IDEAL FEMALE BODY VERSUS IDEAL ATHLETIC BODY: HOW SOCIAL MEDIA AFFECTS BODY IMAGE OF COLLEGIATE FEMALE RUNNERS

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BODY: HOW SOCIAL MEDIA AFFECTS BODY

IMAGE OF COLLEGIATE FEMALE RUNNERS

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Go Pokes!

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Abstract: Female athletes are conflicted because they are pressured to conform to society's ideal female body portrayed in the media and the ideal athletic body for their sport. In the sport of running, there is a huge emphasis on body weight, putting female distance runners at risk of developing body image concerns and disordered eating behaviors. Applying Fredrickson and Roberts' objectification theory, this study aims to determine if the ideal female body portrayed in social media influences collegiate female runners' body image perceptions and which ideal body type has a more significant impact on those athletes. Moreover, it investigates the significance of collegiate female runners' athletic environments, including their coaches and teammates.

The researcher used non-probability sampling by recruiting 12 active collegiate female runners from several different U.S. States between 19 and 23 years old, with a mean of 21.83 years. To gain a deeper understanding of the conflict collegiate female runners experience, the researcher conducted in-depth interviews, including questions about social media, self-comparison, and participants' athletic environments. Additionally, participants completed an online survey about their social media use, perfectionism and self-criticism levels, and demographics. Thematic analysis revealed that the ideal female body influenced most participants only in a social context. The ideal athletic body had a more significant impact on participants' body image perceptions due to their identities as runners, performance pressures, and self-comparison with successful runners. Additionally, the athletic environment harmed most female runners' body image perceptions and relationships to food caused by improper behaviors of their coaches and teammates.

These findings demonstrate the prevalence of negative body image and eating disorders among collegiate female runners. Moreover, this study illustrates the impact of those athletes' physical and social media environments, influencing how they view and rate their bodies and what ideal body type they wish to conform to. Collegiate athletes must follow and surround themselves with people who make them feel positive about their bodies. Coaches must prioritize creating a healthy athletic environment and providing their athletes with professionals, including psychologists and registered dietitians.

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CHAPTER I

INTRODUCTION

The media often portrays females as tall and thin. Most fashion and health magazines only feature skinny women, producers often force actresses only to weigh a certain amount, and female models typically wear size zero (Brown, 2006). Thus, women are constantly exposed to thin females, and the rise of social media has only increased the possibilities for unfavorable comparison. According to a Pew Research Center study, 78% of U.S. women are active on at least one social media platform, with YouTube, Facebook, and Instagram being the most popular platforms (Pew Research Center, 2021). The majority of those women are highly affected by social media and compare themselves to others (Murray, 2018). Consequently, females report higher body dissatisfaction, lower self-esteem, and disordered eating behaviors (Burnette et al., 2017; Dalley et al., 2009; Roca, 2018; Tiggemann & Williams, 2012).

Based on social psychology's objectification theory, society sees women as objects because of sociocultural changes (Fredrickson & Roberts, 1997). Instead of focusing on the biological body, Fredrickson and Roberts' objectification theory's focal point is the body within social and cultural contexts. In these contexts, females are often sexually objectified and reduced to their bodies. As a result, women take on people's views and start treating themselves as objects, a process called self-objectification

(Fredrickson & Roberts, 1997). Due to the focus on physical attributes, women strive to look like the ideal object portrayed in the media. Specifically, most women want to conform to the ideal female body shown in magazines, television, or social media. Therefore, social psychology's objectification theory provides a framework that helps us understand the influence of mass media and social media on females' body image.

Because of the idealized image media creates, female athletes are conflicted. There is a difference between an ideal female body portrayed in the media and an ideal athletic body necessary for their sport. This conflict puts pressure on female athletes, having them concentrate more on their physical appearance than on their athletic performance. Athletes struggle with being an athlete that is muscular and strong because the majority of females in the media are tall and thin. For this reason, many do not see themselves as feminine enough, and as a result, experience increased body dissatisfaction, which can have severe consequences. It can lead to low self-esteem, depression, and eating disorders (Green & Lankford, 2016). Also, because of a negative body image and dieting, female athletes may experience at least one condition from *Relative Energy Deficiency in Sport* (RED-S). RED-S is also called the female athlete triad and includes an energy deficit, amenorrhea, and osteoporosis (International Olympic Committee, 2005). The energy intake and energy expenditure are not in balance, which affects the female's "metabolic rate, . . . immune system, bone health, . . . and abnormalities on other systems" (Cadegiani, 2020, p. 169). Consequently, athletes experience reduced strength, low energy levels, bone injuries, psychological problems such as depression, and decreased athletic performance (Cadegiani, 2020).

The ideal athletic body looks different in every sport. For example, professional divers and gymnasts typically have a small physique, while a larger physique is beneficial for basketball and tennis players (Stewart & Sutton, 2012). Moreover, muscles must be "worth its own weight" (Stewart & Sutton, 2012, p. 157). Every sport has an optimal power and weight ratio; thus, some sports require more muscles, strength, and power than others. Endurance sports (e.g., long-distance running) are considered a lean sport with stereotypical athletes being skinny and lean (Sungot-Borgen, 1994; Wells et al., 2015). Low body fat percentages are beneficial for endurance athletes because most fat cells only result in extra weight that those athletes have to carry, leading to increased energy costs (Stewart & Sutton, 2012). When performing the same task, the athlete with a higher body-fat percentage has to use more energy than those with a lower body-fat percentage. Thus, there is a common belief among endurance athletes that a decrease in body weight increases performance (Sungot-Borgen, 1994; Wells et al., 2015).

Both Mary Cain and Elise Cranny are professional runners and pointed out RED-S's negative consequences and the belief that being thinner makes you faster. Cranny appealed to other runners to fuel properly and seek help immediately because RED-S "can have long-lasting negative effects if left unattended" (Kelly, 2020, para. 3). She waited too long to adjust her disordered eating behaviors, having her side-lined due to numerous injuries. In an interview with *Citius Mag,* Cranny emphasized the importance of "focusing on gaining strength instead of losing weight, and getting that consistent, long, healthy career" (Zimmermann, 2021, 12:41). It would be natural for a female's body to change during puberty and adolescence, and athletes should focus on how they feel during practice and not on how they look (Cranny, 2020).

Cain, who was one of the most talented American teenage runners of all time, did not only lose her period for multiple years and suffered five bone injuries, but she also experienced suicidal thoughts (Crouse, 2019). While Cain was part of the Nike Oregon Project, she experienced abusive coaches who wanted her to become thinner to become faster, drawing attention to a toxic running culture (Hruby, 2019). After Cain's interviews with magazines such as *The New York Times,* numerous other athletes came out and confirmed that the running culture encourages weight loss. Coaches would weigh athletes in front of their teammates, force them to fit into tiny uniforms, or provide medications that lead to weight loss (Hruby, 2019).

Due to the combination of a running culture promoting weight loss and media portraying an ideal female body, female distance runners are at risk of developing negative body image, low self-esteem, and disordered eating behaviors. Runners like Cain and Cranny pointed out coaches and performance benefits for reasons of wanting to lose weight. However, in addition to the athletic environment, female runners are constantly exposed to the ideal female body, especially on social media. Consequently, female runners are likely to experience the conflict of wanting to conform to the ideal female body as well as the ideal athletic body. Because of the possible negative consequences, such as bone injuries, depression, and decreased athletic performances, it is necessary to identify all potential causes of body image concerns in distance running. Finding out the grounds will benefit coaches, psychologists, parents, or teammates in helping female distance runners that struggle with body image concerns and eating disorders.

Using objectification theory and qualitative analysis, this research examines how social media affects the body image perceptions of collegiate female athletes competing in long-distance running. Moreover, it determines which body type has a more significant impact on collegiate female runners' body image perceptions, the ideal female body or the ideal athletic body. This research (a) adds to the literature examining body image perceptions by collegiate female athletes affected by social media; (b) offers a greater understanding of the conflict female athletes may experience between wanting to attain an ideal female body and an ideal athletic body; (c) identifies how social media may heighten that conflict; and d) determines the significance of the athletic environment on female runners' body image perceptions and relationships to food.

The remaining chapters of this research study will: (a) provide a literature review addressing body image, media's impact on body image perceptions, body image in female athletics, and existing research about factors that influence female runners' body image perceptions; (b) detail research questions for this study; (c) present the methodological framework used in this study; and (d) display an analysis and discussion of the findings.

CHAPTER II

LITERATURE REVIEW

In this literature review, existing research about body image, possible negative consequences, and body image in female athletics and long-distance running will be examined, as well as the media's influence to increase self-objectification based on Fredrickson and Roberts' objectification theory. The review will conclude with the research questions for this study.

Body Image and Its Consequences

In this section, body image, common eating disorders, and other resulting negative consequences will be defined and explained. Moreover, the researcher will discuss specific human characteristics that potentially lead to increased body image concerns, the influence of early weight stigma experiences, and thus, the importance of a person's family environment in order to develop a positive body image. This section will conclude with existing research about body image among males as well as body image differences among both genders. Green and Lankford (2016) defined body image as "the concept that each individual forms about his or her own appearance" (p. 6). Personal and sociocultural factors can affect people's body image perceptions. The importance of weight and dieting, genes, social environment, and the media are all elements that can play a role in developing a person's body image (Green & Lankford, 2016). Green and

Lankford state that people of every age, gender, and race can suffer from negative body image perceptions; however, young girls are especially at risk. Possible consequences of negative body image perceptions are low self-esteem, over-exercising, depression, and eating disorders such as anorexia nervosa, bulimia nervosa, and binge eating (Green & Lankford, 2016).

Male and females diagnosed with anorexia nervosa weigh less than 85% of their expected body weight; thus, they are severely underweight (Bell et al., 2005). On the other hand, bulimia nervosa involves binge eating and purging (Bell et al., 2005). Patients eat excessive calories in a short time and purge or use laxatives and diuretics afterward because they are afraid of gaining weight. People struggling with bulimia nervosa are not necessarily underweight; therefore, individuals with average weight or overweight can still struggle with an eating disorder.

Taylor and Wardy (2014) stated that people with negative body image focus on their looks and weight instead of appreciating their bodies. They often wish certain body parts would look different, feel insecure, and have a screwed perception of their bodies. Many females struggle with body image concerns but do not openly talk about it, even though finding help and support from others can be helpful. Taylor and Wardy appealed to females that they have no "control over other people's thoughts, reaction, or feelings – but [they] have control over [their] reaction[s] to them" (p. 46). Thus, instead of paying attention to other people's opinions about their bodies, females should be kind to themselves, focus on their different qualities and strengths, and appreciate what their bodies do for them every day. Developing a healthy body image does not happen

overnight; instead, it is a process that consequently leads to freedom, flexibility, and self-acceptance (Taylor & Wardy, 2014).

Human Characteristics Leading to Negative Body Image

Numerous researchers explored what characteristics potentially lead to negative body image. Turk et al. (2021) used a cross-sectional design and studied whether individuals prone to self-criticism and perfectionism are more likely to develop body image concerns. Participants were over 18 years old and answered questions regarding self-compassion, perfectionism, self-criticism, rumination, external shame, body dissatisfaction, and eating pathology. Results showed that "greater self-compassion was associated with lower levels of eating pathology and body concerns" (Turk et al., 2021, p. 33). Therefore, people that were more accepting of themselves were less likely to feel dissatisfied with their bodies.

Grilo and Masheb (2005) conducted structured interviews with binge eating disorder patients to analyze which variables led to their negative body images, and consequently, binge eating behaviors. Moreover, the researchers sent out questionnaires about body shape, eating behaviors, appearance, depression, and self-esteem. The study included 276 women and 76 men between 21 and 65 years old. Among women, depression, self-esteem, and early body shame experiences accounted for 28.4% of reasons that led to body dissatisfaction, while depression, self-esteem, and BMI accounted for 47.4% among men (Grilo & Masheb, 2005). Overall, women were more likely to be dissatisfied with their bodies than men. Grilo and Mashed concluded that self-esteem and depression are essential predictors of body image concerns among both genders. In addition to that, the researchers stated that early body shame experiences would negatively affect women.

Influence of Early Weight Stigma Experiences

Romano et al.'s (2021) cross-sectional study supported Grilo and Masheb's (2005) conclusion that individuals with negative experiences regarding their body type in the past (e.g., someone commenting on their weight or body) are more likely to develop negative body image and eating disorders. Romano et al. explored the relationship between weight stigma experiences and body dissatisfaction. The study defined weight stigma as "the devaluation and denigration of individuals because of their body weights" (Romano et al., 2021, p. 38). The first sample consisted of 1,228 participants, including 75.8% females and an average age of 22 years, and the second sample consisted of 1,368 participants, including 75.8% females and an average age of 20 years. In order to assess experienced weight stigma, researchers used numerous scales such as *The Everyday Discrimination Scale* or the *Stigmatizing Situations Inventory-Brief*. There were "significant associations between reporting weight stigma experiences and higher levels of weight bias internalization" (Romano et al., 2021, p. 41). Consequently, weight bias internalization led to increased body dissatisfaction and eating disorder symptoms (e.g., restrictive eating).

Duarte and Pinto-Gouveia's (2017) study reinforced the belief that early body shame experiences influence today's eating behavior and body image. The researchers utilized self-report questionnaires about the participant's body image, binge eating behaviors, self-criticism, anxiety, and depression among 205 women and 102 men between 18 and 60 years old. Results showed "significant correlations between the centrality of body image-related shame memories and current body image shame, the forms of self-criticism, depressive symptoms, and binge eating symptoms" (Duarte & Pinto-Gouveia, 2017, p. 344). These correlations were present among both genders but

more significant for women. Thus, negative experiences in someone's childhood or teenage years can severely impact how individuals think about their bodies during adulthood. The researchers stated that it is crucial to teach self-acceptance and positive body image at a very young age.

Importance of Family Environment

Smolak and Thompson (2009) expressed the importance of the family environment in developing a healthy body image. During early childhood, individuals learn when and where eating is acceptable and proper table manners. Parents highly influence children's nutrition; for example, children are more likely to eat fruit and vegetables if they are surrounded by their mothers eating fruit and vegetables (Smolak & Thompson, 2009). While it is important to teach healthy eating habits, children also need to learn self-control and listen to hunger cues. Smolak and Thompson (2009) identified that "high levels of parental control in the feeding process were negatively associated with children's ability to regulate energy intake" (p. 23). Thus, too much control might lead to overeating at a later age when the child has fewer restrictions.

If parents forbid particular food, children start labeling them as 'bad' and develop unhealthy attitudes regarding food restriction. Smolak and Thompson (2009) pointed out that children are more likely to develop weight concerns and disordered eating behaviors if their parents restrict their food intake and engage in dieting behaviors. In addition to that, the researchers said that parents and siblings should avoid comments about people's weight and bodies because it can lead to severe negative consequences (e.g., low self-esteem, depressed mood). For these reasons, it appears that parents are risk factors and highly influence children's relationship with food. Taking the studies by Duarte and Pinto-Gouveia (2017), Grilo and Masheb (2005), and Romano et al. (2021) under

consideration, they suggest parents should teach their children self-acceptance and healthy eating habits from a very young age. Moreover, they should avoid negative weight stigma experiences to help children develop a positive body image.

Body Image Among Males

Even though most studies focus on females' body image, negative body image is common among both genders. Glazer et al. (2021) conducted a survey questionnaire about males' eating behaviors, drive for thinness, and muscularity. The study included 4,489 male participants at the age of 11 to 18 years. Results showed that 25.4% were highly concerned with their weight, 93.7% were worried about their muscularity, and only 6.3% wanted to be thinner (Glazer et al., 2021).

Leone et al.'s (2011) study supports Glazer et al.'s (2021) findings. The researchers surveyed 330 high school boys to assess their body image. Participants seemed to be very conscious about their appearance as 68.2% wanted to achieve a perfect body, "with over 60% indicating they were critical of their body" (Leone et al., 2011, p.177). The majority desired a muscular body, and men participating in sports reported less body dissatisfaction. Thus, both Glazer et al.'s (2021) and Leone et al.'s (2011) studies confirm the assumption that negative body image is present among males. However, it appears that most men with body image concerns want to be more muscular and not thinner.

Body Image Differences Among Genders

Davis and Cowles (1991) surveyed exercise behavior, dieting, and body image to compare active females' and males' body image and reasoning for exercise. The study included 112 women and 88 men. The majority of young women (80%) and older women (70%) stated wanting to lose weight (Davis & Cowles, 1991). In comparison, only 61%

of older men and 33% of young men desired to weigh less. Overall, men expressed less body dissatisfaction than women, and most women exercised to lose weight.

Quittkat et al.'s survey (2019) included self-report questionnaires such as the *Body Appreciation Scale* or the *Multidimensional Body-Self Relations Questionnaire-Appearance Scale* to study the levels of body dissatisfaction and importance of appearance among women and men. The sample consisted of 942 women and 385 men, and the average female and male ages were 31 years and 37 years, respectively. Similar to Davis and Cowles' (1991) study, women reported higher body dissatisfaction than men. Moreover, women cared more about their appearance, regardless of their age, while older men placed less significance on their appearance than younger men. Also, women spent more time on their appearance every day; however, increased age usually led to less time spent on their appearance. Other significant results were that older women were more appreciative of their bodies than younger women, but overall, women were less likely to appreciate their bodies than men. Even though Davis and Cowles (1991) and Quittkat et al. (2019) conducted their studies 28 years apart, the results were similar – women expressed higher body dissatisfaction and were more conscious about their appearance than men.

Media's Influence on Body Image Perceptions

Most females in the media (e.g., actresses, broadcast reporters, pictures in magazines) are tall and thin, while the males are strong and muscular (Carrotte et al., 2017; Dallesasse & Kluck, 2013; de Freitas et al., 2018). "Continuous exposure to ideal body types in the media may lead men and women to internalize these images," which can turn into body image dissatisfaction (Green & Lankford, 2016, p. 46). However, people fail to realize that the media does not represent reality. With social media

becoming more important, especially for the younger generation, opportunities for comparison have increased.

Burnette et al. (2017) conducted focus groups in which multiple young adolescents admitted that they compare themselves to others on social media and then feel uncertain about their appearance. A few mentioned that they sometimes feel pressured to look a certain way even though they know that most pictures are retouched. Moreover, the researchers stated that twenty young adolescents mentioned being dissatisfied with at least one part of their appearance, while only four stated that their body dissatisfaction was unrelated to social media.

