

THE RELATIONSHIP BETWEEN SOCIAL MEDIA AND DISORDERED EATING IN COLLEGE-AGED FEMALE GYMNASTS

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Abstract

While the relationships between media and eating disorders and disordered eating patterns in college-aged women have been extensively studied (e.g., Bissel, 2004; Grabe & Hyde 2009; Harper & Tiggeman, 2008; Yamamiya, Cash, Melnyk, Posavac, & Posavac, 2005), fewer studies have been conducted with female athletes. More specifically, limited studies have focused on the relationship between social media and eating behaviors of athletes participating in aesthetic sporting events, even though the highest rates of disordered eating patterns occur in sports where female athletes are scored on judges' opinions (Hausenblas & Carron, 1999; Smolak, Murnen, & Ruble, 2000; Sundgot-Borgen, 1994), and where leanness, thinness, and aesthetic skills and aspects are emphasized (Byrne & McLean, 2002; DiBartolo & Shaffer, 2002). Thus, the current study sought to understand the links among college gymnasts' perceptions of body image, disordered eating behaviors, and perceptions of athletes' body images presented on social media. Furthermore, the study also explored how criticism presented on social media relates to disordered eating symptomatology. The study was conducted via an online survey system by 72 18-25-year-old females who were currently competing or recently competed in club or collegiate gymnastics. Results found significant correlations between the severity of critical comments about physical appearance, emotional reaction to criticism about physical appearance, and disordered eating behavior in instances where the comments were not made on social media, but no correlation was found between severity, emotional reaction, and disordered eating behaviors for comments made on social media.

Keywords: *twitter, facebook, snapchat, instagram, eating disorders, athletes, criticism.*

INTRODUCTION

In 2016, Mexican gymnast Alexa Moreno was berated with scolding, merciless comments criticizing her weight and aestheticism as she competed at the 2016 Rio De Janeiro Olympics. Moreno, a petite twenty-two-year-old was subjected to comments from social media users such as, "Alexa Moreno has the body of two gymnasts, a diet before going to Rio would

have been good." While Moreno never publicly commented on the criticism she received on social media, she is not the only one who has experienced it. Numerous great gymnasts, such as Beth Tweedle, Gabby Douglas, Aly Raisman, and Simone Biles, have also been victims of intense criticism via social media outlets. Gabby Douglas was endlessly

criticized on social media during her second Olympic presence in 2016 for her physical appearance and facial expressions, with people saying she did not look happy enough (Boren, 2016). Simone Biles was criticized in 2017 for her hair style with some people saying that Biles needed a 'black friend' and that she did not look 'fresh' (Gray, 2017). While these athletes are at the professional level, they are not alone; athletes at all levels are receiving criticism about their physique from a variety of different venues. It has been reported that 14% of Division I and II NCAA athletes have been a victim of online criticism (Syme, 2014). It has also been found that gymnasts who heard comments about their body image from their coaches were significantly more likely to engage in disordered eating behavior and more likely to report a diagnosed eating disorder (Kerr, Berman, & De Souza, 2006).

Many different factors can play into an individual developing disordered eating pathology or a clinically diagnosable eating disorder. Recently, research has begun to identify how cultural, individual, and biological risk factors contribute to the development of eating disorders (Jacobi, Hayward, de Zwaan, Kraemer, & Agras, 2004; Stice, 2002). Evidence shows that women who present with a clinically diagnosed eating disorder negatively respond to remarks about their bodies (Lask & Bryant-Waugh, 2000; Palmer, 1998). Furthermore, these negative reactions to comments made by family and peers may predict the onset of binge-eating and purging in those living with bulimia nervosa (Palmer, 1998; Stice, 1998).

These reactions are consistent with the hypothesis of objectification theory, which states that the degree and kind of negative reactions, such as disordered eating, can be predicted through the extent to which societal contexts emphasize a woman's authentic opinions or possible observer's perceptions on her body (Fredrickson & Roberts, 1997). Furthermore, the

