics.com/jfe/form/SV_cOAO7uw5qd6nzv

Requirements for participation:

- At least 18 years old
- College of Wooster varsity athlete

You may contact me, the principal investigator, or my advisor, Dr. Claudia Thompson, if you have any questions about the study.

Maggie Layde
mlayde19@wooster.edu

Claudia Thompson, Ph. D.
crt@wooster.edu

Thank you for your time and participation!

Appendix F
CONSENT TO PARTICIPATE IN A RESEARCH STUDY
THE COLLEGE OF WOOSTER

Sports Participation and Body Image Perceptions
Principle investigator: Maggie C. Layde, Psychology Department

Purpose

You are being asked to volunteer and participate in a research study that consists of an examination of body image perceptions or concerns in varsity athletes of various sports, primarily focusing on body satisfaction. This study also considers eating behaviors and level of physical activity.

Procedures

If you decide to volunteer, you will be asked to rate several items about yourself from a Likert-Scale about your feelings about your body image and other behaviors related to eating and exercise. This survey will take approximately 25 minutes to complete.

Risks

Participants may produce mild anxiety and/or stress when rating certain items on the survey. You may skip any question on the survey to alleviate the feelings of stress and anxiety.

Benefits

There are no direct benefits to you for your participation in this study.

Confidentiality

Any information you give will be held confidential. All data will be anonymous during and after the conclusion of this study.

Costs

There is no cost to you beyond the time and effort required to complete the procedure described above.

Right to Refuse or Withdraw

You may refuse to participate in the study. If you choose to participate and change your mind you may withdraw from the study at any point without penalty.

Questions

If you have any questions, please contact me by email at mlayde19@wooster.edu. You may also contact my advisor, Dr. Claudia Thompson, at crt@wooster.edu.

Consent

Your signature below indicates that you have decided to volunteer for this study. By agreeing to take this survey, you are agreeing to and acknowledging that you understand and have read the above terms.

Appendix G

Contextual Body Image Questionnaire for Athletes (CBIQA)

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

a, own perception; b, own perception compared to others; c, perceived opinion of others.

Appendix H

Compulsive Exercise Test (CET)

Please rate each item about your feelings towards physical exercise. When answering, do not think too long about your responses, and do not skip any items. Items were rated on the scale: 1= never true, 2= rarely true, 3= sometimes true, 4= often true, 5= usually true, and 6= always true.

1. I feel happier and/or more positive after I exercise
2. I exercise to improvement my appearance
3. I like my days to be organized and structured
4. I feel less anxious after I exercise
5. I find exercise a chore
6. If I feel I have eaten too much, I will do more exercise
7. My weekly pattern of exercise is repetitive
8. I do not exercise to be slim
9. If I cannot exercise I feel low or depressed
10. I feel extremely guilt if I miss an exercise session
11. I usually continue to exercise despite injury
12. I enjoy exercising
13. I exercise to burn calories and lose weight
14. I feel less stressed and/or tense after I exercise
15. If I miss an exercise session, I will try and make up for it when I next exercise
16. If I cannot exercise I feel agitated and/or irritable
17. Exercise improves my mood
18. If I cannot exercise, I worry that I will gain weight
19. I follow a set routine for my exercise sessions e.g. walk or run that same route, particular exercises, same amount of time, and so on
20. If I cannot exercise I feel angry and/or frustrated
21. I do not enjoy exercising
22. I feel like I've let myself down if I miss an exercise session
23. If I cannot exercise I feel anxious
24. I feel less depressed or low after I exercise

Appendix I

College Oriented Eating Disorders Screen (COEDS)

	Never	Sometimes	Half the time	Often	Always
1. I am embarrassed when I am with a group of people and I am the only one ordering food.	1	2	3	4	5
2. I compare my body to other women's/men's bodies when I go to a social gathering.	1	2	3	4	5
3. I get very upset when I weigh myself and I have gained a few pounds.	1	2	3	4	5
4. I can see my body getting fatter after I eat a meal.	1	2	3	4	5
5. I believe I am fatter than most people say I am.	1	2	3	4	5
6. I feel very competitive with other women/men who have better bodies than I do.	1	2	3	4	5
7. I feel guilty or sad after I eat something fatty.	1	2	3	4	5

Appendix J

Objectified Body Consciousness Scale (OBC)

Please rate each item about your feelings towards yourself. Do not skip any questions and do not think too long about your responses. Items are rated on a scale from 1= strongly disagree, 2= disagree, 3= somewhat disagree, 4= neither agree nor disagree, 5= somewhat agree, 6= agree, 7= strongly agree.