Dalley et al. (2009) supported the finding that people idealize the thin body type portrayed in the media. The researchers' survey involved media images of lean and overweight females, and participants rated them using a 7-point Likert scale. Participants showed higher body image dissatisfaction (BID) after they had been exposed to the lean media images, and overall, participants with a higher BMI were more dissatisfied with their bodies than participants with a lower BMI (Dalley et al., 2009). Therefore, women who significantly differ from the ideal female body portrayed in the media appear to express higher body image concerns than women whose appearance is closer to the ideal female body.

Hawkins et al. (2004) asked 145 college women to view female images featured in *Cosmopolitan, Vogue,* and *Glamour* and neutral images without models. The researchers used multiple questionnaires, such as *The Profile of Mood States*, *The Rosenberg Self-Esteem Scale*, or *The Media Response Questionnaire*, to identify the effects of those images on females. "Individuals exposed to the thin-ideal media

condition reported significantly higher body dissatisfaction than women who viewed neutral images" (Hawkins et al., 2004, p. 41). Moreover, participants exposed to images of thin models reported lower mood levels as well as lower self-esteem. Additionally, most participants "had higher levels of anorexia- and bulimia-related beliefs and perceptions" (Hawkins et al., 2004, p. 44). Therefore, studies by Burnette et al. (2017), Dalley et al. (2009), and Hawkins et al. (2004) all support the belief media exposure and photos representing society's ideal bodies negatively affect people's body image, mood, self-esteem, and eating behaviors.

Hogue and Mills' (2019) study displayed that not all images on social media harm women. The researchers used an experimental design to determine how pictures of attractive females affect women's body image compared to pictures of family members. One-hundred and twenty-five female college students between 17 and 27 were randomly assigned to either the attractive female or family condition. Participants engaged with an attractive person or family member for 10 minutes on Instagram and Facebook, viewing and commenting on their pictures. The researchers assessed participants' body image before and after the exposure to determine how the women's body image had changed. Hogue and Mills found no change in body image among participants exposed to family members. However, participants who engaged with an attractive female reported higher levels of body dissatisfaction (Hogue & Mills, 2019). This study manifested that pictures of attractive women on social media negatively influence females but not necessarily images of family members or women considered less attractive. Therefore, upward comparison likely leads to increased body dissatisfaction, while downward comparison does not.

Bissell's (2004) study focused on athletes and how different media content affects them. The researcher exposed 78 Division 1 female athletes competing in non-lean sports (e.g., soccer, softball) to entertainment TV and sports media content. Then, participants filled out questionnaires about body image, thin idealization, disordered eating behaviors, and body shapes. On average, the athletes watched 3 hours of entertainment TV and only 1.5 hours of sports media content, primarily men's sports, per day. The researcher identified that exposure to entertainment television and fashion magazines led to an increased drive for thinness and higher scores on the anorexia and bulimia subscales (Bissell, 2004). Consequently, those athletes expressed increased body image distortion. In contrast, Bissell found that exposure to sports media did not affect body dissatisfaction, eating behaviors, or drive for thinness. However, reading sports magazines led to higher scores on the bulimia and drive for thinness subscales. Still, athletes seemed to be more negatively affected by entertainment content and fashion magazines, including actresses and models portraying society's ideal female body.

Comparing Media Exposure Effects Among Men and Women

Most studies focus on how media exposure affects women's body image perception. Van den Berg et al. (2007) surveyed participants to identify the relationship between media body comparison and body dissatisfaction among males and females, including self-esteem, participants' social environment, or body mass index (BMI). The study involved 1,386 females and 1,130 males with an average age of 19. Among females, "media body comparison was positively associated with body dissatisfaction" (Van den Berg et al., 2007, p. 264). Females who scored low in self-esteem and depressive mood were more likely to compare themselves with women in the media. This adds to the studies by Grilo and Masheb (2005) and Turk et al. (2021), who expressed the

importance of self-acceptance and self-esteem in developing a healthy body image. While Van den Berg et al. (2007) found that factors such as depressive mood, BMI, and low self-esteem can lead to body dissatisfaction among males, “there was not a significant path from media comparison to body dissatisfaction” (p.266). For these reasons, it appears that women’s body image is more negatively influenced by media comparison than men’s body image.

Media Exposure Effects on Children

It is important to identify at what age media starts to influence people’s body image to potentially limit the effects and prevent children from developing negative body image perceptions, low self-esteem, or eating disorders. Slater and Tiggemann (2016) conducted interviews with 300 females between 6 and 9 years old to analyze how sexualized messages in the media influence them. Researchers asked the participants to name television programs and magazines they were most familiar with. Then, the researchers exposed the girls to six pictures of the same girl with outfits ranging from conservative to provocative. Slater and Tiggemann assessed the participants’ levels of body dissatisfaction by asking them which girls and outfits looked similar to them and how they wanted to look.

Results showed that most girls desired to wear more provocative clothes, which were also seen as more popular among other girls. Thus, the “girls demonstrated evidence of internalization of sexualization” (Slater & Tiggemann, 2016, p. 21). Most girls expressed a desire for thinness, with 54.4% saying they were driven by their desire to look smaller, while 21.6% wanted to look larger. Only 24% of survey participants stated they were satisfied with their bodies. Additionally, Slater and Tiggemann (2016) found a positive correlation “between the exposure to sexualized media, internalization of

sexualized messages, and body image" (p.21). Girls exposed to sexualized messages desired more provocative clothes, which led to increased body dissatisfaction. Overall, the research study demonstrates that girls at a very young age are already exposed to sexualized messages in the media, negatively affecting their body image.

Eyal and Te'eni-Harari's (2013) study supported Slater and Tiggemann's (2016) findings. The researchers surveyed 391 seventh and eighth graders (53.5% females) from Israel about their media consumption (television, internet, video games), body image perceptions, favorite television character, physical activity levels, and eating habits. On average, participants spent about 10 hours watching television, using the internet, or playing video games. The researchers rated the participants' favorite television character's body shape on a 9-point scale, ranging from *skinny* to *large*. Most characters were thin, as the average score was 3.95 (Eyal & Te'eni-Harari, 2013). Eyal and Te'eni-Harari also rated the characters' beauty and attractiveness on a 5-point scale, averaging 3.46 and 3.38, respectively. Thus, most characters were skinny and above-average looking.

The results also showed that increased media exposure led to increased body dissatisfaction and desire for self-improvement and self-enhancement (Eyal and Te'eni-Harari, 2013). The willingness to self-improve was positively related to social comparison. The more participants compared themselves with their favorite characters, the greater was the "discrepancy between adolescents' current and their desired shape" (Eyal and Te'eni-Harari, 2013, p. 136). Consequently, participants reported higher body dissatisfaction. Overall, females reported greater body dissatisfaction than males,

supporting van den Berg et al.'s (2007) findings that media exposure affects females more significantly, starting at a young age.

Female Character Traits' Influence on Media Exposure Effects

Research showed that thin idealized images portrayed by the media can significantly affect women. Thus, numerous researchers tried to identify particular character traits that limit those effects. Halliwell (2013) exposed 130 female psychology students to advertisements featuring models and product-only advertisements. The researcher used various questionnaires (e.g., the *Body Appreciation Scale*) to identify whether women with negative body image report worse adverse media exposure effects than women with positive body image. The results showed that "women high on thin-ideal internalization reported larger appearance-discrepancies if they had viewed models" (Halliwell, 2013, p. 511).

Moreover, women desiring a thin body and low on body appreciation reported worse media exposure effects. Therefore, women with positive body image appear to be less affected by skinny women portrayed by the media than women with negative body image. Halliwell's findings are interesting because other researchers like Hawkins et al. (2004) and Hogue and Mills (2019) determined that media exposure leads to increased body dissatisfaction. Thus, women that already feel insecure about their bodies are more likely to experience even worse body image after being exposed to the ideal female body in the media.

Mask and Blanchard's (2011) goal was to determine whether body image and eating behaviors of self-determined people are less likely to be affected by society's ideal female body in the media. The researchers exposed 99 female college students to a video either featuring "the societal 'thin ideal' standard of female attractiveness" (p. 492) in

tight clothes (first video) or female models in casual and loose clothes (second video) (Mask & Blanchard, 2011). Before the experiment, participants filled out a questionnaire discovering self-determination. After watching the video, the researchers assigned participants to write down their thoughts and complete a survey regarding thin idealization, perceived pressures, body image, and eating concerns.

Mask and Blanchard (2011) discovered that the video featuring society's ideal female body in tight clothes generated more body comments. While 48 people commented on the models' body composition after watching the first video, only 8 mentioned the models' bodies after watching the second video. Self-determination appeared to be an essential factor regarding thin idealization. Females who scored high on self-determination "reported less internalization of sociocultural beliefs surrounding thinness and obesity" and were less negatively affected by the videos (Mask & Blanchard, 2011, p. 493). Meanwhile, people low in self-determination reported increased pressure to be thin after watching the first video. Thus, the researchers concluded that "the more women engage in everyday activities with a sense of autonomy and volition, the more protected they are from societal ideas of female attractiveness" (Mask & Blanchard, 2011, p. 494).

Social Media Captions and Disclaimer Labels

Body image perceptions are not only influenced by the pictures but also by the captions on social media platforms like Instagram. In a study conducted by Davies et al. (2020), captions about fitness, health, and dieting led to an increased negative mood. Moreover, pictures with body-positive captions led to higher body esteem than identical pictures with fitness captions. For these reasons, researchers must pay attention to the photos, captions, and presented information.

In recent years, ‘fitspiration’ pictures and messages, which is “material that purports to motivate and promote healthy lifestyle habits, especially associated with exercise and diet” (p. 2), have become popular on social media platforms (Easton et al., 2018). Easton et al. (2018) conducted interviews and focus groups with men and women between 18 and 25 years to explore people’s perceptions and thoughts about this particular social media content. Most participants named *Instagram, Facebook*, and *YouTube* as platforms high in ‘fitspirational’ content. While some mentioned increased motivation to exercise and eat healthier, all participants talked about negative aspects well. Often, the content would be unrealistic and not trustworthy, causing frustration and disappointment. One participant stated that “people are putting up their best photos for a reason, and it’s not like real life” (p. 6), while another believes that unrealistic content “make[s] you give up quicker” (Easton et al., 2018, p. 6).

In addition to that, it negatively affected people emotionally and mentally. Participants mentioned a feeling of guilt, body dissatisfaction, and disordered eating behaviors (Easton et al., 2018). One female said, “When I see fitness accounts where all the girls are like svelte and toned, I’m like oh, it’s hard to love me when I look like this” (Easton et al., 2018, p. 7). Taking all interviews and focus groups into account, while numerous men expressed negative consequences, “most of the talk about guilt, body image, and concerns about eating and compulsive viewing came from females” (Easton et al., 2018, p. 7). In conclusion, while ‘fitspiration’ content can potentially motivate people to live a healthier lifestyle, it was mainly associated with adverse effects and feelings. The findings are beneficial for content producers, illustrating the negative effects fitness content can have on people.

Do images portraying ideal body types have less of a negative effect on people if they know that the images have been altered? To examine this question, Frederick et al. (2016) used an experimental design and tested the effectiveness of disclaimer labels, stating, "Warning: This photo has been PHOTOSHOPPED" (p. 172). In another condition, the researchers added phrases to each photo, for example, "This isn't my natural hair color" (Fredrick et al., 2016, p. 172). A total of 2,088 participants were exposed to 10 pictures featuring a woman in a swimsuit. Afterward, the researchers assessed the participants' body image, drive for thinness, and social comparison with questionnaires. In both conditions, Frederick et al. found no significant differences in body image or drive for thinness. Disclaimer labels or other added phrases did not positively affect females' body image. Instead, they were ineffective. Thus, the findings are crucial for people suggesting that disclaimer labels would limit media's influence on people's body image.

Body Image in Female Athletics

Female athletes are at a high risk of developing negative body image perceptions because they have to conform with the ideal female body portrayed in the media and the ideal athletic body necessary for their sport. Krane et al. (2001) conducted focus groups with 8 Division 1 athletes and 10 female exercisers of different sports to identify how the women rate their bodies and how body image affects them psychologically and behaviorally. All women stated that the culture emphasizes a thin and toned body, and the majority said that it made them want to lose weight and have less body fat (Krane et al., 2001). Krane et al. found that the focus group with gymnasts and track and field athletes desired a more muscular body with less body fat, while the ball athletes (e.g., softball, basketball, soccer) desired decreased body weight. Overall, athletes were satisfied with

their female athletic body, but “when considering their body in social contexts or when considering the cultural ideal body, body dissatisfaction was expressed” (Krane et al., 2001, p. 15). For this reason, it appears that female athletes have two different body images: an ideal female body and an ideal athletic body.

The following study confirms the conflict between female athletes wanting to attain an ideal female body and an ideal athletic body. In Steinfeldt et al.’s (2011) study, female collegiate athletes reported the same pressure to conform with feminine norms as non-collegiate athletes while also wanting to conform with masculine standards associated with their sports. Therefore, female athletes experience the conflict between being a woman and an athlete (Steinfeldt et al., 2011). Moreover, “the more a woman desires to be thin, the lower levels of body esteem she reports” (p. 412), which can lead to negative consequences such as disordered eating (Steinfeldt et al., 2011).

Beckner and Record (2016) conducted semi-structured in-depth interviews with 28 female athletes from a large Division 1 university about their body image perceptions. Participants competed in a variety of sports, but the majority were swimmers or soccer players. The researchers “found that female athletes viewed themselves as muscular, identified themselves as different than others, and placed a personal emphasis on weight” (Beckner & Record, 2016, p. 367). While some felt confident in their bodies, others felt uncomfortable having a muscular body because they were “afraid of bulking up and looking too strong for a female” (Beckner & Record, 2016, p. 368). One swimmer said that they have “broader shoulders, bigger arms, and [they] don’t want all that! [They] want to be like other normal females and have normal arms and not big shoulders” (Beckner & Record, 2016, p. 368). In addition to that, body image thoughts seem to

decrease athletes' confidence in their athletic performances. A few females stated in the interviews that it mentally affects them to focus on their weight and body constantly. Instead of focusing on getting better athletically, one athlete said that she started thinking about practice as a way to lose weight. Thus, a multidimensional body image seems to affect athletes mentally, psychologically, and athletically.

Greenleaf (2002) interviewed six former collegiate athletes between 23 and 31 years old to identify how their sport shaped their bodies. Participants competed in track and field/cross country, swimming, volleyball, water polo, triathlon, and cycling. Interviews were semi-structured with open-ended questions. In addition to the discussions, participants filled out the *Figure Rating Scale* to assess their ideal body and impression of their body. Overall, athletes stated that their actual athletic bodies differed significantly from the ideal athletic body, indicating that they felt too large and not lean enough (Greenleaf, 2002). While four out of the six female athletes did not desire to look different to fit society's ideal female body, one volleyball player expressed body dissatisfaction because she felt too muscular and robust compared to non-athletes.

Also, during the interviews, the formers athletes talked about their body image in college and their body image now later in life. One track and field athlete mentioned that she still desires to be skinny and is afraid of gaining weight, while one volleyball athlete stated that she is very aware of her current body because she feels out of shape compared to her body in college (Greenleaf, 2002). All participants still compare their current body to their athletic body in college; therefore, being an athlete can have long-lasting effects and negative consequences on people's body image. Greenleaf found that the athletic environment, including coaches, teammates, and uniforms, seemed to impact the females'

body image hugely. The track and field athlete revealed that her coach always preferred skinny girls and that her teammates' bodies were typically very tall and lean. Consequently, the athletic environment constantly reminded her of her non-ideal body. One swimmer mentioned uniforms and that she always felt judged in her swimsuit because she felt larger than the ideal body for swimming. For these reasons, in addition to the conflict of wanting to attain an ideal female body and ideal athletic body, the athletic environment appears to impact female athletes' body images significantly.

Athletic Environment

The following studies substantiate the belief that the athletic environment can cause negative body image perceptions, particularly coaches. In Rowan's (2017) study, in which the researcher conducted focus groups and interviews with collegiate athletes of different sports, female athletes reported that intra-sport comparisons and fat talk increased their self-consciousness. In addition, collegiate athletes described how low body image might negatively affect their athletic performance. It can decrease confidence, raise concerns about other people's judgments, and lower the athletes' energy levels necessary for their sport (Rowan, 2017). One female athlete brought up the influence coaches can have on the athletes after "a coach [made] public comments about her body and [advised] her to lose weight in front of others on her team" (Rowan, 2017, p. 48).

Beckner and Record (2016) investigated the influence of coaches on athletes' body images. Researchers used the communication theory of identity as a framework, stating that "a person's interactions and communication with others influence the person's identity creation and expression, making identity a relational process" (Beckner & Record, 2016, p. 365). In-depth interviews took place with 28 Division 1 female

athletes competing in a variety of sports. Results showed that communicating with their coaches about body image "had a vital impact on how the athletes perceived their athletic abilities" and influenced their eating and exercise behaviors (Beckner & Record, 2016, p. 367). Additionally, athletes reported a lack of guidance from their coaches about nutrition and how to achieve their ideal weight healthily. One swimmer said that her coach "didn't care how [the athletes] got to that certain weight, he just wanted [them] to get there" (Beckner & Record, 2016, p. 369). Many felt pressured by coaches to look a certain way and wished that coaches would put less emphasis on weight and athletes' bodies because "it just eats you alive" (Beckner & Record, 2016, p. 369).

Coppola et al.'s (2014) study supported these results. Researchers interviewed eight Division 1 female athletes competing in a variety of sports. The goal was to identify how coaches communicate body image with their athletes. According to most participants, coaches "promoted healthy, fit sport bodies that were nourished, energetic, and capable of strong athletic performance" (Coppola et al., 2014, p. 4). The focus would be on building muscles, being strong, and proper fueling. One female mentioned weigh-ins and body fat percentage testing; however, the athlete seemed understanding because she needed to reach a particular body composition to be at her best. Moreover, weigh-ins would also be essential to make sure that athletes do not get too skinny.