objectification theory states that females commonly experience sexual objectification with their bodies being narrowed down to specific body parts such as breasts or thighs, instead of their whole body or person being represented (Bartky, 1990). When females experience this objectification from other individuals, it can lead to self-objectification which is exhibited by body monitoring, body shame, anxiety, and symptoms of depression which can all be possible precursors to disordered eating and eating disorders (Moradi, 2010). Cultural norms play a huge factor in the development of self-objectification, as women who are raised in a culture that objectifies the female body are more likely to self-objectify their own body and worth. This may lead to the belief that one's body is valued primarily on the opinions of other people, or that the body is an object for the consumption of others in and of itself. This segmenting of the body alone can lead to negative emotional outcomes such as shame, anxiety, and feelings of wanting to disappear which can all be common precursors to eating disorders. In support, research has found that anxiety stemming from one's appearance can develop from critical comments made about one's appearance (Dion, Dion, & Keelan, 1990). The shame involved in critical comments about one's physique can lead athletes to disruption of sport performance and activity due to focus on self and appearance rather than task-related cues (Lewis, 1992). Because of these negative comments, behaviors consistent with the formation of disordered eating may be undertaken. While many different factors play into an individual developing disordered eating patterns and/or eating disorders, important predisposing factors such as being female, low self-esteem, depression, perfectionism, dieting, pressure to be thin, and weight and shape criticism cannot be ignored.

Based on research, the social comparison theory may pose a possible

explanation for disordered eating patterns and eating disorders in some populations. Festinger (1954) suggested that people have a drive to measure how they are doing in a given circumstance. In order to accomplish that task, those measurements are often made to an individual who is viewed as having better physical appearance or attractiveness than those making the original comparisons (Pinksavage, Arigo, & Schumacher, 2014). Thompson and Sherman (1999) linked these social comparisons to “competitive thinness”, which is a phenomenon seen not only in sport, but out of sport as well. This need to be thinner than the competitor may be especially relevant when discussing aesthetically-centered sports. If an athlete loses a competition or is not up to the level of the competition being seen on social media, the athlete may compare themselves with an athlete who won or is competing at that level and therefore link the other athlete’s body image or thinness to imply a better performance. For example, a 2005 study found gymnasts stated that coaches gave preferential treatment to gymnasts who displayed certain physical characteristics (Cumming, Eisenmann, Smoll, Smith, & Malina, 2005).

Research has traditionally focused on established media forms such as print, television, and movies and their effects on body image in adolescents and/or females (e.g., Bissel, 2004; Grabe & Hyde, 2009; Harper & Tiggemann, 2008; Yamamiya, Cash, Melnyk, Posavac, & Posavac, 2005). Harper and Tiggemann (2008) found that traditional media such as magazine advertisements has an overwhelming impact on adolescent body image. Using fashion magazines, the researchers measured the effects of advertisements on female adolescents’ self-objectification, social physique anxiety, mood, and body dissatisfaction and found that females who were shown photographs of models reported higher levels of self-objectification, social physique anxiety,

mood, and body dissatisfaction immediately after being shown the images. An additional study by Grabe and Hyde (2009) found that adolescent females who watch music television channels have increasingly negative self-esteem. The researchers found that young women who watched music television channels at least once a week had higher levels of self-objectification than those who spent less time watching those channels. Furthermore, research has shown that even looking at a ‘thin-and-beautiful’ media image for just five minutes resulted in a more negative body image (Yamamiya, Cash, Melnyk, Posavac, & Posavac, 2005). The general consensus of research involving body image and media is that media sources that depict thinness correlate to a greater chance of body dissatisfaction, lower self-esteem, and self-objectification (Bissel, 2004). While traditional media and its effects on psychological health has been extensively studied in the past, it is unknown just how much social media usage impacts psychological health and the development of disordered eating in the regular population, let alone how it may impact athletes.

Although occurrence of clinically diagnosed eating disorders in elite and collegiate female athletes has been higher than those of non-athlete females (Johnson, Powers, & Dick, 1999), it is uncertain how media plays a role in an athlete developing disordered eating behaviors. For example, internet exposure has been found to correlate with drive for thinness in adolescent females (Tiggemann & Slater, 2013). Furthermore, for adolescent females, the more time spent on Facebook, the higher the levels of internalization of the thin ideal, body surveillance, and drive for thinness (Tiggemann & Slater, 2013). While this is certainly important to note, with athletes becoming ever-more accessible to the media, and available to fans via social media, research into how media is affecting disordered eating

behaviors in athletes has become more of a necessity.

