

SOCIAL MEDIA AND MENTAL HEALTH

A Comprehensive Review of Eating Disorders in Young Men and the Literature Gap

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ABSTRACT

Mental Health and Social Media is a literature review of how social networking sites (i.e., Snapchat) and mass media impacts the incidence, risk, and symptoms of eating disorders and disordered eating in men aged 18 to 27. The literature review begins with a general overview and the current literature and research gap. Peer-reviewed articles were searched and entered into an abstract matrix, and 36 were chosen to be in the review. The role of social networking sites (SNS) and mass media in the impact of eating disorder risk, symptoms, and incidence in college-aged men will be explored via the articles, discussing the impact of body image, self-esteem, and drive for muscularity. The main themes in the articles covered for the review are discussed as well as limitations the review faced. Clinical and research implications will be discussed as well.

KEY WORDS: eating disorders, young men, college men, self-esteem, social media, body image, drive for muscularity

Introduction

Disordered eating behaviors and eating disorders have historically been considered female-specific issues. However, anyone can exhibit symptoms and be affected by eating disorders (specified and non-specified) regardless of gender, race, and age (Marques et al., 2011). Eating disorders are rising in prevalence among young adults, with an estimate of eight million Americans diagnosed with OSED or UFED (South Carolina Department of Health, 2018). 1 in 3 men are diagnosed with eating disorders and exhibit disordered eating behaviors and symptoms (National Eating Disorder Association, 2018). The statistics are concerningly high, therefore it is imperative to develop and assess interventional, educational, and preventional programs to assist vulnerable individuals.

Although eating disorders were considered a primarily female psychopathology, there are various factors that can place individuals at risk for developing an eating disorder. Sociocultural models of eating disorders see "Western" culture of beauty (i.e., extreme thin-ness and the objectification of the female body) as specific risk factors for the development of an eating disorder (Moore, 2007). Moore and Bulik (2007) conducted a literature review on the risk factors of eating disorders, and discovered that evidence accumulated in support of both biological (genetic and early developmental trauma) and cultural factors contributing to the increased risk for the development of eating disorders or associated behaviors and attitudes.

Schoen, Brock, and Hannon (2019) examined perceptions of eating disorders in their peers and sought to find gender bias and stereotypes with general eating disorder knowledge. 237 undergraduate college students examined vignettes, and multilevel modeling showed that female characters received stronger endorsements of eating pathology than male characters for similar

symptom presentations. They discovered that college men were more likely than college women to rate female characters as having eating disorders, which shows that there is clear gender bias within perceptions of eating disorder pathology. Eating disorder outreach and prevention work on college campuses should be both gender-inclusive and gender-sensitive.

While the occurrence of bulimia nervosa has decreased since the early nineties of the last century, anorexia nervosa has been on the rise. Smink, Hoeken, and Hoek (2012) reviewed the current literature of the incidence, prevalence, and mortality rates of eating disorders. Using several related databases (such as Pubmed, PsycINFO, etc.), they discovered that all eating disorders had high mortality rates, but anorexia nervosa was the highest. Binge eating disorders were more common among males and older individuals compared to other eating disorders. However, the literature review was limited to Western countries; therefore, research in diverse, marginalized communities is needed.

According to the recent update of the DSM-V, the diagnostic criteria for eating disorders are as follows: Anorexia Nervosa is categorized as "restriction of energy intake relative to requirements," "intense fear of gaining weight or persistent behaviors that interferes with weight gain," or a disturbance in body image; Bulimia Nervosa is categorized as "recurrent episodes of binge eating,"; Binge-Eating Disorder is also categorized as "recurrent episodes of binge eating," but differing from bulimia nervosa due to other criteria; Other Specified Feeding or Eating Disorder (OSFED) and Unspecified Feeding or Eating Disorder (USFED) are specified as "symptoms characteristic of disordered eating behaviors causes clinically significant distress or impairment in daily life" (DSM-V, 2013).

An estimated 10 to 15% of people diagnosed with anorexia or bulimia are males, but due to misinformation, negative stereotypes, lack of education, and social stigma, many believe this estimate is underreported (Mirasol Recovery Center, 2018). There was an underlying assumption within the study that the majority of participants were female within current literature and research, and that, as a whole, males did not have a place within the conversation despite their apparent vulnerability to this disorder.