Athletes also communicated negative aspects of coaches' communication about body image. One athlete reported that her coach made public announcements to the team about certain athletes being in shape and how everyone should aim for their ideal athletic body (Coppola et al., 2014). Furthermore, coaches would not be sensitive enough when they comment on athletes' bodies and place too much importance on weight instead of

athletic performance. One athlete stated that they "still have those girls who are a little bit on the heavier side but are really good but they still get criticized for being overweight" (Coppola et al., 2014, p. 7). Overall, athletes believed that it is not beneficial for coaches to compare and criticize athletes' bodies.

Lean vs. Non-Lean Sports

The ideal athletic body looks different in every sport. Stewart and Sutton (2012) cover the optimal skeletal framework, power and weight ratio, and body fat percentages for various sports. The authors state that "optimal size and proportions underpinning the ideal performance in sport, referred to as morphological optimization" are necessary to accomplish required tasks in different sports (Stewart & Sutton, 2012, p. 155). For example, angular acceleration is a morphology-related limiting factor in gymnastics and diving, which is why most of these athletes "are typically the smallest and lightest of all sports people" (Stewart & Sutton, 2012, p. 155). While distance runners are typically "short and light athletes" (p. 155), field sport athletes such as football players are generally tall and have great body mass (Stewart & Sutton, 2012). Overall, Stewart and Sutton highlight that the skeletal factors and the athletes' physiques are essential for optimal sports performances.

In addition to the skeletal framework, every sport has an optimal power and weight ratio. In general, muscles must be "worth its own weight" (Stewart & Sutton, 2012, p. 157). Consequently, sports require different amounts of muscles, power, and strength, which results in different weight-to-height ratios and body fat percentages. Moreover, increased body fat percentages can be performance hindering in gravitational sports (e.g., endurance running), weight category sports (e.g., weightlifting), and aesthetic sports (e.g., gymnastics). The International Olympic Committee Medical Commission

identified these sports to be at a health risk because they "share a common influence of the pressure for leanness, minimizing fat levels and optimizing power-to-weight ratio" (Stewart & Sutton, 2012, p. 158).

Supported by Wells et al.'s (2015) study, athletes competing in sports emphasizing body weight (considered lean sports) are at higher risk of developing a negative body image and disordered eating. In the study, Wells et al. considered cross country, track and field, swimming, cheerleading, and volleyball as lean sports, basketball, softball, soccer, and golf as non-lean sports. The results stated that lean sports athletes are more vulnerable to eating disorders and outside criticism about their bodies (Wells et al., 2015).

Swami et al. (2009) compared the body image of 41 track and field (considered a lean sport), 47 taekwondo (considered a non-lean sport), and 44 non-athletes. Participants filled out questionnaires to assess their figure ratings, sociocultural attitudes, and physical activity levels. Swami et al. found no significant differences in which figure the participants found most attractive. However, track and field athletes' ideal body was smaller than their actual body, expressing higher body dissatisfaction (BD) than the other two groups. Swami et al. did not find a significant difference in body dissatisfaction between taekwondo and non-athletes. Overall, the researchers determined that "participants' BMI . . . was the strongest predictor of BD" (Swami et al., 2009, p. 612). This finding is not surprising because lean sports athletes had the lowest average BMI (20.45) compared to taekwondo athletes (23.49) and non-athletes (22.70).

Sundgot-Borgen's (1994) study supported Wells et al.'s (2015) and Swami et al.'s (2009) research results. From 522 Norwegian female elite athletes who completed a

questionnaire about their weight, nutrition, menstruation, and physical activities, 117 participants were found to be at risk of developing an eating disorder (Sundgot-Borgen, 1994). From these female athletes at risk, "the prevalence of eating disorders was significantly higher among athletes in aesthetic and weight dependent sports than in the other sports groups" (Sungot-Borgen, 1994, p. 416).

While Nichols et al. (2007) did not find a significant difference in eating disorders among lean and non-lean sports athletes, they identified dissimilarities in menstrual cycles. The researchers surveyed high school athletes competing in lean and non-lean sports to analyze disordered eating behaviors and menstrual irregularities. The sample included 146 lean sports athletes (114 distance running, 32 swimming) and 277 non-lean sports athletes (mainly tennis, volleyball, basketball, softball, and soccer), for a total of 423 participants. Nichols et al.'s results showed that non-lean sports athletes had higher BMI's than lean sports athletes. Furthermore, among lean-sport athletes, 26.7% had irregular menstrual cycles; in contrast, 16.6% were affected among non-lean sports athletes (Nichols et al., 2007). The researchers did not find a significant difference between lean and non-lean sports athletes among the 9.5% who signaled disordered eating behaviors. Nichols et al. concluded that the percentages might seem low compared to collegiate athletes; however, the results are alarming "because they are in the stage of development when adequate energy and nutrient intake and normal menstrual function are critical to bone health" (Nichols et al., 2007, p. 373). The high percentage of lean sport athletes experiencing irregular menstrual cycles might be a sign of RED-S caused by inappropriate fueling (Green & Lankford, 2016).

Nemeth et al. (2020) investigated body image and clothing behaviors of lean and non-lean athletes by conducting interviews with 36 collegiate female athletes. 33.3% participated in lean sports (cross country and rowing coxswains), and 66.7% competed in non-lean sports (basketball, volleyball, rowing). The second part of the study was a *Multidimensional Body-Self Relations Questionnaire* to "assess attitudes towards appearance, fitness, and health" (Nemeth et al., 2020, p. 5). The researchers sent out the survey to 143 female non-athletes to compare their responses to the survey answers of participating athletes. Results indicated that volleyball and basketball players (non-lean sports) did not feel pressured to achieve a specific weight; however, one rower stated that "there is a huge advantage to being tall and being thick, but not necessarily overweight. Big bones, high muscle content, and low fat content" (Nemeth et al., 2020, p. 6). Thus, while rowing might be considered a non-lean sport, body composition appears to be crucial.

In contrast to volleyball and basketball players, cross country athletes and rowing coxswains (lean sports) expressed pressure to stay lean and hit a certain weight (Nemeth et al., 2020). Additionally, cross country athletes had the most experiences with eating disorders and bone injuries (consequences of having RED-S). One participant mentioned that half of her team suffers from an eating disorder, and another struggled with proper fueling. That participant said that "if someone is running really well at the time and she's eating very little, you think: she must be doing something right," expressing the toxicity of eating together with the entire team in dining halls (Nemeth et al., 2020, p. 7). Overall, both lean and non-lean athletes were more influenced by the ideal athletic body than the ideal female body promoted by society.

Regarding uniforms, it appears that the shorter and tighter the uniforms are, the more uncomfortable the athletes feel wearing them. While basketball players expressed confidence wearing their loose shorts, cross country athletes complained about the small and tight bottoms they had to wear (Nemeth et al., 2020). Overall, both lean and non-lean athletes expressed greater body satisfaction than non-athletes; non-lean athletes were the most satisfied with their bodies among all groups. Nemeth et al.'s study shows that athletes competing in lean sports are at higher risk of developing body image concerns due to tight uniforms and the pressure of hitting a certain weight, supporting Well et al.'s (2015), Swami et al.'s (2009), and Sundgot-Borgen's (1994) studies.

Body Image in Distance Running

Long-distance running is considered a lean sport, with stereotypical athletes being skinny and lean, which puts them at higher risk of developing body image concerns and eating disorders (Nemeth et al., 2020; Nichols et al., 2007; Stewart & Sutton, 2012; Sungot-Borgen, 1994; Wells et al., 2015). Kosteli et al. (2014) found that the athletic environment is the leading cause of negative body image perceptions of long-distance runners. The researchers had 21 female runners and 18 throwers complete a questionnaire to assess their body image in the athletic as well as social environment. Among runners, the ideal athletic body was smaller than society's ideal body. Conversely, the ideal athletic body among throwers was larger. Even though runners reported a higher satisfaction regarding societal attractiveness than throwers, they expressed less satisfaction regarding the ideal athletic body for their sport (Kosteli et al., 2014). These results confirm prior studies' results that the athletic environment can lead to increased body image dissatisfaction. Even though distance runners were satisfied with their bodies in a social context, "distance runners can face such strong sport-related pressures to be

slim and physically fit that they become dissatisfied with their bodies in sport contexts" (Kosteli et al., 2014, p. 69). Also, the results support Dalley et al.'s (2009) study, which concluded that women who significantly differ from the ideal female body portrayed in the media (in this case, throwers) express higher body image concerns than women whose appearance is closer to the ideal female body (runners).

Myers' (2017) research supports the belief of an ideal runner's body. In the study, collegiate cross country runners of both genders completed a survey questionnaire to examine their perceived ideal runner's body. The goal was to determine how their daily body image differs from their athletic body image and identify possible risks of developing an eating disorder. Myers (2017) found that the "competitive body image of collegiate cross country runners significantly differs from their daily body image" (pp. 52-53), with the competitive level having no effect on the athletes' body images. Moreover, the athletic context increased the risk of developing an eating disorder. Therefore, the female runners' body images differ based on their environment.

The athletic environment for long-distance runners appears to be a significant problem. Carson et al. (2020) conducted interviews with 29 female collegiate distance runners in which two subthemes emerged: "the ideal 'runners body' and the 'lighter is faster' mentality" (p. 434). According to the athletes, having an ideal runner's body shows dedication and communicates success (Carson et al., 2020). Many young runners believed that lower body weight would increase their sports performance and make them run faster. However, others were aware of the risks of the 'lighter is faster' mentality, such as decreased energy levels and a higher risk of getting injured. Overall, numerous runners

stated that the running culture and environment affect their body image perceptions and eating behaviors (Carson et al., 2020).

In addition to the ideal 'runner's body' and 'lighter is faster' mentality, coaches can play a detrimental role in the athletes' body images. Athletes reported that coaches would allow athletes to compete while struggling with an eating disorder, placing athletic success above the athlete's health (Carson et al., 2020). Furthermore, athletes pointed out "body weight comments, combined with high pressure [to stay lean] to gain coaches' approval" as factors that affect their mental health (Carson et al., 2020, p. 435). For these reasons, the athletic environment, including the idealized image of a long-distance runner, the belief that a lower body weight leads to better athletic performance, and coaches' power seem to be significant risk factors for female runners and their body image perceptions.

Anderson et al. (2016) surveyed 400 (53.3% female) adult distance runners to identify potential disordered eating behaviors and negative body image perceptions. The majority of both genders were not at risk of developing eating disorders. However, women were more likely to be dissatisfied with their bodies regarding appearance and performance. Thus, contrary to the research results from Kosteli et al. (2014), Myers (2017), and Carson et al. (2020), runners "may be vulnerable to concerns about [both] appearance and sport- and performance-related body ideals" (Anderson et al., 2016, p. 46).

Objectification Theory

Rather than focusing on the biological body, Fredrickson and Roberts' (1997) objectification theory focuses on how the sociocultural context constructs the female body. The researchers developed objectification theory as a theoretical framework to

understand women’s "experience of being treated as a body (or collection of body parts) valued predominantly for its use to (or consumption by) others" (Fredrickson & Roberts, 1997, p. 174). Women have little control over sexual objectification, as Fredrickson and Roberts name three areas in which objectification primarily occurs. First, men are more likely to look at women or comment about women’s appearance by using sexualized language (social context). Second, most men look at women in advertisements. Third, media (often sexually) focuses on women’s bodies. Because people are constantly exposed to the media, females are being "looked at, evaluated, and always potentially objectified” (p. 177), and “over time, individuals may be coaxed to internalize an observer's perspective on self, an effect we term self-objectification" (Fredrickson & Roberts, 1997, p. 179).

Self-objectification “begins with compliance to minimally sufficient external pressures, proceeds through interpersonal identification, and ends with individuals claiming ownership of socialized values and attitudes, often by incorporating them into their sense of self” (Fredrickson & Roberts, 1997, p. 177). External pressures include the importance of physical attractiveness in today’s social and economic environments (e.g., job discrimination, dating life). Then, women realize that their appearance influences their quality in various aspects of life. As a result, they internalize the observer’s perspective and start to monitor their bodies.

Fredrickson and Roberts (1997) stated that the resulting body surveillance might lead to body shame, and females potentially change their physical appearance, develop eating disorders, or suffer from mental health problems. Moreover, being objectified can lead to appearance anxiety and safety anxiety. Contrary to men, “the female body

presents women with a continuous stream of anxiety-provoking experiences, requiring them to maintain an almost chronic vigilance both to their physical appearance and to their physical safety" (Fredrickson & Roberts, 1997, p. 183).

Fredrickson and Roberts (1997) believe that self-objectification decreases with age, making adolescents and young women more vulnerable to comparison and striving to look like the ideal object. Young adolescents are at risk "because girls learn that this new body [due to maturing] belongs less to them and more to others" (Fredrickson & Roberts, 1997, p. 193). Therefore, "a girl becomes more fully initiated into the culture of sexual objectification" during puberty (Fredrickson & Roberts, 1997, p. 194).

Self-Objectification's Effect on Women's Mental Health

Various research studies support Fredrickson and Roberts' objectification theory. Tiggemann and Williams's (2012) goal was to assess self-objectification and its consequences among 116 sexually active female college students. The researchers used numerous questionnaires (e.g., *Self-Objectification Questionnaire, Objectified Body Consciousness scale, Eating Disorder Inventory*) and identified the correlations between different variables. The research findings included a correlation between self-objectification and "body shame, lack of internal awareness, disordered eating, and depressed mood" (Tiggemann & Williams, 2012, p. 70). Moreover, self-objectification was positively correlated to body surveillance, "which in turn led to body shame and appearance anxiety. Body shame then led to disordered eating, whereas appearance anxiety led to disordered eating, depressed mood, and poorer sexual functioning" (Tiggemann & Williams, 2012, p. 72). Therefore, this study illustrates the numerous negative consequences self-objectification can have.

Szymanski and Henning (2007) conducted a questionnaire with 217 female participants from 18 to 63 to test Fredrickson and Roberts' (1997) objectification theory by focusing on depression. The results support the assumption that self-objectification decreases with age and leads to body shame, appearance anxiety, and depression (Szymanski & Henning, 2007). However, self-objectification did not cause internal awareness, and inner awareness did not increase depression. Szymanski and Henning (2007) concluded the "inconsistent findings may be due to the differences in the way internal awareness was operationalized in the various studies" (p. 52). Nevertheless, both Tiggemann and Williams (2012) and Szymanski and Henning (2007), support that self-objectification can cause mental health issues among women. The researchers appealed to psychologists to promote body acceptance among patients and help them focus less on their appearance.

Mass Media's Influence on Self-Objectification

According to Fredrickson and Roberts (1997), mass media has increased the issue of sexual objectification. For example, advertisements, music videos, movies, or magazines frequently represent women as sexual objects, emphasizing their bodies (Fredrickson & Roberts, 1997). The experiment by Harper and Tiggemann (2008) supported those findings. The researchers conducted an experiment where 90 female college students had to rate advertisements, including either a thin woman, a thin woman with an attractive man, or no people. The "women who viewed thin-idealized magazine advertisements demonstrated higher levels of state self-objectification, weight-related appearance anxiety, negative mood, and body dissatisfaction" (Harper & Tiggemann, 2008, p. 655). An attractive man in the advertisement did not affect the females'

responses; therefore, a thin woman's image seemed to be enough to produce negative consequences of self-objectification (Harper & Tiggemann, 2008).

Aubrey (2006) identified differences in media exposure effects based on the women's level of self-esteem and thin-ideal internalization. The researcher conducted a two-wave panel study to examine the effects of sexually objectifying media on body image. One hundred forty-nine female college students participated in the first wave, and 65.6% of the first wave participants completed the second wave one year later. Aubrey (2006) assessed the participants' engagement with particular television shows and magazines, which had been rated by judges "according to how sexually objectifying they perceived them to be" (p. 162). Moreover, the researcher surveyed participants about self-objectification, appearance anxiety, body shame, thin-ideal internalization, and self-esteem. Results showed that exposure to sexually objectifying media only negatively affected participants' self-objectification slightly. Females low in self-esteem and high in thin-ideal internalization, however, were significantly affected (Aubrey, 2006).

Interestingly, Aubrey (2006) found that participants high in self-objectification, appearance anxiety, and body shame reported less exposure to sexually objectifying media one year later, avoiding media content that negatively affects them. Women high in self-esteem and low in thin-ideal internalization were more likely to "avoid the 'risk' of exposing themselves to sexually objectifying media" (Aubrey, 2006, p. 170). In conclusion, according to Aubrey's study, women low in self-esteem and high in thin-ideal internalization are more vulnerable to sexualized media content, supporting Halliwell (2013), who found that women low in self-acceptance are more likely to compare themselves with the ideal female body in the media. However, women seemed

to recognize the negative consequences of this particular content, and as a result, engaged less with it. This self-protective mechanism appeared to be effective.

Social Media’s Influence on Self-Objectification

With social media becoming more significant in people's lives, the opportunities for comparison have increased. Roca (2018) used qualitative research, including in-depth interviews with heavy female social media users, to explore social media's effects on females' body image perceptions. The researcher classified the participants as heavy social media users based on their social media accounts and their frequency of use. The findings support Fredrickson and Roberts' (1997) idea of self-objectification. The majority of participants called social media a "virtual world where an individual presents their best-looking self" (p. 49) and pointed out the "significance of physical appearance" (p. 49) on social media (Roca, 2018). Moreover, multiple participants "voiced [their] concern[s] about perceptions, reactions, and disapproval from others on social media regarding their physical appearance" (Roca, 2018, p. 50). Furthermore, participants stated that social media increases comparison with others and shapes beauty ideals (Roca, 2018).

Fredrickson and Roberts (1997) mentioned that women experience the importance of physical attractiveness in their social environment as it “correlate[s] more highly with popularity, dating experience, and marriage opportunities” (Fredrickson & Roberts, 1997, p. 178). Strubel and Petrie (2017) studied the relationship between Tinder use and body image concerns and self-esteem. The researchers called Tinder use an “objectifying process” (p. 34) because swiping left or right “may increase body consciousness and psychological distress” (Strubel & Petrie, 2017, p. 34). The researchers surveyed 913 women and 234 men between 18 and 34 years about their Tinder use, body satisfaction,

appearance comparisons and internalization, body surveillance, body shame, and self-esteem. The study included 100 Tinder users and 1,047 non-users. Strubel and Petrie found that Tinder users were less satisfied with their appearance, more prone to internalization, and more ashamed of their bodies. Additionally, male Tinder users reported lower levels of self-esteem, and overall, Tinder users were more likely to self-objectify themselves.