While results indicate that criticism is related to the development of disordered eating pathology in gymnasts (Rosen & Hough, 1988) and social media correlates with the development of disordered eating patterns in adolescent and college-aged females (Tiggemann & Slater, 2013), these variables have not been studied together. Further, research indicates gymnasts have admitted that criticism about their body has led them to developing disordered eating behaviors (Rosen & Hough, 1988), but studies have not been conducted considering the relationships between social media and disordered eating pathology in female athletes, or more specifically, female gymnasts, an already vulnerable population of athletes (Martisen, Bratland-Sanda, Eriksson, & Sundgot-Borgen, 2013). Therefore, the purpose of this study was to explore criticism, social media usage, and disordered eating in college-age female gymnasts through five main research questions: 1) what are their social media patterns?; 2) is there a relationship between social media usage and disordered eating behaviors?; 3) are there relationships between criticism (i.e., emotional reaction and severity) about physical appearance and disordered eating behaviors?; 4) are there relationships between criticism (i.e., emotional reaction and severity) about physical appearance received on *social media* and disordered eating behaviors?; and 5) which factors predict disordered eating behaviors?

METHODS

Participants were recruited from club gyms and colleges throughout the United States via email, social media, and word of mouth to coaches, support staff, and directly to athletes. The final sample included 72 females between the ages of 18-25 years ($M= 20.12$, $SD=1.89$) who self-identify as competitive gymnasts

(must have competed within the last three years). The overwhelming majority of the participants identified as Caucasian (79.31%), while 6.9% identified as Hispanic/Latina, 5.75% considered themselves Black/African-American, 3.45% considered themselves Asian, another 3.45% identified as Pacific Islander, and 1.15% of the participants identified as Native American. A large majority of the participants competed in college varsity level gymnastics (87.67%), while 6.85% stated that they participated in recreational gymnastics, and 5.48% only competed in club gymnastics; overall average years of participation across levels was 14.93 years ($SD= 2.23$).

To test the research questions, researchers employed the use of four questionnaires combined into one survey. The survey included a demographics questionnaire developed by the researchers to explore basic demographic information, including ethnicity, competitive level, gymnastics skill level, and perceptions of ideal body image for their sport. The second questionnaire included questions about social media engagement, such as do the participants allow strangers to follow them on social media, and have they ever been a victim of offensive and harsh comments on social media were asked. Two questions developed by Sidani, Shensa, Hoffman, Hanmer, and Primack (2015) were used to estimate how often participants used social media in a 24-hour period and how often participants visited nine common social media platforms (e.g., Twitter, Facebook, Snapchat, Instagram).

The Social Hassles Questionnaire (Muscat & Long, 2008) was also used to examine the “context, source, emotional response, and content of critical comments about weight and body shape” (p. 8). The scale has three subscales: the frequency of critical comments, emotional responses to those comments, and the severity of the comments. Overall, there are 12 questions, with 6 Likert-scale questions, ranging from 1 (not at all affected) to 4 (very affected)

and 6 questions examining the emotions felt around the comment or how well they remembered the comment. Examples of these questions include, "To what degree do you feel the comment made by this person about your body has had an impact on how conscious you are about your body shape, diet, or need to change your weight?" and "To what degree did you feel the comment made by this person about your body has resulted in you attempting to make changes to your body?" Participants were also asked to identify who they received the critical comment from, whether the person indicated told them they should lose weight or change their diet, how often they have received critical comments, and how long ago those comments occurred. The sum of all of the Likert scale answers indicate how much the critical comment impacted the participant, with lower scores indicating less impact and higher scores indicating most impact. Original inter-rater reliability was listed as 84% with a sample population of 223 female athletes between the ages of 18 and 25 (Muscat & Long, 2008).

For this study, the Social Hassles Questionnaire was included twice; once in original form as described above, and again with modifications made to identify how the participant reacted to critical comments made on social media about their aesthetic. Modifications consisted of re-phrasing the questions asked to include instances of social media usages, such as, "To what degree did the comment about your body made *on social media* impact your behavior/attitude towards your body?"

The fourth questionnaire was the Eating Attitudes Test (EAT-26; Garner et al., 1982), used to assess disordered eating behaviors. A three-part questionnaire, the EAT-26 includes questions and statements regarding the height, weight, and ideal weight of the participants and 26 items with a Likert-scale measuring from 1 (always) to 5 (never) measuring eating

attitudes. For example, statements such as "I cut my food into small pieces," and "I feel extremely guilty after eating." Finally, five additional questions, with answer choices from 1 (never) to 5 (once a day or more), measure the behavioral components regarding disordered eating. Examples of such questions include "[have you] ever used laxatives, diet pills, or diuretics (water pills) to control your weight or shape?" and "[have you] ever made yourself sick (vomited) to control your weight or shape?" A score at or above 20 indicates that there may be a concern for disordered eating behavior.