Kukk and Akkermann (2017) investigated associations between emotional fluctuations and regulation difficulties to predict binge eating and overeating episodes. They used the experience sampling method with both men (N = 61) and women (N = 97). Among women, fluctuations in negative emotion, negative emotion regulation difficulties, predicted binge eating. Among men, however, "trait impulsivity and fluctuations in negative emotion" predicted binge eating (Kukk, 2017). Overeating was not associated with the aforementioned aspects.

College students in particular are vulnerable to eating disorders and disordered eating behaviors (Eisenberg, Nicklett, Roeder, & Kirz, 2011). However, many might be unaware they exhibit symptoms of eating disorders/disordered eating behaviors. After examining the prevalence, correlation, persistence, and treatment-seeking symptoms of eating disorders in college students through the use of an anonymous survey, Eisenberg (2011) found that of the 56% of students who completed the baseline survey, the prevalence of positive screens was 13.5% for women and 3.6% for men.

The perception that eating disorders occur solely or primarily among women, and the consequent exclusion of men from eating disorder research for much of the previous decades has caused crucial gaps in our understanding of the clinical presentation and management of eating

disorder in men, including gaps within our personal understanding of issues related to classification and assessment (Murray et al., 2017). An overview of the history of men diagnosed with eating disorders and synthesized "current evidence that relate to the unique characteristics of male presentations across the diagnostic spectrum of disordered eating" (Murray et al., 2017) discovered that men were significantly more likely to be diagnosed with a residual "other eating disorder" diagnosis, which further demonstrates the lack of applicability of the current classifications schemes to men who are vulnerable to this disorder.

Men with eating disorders are currently underdiagnosed and undertreated, misunderstood by their clinicians and those around them. Most body image/dissatisfaction research and assessments place emphasis on feminine ideals, having more of a focus on areas of importance for females. As a result, men don't have a space in the discussion or feel like they won't be treated as seriously (Strother, Lemberg, Stanford, & Tuberville, 2012). Awareness of these issues is crucial in order to improve the current state of the research and clinical field as an increase in awareness may encourage environments in which men will feel comfortable and have the space and voice to talk about their issues with food and their body without feeling ashamed or ridiculed.

This summative but not exhaustive literature review seeks to evaluate, critique, and synthesize information on research regarding social media's effect on eating disorders and disordered eating in college-aged men. There are a variety of areas that do not have robust research and/or data to target populations like men, such as symptoms of eating disorders and disordered eating, the role of social media on the incidence and risk of eating disorders, the impact of body image, drive for muscularity, and self-esteem, as well as effective treatments and

intervention programs for this community. Current research was analyzed to bring awareness to the literature gap and individuals being excluded in this area, in addition to raising new questions that have yet to be answered within the field. Much of the literature that exists focuses on the diagnosis, symptoms, and treatment of female-identifying people who meet the criteria for eating disorders and disordered eating, but men are rarely allowed a space in this discussion.

Methods

The articles for this literature review were found by searching for a combination of terms regarding social media, eating disorders, and disordered eating among young men. Search terms were restricted by year published and age range. Articles must have been published in the last fifteen years (2004-2019) in order to have current and accurate information within the field. The age range was 18 to 27 years old as this literature review focused on college-aged men, rather than adolescents, as there was not much focus placed on them in this field of research.

The types of articles included in this integrative literature review were limited to prior conducted literature reviews (cross-sectional, meta-analytic) and a small amount of experimental research. With the exception of three, they were focused on W.E.I.R.D. (Western, Educated, Industrialized, Rich, Democratic) societies as there was limited research done in non-western regions. In the EBSCO PsychINFO database, when the search terms "eating disorders" and "young men" are searched together, 1,240 items were found. In Google Scholar, when these same terms were searched together, 18,100 articles were discovered. When "social media" and "eating disorders" were searched together with "young adults", the results shrink to 300. When "young adults" were switched with "young men," the results turned to 170. When "eating

disorders in young men" were searched in the Wiley Online Library, 9,481 items were found. However, the majority of the articles and books included appeared due to the "college" term in the search and were irrelevant. In the peer-reviewed database Science Direct, when these terms are searched together, 9,042 articles were discovered. When "social media" was added, the results shrunk to 2,038. However, the majority placed an emphasis on women. Articles from the Journal of Eating Disorders and the Journal of Behavioral Medicine were discovered through Google Scholar.