The study supports Fredrickson and Roberts' (1997) supposition that the importance of people's appearance in their social environment can lead to self-objectification and negative body image. Tinder users are interested in connecting with others, going on dates, engaging in sexual activities, or finding serious relationships. Because Tinder is a dating app in which people primarily decide if they are interested in another person based on a profile picture, Tinder users translate their 'success' to their appearance, resulting in self-objectification.

Deighton-Smith and Bell (2018) analyzed social media content involving #fitspiration content, which the researchers considered as "media content . . . to inspire fitness among those who encounter it" (p. 467), focusing on appearance and attractive bodies. The researchers applied objectification theory as a theoretical framework to understand how exposure to images that sexually objectify women affect females' body image. In the first part of the study, Deighton-Smith and Bell did a content analysis of 490 Instagram #fitspiration images picturing people to analyze the portrayal of the bodies. The researchers identified that 88.12% showed skinny and lean individuals, encouraging "sociocultural ideals for attractiveness" (Deighton-Smith & Bell, 2018, p. 473). Most males were muscular, supporting Glazer et al.'s (2021) and Leone et al.'s

(2011) studies that identified men's desire for muscularity. In contrast to men, "women were more likely . . . to be in full body shots, wearing sexualized clothing and revealing their legs" (Deighton-Smith & Bell, 2018, p. 474). Moreover, the images portrayed fewer female faces, exclusively focusing on their bodies. Therefore, Deighton-Smith and Bell found that #fitspiration content objectifies women to a higher degree than men.

The second part of the study was an analysis of the messages of 392 #fitspiration posts. Deighton-Smith and Bell (2018) identified six themes, including a) having a fit body is attractive; b) people have to be committed and determined to achieve a fit body; c) it is the individuals' decision if they want to live a healthy lifestyle; d) people have to tolerate pain if they want to achieve a fit body; e) the fitness lifestyle is a battle against yourself; and f) #fitspiration posts form a fitness community.

In conclusion, most pictures featured a lean and thin body. Deighton-Smith and Bell (2018) concluded that in combination with the messages and different themes that emerged from the second part of the study, people would create the feeling that they have to look this way to be attractive. Moreover, people that do not conform with the ideal body portrayed by #fitspiration posts would likely feel guilty and experience lower levels of self-worth. Therefore, both parts of the study illustrate how #fitspiration posts are "continuous reminder[s] to both men and women that one's body represents an object of desire" (p. 478), potentially leading to body shame, depression, and disordered eating behaviors (Deighton-Smith & Bell, 2018).

Sexualization of Athletes

The media often sexualizes female athletes and focuses on their physical appearances rather than their athletic performance. Linder and Daniels (2018) used an experimental design to explore differences in self-objectification levels after viewing

sexualized or performance images of the same athletes. They exposed college men and women to “either five sexualized . . . or five performance images” (p. 30), and afterward, assessed the participants’ self-objectification levels, peer appearance conversations, and athlete engagement (Linder & Daniels, 2018). Both men and women signaled higher self-objectification levels and used fewer physicality self-descriptors after viewing the sexualized images of athletes (Linder & Daniels, 2018). Contrary to that, both men and women signaled lower self-objectification levels and used more physicality self-descriptors after viewing athletes' performance images (Linder & Daniels, 2018). Consequently, sexualized images of athletes seem to harm self-objectification, while performance images seem to impact people positively.

The quantitative research conducted by Daniels and Wartena (2011) supported these findings. The researchers used a survey to investigate the reactions of 104 adolescent boys to sexualized images compared to performance images of athletes. When looking at the sexualized images, the boys mainly commented on the females' appearances (Daniels & Wartena, 2011). When looking at the performance images, Daniels and Wartena did not find a significant difference in athleticism statements. Still, the researchers did find "a difference in the emotional tone of statements made in the two conditions" (Daniels & Wartena, 2011, p. 574). Most adolescents used a positive tone to describe athletes' athleticism in performance images, while the tone varied in describing the sexualized athletes (Daniels & Wartena, 2011). Therefore, sexualized images of athletes seem to shift the focus on their physical appearance rather than their athleticism, treating female athletes as objects.

Smith's (2016) goal was to examine how performance, glamorized, and sexualized media images affect collegiate female athletes. The researcher exposed 83 participants from different States in the United States to one of the three conditions and asked questions about their training, media exposure, social comparison, body esteem, and self-objectification. While participants exposed to performance images reported the "highest level of body esteem" (p. 293) and focused on physicality statements, participants in the glamorized and sexualized conditions primarily focused on their appearance when describing themselves (Smith, 2016). The appearance focus resulted in "more negative than positive statements about their body, their appearance, and their physicality when compared to participants in the performance condition," partly due to unfavorable comparison with the portrayed athletes (Smith, 2016, p. 293). The study demonstrates that images of athletes in sport-specific contexts lead to less self-objectification than sexualized images, conforming with Linder and Daniels' (2017) as well as Daniels and Wartena's (2011) research findings.

Research Questions

Even though both genders can suffer from negative body image, women appear to be especially at risk. Researchers like Turk et al. (2021) or Grilo and Masheb (2005) found that individuals with specific characteristics are more likely to develop negative body image perceptions. Others highlighted the importance of the family environment and teaching body acceptance at a very young age. Nevertheless, social media appears to be one of the most crucial factors in females' body image as it offers many opportunities for comparison nowadays. Fredrickson and Roberts' (1997) objectification theory provides a framework that helps us understand why women strive to look like the ideal female body portrayed in the media.

As noted in the literature review above, most female athletes want to conform to the ideal female body and the ideal athletic body necessary for their sport. Because of an increase in training volume resulting in body changes and performance pressures requiring athletes to dedicate themselves to their sport, collegiate athletes are especially vulnerable. However, due to different body types and emphasis on body weight, some collegiate athletes are more prone to negative body image and eating disorders than others. Lean sport athletes seem to be at higher risk because of the importance of low body weight and leanness (Nemeth et al., 2020; Nichols et al., 2007; Stewart & Sutton, 2012; Sundgot-Borgen, 1994; Swami et al., 2009; Wells et al., 2015). Researchers found different results for causes of negative body image among lean sport athletes, ranging from the athletic environment (e.g., coaches or teammates), to the belief that a decrease in weight leads to an increase in athletic performance, concepts of the ideal athletic body, and the ideal female body.

Distance running is a common lean sport included in body image research studies (Nemeth et al., 2020; Nichols et al., 2007; Swami et al., 2009; Wells et al., 2015). Yet, the significance of social media's impact on collegiate female runners' body image is still unclear because research is limited. Halliwell (2013) found that females who are already insecure about their bodies are more likely to be negatively affected by the ideal female body portrayed in the media. Therefore, due to a running culture promoting weight loss and the resulting body surveillance, collegiate female distance runners are likely to be impacted by social media. Negative body image can lead to mental health issues, eating disorders, and low self-esteem (Duarte & Pinto-Gouveia, 2017; Green & Lankford, 2016; Grilo & Masheb, 2005; Hawkins et al., 2004; Romano et al., 2021). Additionally,

disordered eating behaviors among athletes can lead to RED-S, including bone injuries, low energy levels, and decreased athletic performances (Cadegiani, 2020). Thus, detecting the causes of negative body image is crucial. Due to contradicting results and a gap in knowledge about whether social media, including the image of the ideal female body, affects long-distance runners, the researcher suggests the following first research question:

> RQ1: Does the ideal female body portrayed in social media affect the body image of collegiate long-distance runners?

If the ideal female body portrayed in social media appears to affect the body image of collegiate long-distance runners, the researcher proposes the following research question:

> RQ2: What type of body image has a greater influence among collegiate long-distance runners – the ideal female body or the ideal athletic body?

To include the significance of the athletic environment in collegiate long-distance runners' body image, the researcher proposes a third research question:

> RQ3: Does the athletic environment influence the body image of collegiate long-distance runners?

CHAPTER III

METHODOLOGY

This research utilized a qualitative approach to gain a deeper understanding of social media's effect on female collegiate runners' body image perceptions. Researchers like Duarte & Pinto-Gouveia (2017), Hawkins et al. (2004), and Van den Berg et al. (2007) used a quantitative approach, including survey questionnaires and experiments, to assess the body image of the general population or media's effects on body image. However, it appeared that qualitative research was better suited to explore body image in female athletics (Beckner & Record, 2016; Carson et al., 2020; Coppola et al., 2014; Greenleaf, 2002; Nemeth et al., 2020; Rowan, 2007; Stephens et al., 2021). Following Beckner and Record's (2016), Greenleaf's (2002), Krane's (2001), and Steinfeldt's (2011) research findings of a multidimensional body image, the researcher used in-depth interviews to explore the complex conflict experienced by female athletes of having two different body images, an ideal female body and an ideal athletic body. Conducting interviews was also an appropriate method for sensitive issues that required follow-up questions and insight into the individual's attitudes and feelings (Zhou & Sloan, 2015). While participants shared sensitive information, the researcher gave back "a sense of presence," taking part in the participant's story (Corbin & Morse, 2003, p. 342). Even though interviews about sensitive topics required participants to open up and share

information they might have never shared with others, Corbin & Morse (2003) found that people "hope that telling their story will help others. Some people just have a need to talk. Talking helps them to sort things out, make sense out of events, or conquer fear or shame. Sometimes persons want to see how a stranger reacts to their story before they tell it to someone closer to them" (p. 342). Moreover, Beck (2005) experienced that most female participants wanted to help other women to show them that they are not alone.

Burnette et al. (2017) reported hesitation and long pauses after sensitive questions about social media and young adolescents' body image perceptions during focus groups. Therefore, the researcher chose in-depth interviews to (a) bond with the participants in a private setting; (b) gain a deeper insight; and (c) discover the young adults' honest feelings by avoiding distractions and social influences. The remainder of this section will outline (a) the sample collection method (i.e., the recruitment of female collegiate runners); (b) the study's procedures, including the distribution of consent forms; (c) data analysis methods; and (d) issues of verification and credibility.

Sample

The researcher sought out collegiate female runners to collect insights from different track and field and cross-country programs across the United States. The researcher used a combination of non-probability sampling methods, including convenience and quota sampling. The inclusion criteria for participants were (a) active female cross country runner enrolled in an NCAA Division 1, 2, or 3 college or university; and (b) English-speaking. Recruitment strategies included (a) emailing cross-country programs with general information about the research study and the researcher's contact information (see Appendix A); (b) messaging recruitment information to collegiate female runners via social media (see Appendix B); (c) word of mouth; and (d)

snowball recruitment in which participants already recruited for the study identified other collegiate female runners who served as subjects. IRB approval was sought for all recruitment messages utilized (see Appendix C). The sample size must be large enough to reach saturation which is "the point at which no new information or themes are observed in the data" (Guest et al., 2006, p. 59). Saturation was reached after a sample size of 12 interviews.

Procedure

The researcher used a qualitative approach with a pre-imposed survey questionnaire. An online survey to gather demographic information and assess the participants' social media use as well as self-criticism and perfectionism levels enriched the qualitative research part and verified that participants were active collegiate female runners, and thus, qualified for this research study (see Appendix D). The researcher used *SurveyPlanet.com* to construct the questionnaire and secure participants' responses. In terms of demographic information, the researcher gathered data on participant's gender, age, college, grade (freshman, sophomore, junior, senior, graduate student), and track and field event (sprints, distance running, jumps, throws, multi-events). To ensure social media use, participants had to answer questions about what platforms they used (e.g., Instagram, Twitter), how many hours a day they spent on social media, and how many years they had been active on social media. To determine perfectionism and self-criticism levels, participants answered questions about what standards they had for themselves and whether success affected their worth.

The researcher followed up by conducting in-depth interviews to explore participants' self-objectification levels influenced by social media, ideal body types, and athletic environments guided by Fredrickson and Roberts' (1997) objectification theory.

The researcher performed semi-structured interviews modeling Greenleaf's approach (2002), including open-ended questions based on the literature, and exploratory and follow-up questions if necessary (see Appendix D).

The researcher distributed consent forms, approved by the IRB, via email, informing potential participants about the study and their rights (see Appendix E). The consent form stated (a) the study's purpose; (b) anticipated length of their involvement; (c) level of risks involved; (d) assurance of confidentiality; and (e) the interviewee's rights. Participants were informed of their right to skip questions that made them feel uncomfortable or that they were free to withdraw from the study at any time without any information previously gathered being used in the study. Following this, participants received the online survey via email, which they had to complete before the interview to ensure the quota requirements. The researcher then arranged a time to conduct the interview.

While in-person interviews were preferred, the ongoing pandemic required interviews to be recorded over one-on-one Zoom calls. This step was also beneficial in that it allowed people that lived in different places across the United States take part. Following procedures established by Coppola et al. (2014), interviews were analyzed for notable occurrences (e.g., facial expressions, emotions, and pauses). On average, interviews were 39 minutes in length, with the shortest interview being 15 minutes and the longest interview being 68 minutes. Participants needed to fully understand the purpose and information presented in the consent form. Thus, before each interview, the researcher asked the participants if they had any remaining questions and reminded them that they could skip questions and exit the interview at any time. It was essential to make

participants feel comfortable and build trust because “as trust builds, gradually more of the story unfolds” (Corbin & Morse, 2003, p. 342).

The study involved sensitive information that required participants to be vulnerable. After each interview, the researcher provided participants with contact information from the National Eating Disorders Association (NEDA), which offers support and resources to people who struggle with negative body image perceptions and eating disorders (see Appendix F). Moreover, the researcher asked participants if they knew other collegiate female runners suited for the study to follow the snowball sampling method.

The researcher used a questionnaire protocol in which every subject was asked the same set of open-ended questions during the in-depth interviews. However, the researcher asked different follow-up questions if necessary. The researcher used an inductive approach and began by assessing the influence of social media on long-distance runners’ body image (e.g., “Tell me about a time when social media has affected your body image perception”). Moreover, the goal was to explore the participants’ behaviors on social media and determine whether they were prone to self-comparison.

Then, the researcher explored RQ1 and whether the image of an ideal female body portrayed by the media affected the participants (e.g., “Do you think the media portray an ideal female body? If yes, could you describe how the ideal female body looks like?”). To assess possible body discrepancies, participants described how the ideal female body looked and whether they thought their bodies fit that body type.

To discover RQ2, the researcher explored the participants’ idea of an ideal athletic body (e.g., “Do you think running requires a specific body type? If yes, how does this

specific body look like?”), and determined which body type affected the participants more negatively (e.g., “Taking the ideal female body and ideal athletic body into account, what body type do you think influences you more?”). Participants addressed self-comparison and the importance of body weight in running.

Lastly, the researcher explored RQ3 by focusing on the athletic environment's influence on the participants' body image. Participants answered questions about their coaches (e.g., "Has your coach ever commented on your body?") and teammates (e.g., “Do you regularly talk to your teammates about body image and eating behaviors?”). The goal of RQ3 was to determine if the athletic environment was harmful to the participants’ body image perceptions. Before ending the interview, the researcher asked the participants if they had any remaining questions or if they wanted to elaborate on anything further.

Data Analysis

To calculate descriptive statistics, including means and frequencies of the demographic data, participants’ social media use, and perfectionism and self-criticism levels, the researcher downloaded and imported the online data from *SurveyPlanet.com* into a Microsoft Excel document and conducted the statistical analysis.

Interviews were transcribed verbatim from the recordings using *Grain*. Following the approach of Beckner & Record (2016), Burnette et al. 2017), and others, the researcher used Braun and Clarke’s (2006) theoretical thematic analysis to identify themes in the data. The researcher became familiar with the data by reading transcripts and listening to the recordings. The data was coded for the research questions, keeping the broad themes of social media, the ideal female body, the ideal athletic body, and the athletic environment in mind. Five themes emerged from the data: (a) social media as a

highlight reel; (b) self-comparison; (c) conflicting body ideals; (d) athletic environment; and (e) maturity. Following Easton et al.’s (2018) approach, the researcher assigned key patterns and quotes from participants to these five broad themes, and subthemes emerged from participants’ responses. Audio recordings, transcripts, and questionnaires were labeled with pseudonyms to ensure anonymity. The researcher stored all files in a password-protected computer. Furthermore, pseudonyms were used in the Analysis and Discussion sections to secure participants’ anonymity, and schools were not named to protect their program, coaches, and participants’ teammates. Quotes were reported verbatim.

Verification and Credibility

Verification of this research study was established by triangulation and member checks of participants' statements. Following Coppola et al.’s (2014) and Johnson et al.'s (2017) research, the researcher incorporated multiple sources to verify the obtained data. The researcher compared study data with previous research on the same subject matter obtained using a different method (e.g., quantitative analysis, focus groups). Additional data sources included newspaper articles, media coverage, and podcasts in which other runners talked about their body image struggles. Furthermore, following Rager's (2004) member checking method, the researcher reviewed essential or unclear statements with participants to ensure that all interpretations were correct.

The credibility of this research was established through the writing of texts. The researcher followed the direction of Creswell (1998) to use rich, thick descriptions in the writing of the text, including the commentary provided by the subjects that established the themes and sub-themes of the study. The researcher also used objectification theory (the analytical lens of this study) and previous research to support the study’s findings.

CHAPTER IV

ANALYSIS

Demographics

Each participant filled out an online survey before their interview to gather demographic information. Moreover, the goal was to ensure each participant fulfilled the quota requirements (active NCAA female runner, English speaking) and assess the participants' social media use as well as self-criticism and perfectionism levels. All participants (n=12) identified as female long-distance runners, and the average age was 21.83 years, with the youngest participant being 19 years old (n=1) and the oldest participants 23 (n=5) (see Table 4.1). Most participants were graduate students (n=5), followed by seniors (n=3), juniors (n=2), and sophomores (n=2) (see Table 4.2). Of the 12 participants, 92% competed for an NCAA Division 1 university (n=11), and one participant was part of an NCAA Division 3 program (see Table 4.3). Participants had competed for 18 different schools in 12 U.S. states (see Table 4.4). Five participants had transferred schools at least once, thus having experiences to share from more than one university.