Prior to data collection, approval was sought from the University Institutional Review Board. Upon approval, a request for participation was distributed by email, word-of-mouth, and flyers to athletes, coaches, and support staff at universities across the United States. The researchers also recruited participants via social media websites. With this participant request, researchers included the link to a Qualtrics-based survey. The link included informed consent obtained via electronic signature, as well as the components of the survey including the demographics questionnaire, the Social Hassles questionnaire, the modified Social Hassles Questionnaire, and the EAT-26. The participants were informed that the information is anonymous. The survey took approximately 16 minutes to complete.

This study was designed to explore the relationships among social media usage, disordered eating attitudes, and the experience of criticism about physical appearance for female college aged gymnasts.

Descriptive statistics were run to explore the demographics and the social media usage patterns. Pearson's correlations were conducted between participants' subscale scores (i.e., emotional reaction to criticism about physical appearance and severity of the critical comments about physical

appearance) from the Social Hassles Questionnaire and the modified Social Hassles Questionnaire related to social media with the EAT-26. Alpha levels were set at .05. Finally, a multiple regression analysis was run to predict disordered eating behaviors from critical comments from coaches, Instagram and Snapchat usage, emotional reaction to critical comments, severity of critical comments, years of participation in the sport, and body satisfaction. Assumptions of normality were met prior to data analysis.

RESULTS

All of the participants surveyed reported engaging in social media, while 56.2% of did not allow strangers to follow them on social media. As far as body satisfaction, the majority of participants were in the middle with 34.8% stating that they were somewhat satisfied with their body image, 22.5% stating that they were somewhat dissatisfied, and 12.4% stating they were neutral. Only 10% were on the continuum ends, with 9% of participants claiming that they were extremely satisfied with their body image, and 1.1% claiming

that they were extremely dissatisfied. A large portion of the participants claimed that they had received criticism about their bodies from significant people in their lives (43.8%), who included coaches (32.6%), friends (15.7%), mothers (10.1%), fathers (5.6%), and boyfriends (3.4%).

Results for the first research question indicated that participants were using social media for an average of 3.27 hours a day, with Snapchat being the most utilized (see Table 1). In comparison to the college student population as a whole, a previous study found that college students spend a little more than 16 hours per week on social media (Huang & Capps, 2013). For this study, the usage for each individual social media outlet was scaled on a Likert scale because it was determined that participants would not be able to accurately report the hours/minutes spent on each source: 1 (*I don't use this platform at all*), 2 (*Less than once a week*), 3 (*1-2 days a week*), 4 (*3-6 days a week*), 5 (*about once a day*), 6 (*2-4 times a day*), 7 (*5 or more times a day*).

Table 1
Means and standard deviations of social media outlet usage.

Outlet	M	SD
Snapchat	6.37	1.24
Instagram	5.80	1.67
Facebook	4.13	1.74
Twitter	4.09	2.21
YouTube	3.29	1.56
Google+	2.51	2.11
Pinterest	2.50	1.71
Tumblr	1.09	0.44
Reddit	1.03	0.17

Note: Likert Scale options: 1 (*I don't use this platform at all*), 2 (*Less than once a week*), 3 (*1-2 days a week*), 4 (*3-6 days a week*), 5 (*about once a day*), 6 (*2-4 times a day*), 7 (*5 or more times a day*).

Table 2
Descriptive Statistics for Social Hassles Results.

	Minimum	Maximum	Mean	SD
Severity	3	12	7.15	2.72
Emotional Reaction	0	8	4.40	2.28
Severity (Social Media)	3	9	3.60	1.46
Emotional Reaction (Social Media)	0	8	1.17	2.15

Table 3
Regression Analysis.