Abstracts were searched for relevant information and entered into a matrix. Following the abstract review, the articles were then reviewed in full. Thirty-six articles were included in the final literature review.

See appendix A for the abstract matrix.

Role of Social Media on Eating Disorder Symptoms and Incidence

People were continuously bombarded with images of cisgender, white, uncommonly skinny or muscular people on Social Networking Sites (SNS), such as Instagram, Snapchat, and Facebook (to name a few of the most frequented forums), and, subsequently, experienced a disconnect between the reality of what their body actually looked like and the "ideal" body that was perfectly tailored with editing software (Shoger, 2010). People could become insecure about their bodies and have negatively impacted self-esteem and body image due to this disconnection, which, in turn, could lead to an increased susceptibility in eating disorder risk and symptoms (Lee, Lee, Choi, Kim, & Han, 2014).

The psychological effect of social media, mass media, and popularized images on individuals wasn't a new discovery. However, research and literature only looked at the males' perspective within the recent fifteen years in an attempt to decrease the gap found in this population. Mass Media was seen as a pervasive force in shaping physical appearance and aesthetic ideals, coined as "pop culture," but there were few who studied media exposure on males' body image. 158 men were exposed to TV ads that contained either neutral images or images of the "ideal male." While considered inconsistent with previous research, as there were no dispositional effects noted to influence the schematicity on mood and body image changes, Aguata and Tantleff-Dunn (2004) discovered that participants who were exposed to ideal image ads became significantly more depressed and reported a higher level of muscle dissatisfaction than participants in the neutral ad group.

Pressure from mass media images significantly related to mens' negative body image, feeling worse about themselves and their own bodies, as they failed to conform to the muscular "ideal" male body (Barlett, Vowels, & Saucier, 2008). After conducting a meta-analysis of 25 studies with 93 effect sizes, results from both Study 1[d = -0.19, p < .0001; CI: -0.21 to -0.17,] and Study 2[d = -0.22, p < .0001; CI: -0.30 to -0.14] suggested that as men felt an increased pressure from the media to conform to societal ideals, their emotions toward their bodies worsened. The meta-analysis showed that pressure from mass media and images correlated negatively, to body satisfaction, body esteem, self-esteem, psychological disorders, and behavioral outcomes (i.e., excessive exercise and disordered eating) (Barlett, 2008).

Image exposure in young men (i.e., exposure of images saturated with the societal expectations of what a man is supposed to look like) had a negative impact on their body

satisfaction. Blond (2008) reviewed experimental studies in young men's body dissatisfaction in relation to exposure of images of attractive, muscular men who achieved the beauty ideal. Effect sizes indicated that exposure to these images had a small, but statistically significant negative effect on men's body dissatisfaction. The literature review suggested that young men who are dissatisfied with their bodies have an increased risk for negative self-evaluations when they are exposed to these idealized images (Blond, 2008).

Dittmar (2009) critically analysed the causal link between media and body image. They identified various diverse factors that made individuals susceptible to perfect body ideals in media (i.e., drive for muscularity), and presented findings of previous research that supported a qualified and complex picture of media effects (or influences), and highlighted the importance of individual differences and psychological processes related to self and identity (Dittmar, 2009). However, their study placed more emphasis on females diagnosed with eating disorders than with males, further exacerbating the literature and research gap within this field.

Diggan and McCreary (2004) examined the relationship between consumption of muscle and fitness magazines and body satisfaction in gay and heterosexual men. They found that gay men were more concerned with thinness compared to heterosexual men, and had an increased risk of maladaptive disordered eating whereas heterosexual men had a greater drive for muscularity. Men who did not identify as hetersexual, on average, scored higher on the EAT compared to heterosexual men, indicating poorer eating habits and a higher drive for thinness. However, it was noted that the study lacked a larger sample size and diverse population.