Table 4.1
Age of Participants

Age	Number of Participants	Percentage
18	0	0%
19	1	8%
20	1	8%
21	2	17%
22	3	25%
23	5	42%
24	0	0%
Over 24	0	0%

Table 4.2
Classification of Participants

Classification	Number of Participants	Percentage
Freshman	0	0%
Sophomore	2	17%
Junior	2	17%
Senior	3	25%
Graduate Student	5	42%
I am not in college	0	0%

Table 4.3
NCAA Division of Participants

NCAA Division	Number of Participants	Percentage
Division 1	11	92%
Division 2	0	0%
Division 3	1	8%
I am not in college	0	0%

Table 4.4
Frequency Table of States Represented

U.S. State	Number of Participants
Colorado	2
Idaho	1
Illinois	1
Indiana	2
Iowa	1
Kansas	1
Michigan	1
New Mexico	1
Oklahoma	5
Utah	1
Washington	1
Wisconsin	1

Social Media Use

Among the 12 participants, all used Snapchat (n=12), followed by Instagram (n=11), Facebook (n=8), TikTok (n=6), YouTube (n=5), and Twitter (n=4) (see Table 4.5). When asked what social media platform they used the most, 83% chose Instagram (n=10). Snapchat and Facebook were chosen by one participant, respectively (see Table 4.6). A majority (n=7) reported spending 1 – 2 hours on social media every day. Only one participant spent less time, while two participants spent 3 – 4 hours (n=2) and the remaining two participants spent 5 – 6 hours (n=2) on social media every day (see Table 4.7). All participants had been active on social media for more than five years with half (n=6) stating they had been active for more than eight years (see Table 4.8).

Perfectionism and Self-Criticism Levels

Participants rated four statements regarding perfectionism and self-criticism on a 7-point Likert-type scale. All participants strove to be perfect in everything they did, with 33% (n=4) choosing *Very Agreeable,* 58% (n=7) choosing *Agreeable,* and one participant choosing *Somewhat Agreeable* (see Table 4.9) The mean score was 6.25. Additionally, 75% (n=9) answered *Very Agreeable* to the statement, "I set high standards for myself" (see Table 4.10). Three participants answered *Agreeable* (n=2) or S*omewhat Agreeable* (n=1). The mean score was 6.67. In terms of self-criticism, ten participants stated they questioned their worth when they did not succeed, with 50% (n=6) selecting *Very Agreeable* and 33% (n=4) selecting *Agreeable,* respectively (see Table 4.11). Here, 17% (n=2) somewhat disagreed with the statement. The mean score was 6.00. To the statement, "I feel negative and disapproving about my own flaws," 17% (n=2) answered *Very Agreeable,* 50% (n=6) answered *Agreeable,* and 25% (n=3) answered *Somewhat*

Agreeable (see Table 4.12). Only one participant disagreed with the statement. The mean score was 5.58.

Table 4.5
Social Media Platforms Used by Participants

Social Media Platform	Number of Participants	Percentage
Facebook	8	67%
Instagram	11	92%
Twitter	4	33%
TikTok	6	50%
Snapchat	12	100%
YouTube	5	42%
None	0	0%

Table 4.6
Social Media Platforms Participants Used the Most

Social Media Platform	Number of Participants	Percentage
Facebook	1	8%
Instagram	10	83%
Twitter	0	0%
TikTok	0	0%
Snapchat	1	8%
YouTube	0	0%
None	0	0%

Table 4.7
Time Spent on Social Media Every Day

Time Spent	Number of Participants	Percentage
Less than 30 minutes	0	0%
30 - 59 minutes	1	8%
1 - 2 hours	7	58%
3 - 4 hours	2	17%
5 - 6 hours	2	17%
7 - 8 hours	0	0%
Over 8 hours	0	0%
I am not active on social media	0	0%

Table 4.8

Years Active on Social Media

Years Active	Number of Participants	Percentage
Less than one year	0	0%
1 - 2 years	0	0%
3 - 4 years	0	0%
5 - 6 years	3	25%
7 - 8 years	3	25%
Over 8 years	6	50%
I am not active on social media	0	0%

Table 4.9

Statement: "I strive to be perfect in everything I do."

Choice	Number of Participants	Percentage
Very Disagreeable	0	0%
Disagreeable	0	0%
Somewhat Disagreeable	0	0%
Neutral	0	0%
Somewhat Agreeable	1	8%
Agreeable	7	58%
Very Agreeable	4	33%

Table 4.10

Statement: "I set high standards for myself."

Choice	Number of Participants	Percentage
Very Disagreeable	0	0%
Disagreeable	0	0%
Somewhat Disagreeable	0	0%
Neutral	0	0%
Somewhat Agreeable	1	8%
Agreeable	2	17%
Very Agreeable	9	75%

Table 4.11

Statement: "I question my worth if I don't succeed."

Choice	Number of Participants	Percentage
Very Disagreeable	0	0%
Disagreeable	0	0%
Somewhat Disagreeable	2	17%
Neutral	0	0%
Somewhat Agreeable	0	0%
Agreeable	4	33%
Very Agreeable	6	50%

Table 4.12

Statement: "I feel negative and disapproving about my own flaws."

Choice	Number of Participants	Percentage
Very Disagreeable	0	0%
Disagreeable	1	8%
Somewhat Disagreeable	0	0%
Neutral	0	0%
Somewhat Agreeable	3	25%
Agreeable	6	50%
Very Agreeable	2	17%

Qualitative Analysis

Deductive thematic analysis revealed five themes that were evidenced across all interviews. The first theme, *Social Media as a Highlight Reel*, emerged from the initial data and describes participants and other people's behavior on social media. The next two themes, *Self-Comparison* and *Conflicting Body Ideals,* developed from questions grounded in Fredrickson and Roberts' (1997) objectification theory and highlight two ideal body types: the ideal female body and the ideal athletic body. The fourth theme, *Athletic Environment,* primarily unfolded from questions about coaches and teammates and captures participants' experiences within the running culture. It became clear that the athletic environment significantly influences participants' body images, mental health, and relationships to food. The last theme, *Maturity,* manifested itself when participants' shared their negative experiences with body image and eating disorders, and how those experiences have shaped their present behaviors, thoughts, and attitudes.

It was evident that social media and the athletic environment played significant roles in collegiate female runners' body image perceptions. All participants admitted that they have struggled with negative body image at some point in their collegiate careers. It did not make a difference whether participants competed for an NCAA Division 1, 2, or 3 program; whether they were an All-American or non-varsity athlete; or whether they were a middle distance (800m and 1500m/mile) or long-distance runner (3,000m or longer). Pseudonyms are used to secure participants' anonymity, and schools are not named to protect their program, coaches, and participants' teammates. Quotes are reported verbatim.

Theme 1: Social Media as a Highlight Reel

At the beginning of each interview, participants were asked to recall a time when social media affected their body image perception. Even though the researcher did not specifically ask about the negative aspects of social media, all participants only talked about the harmful effects of social media in terms of people's mental health and body image perceptions. Nobody mentioned a time in which social media positively affected them regarding their mental health or body image. "Shelby" called social media "a lot more toxic environment than positive environment." The overwhelming majority of participants stated being self-conscious when they see other people's bodies, success, workout routines, or diets on social media. They questioned whether they should look, train, or eat differently. Moreover, social media affected people's perception of what their bodies should look like. For example, "Shelby" talked about being under the impression that she needed to have a thigh gap because it was talked about on social media:

> Around the 2018 era, there was the whole thing about like a thigh gap. And I definitely remember that, like not thinking about, or like hearing about the concept beforehand, but then, um, suddenly, like, it was a thing on Instagram, and I was like self-conscious like, do I have a thigh gap? Do I not? And I don't have a thigh gap. And then, like, does that mean that I need to lose weight?

Often, participants like "Jordan" had been satisfied with themselves, but as soon as they went on social media, their perceptions changed, and they were more critical of their bodies. "I can name like many times when I'm like, I feel good about how I look or I think I'm in good shape, but then you see something on social media, and instantly it just changes, I guess my expectations of how I should look." These statements by participants

demonstrate social media's harmful impact on collegiate female runners' perceptions of what their bodies should look like, and how seeing other people's bodies increases their self-consciousness.

Participants were asked next about participants' social media behavior, including posting and editing pictures. Many referred to social media as a highlight reel of people's lives in which everyone only posts the best content and photographs of themselves. Additionally, people would only share their successes. "Jordan" stated, "Very few people post negative, um, content about like a bad time in their life or, um, I don't know, like a moment where they've struggled." "Sierra" said that this mainly affected her when she was in a negative mental health space at her old school:

> Cause when I was at [my old school], those were some of like the really hardest years of my life, and it really negatively affected me. I think just seeing other people seemingly happy and doing well [on social media]. And then I was just in this deep dark hole, and it was, oh, it was when it was really bad for me.

Because they perceived social media as a highlight reel, participants felt the need only to post their best pictures to show off the best version of themselves on their social media profiles. "Sierra" called social media profiles "a non-realistic image of what your life looks like." Even though none of the participants said they would edit their bodies when they posted pictures, most used filters to make their photos look more appealing. Moreover, most participants said they would not post a picture if they did not like their bodies.

> "Annamaria": People post the good things on social media, not really the bad. So it's like, if I take cute pictures, I want to post the picture I felt the best in or look

the best in … If there was a picture I didn't like of my body, that just wouldn't go to the internet.

Participants mentioned different reasons why their picture might look bad in their eyes; for example, the photo was taken from a wrong angle, or participants did not like their facial expression, hair, or smile. Yet, the most common reason was looking 'big' or not muscular enough. "Shelby" said, "Even if I have a really good race and I want to post about it, if all the pictures I think look bad and by bad, meaning I don't look super fit, then I might not post it." "Allison" also pointed out the few amounts of clothes runners wear: "Especially with running pictures, like in the summer, when I'm often wearing a sports bra. I definitely would pick a picture that I think like makes me look more muscular."

In the course of the interview, two participants realized that they were too critical of themselves. "Hannah" said, "I just think that we all think that other people care more about what we look like than they actually do." "Jenna" told a story that supported "Hannah's" perception:

> My boyfriend will post a picture, and I'll be like, delete that. Like my legs look too weird or like, I just don't like that. And he'll be like, it's literally just you, like, what do you mean? And I'm like, just, I don't want to look like that on social media, even though that's literally what I look like.

Theme 1, *Social Media as a Highlight Reel,* illustrates that collegiate female runners feel the need to portray the best version of themselves on social media for the reason that they perceive it to be a highlight reel of people's lives in which everyone only posts successes and flawless pictures. As a result, female runners feel pressured to adhere to specific

beauty standards. Most become self-conscious and critical of their bodies, affecting their body image perceptions and mental health.

Theme 2: Self-Comparison

Most of the toxicity social media brought into the participants' lives stemmed from self-comparison with other people and their bodies. However, self-comparison appeared to play a significant role in people's body image perceptions outside of social media as well. Five subthemes emerged from this theme: (a) successful runners; (b) celebrities/models/influencers; (c) teammates; (d) peers; and (e) people's old selves. Subthemes are ordered by the amount of conversation they generated.

Subtheme A: Successful Runners

Participants were asked which accounts they mainly followed on social media. Except for family and friends, successful runners appeared to be the group that participants followed the most. Everyone mentioned that they would follow numerous professional or collegiate runners from other teams because they either looked up to those people, knew them personally, or were interested in race results or their training. Throughout all interviews, it was evident that participants were primarily prone to comparison with other runners. "Allison" said, "I do think like professional runners probably make the biggest difference. Um, cause like they're so good and they look, their body looks so good."

While getting insight into successful runners' personal lives (e.g., training, diets) could be interesting, the majority mentioned that it caused them anxiety, low self-esteem, and negative self-comparison. Three participants, including "Laura", stated that self-

comparison with other athletes was a crucial reason they decided to either delete their Instagram account entirely or spend less time on it.

> "Laura": I followed all of the professional runners and everybody that we were competing with collegiately very much … it was always kind of frustrating, I guess, to see other athletes looking more fit than I did and stuff like that. Um, because you know, the photos that people post of their running, you know, they're always super strong … and they look super fit and thin, and it definitely was frustrating to keep following that. That was, I think, ultimately one of the reasons I decided to step away from it. It was just, you know, ultra-comparison, um, between me and other runners.

The overwhelming majority of participants talked about how self-comparison with professional runners could be very risky for high school or collegiate athletes because it puts unrealistic expectations on them of how their bodies should look like. Risks named by participants included (a) RED-S; (b) overtraining; and (c) being underweight at a crucial time in females' development (e.g., getting your period, building a healthy bone density). Many seemed torn between knowing that they should not look like professional runners but still comparing themselves to those athletes.

> "Sierra": Especially with the running world, like you're comparing yourself constantly and like looking at these professional runners who have been doing the sport for years and years … and so just often it like leads you to be like, oh, I wish I were that ripped or had that much muscle, but, um, it's unrealistic in a lot of ways.

When participants described the ideal athletic body in the sport of running, all of them connected that body type with professional or other successful (e.g., collegiate) runners. “Vivian” said, “I think that a lot of the idea of what the ideal [athletic] body looks like is based on who’s the most successful at the time.” The responses of how the ideal athletic body in their sport looked like were almost identical. Every participant described the body type as ‘lean,’ and other common adjectives were ‘skinny,’ ‘small,’ ‘low body fat,’ ’long legs,’ or ‘tone.’ However, there was a difference in responses about the importance of having muscles and being strong. “Annamaria” described the ideal runner as being “lean, very little to none, no body fat, just basically skin and bones,” and “Jenna” described it as “fragile.” She said that “people have to question whether or not you’re healthy.” In contrast, “Miranda” and “Vivian” mentioned the ideal athletic body having “muscular features.”

> “Vivian”: I mean number one, I think, is very lean. That’s the biggest thing. I think very vascular, but not, not in a bulky way. Um, yeah, definitely like number one thing I think is skinny and with a lot of defined, um, fine musculature … always very, very lean, very ripped all the time.

“Shelby” also highlighted the differences in body types between middle-distance and long-distance runners:

> I would say there’s a slight difference between middle distance and distance. Usually, middle distance [runners], they can like pass for being a little bit more muscular. Um, but then for some, like as soon as you are above 3k, then you have to, you can’t have like thighs … it’s really all about just like body fat percentage and, and weight I guess.

Overall, 11 of the 12 participants believed they did not fit the ideal athletic body type. “Cecelia” said, “I think like if I were the most ideal, I would be leaner than I am right now,” and “Shelby” declared, “I wouldn’t put myself as ideal because I’m not as toned as what I consider the ideal to be.” A few participants explained that they might look like a runner from an outside perspective. Still, within the running community, they felt like they were too big compared to the best runners in the NCAA or professional runners.

While almost all participants were under the impression that they did not fit the ideal athletic body type, all but two stated they wished to look like the ‘ideal runner.’ “Jenna” admitted that she still wanted to fit the ideal athletic body even though attaining that body image did not seem sustainable and healthy at times:

> Oh, like immediately I was like, yes, I do wish. But then I’m also like I’ve been down that road. Like it’s just such a fine line to walk, and it’s a dangerous line to walk because for me to like attain that body image, I would have to be unhealthy … But also I’m like, obviously I do [wish to fit that body type].

A couple of participants wanted to fit that body type for a very long time; yet, they did not wish to live with the consequences of trying to look like the ideal runner anymore. “Sierra” said, “No, because I know that it’s going to just damage me again, and I’ve worked so hard to get my bone density up … I cannot go back to what I used to do because I want a healthy life.” “Cecelia” mentioned injuries and unhappiness as reasons for not wanting to fit that body type anymore.

The main reason the female runners compared themselves to professional or other successful collegiate runners and wanted to look like the ideal athletic body in their sport appeared to be athletic performance. This strive for performance increase and success in

running was prevalent in every interview. Due to a uniform body type of successful runners (e.g., being lean, skinny, and toned), there seemed to be the belief that the thinner and leaner an athlete is, the better. Therefore, the overwhelming majority wanted to become a faster runner with the ideal athletic body.

> "Vivian": You're thinking like, oh, if I was just lighter, I'd be faster. And then once it gets into your head, I feel like you can start psyching yourself out … that even more convinced me that like, I should be thinner because if I am thinner, I would feel better, um, and be lighter and run faster.

Participants mentioned that it was easier to resist comparison with other runners when they performed well and had success. However, when they struggled and were less successful, they were more prone to see differences between their bodies and the bodies of faster runners. "Laura" said, "It seems like such an easy way to fix your problems is to look more like a runner," and "Jayne" stated:

> I think it's really easy to like when I'm having success to just not care and be like, well it's working and whatever. And I think when times are tough, when maybe I'm struggling or not performing as well, I may be questioning myself like, well, is it because of this? Or, um, you know, is it because I don't have the ideal body?

This subtheme shows that collegiate female runners are prone to self-comparison with successful runners because they connect athletic success to their body types. Because all participants followed professional and collegiate runners on social media, they were constantly exposed to the ideal athletic body, which was described as very 'lean' and 'small.' The majority of participants wished to fit the ideal athletic body even though it

was challenging to sustain and included risks (e.g., RED-S, bone injuries, eating disorders).

Subtheme B: Celebrities, Models, and Social Media Influencers

All participants stated that they did not follow and compare themselves to many celebrities, models, or other social media influencers. Reasons given by participants included lack of interest in those people's lives, having their identity rooted in sport, and struggling to relate to celebrities. In addition to that, "Laura" said, "I've never been all that into, uh, following influencers because I think it's kind of dumb." Moreover, a few participants mentioned that they did not compare themselves to famous people on social media because of Photoshop. According to "Jordan," celebrities, models, and influencers would edit their pictures to the degree that it "doesn't always reflect real life."

However, participants said they were still exposed to many famous people on their discovery pages on Instagram, magazines, or television. Everyone connected the idea of an ideal female body with the looks of celebrities, models, or social media influencers. "Shelby" said, "There's very, very little diversity in the media, all media. Um, in terms of like female body types." Due to their popularity, they "reinforce what the ideal type is," according to "Jayne". As a result, 'normal' people would look up to them and conform to famous people's bodies. "Jordan" said, "I think, yeah, [people want to conform with] whatever's like popular, which is what influencers are, they are popular. It's kind of what's passed down into what other people, um, want to be." However, "Jordan" and another participant also considered that influencers might only be popular because they fit that ideal:

> What if they're influencers because of the way they look, you know? So that could also be the case of, oh, this girl is really pretty. And she has what we think is the ideal body and hair … And then she gets popular because she has the specific body type that most people want to have.