Variable	B	β	t	p
Coach	-.0201	-.217	-1.39	.175
Severity of comment	-0.053	-.325	-1.41	.168
Emotional reaction to comment	-0.013	-.068	-0.26	.799
Years of participation	-0.021	-.110	-0.74	.463
Body satisfaction	-0.086	-.213	-1.14	.262
Instagram usage	0.023	.094	0.549	.587
Snapchat usage	0.049	.382	2.337	.026

For research questions two, three, and four, descriptives were run (see Table 2) and Pearson's bivariate correlations were computed. For research question two, no significant correlations and a small effect size were found between average hours spent on social media and disordered eating behaviors ($M = 1.74$; $SD = .44$), $r = .199$, $p > .01$). According to Cohen (1992), effect sizes are considered small if $r < .3$, medium if $r < .5$, and large if $r = .5$ or greater. For research question three, a strong correlation in addition to a large effect size was found between severity of the critical comment about physical appearance and disordered eating behaviors, $r = .722$, $p < .01$, as well as emotional reaction to critical comments about physical appearance and disordered eating behaviors, $r = .566$, $p < .01$. This means that the more severe the emotional reaction to the comment and the more severe the comment itself, the more likely disordered eating behaviors were displayed. For the fourth research question, which explored comments made on social

media, no relationships were found between the emotional reaction or the severity of the comment made on social media and disordered eating behavior, $r = -.143$, $p > .01$ and $r = -.026$, $p > .01$, respectively.

For the fifth research question, a multiple regression analysis was conducted to examine potential predictors of disordered eating behavior. The potential predictors included criticism received by coaches, the emotional reaction and severity of comments not made on social media, years of participation in the sport, satisfaction with physical appearance, Instagram and Snapchat usage, and total hours spent on social media (see Table 3). The multiple regression analysis was significant with a large effect size ($f^2 = .43$) predicting 43% of the variance in eating behaviors in college-aged female gymnasts ($F(8, 31) = 2.90$, $R^2 = .428$, $p < .05$). A post-hoc power analysis with the 72 participants was run with the alpha of .05, which determined the power at .99 leading to confidence in the results.

DISCUSSION

The aim of this study was to explore the relationship between criticism, social media usage, and disordered eating in college-age female gymnasts. Significant associations were found between general criticism and disordered eating behavior. Combining variables related to social hassles, body satisfaction, usage of certain social media outlets, and years of participation could predict disordered eating. No relationships were found between social media variables and disordered eating behaviors.

Previous research has found significant association between social media usage and disordered eating in adolescent females (Becker et al., 2011). Furthermore, internet exposure has been linked to internalized body image concerns (Tiggemann & Slater, 2013), and Facebook usage correlates with disordered eating patterns in college-aged females (Tiggemann & Slater, 2013). Although a link was found between general criticism received and disordered eating behaviors, the results of this study did not find a link between critical comments received on social media and disordered eating behaviors in this sample of college-aged female gymnasts. This could be due to a variety of reasons, such as participation in the sport itself, which could serve as a protective factor, or the fact that over 72% of the participants had private social media accounts. This is significant because if a person only allows people that they know to follow them on social media, the chances of receiving a critical comment may be lower than if strangers can make comments. This may be different than professional elite gymnasts, who may be more apt to receive critical comments about their body on social media because of the high level of visibility. Additionally, 55% of the participants of this study reported being either extremely satisfied with their body or somewhat satisfied with

their body, so this group in particular may not have been very vulnerable to criticism.

Another reason could be that these athletes may have developed mental skills that allow them to overcome criticism made on social media, such as coping with adversity. Additionally, while coaches could present as a risk factor in athletes' development of disordered eating patterns (Muscat & Long, 2008), athletes' peers could play a large role as a protective factor (Ulrick-French & Smith, 2006). Being accepted by peers and having strong friendships have been shown to predict perceived competence in athletes (Ulrick-French & Smith, 2006), which serves as a protective factor from disordered eating in itself. This could be explained by the social comparison theory that states people have the drive to measure how they are doing in any given circumstance by comparing themselves to their peers. If they are perceiving themselves as better or on equal level to their peers, the risk of developing disordered eating patterns may be less. Additionally, the objectification theory, which states that the degree and kind of negative reactions can be predicted through the extent to which women are objectified, could pose an explanation as well. If a gymnast is not objectified for her physical appearance, but rather her actual skill, then she may be less likely to be vulnerable to disordered eating behaviors. Finally, self-esteem may also play an important role as a protective factor against the development of disordered eating patterns. Sports participation has been linked to higher self-esteem levels in college-aged women (Cate & Sugwara, 1986), which is linked with lower instances of psychopathology (Larson & Kleiber, 1993). Previous research has found links between preexisting psychopathologies such as depression, anxiety, and disordered eating behaviors (Zucker, Womble, Williamson, & Perrin, 1999; Garner 2004).