People tend to compare their bodies to those that appear in social media. Berg, Paxton, Keery, Wall, Guo, and Neumark-Sztainer (2007) examined the role of media body comparison as

a mediator of the causal link between the psychological factors and sociocultural factors discovered with the pressures of both body dissatisfaction and drive to be thin in females and males. Although male body comparison was not a significant predictor of body dissatisfaction compared to female body comparison, the study provided a methodology in which the nature of body comparison in young adults were able to be further explored (Berg et al., 2007). However, more research was needed for the development of body comparison and dissatisfaction in males.

Muscularity, self-esteem, depression, and body image had a negative correlation with eating disorder symptoms. In an experimental study, 150 college men were surveyed with comprehensive measurements that included computerized tests which assessed body image perception and the Somatomorphic Matrix (SMM), a computerized body image assessment of an individual's body image related to their known body composition values (Olivardia, Pope Jr., Boroweicki III, & Cohane, 2004). American college men displayed substantial body dissatisfaction, which was closely linked to depression, low self-esteem, eating pathology, and the usage of performance-enhancing drugs. The SMM assessment confirmed the hypotheses that men perceived themselves to have slightly more body fat than in reality, but also perceived themselves to have more muscle than their measured muscularity (Olivardia, 2004).

Holland and Tiggerman (2015) reviewed literature on mass media effects on body image and disordered eating. They conducted a systematic review of 20 studies that were peer-reviewed articles on social networking site (SNS) usage and body image and eating disorders. The articles demonstrated that the use of SNS was associated with negative body image and an increase in eating disordered behaviors. The most problematic were specific activities on SNS that involved viewing and uploading photos, and seeking negative feedback via status updates (Holland,

2015). Underlying processes were addressed in a small amount of studies, and discovered that appearance-based social comparison mediated the relationship between SNS usage, body image, and eating concerns. There were no differences between genders.

1,765 young adults were randomly selected and participated in a cross-sectional survey that examined the association between social media use and eating concerns. There were significantly positive linear associations between the social media use variables and eating concerns (p < 0.001) (Sidani et al., 2016). Participants who spent the majority of their time on social networking sites had a higher risk for disordered eating. Results indicated strong and consistent associations between social media use and eating concerns in a nationally represented sample of young adults.

Gigi, Bachner-Melman, and Lev-Ari (2016) hypothesized that disturbed body image and eating attitudes in gay and bisexual men could be explained by a susceptibility to social messaging. 260 men between the ages of 18 to 25 participated in the study and completed measures of disordered eating, body image, internalization of attitudes toward appearance, and concern for appropriateness (Gigi, 2016). Men who identified as gay and/or bisexual reported higher levels of disordered eating and dissatisfied body image compared to men who identified as heterosexual. Men who identified as gay or bisexual were also vulnerable to social messages and reported being significantly more likely to be influenced by ads of "conventionally attractice" physical appearances than heterosexual men (Gigi, 2016). The results of this study supported the hypothesis that sensitivity to social messages about appearance was a link between sexual orientation and disordered eating in men.

Kim and Chock (2016) sought to examine the relationship between young men and womens' social media use and their body image concerns. 186 participants were sampled for a cross-sectional survey. Results of their study indicated that media exposure (i.e., time spent on social media) was not related to body image concerns. However, online social grooming behaviors (i.e., viewing and commenting on peer's profiles) were significantly correlated with the drive for thinness for all participants (Kim, 2016). The study contributes to the relatively small number of studies that examine the relationships between social media and body image concerns. As social networking sites rise in popularity, a development in understanding how these relationships work is imperative.

Bardone-Cone, Cass, and Ford (2008) examined biopsychosocial factors related to body dissatisfaction in young men within a multivariate and moderator context. Male (n = 111) and female (n = 236) undergraduates filled out self-report questionnaires assessing body mass index (BMI), media influence, a history of weight-related teasing, and socially prescribed perfectionism, along with various indices of body dissatisfaction (Bardone-Cone, 2008). Perceived pressure from the media was consistently related to body dissatisfaction in men whereas multiple biopsychosocial variables accounted for body dissatisfaction in women. Socially prescribed perfectionism and a history of weight teasing each moderated the relationship between BMI and male body dissatisfaction, and identified men who were low in body dissatisfaction. Findings indicated that applying a biopsychosocial framework to the study of body dissatisfaction in men was useful and suggested the need for including other factors, such as male peers and sports involvement, in understanding contributors to male body image (Bardone-Cone, 2008).