When asked what the ideal female body looked like in their opinion, common adjectives were 'skinny,' 'long legs,' 'tall,' 'not too much muscle,' 'curvy,' 'hourglass figure,' and 'petite.' Some participants said that there were two ideal female body types: one being as slim as possible, and one having an hourglass figure, including curves while still having a tiny waist:

> "Cecelia": I think there are like two different ideals that are somewhat conflicting, but I feel like there's one ideal that's been around for a while that's thin … mostly just like really lean, really thin. I feel like we're in a new trend of like curves, so having a butt, boobs, but still, everything else being really thin.

Many participants claimed that the ideal female body type would change over time, primarily caused and reinforced by the media. "Annamaria" said that "media plays a huge, huge role in the ideal female body type," and "Hannah" claimed, "I would say that media switches every few years with what it thinks is like the best body type." Overall, 10 of the 12 participants were convinced that they did not look like the ideal female body, while the other two participants stated that their perception of whether they fit the ideal female body type switched day-by-day. "Cecelia" was one of the participants that thought there were two ideal female body types, and she was the opinion she did not fit either of them:

> I do not have the curves, the butt, boobs. I recognize that I'm thin and white and able-bodied and all of those things. And I have those privileges, but I'm not, I've never felt like I'm like the media's standard … I'm also not thin enough to be like the model, the double zero kind of thing.

Half of the participants professed not wanting to fit the ideal female body type, mainly because they preferred to look like the ideal runner. The other half stated they looked up to the ideal female body. "Miranda" said, "I guess most everyone would want to, um, you know, be the ideal body type." "Sierra" said she struggled with an eating disorder for a few years, including food restriction and being severely underweight, in order to conform to the ideal athletic body. However, her perception of having curves and a higher body fat percentage has changed. "Sierra" said, "It's like what a woman should look like. I don't want to look like a little girl anymore." Yet, even though half of the participants said they sometimes wished to look like the ideal female body, it was evident that all participants compared themselves less to celebrities, models, and social media influencers than they did to other runners.

Subtheme C: Teammates

Outside of social media, participants primarily compared themselves to their teammates. This subtheme overlaps to some extent with the *Teammates' Behavior* (a subtheme of *Athletic Environment*). However, this subtheme focused on the physical appearances of teammates and less on eating behaviors or conversations about body image. Participants seemed to be especially prone to comparison with their teammates because they were around their teammates every day, often just in shorts and sports bras. "Miranda" said that her teammates "make [her] feel kind of fat sometimes." Moreover, a

few talked about pictures from a race or practice. “Vivian” said, “I look at race photos a lot, and I’m looking at, okay, well, how do I look compared to my teammates? … Like, do I look bigger than them?” Overall, participants appeared to be very aware of their teammates’ bodies, to the extent that they noticed when someone had lost (or gained) weight immediately.

> “Laura”: They’re the ones that you compare yourself to every single day. Um, and you try hard not to compete with your teammates, but in a way, you always are. And, um, especially when you’re doing the same training as somebody else and suddenly they start running faster or looking differently. Um, you notice immediately, um, you know, when somebody looks different.

Indicated in “Laura’s” statement, the strive for performance increase and success was prevalent in this subtheme again. The majority admitted that they were primarily affected by faster teammates. In addition, many, like “Vivian,” talked about teammates who had lost weight before having a significant increase in performance and how it made them question whether they should look more like those teammates: “Within our team, I guess the trickiest thing is when somebody else is having more success. You look at them, and you’re like, what are they doing that I’m not. Are they leaner than me right now?” “Sierra” remembered the year she came to college and started to look up to older girls that were All-Americans and national champions, and how their physical appearances affected her:

> I was there my freshman and sophomore year. And a lot of the older girls who are really, really good. And they were all really, really small. And so I think I got there and was just kind of like, well, this is like, you know, what it takes to be

good … Because they were like the leaders on the team. And so I just looked up to them.

Later, "Sierra" talked about having body image concerns, developing an eating disorder, getting injured, and needing to see a psychologist to treat her eating disorder. After two years, she ultimately left the school because of constant comparison with her teammates, leaving her unhealthy and unhappy.

Even though participants talked about being self-conscious due to self-comparison with their teammates, a few mentioned that it was not their teammates' fault.

> "Vivian": That's not the fault of my teammates, you know, they are who they are, and they look how they look. Um, but it's definitely a trap that I kind of fall into is something, well, maybe if I looked a little bit more like that, I'd be faster. Um, but that's, that's not on them. That's on me.

While participants primarily compared themselves to successful runners on social media, they were mainly impacted by teammates in their physical environment because participants were constantly surrounded by them at practice, running events, team dinners, or social life. It was easy for them to look up to successful teammates, feeling the need to conform to their body types. Teammates had the potential to make participants "feel fat" ("Miranda") and increase their self-consciousness.

Subtheme D: Peers

For this subtheme, the researcher classified peers as to include friends outside the participants' sport (non-runners) and family members. Participants mostly followed friends and family members on social media; yet, the overwhelming majority stated that they were less likely to compare themselves to them. The most common reason was that

their peers were not runners, and thus, their body types or non-running related successes did not affect them as much. In fact, most participants did not mention peers at all when they talked about self-comparison and how social media affected their body image. Only a few discussed being influenced by their peers. While “Allison” said that she would compare herself to “anyone [she] would see on the internet if they looked specifically fit,” “Annamaria” was the only one that explicitly talked about people she knew outside of running and how she was more affected by them:

> I can find myself comparing more, believe it or not, to people that I know. Maybe not my closest friends, because I truly know what’s going on behind the scenes, but a lot of people that I know, but maybe don’t keep up with all the time. It’s easy to see what they’re posting and think, wow, they are having like the time of their life or that they look really good … because that’s someone who’s in my life, even if I don’t talk to them very often, it can be like, wow, we’re in the same environment, and even then our results are vastly different or whatever.

Nevertheless, it was evident that family members and friends outside of running had a significantly less impact on most participants’ body image perceptions, even though they primarily followed these people on social media.

Subtheme E: Old-Self

A few participants talked about comparing themselves to their bodies when they were either in high school or when they struggled with an eating disorder that caused them to be underweight and very lean. “Sierra” said, “Oftentimes, I’m like a little self-conscious now that I look so much different than I used to.” Participants were primarily prone to that type of comparison when they were more successful at a lower body weight.

"Hannah" revealed, "It's hard sometimes to not look back and think that all my success was just because I was like tiny." She claimed that she knew "that that's unhealthy and [she] wouldn't ever do that again, but [she does] miss being tiny." Three other participants that had struggled with an eating disorder also admitted that they sometimes missed the way they looked, or their new body type made them feel self-conscious at times, even though they knew it was unhealthy.

Theme 3: Conflicting Body Ideals

Although most participants mentioned that the two body types were similar in terms of thinness, the main difference between the ideal female body and the ideal athletic body was curves (boobs and a butt), caused by a higher body fat percentage. Moreover, all participants described the ideal female body as less muscular. "Shelby" talked about the ideal female body being more feminine:

> Um, I guess what you would call curviness… society's ideal body is a lot more feminine than, um, a runner's body because, if you have boobs, then that means you have to have some sort of body fat percentage. And then that means that you won't be as toned.

"Miranda" was of the opinion that being a woman "means having body fat and having curves," which is why "being a woman and a runner don't mix together super well." Eleven of the participants stated that they compared themselves and were more affected by the ideal athletic body while the other participant said both types affected her equally. Yet, almost all participants talked about situations when they would rather have more curves and look closer to the ideal female body, causing female athletes to be conflicted. Those participants wished to be as lean as possible without having curves and a high

body fat percentage in terms of running. However, they also wanted to look desirable in the world outside of running; for example, when they went to a party, wanted to attract boys, or wore clothes that would fit them better with curves.

> "Annamaria": I feel like half the time, like the performance side of me, I'm like, I need to look like the other way, the way the other runners do because that will make me successful. But then the other half, the time when I'm just like getting ready for a night out or going out with my friends, and I'm putting on an outfit, and I hate the way that it looks on me like that has to do more with like, dang, I wish I was one of these model looking girls.

When participants shared their thoughts of wanting to conform to the ideal athletic body while also wishing to look like the ideal female body at times, it was evident that their perception of their bodies changed based on their environment. "Shelby" recalled a time when she got injured and gained weight and how she was happy at first, but as soon as she was surrounded by athletes again, her perception changed:

> I got injured and didn't run. And then I got, I gained a lot of weight, very pretty fast. And at first, I was very happy with it because it immediately like filled out my boobs and my butt, and I was like, oh, you know, it's so hot. Um, then I went to an event like a banquet kind of event [with other runners]. And suddenly, I realized like how much I changed compared to others. Cause I was like, I didn't see any real athletes for the first few months of me being injured. And then suddenly I went there, and I saw everyone and started comparing. And then I got really, really insecure. I felt like I didn't look like them anymore.

While "Shelby" felt insecure when runners surrounded her but confident when she was in a social context, "Cecelia's" story was just the opposite:

> It was kind of interesting because at the times when I would be the lowest weight I would feel a little bit more confident in the running world. Like when I was on the track, I'd be like, okay, this is what it's supposed to be. Like, I fit in. And then any time I would leave that, like if I would go to like just the public gym or whatever I would feel so self-conscious because I thought that I was like too lean and too skinny. And so they're very conflicting. And as much as I would, you know, then desire that like ideal female body outside of running, I couldn't let go of that ideal runner's body.

Nevertheless, the overwhelming majority confidently said they would rather look like the ideal athletic body in spite of the dominant societal ideal female body image. Reasons included "being much more surrounded by messages praising the athlete body image than society's female body image" ("Shelby"), the ideal athletic body being "more relevant to [her] life goals than the ideal female body" ("Laura"), and being "caught up in it and still so involved in running" ("Miranda"). Moreover, "Jordan" said, "Because that's my main goal and the season of life is to be like the best runner I can be. I mean, I don't care too much about, ha, I don't know, being an Instagram model or whatever." "Jenna" also talked about the expectations to look like a runner: "I've been known to be a runner for so long that like, it's almost like expected of me to have that body image." "Hannah" agreed with this sentiment:

> I feel like the running world has like a lot bigger of a community on social media than like a lot of other sports … It's all about the comparison thing. Like

> everybody follows each other and follows pros and follows other collegiate runners … I feel like it's kind of like, you think that people might not validate you as a runner if you don't look like a runner … You just want to look like a runner, you know. I feel like it's just like a thing amongst runners that you want to look like whatever runners are supposed to look like.

This theme describes the conflict collegiate female runners experience of wanting to conform to both the ideal female body and the ideal athletic body for their sport. Almost all participants stated they were more impacted by the ideal athletic body. Yet, they experienced situations in which they wished to look like society's ideal female body portrayed in the media (e.g., celebrities).

Theme 4: Athletic Environment

This theme evolved from questions about the participants' coaches and teammates. Participants shared their experiences of being on their college team, and how their coaches and teammates influenced their body image perceptions. Three subthemes emerged from this theme: (a) the importance of body weight; (b) coaches' behavior; and (c) teammates' behavior. Overall, many participants talked negatively about their athletic environment and its influence on their body image perceptions and relationships to food. Whether it was the immense pressure to perform well, teammates struggling with eating disorders, or coaches commenting on their athletes' bodies, the overwhelming majority had negative experiences to share. "Annamaria" admitted, "Some of the times I've been in the best relationship with myself and like food have been in times when honestly I haven't been running or I've just been running more for fun." Moreover, she said that there was not one single factor that affected her most negatively, rather, "it's an

accumulation of everything that takes part in athletics." Two participants, including "Laura," admitted that they had thoughts of quitting the sport because "the environment was so toxic." Moreover, "Sierra" talked about the prevalence of eating disorders in the sport of running:

> I hate it. It's like the one thing that I just hate about the sport, it's awful. Like some days, I mean, like some of my roommates [and teammates] I can see struggle with it, and some days it like really gets to me and I'm just like, I'm done, I can't do this anymore. Like I cannot see it. I do not want to be around it. And I am done with this culture.

Thus, collegiate female runners' athletic environments can potentially impact their body image perceptions and relationships to food significantly. Some participants experienced such harmful effects that they wanted to quit the sport to escape the "toxic" ("Laura") environment.

Subtheme A: Importance of Body Weight

Participants were asked to discuss the importance of body weight in running. Most recognized that body weight was a "touchy subject" ("Jenna") that many coaches and other runners try to avoid talking about. Yet, all were the opinion that it is important at least to some extent, and according to "Jayne", "every single person in the sport would be lying to say that it doesn't like play some sort of role and people don't think about it a lot." Even though many participants agreed that a high body fat percentage would be detrimental to someone's performance, they also stated that body composition is highly individual. "Annamaria" said, "You're going to have an optimal fitness level, and that optimal fitness, like to be the best of your ability, is different for every single person."

“Laura” and “Shelby” talked about other things that people could improve on before focusing on body weight. “Laura” believed that being too thin could cause runners to lose their strength and power, which is why they should focus on “being slightly bigger and stronger,” and “Shelby” said:

> It’s not as important as other things. Like there are more high-priority things to focus on and that I can improve and develop until I need to start focusing on body fat percentage and all that … it’s not worth the risk to try to take it and get injured and then not be able to run at all.

Like “Shelby,” others recognized the possible negative consequences of not fueling properly, especially during puberty and young adulthood. Participants mentioned RED-S, including the loss of their period, decreased bone density, bone injuries, mental health issues like depression, decreased athletic performance, and low energy levels. Overall, participants struggled to find a concrete answer on how vital body weight is in running. Still, many of the participants, such as “Cecelia,” believed that “whether or not it is really important, it’s made to feel really important.”

Subtheme B: Coaches’ Behavior

Most participants had similar attitudes and perceptions regarding the ideal body types, self-comparison with successful runners and teammates, or the importance of body weight in the sport of running. However, all had very different experiences with their coaches to share. Half of the participants had coaches who never commented on their athletes’ bodies. Instead, they encouraged them to eat whatever they wanted, go to the fueling station after their runs, or eat dessert instead of limiting themselves to solely ‘healthy’ food. In contrast, “Jenna” and “Sierra” revealed that their coaches had told them

to lose weight. Both had struggled with an eating disorder during their first two years of college, which caused them to have amenorrhea (loss of their period), be severely underweight, and be depressed. At first, "Jenna's" coach told her, "you're too skinny, you need to gain weight," so she did. But as soon as her athletic performance decreased, he approached her again:

> He was just kind of like, what's the difference between now and like two years ago when you were running your fastest? And then he mentioned like, oh, like, you look a little bit quad heavy, which is like a comment that isn't necessarily bad, but in the context of the situation, it was, it was pretty clear that he meant like you've been gaining weight.

"Sierra's" experience seemed even more unpleasant. She transferred schools to leave her old school's toxic athletic environment behind, which had caused her to develop an eating disorder. At her new school, she gained weight as part of recovery, but unfortunately, she also got injured many times (bone injuries that were most likely caused by low bone density). Her coaches started to blame "Sierra" for all her injuries, saying that she kept getting injured because she had gained weight. Moreover, "Sierra" said that her coaches measured their athletes' body fat percentages once a month. She revealed a story that happened after her first body composition test:

> The female coach, she like had a talk with me and was like, well you need to get back down to like 108 [pounds]. And that's what she said. She's like, you're not going to be able to run well unless you're around that weight. And I just remember like thinking like, why the hell would you give me a specific number, and how do you know that that number is going to be good for me? … They're

> just so concerned with the female bodies … It was just every meeting with the coaches, just like, well, if your body fat percentage was lower you probably wouldn't get another injury.

"Jordan" and "Laura" mentioned that they were never told to lose weight, yet their coaches commented on other people's weight. "Jordan" said, "He went up to our best guy and was like, the reason he's running well is because he lost weight." "Laura" disclosed that her coach told athletes not to snack between meals, skip dessert, and recruit thin and lean girls. "Vivian" and "Cecelia" believed their coaches had an image of what a runner should look like in their minds but never talked about it because they were worried about the consequences (e.g., getting fired for making harmful comments). "Vivian" did not feel comfortable with her weight and went to her old college coach for guidance:

> I came to the coach, you know, asking for advice on what I could do to work on that. And she actually, she wouldn't talk about it with me and that almost made it worse because I, you know, came looking for healthy, helpful guidance and basically was told that that was something I wasn't allowed to talk about. And so it felt like the coach was trying so hard to avoid having athletes that had eating disorders, and they were kind of pushing me in that direction by not giving any help at all.

Like "Vivian," many participants discussed the negative consequences of coaches staying silent or not taking enough action when athletes are struggling with eating disorders on the team. "Annamaria" believed that "a lot more is said than is actually done." Four of the participants identified that the "social impact that those kinds of athletes have on other athletes is probably maybe the most significant factor" ("Shelby") on people's body

image and relationships to food. For this reason, she wanted her coach to provide those athletes with resources to get healthy first before continuing running. “Hannah” was of the same opinion and stated, “I think if people are like very obviously struggling, they should not be allowed to like come to practice and work out, or compete and like represent your program.” “Sierra’s” parents noticed that she was struggling with an eating disorder and decided to call her coach at the first college she went to:

> There was a time my parents even tried to call the coach and talk to him because they were worried about me and my weight. And, uh, they wanted to see if like he could give me some help, just talk to a nutritionist. And he was like, yeah, I’ll take care of it. And then never did anything to help me. So it’s like, you know, he knew that people on the team weren’t well, but he just didn’t care because they were running well.

“Sierra” mentioned the conflict that many coaches faced. Many knew that their athletes were struggling with an eating disorder, yet, they wanted their best athletes to compete to earn team points at conference championships, become All-Americans, or win national championships. For this reason, they decided not to act as long as those athletes were performing well. “Laura” stated that coaches were under a lot of pressure from the athletic departments and universities to perform well. For this reason, many coaches did not care about the long-term health of their athletes.

> “Laura”: You have four years with a coach. The coach has an incentive to make you run really fast for a short period of time. They’re not invested in you; you running well for 10 years. They’re invested in you running well for one season so

> they can recruit more athletes or win a national championship. It's not about longevity.