1. I rarely think about how I look.
2. I think it is more important that my clothes are comfortable than whether they look good on me. *
3. I think more about how my body feels than how my body looks. *
4. I rarely compare how I look with how other people look. *
5. During the day, I think about how I look many times.
6. I often worry about whether the clothes I am wearing make me look good.
7. I rarely worry about how I look to other people. *
8. I am more concerned with what my body can do than how it looks. *
9. When I can't control my weight, I feel like something must be wrong with me.
10. I feel ashamed of myself when I haven't made the effort to look my best.
11. I feel like I must be a bad person when I don't look as good as I could.
12. I would be ashamed for people to know what I really weigh.
13. I never worry that something is wrong with me when I am not exercising as much as I should. *
14. When I'm not exercising enough, I question whether I am a good enough person.
15. Even when I can't control my weight, I think I'm an okay person. *
16. When I am not the size I think I should be, I feel ashamed.
17. I think a person is pretty much stuck with the looks they are born with. *
18. A large part of being in shape is having that kind of body in the first place. *
19. I think a person can look pretty much how they want to if they are willing to work at it.
20. I really don't think I have much control over how my looks. *
21. I think a person's weight is mostly determined by the genes they are born with. *
22. It doesn't matter how hard I try to change my weight, it's probably always going to be about the same. *
23. I can weigh what I'm supposed to when I try hard enough.
24. The shape you are in depends mostly on your genes. *

*Note: *Reverse score item.*

Appendix K

Demographic Questions

What is your age?

- 18 yrs. (1)
- 19 yrs. (2)
- 20 yrs. (3)
- 21 yrs. (4)
- 22 yrs. (5)
-

What year are you?

- First year (1)
- Sophomore (2)
- Junior (3)
- Senior (4)
-

What is your gender?

- Male (1)
- Female (2)
- Other (3)
-

What varsity sport do you participate in?

Please answer a few questions about you and your sport.

How revealing/exposing do you think your sport attire is?

	Not revealing/exposing (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	Very revealing/exposing (10)
I think my sport attire is...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How comfortable are you in your sports attire?

	Extremely uncomfortable (1)	Moderately uncomfortable (2)	Slightly uncomfortable (3)	Neither comfortable nor uncomfortable (4)	Slightly comfortable (5)	Moderately comfortable (6)	Extremely comfortable (7)
I feel _____ in my sports attire.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How long have you participated in your sport (number of total years)?

Appendix L
Research Participant Debriefing Form

Objective

The general objective of this study is to examine body image consciousness, body image, physical activity, and eating behaviors in varsity athletes with various types of uniforms.

Other Research

Noll, S. M., & Fredrickson, B. L. (1998). A mediational model linking self-objectification, body shame, and disordered eating. *Psychology of Women Quarterly*, 22(4), 623-636.

And:

Varnes, J. R., Stellefson, M. L., Miller, M. D., Janelle, C. M., Dodd, V., & Pigg, R. M. (2015). Body esteem and self-objectification among collegiate female athletes: Does societal objectification make a difference? *Psychology of Women Quarterly*, 39(1), 95-108.
<https://doi.org/10.1177/0361684314531097>

Questions

Maggie C. Layde senior psychology major, am performing this research. If you have any questions or concerns you can contact me via email at mlayde19@wooster.edu. My advisor, Dr. Claudia Thompson also can be contacted via email at crt@wooster.edu

Additional Services

If needed, counseling services through the College of Wooster's Longbrake Student Wellness Center is offered. You can call (330) 263-2319 to make an appointment and speak with a counselor.

Thank you for your participation in this study. Please do not discuss this experiment with other student athletes, as it may jeopardize the results of this research.