Fardouly and Vartanian (2015) conducted a literature review on social media usage and body image concerns. They reviewed correlational, experimental, appearance comparisons, and longitudinal studies. Correlational studies consistently showed that social media usage (particularly Facebook) was associated with body image concerns among young women and men. Longitudinal studies suggested that this association would strengthen over time.

Furthermore, appearance comparisons played a role in the relationship between social media and body image. Experimental studies, however, suggested that brief exposure to one's own

Facebook account does not negatively impact young women's appearance concerns (Fardouly, 2015). Further longitudinal and experimental research was needed to determine which aspects of social media were most detrimental to people's body image concerns.

To investigate the role of social comparison processes in men's responses to images of muscular-ideal male beauty, Hargreaves and Tiggermann (2009) had a sample of 104 male university students view either 15 television commercials with an ideal male image or 15 nonappearance commercials with no ideal image. Men who scored high on appearance orientation were the most vulnerable and found to engage in "greater upward social comparison to muscular-ideal images" which, predictably, changed body satisfaction (Hargreaves, 2009). These findings provided consistent evidence that media images played a significant role in men's body image.

Impact of Body Image, Drive for Muscularity, and Self-Esteem

Not only did social media have an effect on disordered eating, it directly impacted body image, self-esteem, and a drive for muscularity. An insecure body image caused interpersonal problems. Attachment struggles, intimacy fears, and social anxiety could have a causal

relationship with negative body image. College students completed an assessment of the dimensions of body image, interpersonal anxiety and adult attachment processes for both sexes (Cash, Theriault, Armis, 2004). There were significant associations of body image and social anxiety for both sexes, and greater body dysfunction was linked to less secure attachment.

Holmstrom (2004) conducted a meta-analysis on media's effects on body image. An estimate of overall effect size, trends in the research, and the influence of moderating variables were examined and reported. Results suggested depictions might have little to no effect on viewers, but images of overweight people had a positive effect on body image (Holmstorm, 2004). Increasing the number of subjects by combining studies provided a better overall estimation of the relationship between media and body image. The analysis suggested that there was a relationship between media and body image, but that the relationship was discovered to be small. Nonetheless, it addressed the issue that awareness of media saturation on thin body image was needed.

Daniel and Bridges (2009) explored the objectification theory to see which objectification variables mediated the relationship between internalization of media ideals and the drive for muscularity. Through an online survey, 244 college-aged men completed questions with a variety of variables (i.e., internalization of media ideals, self-objectification, body surveillance, body shame, muscularity drive, and BMI). The study utilized path analysis to investigate the relationship and discovered that the internalization of media ideals was the strongest predictor of the drive for muscularity (Daniel & Bridges, 2009). While the variables of objectification theory did not have an impact, contrary to the hypothesis, the study suggested that the theory may not be applicable to men as it is currently measured, citing a need for an improved version.

To find an accurate measure of body image in men, Cafri and Thompson (2004) evaluated existing methods of male body image assessment. They used three guidelines, and found that the most effective measures were the Drive for Muscularity Scale, the Somatomorphic Matrix, and a modification of the previously mentioned measure. A standard of assessing male body image centered on muscular appearance was important as it gave future clinicians the tools they needed in order to properly assess and treat clients who were affected by this.

Self-esteem had an important component in weight concerns. Low self-esteem had been found to have a significant impact on weight concerns (Hatoum & Belle, 2004). After 89 college-aged men read male-directed magazines, the findings discovered an association with concerns about muscularity and general fitness, beauty product use, and dietary supplements for muscle building (Hatoum, 2004). Men's media exposure had also been associated with their standards for women's bodies, meaning that the more male-direction magazines and movies they consumed, the more they valued thinness in women.