Overall, none of the participants perceived it as helpful for coaches to tell their athletes to lose weight because everyone was already self-conscious about their bodies due to self-comparison with successful runners and their teammates. However, staying silent and not acting when athletes struggled with an eating disorder and negative body image was just as detrimental. Thus, most participants mentioned that coaches should immediately address eating problems on the team and take actions (e.g., distancing struggling athletes from the team, not letting them compete) to create a healthy athletic environment for athletes. In addition to that, a few participants believed that coaches should not give struggling individuals attention in terms of praising them in front of others. Most athletes would fight for their coaches' attention, and thus, it would encourage people to lose lots of weight.

> "Shelby": Because if a person is very thin and they're being praised, even if they're being praised for things that are not related to being thin, I think a lot of female athletes in their mind are going to equate it to that as in like, well, I want to be praised as well, so I need to be as thin.

This subtheme illustrates the significant impact coaches have on their athletes, and how critical it is for them to understand what comments and actions are negatively perceived by collegiate female runners. Participants demanded better help from their coaches and appealed to them to prioritize their athletes' health.

Subtheme C: Teammates' Behavior

When participants were asked how their teammates influenced their body image perception, the majority mentioned that they were in an environment where at least two or three of their teammates had disordered eating behaviors. It was evident that those athletes' eating behaviors had an impact on the athletes around them.

> "Shelby": I feel like on teams, especially, it's basically like a snowball. The more people that are struggling and the thinner people are, the more thin the others are going to become, and the more people, new people, they're going to like drag into that cycle.

Among teammates, it was common to have meals together in three locations: either in private residences, in campus dining halls, or dining establishments when the team traveled to a competition. Thus, it was very easy for the participants to observe their teammates' eating behaviors and see what everyone ate. Many stated that it was easy to adapt to unhealthy eating habits (e.g., not eating enough, avoiding certain food groups) when they observed them among teammates, especially when they were the leaders and best runners. Participants admitted that they questioned whether they should eat less because they did not want to eat double the amount their athletes ate and felt insecure because of their teammates' eating behaviors. "Hannah" was asked to give an example when her teammates made her feel insecure:

> If you all want to get dessert and someone's like, I can't eat that. Or like you're eating dinner and like you've finished your thing, and you're like ready to eat a snack or dessert after your whole meal, and then someone's like, I'm just so full. And they ate like four bites of their spaghetti.

Participants who had teammates and friends who struggled with an eating disorder mentioned they wished to help them. However, nobody exactly knew what to do in those situations, and it made them “feel very stressed as a teammate” (“Vivian”). Moreover, it was described as “draining” (“Annamaria”), especially if someone did not want to be helped. Some had to distance themselves from struggling teammates because it affected their mental health and body image perceptions. “Hannah” struggled with a severe eating disorder for two years. When her teammates tried to help her and commented on her weight loss and eating behaviors, it had the opposite effect. She believed that “people will get better when they want to.” In addition, “Hannah” said:

> When people started commenting on my body, on my weight loss, it kind of like turned into a more unhealthy thing. And like, you know, then you start to like kind of compete with yourself … I think it made it worse. Yeah. It just like, kind of brought my own attention and like awareness to it more. And I don’t know, it was just like, whatever I’ve been doing has been working apparently or like making me look more fit. So like, I’ll just like keep doing what I’m doing and like take it to more extreme.

Seeing teammates with eating disorders was especially difficult for people that had struggled with restriction and disordered eating before. It made it harder for them to continue their recovery and stick with their newly developed healthy eating habits. “Vivian” said, “It’s kind of triggering in a sense to see someone do the things that you used to do, even though I know full well that those things won’t make me successful.” “Hannah” revealed that it was challenging to see teammates with eating disorders being

successful. Sometimes, it made her want to fall back to unhealthy eating habits (e.g., not fueling her body), but she tried to remind herself that she was "doing the right thing."

Not only teammates' eating behaviors negatively influenced participants' body image perceptions and eating behaviors. A few talked about comments being made that might not seem harmful, but that had a significant impact on others. "Shelby" said that teammates had commented on her body shape before, and even though they meant it in a positive and empowering way, those comments left her self-conscious because "it's still surrounded by the fact that [she had] a body that [was] different than the ideal body type" ("Shelby"). "Annamaria" talked about comments about food or when teammates spoke about their bodies:

> When they say, oh my God, I feel so fat. I eat so much, or, oh my God, that's making me so bloated. I feel huge. Or um, like saying, oh my God, I can't eat that. That's too greasy … You see someone you look up to or someone you care about, and they think that about themselves, but you already compare yourself as so much larger than them. If they think they look huge then what does that make like me? Like, does that make me a giant?

Some participants talked about observing other teams and how they frequently talked with their teammates about other athletes and their bodies, primarily when someone had lost a significant amount of weight. For example, when athletes from other teams got stress fractures, they questioned whether it was because that athlete had lost a lot of weight before the injury. In combination, a few mentioned that they supported each other and promoted healthy eating habits (e.g., fueling your body, no restriction) within the team to avoid injuries and create a healthy environment for everyone. While this seemed

genuine in some team environments, “Laura” believed that this was not necessarily how reality looked like: “Everybody is in agreement. It’s a bad thing. We should eat what we want. We should do what we want. Um, every body type is beautiful, and every body type can be fast … but then the actions don’t match the words necessarily.” “Annamaria,” “Jordan,” and “Sierra” all stressed the importance of surrounding yourself with teammates “who make you feel good about yourself” (“Annamaria”). It did not matter how mentally strong you were, “being around teammates who are visibly struggling is very difficult” (“Annamaria”). “Jordan” and “Sierra” struggled with disordered eating and negative thoughts regarding their body and food at their old schools, where many of their teammates struggled with disordered eating behaviors. However, both transferred to a different school with a healthier team environment, which had significant positive effects on their relationships to food, illustrating the crucial impact coaches and teammates can have on collegiate female athletes.

Theme 5: Maturity

Participants had different experiences with negative body image and disordered eating behaviors to share. Many of them had body image concerns, especially at the beginning of their collegiate careers, that led to eating disorders that caused them to be underweight, depressed, and injured. Some others never went through periods of immense changes in their bodies or eating behaviors but still experienced negative body image. Regardless of the severity of their struggles, all participants indicated the importance of maturity in dealing with body image concerns, social media, self-comparison, and other people’s behaviors and expectations. In terms of social media,

many stated they realized what people they should follow and which accounts had adverse effects on their body image perceptions.

> "Cecelia": I hit a point where it affected me too much that now I'm able to see how toxic it was … so I think I will allow social media to be more positive for me now where I see a more diverse range of body types. I follow creators who are in like different bodies than me and speak positively about them and things like that. But again, I don't think I'd be here without having first experienced the negatives of social media.

"Laura" talked about making a conscious effort not to fall into the cycle of food restriction because numerous of her teammates struggled with eating behaviors and had to either medically retire or stop running due to mental health issues:

> I have been around in the system long enough to see people completely destroyed themselves, and people come in, lose a bunch of weight, be really fast, and then just never run again. Um, and I think that seeing the real-time effects of that kind of behavior is probably a great way to, um, to not go down that path yourself.

Other participants believed that they were able to change their mindset because they experienced the negative consequences of food restriction and being severely underweight. Moreover, they were convinced that it would be tough to change their behaviors as long as people did not experience those consequences themselves.

> "Shelby": The reason it doesn't affect me as much as other people is because I think I went through the experience of getting injured and feeling the repercussions of, you know, not treating my body well. And I have the trauma that a lot of people don't. Like, even if they hear stories. Until you go through it

> yourself, it's really hard to understand, um, like how bad, how harmful it can be, and how much it's not worth it.

The majority shared what their behavior looked like when they severely struggled with negative body image and their relationship to food. Often, it simply started as an effort to be a healthier and better athlete, for example, eating less sugar and processed foods. However, a few participants stated that it became a "rush" ("Jordan"), so they started to compete with themselves. All participants who had taken actions to lose weight mentioned food restrictions. Other actions that participants took to lose weight was count calories (and calculate how much they had to run to burn those off), chew gum to suppress hunger, only consume diet drinks, weigh themselves every day and write down their weight, skip meals, focus on low-calorie foods (e.g., vegetables), cut out carbs from their diet, and excessive exercising. "Vivian" admitted that she "blacked out on the elliptical" a few times and woke up on the gym floor because she was barely eating but still exercising a lot.

Even though all participants still believed that body weight is important in their sport (at least to some extent), many realized that their behavior was not sustainable. Most of the participants mentioned injuries, "Hannah" admitted that she was "exhausted" after restricting her food intake for over two years, and many stated they were unhappy and depressed. Moreover, "Sierra" said:

> I mean, just basically the doctor telling me that if I didn't do something to help increase my bone density, then I probably wouldn't even be able to have kids when I'm older. And so that was kind of just like for me, like, oh my God, like I

> want to have children when I'm older and I want to have a healthy life, and I shouldn't be restricting myself and damaging my body.

Overall, most participants were of the opinion that it was easy to think at first that their athletic performance in college was the most important thing in their lives. Thus, they took measures to lose weight and increase their athletic performance because they only thought about the present. It took them a few years to realize how harmful their actions were because they had to mature to comprehend the long-term consequences. According to "Hannah":

> Especially when you're young, you know, you might not think about the whole kids thing. But as you start to go through college and think about the rest of your life, like at first, you might not care about like, not having your period and whatever, but then you think about how it could affect you later on down the road. And it's like, maybe I don't actually want to go through this anymore and risk the rest of my life.

"Hannah" indicated that younger female runners are potentially more at risk of taking actions (e.g., food restriction) after experiencing body image concerns because they are not fully aware of the negative consequences yet. Moreover, participants had to experience RED-S symptoms, bone injuries, and mental health problems, often at the beginning of their collegiate careers, to realize that their behavior patterns were not sustainable. Thus, throughout the interviews, it became evident that more mature collegiate female runners are likely to be able to change their mindset positively.

CHAPTER V

DISCUSSION

This research examined how social media affects collegiate female runners' body image perceptions by focusing on the conflict many female athletes experience of wanting to conform to the ideal female body portrayed in the media and the ideal athletic body in their sport. The goal was to determine what body type has a more significant influence on collegiate female runners' body image perceptions. Moreover, participants shared their experiences with coaches and teammates, which helped identify the significance of the athletic environment on collegiate female runners' body image and relationships to food. Because this study focused on two ideal body types that are perceived as the ideal objects female athletes look up to, Fredrickson and Roberts' (1997) objectification theory served as the theoretical framework.

Results indicate that collegiate female runners in this study were primarily influenced by the ideal athletic body due to (a) their identity as a runner; (b) performance pressures; and (c) self-comparison with successful runners. The study also suggests that social media (e.g., Instagram pictures) of professional runners have a greater impact when it comes to body image for these participants rather than other celebrities (i.e., Kim Kardashian). Furthermore, the athletic environment appears to pose a greater risk for

most collegiate female runners' body image perceptions and relationships to food caused by detrimental comments and actions of their coaches and teammates.

This study supports the belief about the prevalence of negative body image and disordered eating behaviors among collegiate female runners. It illustrates the need for professionals, including registered dietitians and sports psychologists, in collegiate athletics in order to help females deal with the pressure of conforming to society's ideal female body and the ideal athletic body in their sport, educate them about their nutrition needs, and guide their process of achieving a healthy body weight. Moreover, this study suggests the critical importance for coaches, parents, teammates, and psychologists to better understand the thoughts, perceptions, and attitudes of these athletes, the competitive and emotional conflicts they experience, and why disturbing behaviors and/or comments by these athletes should be taken seriously. The remainder of this chapter will delve into the three research questions posed in the study using the five emerging themes from the in-depth interviews as well as the theoretical perspective used (objectification theory). The chapter will conclude with a discussion of study limitations as well as future research.

The Ideal Female Body

RQ1 sought to identify how the ideal female body influences collegiate female runners. In general, social media seems to have a harmful effect on collegiate female runners because they are prone to self-comparison. In terms of the ideal female body, it was apparent that social media plays a massive role in their perception of what that body type looks like. Due to their popularity and status, all participants believed that society desires the body type of most celebrities and connected the ideal female body to 'famous'

people's bodies. It appears that collegiate female runners interviewed often did not realize that they compared themselves to that body type; instead, it happened subconsciously. Because even though the overwhelming majority of participants stated they did not follow and compare themselves to celebrities, models, or social media influencers, they were all able to describe that body type and say how their bodies looked different.

Additionally, the ideal female body influenced most participants in a social context. Many collegiate female runners interviewed wished to look like the ideal female body portrayed in the media when they were surrounded by non-runners, wore non-running clothes, or went to parties. This finding is consistent with Fredrickson and Roberts' (1997) objectification theory which focuses on how the sociocultural context constructs the female body. The ideal female body is seen as the ideal object in a social context. Therefore, due to external pressures and the importance of physical attractiveness, collegiate female runners may want to fit the ideal female body in a social context because they think society desires this body type, matching Steinfeldt et al.'s (2011) research which found that female athletes feel the same pressure to conform to feminine norms as non-collegiate athletes. For this reason, collegiate female runners interviewed were more satisfied with a higher body fat percentage, being less lean, and having curves, when they were not in their athletic environment and concerned about their running performance. This observation also conforms to Myers' (2017) research which found that female runners' body images differ based on their environment. In Myers' research study, participants were satisfied with their bodies in a social context but expressed body dissatisfaction in their athletic environment. This study suggests that

collegiate female runners want to conform to the ideal female body in a social context, which is an important finding because it illustrates the conflict female athletes experience of having two ideal body images.

The Ideal Athletic Body

RQ2 sought to determine which ideal body type has a greater influence on collegiate female runners, the ideal female body or the ideal athletic body. It was evident from the study that the ideal female body only plays a minor role in the body image perception of collegiate female runners. This finding is consistent with Kosteli et al.'s (2014) research which identified that the ideal athletic body had a more significant impact on female runners. The majority of participants were constantly surrounded by other runners at running events, practice, and in their social life because they often lived and spent time with their teammates outside of practice. Moreover, participants mostly followed other collegiate or professional runners on social media, and all participants connected the ideal athletic body with those athletes and their success. Additionally, interviews and online survey responses revealed that most collegiate female runners are very critical of themselves and strive for perfectionism, which, according to Turk et al.'s (2021) research, increases the likelihood of body image concerns among females. To illustrate collegiate female runners' high levels of self-criticism - 11 out of 12 stated they did not look like the ideal runner, and 83.3% admitted in the online survey that they question their worth if they do not succeed. To illustrate collegiate female runners' high levels of perfectionism – all but two participants revealed they wanted to look like the ideal runner, and 91.7% wanted to be perfect in everything they do and set high standards for themselves.

Supported by Fredrickson and Roberts' (1997) objectification theory, the ideal athletic body is seen as the ideal object beneficial for their running performance. Due to their competitiveness and focus on athletic performance, collegiate female runners strive to conform to the ideal athletic body because they believe it helps them become better runners. Therefore, because most collegiate female runners prioritize athletic success and identify themselves as runners, the ideal athletic body seems to have a more significant influence on their body image perceptions than the ideal female body. Participants in this study suggest that there are situations in which collegiate female runners wish to have curves and a higher body fat percentage, yet, they are more involved in running and "much more surrounded by messages praising the athlete body image than society's female body image" ("Shelby"). Their main goal in college is to be the best runner they can be, so they primarily look up to the ideal athletic body in their sport. These findings can possibly help psychologists, coaches, and parents to better understand the thoughts, attitudes, and perceptions of collegiate female runners who struggle with negative body image. The focus of their conversations with athletes should be on (a) the ideal athletic body; (b) self-criticism; (c) perfectionism; and (d) performance pressures.

Athletic Environment

RQ3 sought to determine how collegiate female runners' athletic environments influence their body image perceptions and relationships to food. Participants had very different stories and experiences regarding their athletic environment to share. However, it became evident that the athletic environment primarily influenced these participants' body image perceptions due to their coaches and teammates' behaviors. Participants in this study discussed multiple behaviors by coaches that appeared to negatively impact

their own or others' body image perceptions: (a) telling their athletes to lose weight; (b) not listening to their athletes when they ask for help; (c) failing to address negative body image and disordered eating behaviors on the team; or (d) praising athletes with eating disorders. These experiences and sentiments match with the findings of researchers like Beckner and Record (2016), Coppola et al. (2014), and Rowan (2017), who found that coaches significantly impacted female athletes' body image perceptions. Participants in their research studies also wished coaches would stop commenting on athletes' bodies because it negatively influenced their eating behaviors and confidence regarding their athletic abilities.

In addition, the study's participants identified the significant impact of having teammates who struggle with eating disorders. Other behaviors from teammates that negatively influence collegiate female runners' body image perceptions include (a) bringing attention and commenting on other people's bodies; (b) constantly talking about food and body weight; or (c) restricting their food intake (e.g., no dessert/sugar). These findings are consistent with Rowan's (2017) research which found that comparisons with teammates, as well as conversations about other people's bodies and food, increased female athletes' self-consciousness. Therefore, coaches' and teammates' behaviors push collegiate female runners towards the ideal athletic body. For this reason, the athletic environment represents another reason why that body type influences those athletes more significantly than the ideal female body.

Significance of Collegiate Female Runners' Environment

Based on the interviews with participants, it is evident that environment plays a significant role in collegiate female runners' body image perceptions. The environment

influences what body type collegiate female runners wish to conform to, their perceptions of their bodies, and their relationships to food. In terms of social media, participants described it as a highlight reel of people's lives. Thus, because the majority only post the best version of themselves on social media platforms like Instagram, unrealistic expectations arise of how female bodies should look. Female runners are likely to feel negative about their bodies if they do not fit those body types. Moreover, it makes them more critical and selective of their own social media pictures. These findings are consistent with research from Burnette et al. (2017), Dalley et al. (2009), Green and Lankford (2016), and Hawkins et al. (2014), who found that women who were constantly exposed to the ideal female body types were likely to internalize these images over time, be more critical of their bodies, and feel self-conscious. Participants' perceptions in this research illustrate the importance of showing a diverse range of body types on social media, in commercials, as well as in movies or television shows. It would create less unrealistic expectations, and women would most likely have fewer negative feelings about their bodies because they feel more desirable and accepted.