Finally, criticism of one's weight has been shown to play a large factor in the

culmination of an athlete developing disordered eating behaviors (Muscat & Long, 2008). The results from this study are consistent with Kerr, Berman, and De Souza's (2006) findings that criticism from coaches could be a factor in a gymnast developing disordered eating patterns. This is because

“Comments from someone critically important in an athlete's life, someone whom the athlete always wishes to please, carry much weight. When these comments focus on a highly sensitive issue, they can devastate the athlete” (Rosen & Hough, 1988, p. 144). By criticizing or praising gymnasts for their weight without taking into effect why the gymnast has lost weight or investigating how the weight could be impacting her performance, significant people in the gymnast's life could enforce disordered eating behaviors (Rosen & Hough, 1988).

LIMITATIONS

It is important to note the limitations for the current study and provide suggestions for future research. The main limitation of this study was the sample size of the participants. Although measures were exhausted in the recruitment of participants; it may have been beneficial to have sent the recruitment materials out earlier in the off season as opposed to a month before the college gymnastics season started. Another limitation was the limited reliability data for the Social Hassles Questionnaire (Muscat & Long, 2008), as it is a relatively new instrument and has not been extensively tested. While the Social Hassles Questionnaire is relatively new, and not extensively tested, it is the only questionnaire that measures emotional response to criticism made specifically for athletes that is readily available. Furthermore, this study did not account for mental health status beyond possible disordered eating behaviors. Since depression and anxiety have been linked as a precursor to disordered eating patterns

(Zucker et al., 1999; Garner, 2004), it may be beneficial to also account for those pathologies in any future study, along with self-esteem.

Future research should seek to further understand the relationship between criticism received on social media and disordered eating behaviors in athletic populations. This study was the first of its kind to study the relationship between social media usage and disordered eating in college-aged female gymnasts, but yet research is still extremely limited in studying these variables in the larger athletic population as a whole. Athletes from different sports may respond differently to criticism than gymnasts would. Because aesthetically centered sports are the most prone to disordered eating pathology (Byrne & McLean, 2002; DiBartolo & Shaffer, 2002), it could be beneficial to study these variables in other aesthetic sports such as figure skating, diving, cheerleading, or even sports that are not aesthetically-centered such as softball or basketball. Additionally, it may be useful to explore whether these variables are impactful in males in aesthetically-centered sports as well and social media usage's impact on mental health in athletes as a whole.

IMPLICATIONS

The results from this study could have implications for athletes from other sports, coaches, parents, mental health professionals, and other important support systems in an athlete's life. This study is consistent with previous findings that critical comments made by significant people in an athlete's life could impact their eating pathology and behaviors. This could be counteracted by immersing the athletes in environments where focus is put on physical and emotional components of an athlete's performance instead of an athlete's physical shape. Furthermore, it would be beneficial for athletes, parents, and other significant people in athletes'

lives to receive training in order to recognize the signs of disordered eating behaviors. Finally, while it has been shown that criticism received from significant people in a gymnast's life correlates with disordered eating, this study did not find links between criticism received on social media and disordered eating behaviors. The study did find that Snapchat usage, which is the most utilized social media outlet by the participants, may predict disordered eating behavior in gymnasts. This finding may be beneficial to significant people in athletes' lives as a way to help educate them of the potential dangers of social media outlets such as Snapchat and how to support an athlete if they develop disordered eating behaviors.

CONCLUSION

While this study did not find significant correlations between criticism received on social media and disordered eating behaviors in college gymnasts, findings were consistent with Kerr et al., (2006) findings that criticism from support systems in athletes' lives can play a significant role in the development of disordered eating behaviors. Comments made by coaches, parents, or other significant figures in athletes' lives can cause shame about one's body image which can lead to a decrease in athletic performance and achievement (Lewis, 1992). In order to combat the effects of criticism in athletes, including comments possibly made on social media, care should be taken to begin education initiatives for coaches, families, friends, and athletes themselves in order to prevent further and dangerous development of disordered eating behaviors and patterns now and in the future.

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