Griffiths, Murray, Krug, and McLean (2018) sought to see if social media's association with body image dissatisfaction and eating disorder symptoms were generalizable to minority-identifying men. An online survey advertised for users of popular dating apps, and within a nationwide sample focused in Australia and New Zealand, 2,733 men who identified within the LGBTQ community completed the questionnaire. Participants answered questions about how frequently they used 11 different social media platforms, in addition to questions about their "dating app use, body image, eating disorder symptoms, and anabolic steroids" (Griffiths et al., 2018). Findings saw that Facebook, YouTube, Instagram, and Snapchat were the most used. Griffiths et al. (2018) discovered a pattern of small-sized and positive associations

that emerged between "social media use and body dissatisfaction, eating disorder symptoms, and thoughts about using anabolic steroids." Amongst the social media platforms used, Facebook, Instagram, and Snapchat had the strongest associations. They found that "the associations of social media use with both muscularity dissatisfaction and eating disorder symptoms were stronger for image-centric social media platforms than non-image platforms" (Griffiths et al., 2018). The study also found that previous research suggesting body dissatisfaction and related variables among women can be generalized to sexual minority men. Therefore, additional research with men who identify as LGBTQ+ is needed to explore the distinctions between adaptive and maladaptive social media use in the context of body dissatisfaction, eating disorders, and anabolic steroid use.

Concerned with the relation between sexual orientation, media usage, and eating and body image concerns, Carper, Negy, and Tantleff-Dunn (2010) surveyed a sample of 78 college-aged men. They completed measures of "sexual orientation, eating disorder symptoms, appearance-related anxiety, perceived importance of physical attractiveness, perceptions of media influence, and media exposure" (Carper, 2010). Gay men scored significantly higher on drive for thinness, body dissatisfaction, and body image-related anxiety than their straight counterparts. Perceptions of media influence were higher for gay men and significantly mediated the relation between sexual orientation and eating and body image concerns (Carper, 2010). Sexual orientation had also moderated the relation between perceived media influence and beliefs regarding the importance of physical attractiveness as it was significant for gay men, but not straight men. The current findings suggest that gay men's increased vulnerability to media influence partially accounts for the relatively high rate of eating pathology observed within this

community (Carper, 2010). This study showed the need for samples from men in racially diverse communities and marginalized identities. Prevention programs and services for those who identify within the LGBTQ+ community and other vulnerable communities was in need as well.

Researchers have started investigating the relationship between social media usage and various psychological wellbeing variables, specifically body image (Saiphoo & Vahedi, 2019). They conducted a quantitative review of cross sectional research with an analysis of 63 independent samples (N = 35,552). Using a random-effects model revealed an overall effect size of r = 0.169, CI [0.131, 0.206], which indicates a small, positive, and significant relationship between social media use and body image (Saiphoo, 2019). Other variables found to be significant moderators of the relationship were type of social media use, body image dimension, country grouping, and age.

Treatment and Intervention

When the discussion of eating disorder treatment arose, there was no general consensus on what was effective both in terms of treatment and intervention of these issues. Therefore, there was a high need to further examine the processes involved in the development of eating disorders in males. Because of the stigmatization and sociocultural perception of eating disorders being a primarily female illness, young men vulnerable to this disorder might fail to recognize their symptoms and/or behaviors of an eating disorder (Räisänen & Hunt, 2013).

Majority of eating disorder assessment tools were developed and validated for women, and weren't specific toward mens' needs. Stanford and Lemberg (2012) developed a preliminary tool, the Eating Disorder Assessment for Men (EDAM) as a male-specific eating disorder

assessment tool. Although their sample size was too small to be applicable to the entire population, a factor analysis of EDAM found four components that were said to be "core diagnostic issues" (Stanford & Lemberg, p. 435): binge eating, muscle dysmorphia, body dissatisfaction and disordered eating. The findings of their study held imperative implications of emerging research and prompted the development and utilization of a valid and reliable male-specific eating disorder assessment tool.

Robinson, Mountford, and Sperlinger (2012) surveyed men who were diagnosed with eating disorders and currently seeking treatment. Themes were found through the qualitative study that discussed and explored participants' experiences as men who were diagnosed with eating disorders. Some of the themes discovered illustrated issues that were unique to male experience and presentation (e.g., eating disorders being thought of as a female problem); whereas other themes (e.g., eating disorders were seen as a problem and a solution) were similar to female eating disorder literature. The results of the qualitative study reinforced the importance of eating disorder awareness for men, and its impact on male presentation and treatment preferences (Robinson, Mountford, & Sperlinger, 2012). The study also highlighted areas where care for men diagnosed with eating disorders could be improved, including further training for clinicians, raising awareness to reduce the stigma and isolation involved, and providing male-specife care.