Based on the interviews in the study, collegiate female runners must create a social media environment and follow accounts that do not harm their mental health and body image perceptions. Participants like "Jenna" or "Jayne" stated that they were less influenced by pictures of their peers, supporting Hogue's and Mills' (2019) research which found that photographs of family members did not harm people's body image perceptions. However, the majority of participants reported they also followed and mostly compared themselves to other runners on social media, harming their body image perception and increasing the pressure to conform to this particular body type. For these

reasons, collegiate female runners should limit the number of athletes of their sport (representing the ideal athletic body) on their social media pages.

In terms of the physical environment, this study suggests that many collegiate female runners wish to look like the ideal female body in a social context because they have fewer thoughts about running and are surrounded by non-runners. Instead, they value what society desires and adapt to the people around them and what they think is attractive. However, the majority of collegiate female runners are surrounded mainly by runners (practice, running events). Here, collegiate female runners strive to look like the ideal athletic body because it is considered the ideal object among runners. Similar to their social media environments, it might be beneficial for collegiate female runners to try to surround themselves with friends and family members who have a positive impact on their body image perceptions.

The experiences and stories of participants about their coaches and teammates further demonstrate the significance of the environment on collegiate female runners' body image perceptions. Throughout the interviews, it became apparent that if multiple runners on a team struggle with negative body image and eating disorders, others are more prone to develop disordered eating behaviors and mental health issues as well. As "Shelby" said, "It's basically like a snowball … The more people that are struggling and the thinner people are, the more thin the others are going to become, and the more people, new people, they're going to like drag into that cycle." Confirmed by Rowan's (2017) research, people with a healthy athletic environment in which not many people struggle with eating disorders and negative body image are most likely less influenced by their athletic environment. Therefore, collegiate female runners should consider transferring

schools if coaches and/or teammates negatively influence their body image perceptions and relationships to food. This statement is further supported by "Jordan" and "Sierra," who stated that their body image perceptions significantly improved after they transferred schools, leaving their former athletic environment behind that included many teammates who suffered from eating disorders.

Desired Behavior by Coaches

This study strongly suggests that every coach's priority should be to create a healthy athletic environment for their athletes. They should avoid commenting on athletes' bodies and telling them to lose weight because most collegiate female runners are already self-conscious about their bodies and very critical of themselves due to self-comparison with successful runners on their team or on social media. However, if athletes come and ask for help, coaches should provide them with resources (e.g., registered dietitians) to help them healthily achieve a comfortable weight. They should have open conversations with athletes who struggle with body image concerns and their relationships with food and immediately address those issues. Here, actions speak louder than words because multiple participants complained about coaches who did not act. Instead, they kept letting athletes with eating disorders compete and did not require them to get medical and psychological help. These experiences by participants are consistent with Carson et al.'s (2020) research in which participants admitted that it affected their mental health when coaches placed athletic success over athletes' health. These findings are crucial for distance-running coaches because it makes them rethink their behavior patterns. Moreover, participants' sentiments assist them in creating an environment for

the team that promotes healthy eating behaviors and positive body image among all female runners.

Maturity

Throughout all interviews, it became clear that (a) younger collegiate female runners are more prone to engage in disordered eating behaviors; and (b) the experienced consequences of negative body image and disordered eating behaviors are so detrimental that they often change collegiate female runners' mindsets. Most participants struggled with disordered eating behaviors in high school or their first two college years. However, they quickly realized the consequences of not fueling their bodies properly; for example, injuries, low bone density, depression, decreased athletic performances, or low energy levels. A decrease in body weight and body fat percentage is often followed by an increase in athletic performance. Still, collegiate female runners often seem to realize over the years that the success is short-lived and that it is not sustainable not to meet their energy demands (calorie deficit) and be underweight. Yet, it seems to be more challenging to change the mindset of athletes who are not mature or educated enough about possible negative consequences or who have not experienced the harmful effects themselves. Therefore, it is necessary for professionals (e.g., registered dietitians) to educate collegiate female runners, starting at a very young age. This sort of counseling for young runners is supported by Eyal and Te'eni-Harari's research (2013) as well as Slater and Tiggemann's study (2016). Needless to say that older athletes (upper-level college students or post-collegiate athletes) can develop body image concerns and alter their bodies, yet, it is especially necessary to look out for younger athletes.

Limitations

Qualitative research is the first step in understanding the complex conflict that collegiate female runners experience of wanting to conform with the ideal female body and the ideal athletic body. Here, in-depth interviews are a great research technique for exploratory research in which participants share their attitudes, feelings, and experiences in a private setting without other social influences. However, in-depth interviews also have several potential limitations. First, they lack external validity. Even though there were strong common themes and similar opinions, perceptions, and experiences among the participants, the findings cannot be generalized due to the small sample size of 12 collegiate female runners. In addition to that, qualitative research is subjective and bias (whether on the part of participants or the researcher) is a constant issue.

Negative body image and disordered eating behaviors are sensitive topics for participants to talk about. Although most participants opened up and shared their stories and experiences, it is impossible to verify what participants said and if they were sincere in their thoughts, feelings, and attitudes. For example, most talked about their athletic environment. Even though all participants were assured that this research was anonymous and confidential, they might have been hesitant to share certain things with the researcher because this information could have negative consequences for the program and their coaches.

Another concern is the age of most participants. The majority were upper-level students who had experienced disordered eating behaviors and negative body image at the beginning of college. As a result, many stated they realized over the years that it is not worth sacrificing their long-term health to conform with the ideal athletic body,

engaging in disordered eating behaviors and suffering from mental health problems. However, those athletes had to experience the negative consequences themselves to come to that conclusion. Therefore, shared attitudes, perceptions, and experiences might have differed if more participants were first- or second-year students because of a lack of maturity.

Future Research

Due to the high number of seniors and graduate students that had already struggled with disordered eating behaviors, future studies should include more first- and second-year students and explore whether they have different attitudes, perceptions, and experiences to share. Moreover, future research should involve studies focusing on high school athletes. The amount of change their bodies go through during puberty can significantly impact female runners, leaving them self-conscious and insecure. However, it is crucial to understand and detect all causes of body image concerns and disordered eating behaviors among high school runners because adolescence is pivotal for their development. Thus, not fueling their bodies properly can lead to injuries and other RED-S symptoms later in college and prevent them from competing.

There are many research studies or articles written about body image involving women or female athletes. However, body image concerns and eating disorders among men and male athletes is a topic that is not often talked about, even though the pressure to perform most likely makes men want to conform to the ideal athletic body for their sport as well. For this reason, future research should explore body image among male athletes to verify that female athletes are not the only ones struggling with negative body image and eating disorders and that attention must be paid to male athletes as well.

One of the participants mentioned that female runners feel double the pressure to be at a low body weight because both society and their athletic environment tell them to be thin. For this reason, lean-sport athletes would struggle with negative body image and disordered eating behaviors more often than non-lean sport athletes. Therefore, future researchers should repeat similar studies with athletes from other sports (e.g., soccer, softball) and identify whether the ideal female body and the ideal athletic body affect them differently.

Finally, many participants shared their experiences with their coaches and teammates. While most stated their coaches had never commented on their bodies or told them to lose weight, some talked about body fat measurements, inappropriate comments, and other improper behaviors. Due to the significant influence coaches have on their athletes' body image perceptions and relationships to food, researchers should conduct a quantitative study with a large sample size of NCAA runners (both genders) in which they anonymously answer questions about their coaches regarding body shaming, body fat measurements, and other conversations about body weight.

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APPENDICES

Appendix A

Recruitment E-Mail to Cross-Country Programs

Dear Mr./Mrs. ____,

My name is Ariane Ballner, and I am a student-athlete at Oklahoma State University. I am currently in the process of finding collegiate female runners that would like to take part in my research study for my master's thesis, exploring how social media affects the body image of collegiate female runners. Participants will have to complete a short online survey to assess demographic information and social media use and agree to an interview with an approximate length of 30 to 45 minutes. Responses will be both anonymous and confidential.

I would appreciate it if you could forward this email to your female cross-country team. If any of your athletes are interested in participating, they can find my contact information below.

Thank you in advance for your time and participation.

Sincerely,

Ariane Ballner

M.S. Degree Candidate

Oklahoma State University

Ariane.Ballner@okstate.edu

Appendix B

Social Media Message to Collegiate Female Runners

Hello ____,

My name is Ariane Ballner, and I am a student-athlete at Oklahoma State University. I am currently in the process of finding collegiate female runners that would like to take part in my research study for my master's thesis, exploring how social media affects the body image of collegiate female runners. Participants will have to complete a short online survey to assess demographic information and social media use and agree to an interview with an approximate length of 30 to 45 minutes. Responses will be both anonymous and confidential. You are free to exit the research study at any time.

Please let me know if you would be willing to participate or know of any other female collegiate female runners suited for the study. You can find my contact information below.

Ariane Ballner
(405) 564-2390
Ariane.Ballner@okstate.edu

Appendix C

IRB Approval

Oklahoma State University Institutional Review Board

Date:	01/21/2022
Application Number:	IRB-22-27
Proposal Title:	Ideal Female Body Versus Ideal Athletic Body How Social Media Affects Body Image of Collegiate Female Runners
Principal Investigator:	Ariane Ballner
Co-Investigator(s):	
Faculty Adviser:	John McGuire
Project Coordinator:	
Research Assistant(s):	
Processed as:	Exempt
Exempt Category:	

Status Recommended by Reviewer(s): Approved

Appendix D

Online Survey

INSTRUCTIONS

Please read the questions carefully and answer each to the best of your knowledge. The first part determines your social media behavior, the second part includes question about self-criticism and perfectionism, and the third part assesses demographic information.

PART 1 – SOCIAL MEDIA USE AND PERFECTIONISM

Please respond to the following questions.

1. Please select all social media platforms that you are currently active on.
    a. Facebook
    b. Instagram
    c. Twitter
    d. TikTok
    e. Snapchat
    f. YouTube
    g. I am not active on social media
2. Please select the social media platform that you are most active on.
    a. Facebook
    b. Instagram
    c. Twitter
    d. TikTok
    e. Snapchat
    f. YouTube
    g. I am not active on social media
3. On average, how many hours do you spend each day on social media?
    a. Less than 30 minutes
    b. 30 – 59 minutes
    c. 1 – 2 hours
    d. 3 – 4 hours
    e. 5 – 6 hours
    f. More than 6 hours
    g. I am not active on social media

4. For how many years have you been active on social media?
    a. Less than one year
    b. 1 – 2 years
    c. 3 – 4 years
    d. 5 – 6 years
    e. 7 – 8 years
    f. Over eight years
    g. I am not active on social media

PART 2 – PERFECTIONISM AND SELF-CRITICISM

Please respond to the following questions, ranging from 1 = Very Disagreeable to 7 = Very Agreeable.

1. I strive to be perfect in everything I do.

   Very Disagreeable 1 2 3 4 5 6 7 Very Agreeable

2. I set high standards for myself.

   Very Disagreeable 1 2 3 4 5 6 7 Very Agreeable

3. I question my worth when I don't succeed.

   Very Disagreeable 1 2 3 4 5 6 7 Very Agreeable

4. I feel negative and disapproving about my own flaws.

   Very Disagreeable 1 2 3 4 5 6 7 Very Agreeable

PART 3 – DEMOGRAPHIC INFORMATION

Please provide the following information.

1. Gender
    a. Female
    b. Male
    c. Non-binary
    d. I prefer not to say
2. Age
    a. 18
    b. 19

c. 20
d. 21
e. 22
f. 23
g. 24
h. Over 24

3. Classification
    a. Freshman
    b. Sophomore
    c. Junior
    d. Senior
    e. Graduate Student
    f. I am not in college
4. NCAA Division
    a. Division 1
    b. Division 2
    c. Division 3
    d. Other
    e. I am not in college
5. Main Track and Field Event
    a. Sprints
    b. Distance Running
    c. Jumps
    d. Throws
    e. Multi-Events
    f. I am not a track and field athlete
6. College/University: ___________

Appendix E

Interview Questions

Social Media in General

- Generally speaking, would you say that social media affects your body image?
- If yes, tell me about a time when social media has affected your body image perception
- What social media accounts do you follow the most (e.g., athletes, friends and family, influencers), and how do their bodies look like?
- Do you compare yourself to those accounts?
- Did you feel the need to change your body because of it?
- Do you make sure that your body looks good when you post pictures on social media?
- If yes, can you elaborate on why you want your body to look good?
- Do you edit your body before you post pictures on social media?
- If yes, can you elaborate on why you edit your pictures?

RQ1

- Do you think the media portray an ideal female body?
- If yes, could you describe how the ideal female body looks like?
- Do you think you fit that body type?
- If not, do you wish you would fit that body type?
- Have social media pictures of influencers, models, or celebrities ever affected your body image perception? Do you think they reflect the ideal female body?
- Do you compare yourself to their bodies?

RQ2

- How important is body weight in your sport?
- Do you think running requires a specific body type to be successful?
- If yes, how does this specific body look like?
- Would you say you fit this particular body type?
- If not, do you wish your body would fit this particular body type?
- If the participant does not think running *requires* a specific body type, ask how most runners look like and if the participant thinks she looks like that as well
- Taking the ideal female body and the ideal athletic body into account, what body type do you think influences you more?
- Why do you think that particular body type influences you more than the other?

RQ3

- In what way does your coach affect your body image perception?
- In what way do your teammates affect your body image perception?
- Has your coach ever commented on your body? If yes, what did he say?

- Has one of your teammates ever commented on your body? If yes, what did that person say?
- Do you regularly talk to your teammates about body image or eating behaviors?
    - What do these conversations look like?
- Do you ever compare your body to your teammates' bodies?
- Are you aware of teammates that struggle with negative body image and/or disordered eating? If yes, does it affect you?
- Lastly, what do you think affects you more negatively: social media or your athletic environment?

CLOSING QUESTIONS

- Before we end the interview, were there questions you would like to go back to and elaborate further on?
- Do you have any comments or questions regarding the study?

Appendix F

The School of Media and Strategic Communications

CONSENT FORM

Ideal Female Body Versus Ideal Athletic Body
How Social Media Affects Body Image of Collegiate Female Runners

Background Information

You are invited to be in a research study with the goal of exploring the significance of social media on collegiate female runners' body image, including the ideal female body and the ideal athletic body. The researcher asks you to read this form and ask any questions you may have before agreeing to be in the study. Your participation in this research is voluntary. There is no penalty for refusal to participate, and you are free to withdraw your consent and participation in this project at any time. You can skip any questions that make you uncomfortable and can stop the survey and interview at any time. Your decision whether or not to participate in this study will not have any consequences.

This study is being conducted by: Ariane Ballner, M.S. degree candidate of The School of Media and Strategic Communications, Oklahoma State University, under the direction of John McGuire, The School of Media and Strategic Communications, Oklahoma State University.

Procedures

If you agree to be in this study, we would ask you to do the following things: The participant will be asked to complete an online survey about their demographic information, social media use, perfectionism, and self-criticism. After completion of the survey, the researcher and participant will agree on a date and time for an interview via Zoom. The interview will be audio and video recorded. The research study is complete for the participant as soon as the interview is finished.

Participation in the study involves the following time commitment: The online survey should take less than 5 minutes to complete. The researcher projects the interviews to be 30 to 45 minutes in length.

Compensation

You will receive no payment for participating in this study.

Risk:

The interview includes sensitive questions that may lead to emotional distress.

Confidentiality

The information you give in the study will be stored anonymously. This means that your name will not be collected or linked to the data in any way. The researcher may use direct quotes from the participant without including any identifiable information. Only the researcher will know that you have participated in the study. The researcher will collect your information through an online survey and in-depth interview. In regards to the online survey, the researcher works to ensure confidentiality to the degree permitted by technology. It is possible, although unlikely, that unauthorized individuals could gain access to your responses because you are responding online. However, your participation in this online survey involves risks similar to a person's everyday use of the internet. If you have concerns, you should consult the survey provider privacy policy at https://surveyplanet.com/privacy-notice. The interview will be audio and video recorded as well as transcribed. The data will be stored in a password-protected computer. The recording will be deleted after the transcription is complete and verified. This process should take less than one week after the interview took place. When the study is completed, the rest of the data (online survey, transcripts) will be deleted from the researcher's computer and Zoom account. This is expected to occur no later than May 2022.

Contacts and Questions

The Institutional Review Board (IRB) for the protection of human research participants at Oklahoma State University has reviewed and approved this study. If you have questions about the research study itself, please contact the Principal Investigator at 405-564-2390 or Ariane.Ballner@okstate.edu. If you have questions about your rights as a research volunteer or would simply like to speak with someone other than the research team about concerns regarding this study, please contact the IRB at (405) 744-3377 or irb@okstate.edu. All reports or correspondence will be kept confidential.

Statement of Consent

I have read the above information. I have had the opportunity to ask questions and have my questions answered. I consent to participate in the study.

Indicate Yes or No:

I give consent to be audiotaped during this study.
___Yes ___No

I give consent to be videotaped during this study:
___Yes ___No

I give consent for my direct quotes to be used in this study:
___Yes ___No

By writing your first and last name, you indicate that you understand and agree to the information presented above:

Signature: ____ Date: _________

Signature of Investigator: ___________________________________ Date: _________

Appendix G

NEDA Contact Information

NEDA CONTACT INFORMATION

Website:	https://www.nationaleatingdisorders.org/
Mailing Address:	National Eating Disorders Association
	1500 Broadway
	Suite 1101
	New York, NY 10036
E-Mail:	info@NationalEatingDisorders.org
Toll-Free Phone Number:	1-800-931-2237
24/7 Support:	Text 'NEDA' to 741741

VITA

Ariane Ballner

Candidate for the Degree of

Master of Science

Thesis: IDEAL FEMALE BODY VERSUS IDEAL ATHLETIC BODY: HOW SOCIAL MEDIA AFFECTS BODY IMAGE OF COLLEGIATE FEMALE RUNNERS

Major Field: Mass Communications

Biographical:

Education:

Completed the requirements for the Master of Science in Mass Communications at Oklahoma State University, Stillwater, Oklahoma in May, 2022.

Completed the requirements for the Bachelor of Science in Business Administration at Oklahoma State University, Stillwater, Oklahoma in December, 2020.