Nonetheless, there was a clear need for inclusive treatment and intervention within this population, and there was still a lack in the current measurement available.

Discussion

The goal of this literature review was to assess current peer-reviewed literature published within the last 15 years on social media's influence on eating disorder incidence and risk in young men aged 18-27 as well as bring awareness to the literature gap discovered within this area of research. After a thorough search in various academic journals, 36 articles met the criteria, were summarized in a literature review matrix, and assessed.

It can be concluded that social networking sites (i.e., Instagram, Snapchat, etc.) have a negative impact on eating disorder symptoms and behaviors in college-aged men. The studies in this literature provide statistical evidence that show there is a significant correlation between social media usage and eating disorder behaviors.

Another conclusion derived from this literature review is that social media usage has a negative effect on body image, drive for muscularity, self-esteem, and body satisfaction in college-aged men as well as men who are in minority communities (i.e., LGBTQ+).

Treatment and intervention programs for men sorely lack as well. Most are female-specific, and the measures that are male-specific either lack the information needed to be generalizable, underdeveloped as a measurement tool, or had not received the results hypothesized and, therefore, was rejected.

Limitations

This literature review faced various limitations. There were a limited amount of studies that achieved the criteria needed. Most studies that surfaced from the search placed a focus on young women or adolescents. This shows that there is a literature gap involved in this section of research, furthering the need for more research and intervention.

Although the review acknowledges the lack of diversity, most of the studies in the literature review are from W.E.I.R.D. countries. Therefore, it is important to conduct further research in marginalized communities and gain different perspectives.

Clinical and Research Implications

A variety of clinical and research implications were discovered within the literature review and considered for this discussion. As the literature gap within the field of eating disorder research is explored, it is imperative that future clinicians and researchers strive to close the gap. While there is a good amount of correlational research supporting the maladaptive effects of SNS on body image and disordered eating, there is an increased need for more longitudinal and experimental studies on this issue. Men diagnosed with eating disorders that seek treatment face boundaries due to gender bias and the social stereotype that eating disorders are a female-dominated prognosis. Clinicians, when faced with these patients, should understand the underlying biases and problems as they do assessment and develop a treatment plan.

The development of educational and outreach programs about eating disorders and disordered eating need to be considered as well. 106 students from undergraduate psychology courses were sampled (though, not all were psychology majors) and recruited to participate in a study on health beliefs, and completed a questionnaire assessment of their knowledge and beliefs about either anorexia nervosa (AN) and bulimia nervosa (BN) (Hunt & Rothman, 2005). The vast majority believed that restrained eating was a major characteristic of anorexia nervosa and cyclic eating for bulimia nervosa. They also believed that AN and BN stemmed from psychological or social factors rather than biological.

Populations vulnerable to eating disorders and disordered eating behaviors have an increased need to be informed, and educated on the various ways of eating disorder presentation in individuals. Another form of research to be explored is the cognitive schemas of body image in men. It could help clinicians explain how some individuals are capable of disregarding social media messages of attractiveness and, therefore, create ways to effectively confront pressures to meet an often-times unattainable goal of beauty.

The role of social media on eating disorder risk and incidence in men should be further explored and researched. As society begins to turn to remote forms of access and entertainment, there is an increase in activity on social media platforms. The effect this could have on eating disorder incidence and risk in college-aged men is unknown; therefore, further research is needed in order to properly gather resources for a vulnerable population.

Conclusion

The literature review focused to describe the gap found within eating disorder research and literature on social media's effect on eating disorder risk and incidence in college-aged men.

36 peer-reviewed articles were submitted to an abstract matrix and analyzed for the review.

While the study faced various limitations in terms of breadth and diversity of literature, it was discovered that social media plays a significant role in how college-aged men viewed themselves and their disordered eating behaviors and further research needs to be conducted to better understand how to better treat this vulnerable population.

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Appendix A

Literature Review Matrix

Author/ Date	Theoretical/ Conceptual Framework	Research Question(s)/ Hypotheses	Methodology	Analysis & Results	Conclusions	Implication s for Future research	Implications For practice
Aguata, Tantleff-D unn 2004	Mass media as a pervasive force in shaping physical appearance and ideals	Effect of media exposure on males' body image	158 men were exposed to TV ads containing ideal male images or neutral images between TV programs	Participants exposed to ideal image Ads became significantly more depressed & higher levels of muscle dissatisfactio n than the neutral ad group	Inconsistent with past research, no dispositional effects were noted that would suggest the influence of schematicity on mood and body image changes	future research should aim to identify spe- cific long-term effects of media exposure.	Understandin g more about males' cognitive schemas of body image, for example, may help explain how some individuals are able to disregard media messages of attractiveness and effectively confront the everyday pressures of meeting an unattainable ideal.
Holmstrom , 2004	Body image	Meta-analysi s on media's effects on body image	An estimate of overall effect size, trends in the research, and the influence of moderating variables are examined and reported.	images of	Increasing the number of subjects by combining studies provides a better overall estimate of the relationship between media and body image. This analysis suggests that	addressing the issue of media saturation of thin images is important.	[Didn't Discuss]

	<u> </u>	<u> </u>			41		
					there is a		
					relationship between		
					media and		
					body image,		
					but that		
					relationship		
					is very small.		
Daniel, Bridges,	Objectificatio n theory	Objectificati on variables would	An online survey accessing	Path analysis were used to investigate	Internalizatio n of media ideals was	Suggest that objectification theory may	[Didn't Discuss]
2009		mediate the relationship	internalizatio n of media	relationships among these	the strongest predictor of	not be applicable to	
		between	ideals,	variables	the drive for	men as it is	
		internalizatio	self=objectifi		muscularity,	currently	
		n of media	cation, body		followed by	measured	
		ideals and	surveillance,		BMI, though		
		the drive for	body shame,		variables of		
		muscularity	muscularity		objectificatio		
			drive, and		n theory had		
			BMI were		no impact		
			completed by		contrary to		
			244		hypotheses		
			college-aged				
			males				
	Accurate measure of	A review of which	Existing methods of	3 guidelines were derived	The most effective	Attempts are underway to	A standard of assessing
Cafri,	body image in	method	male body	for assessing	measures	revise the	male body
Thompson,	men	accurately	image	male body	were the	measure to	image
2004		measures	assessment	image	Drive for	improve its'	centered on
2001		body image	were	mage	Muscularity	reliability	muscular
		in men	evaluated		Scale,	(somatomor	appearance
		III IIICII	Cvaraatea		somatomorph	phic matrix)	арреаганее
					ic matrix, and	pine matrix)	
					a		
					modification		
					to the		
					previously		
					mentioned		
					matrix		
	Social	Investigating	Sample of	Exposure to	Men high on	Findings	[Didn't
Hargreaves	comparison	the role of	104 male	muscular-ide	appearance	provide	Discuss]
	processes and	social	university	al TV	orientation	consistent	
, Tiggerman	response cycle	comparison	students	commercials	were most	evidence for	
n,		processes in	viewed either	led to lower	vulnerable	a role for	
2009		men's	15 TV	muscle	and engaged	media	
		responses to	commercials	satisfaction	in greater	images in	
	1	- 22F 2115 6 5 1 0		- 20021220000	8		

	T	T	T		T	T	Г
		images of muscular-ide al male beauty	w/ ideal male image or 15 nonappearanc e commercials w/ none	and physical attractiveness compared to nonappearan ce commercial group	upward social comparison to muscular-ide al images which, in turn, predicted changes in body satisfaction	men's body image	
Barlett, Vowels, Saucier. 2008	Meta-Analyse s of effect of media image on men's body image	The extent to which pressure from the mass media to conform to the muscular "ideal" male body affects men's self-images	25 studies contributing 93 effect sizes were included in two meta-analyses		Results from both Study 1 and Study 2 suggest that as men felt pressure from the mass media (in correlational and experi-mental designs) they felt worse about their bodies.	Results showed that pressure from the mass media was related to body satisfaction, body esteem, self-esteem, psychologica l disorders (e.g., depression), and behavioral outcomes (e.g., excessive exercising)	[Didn't Discuss]
Hatoum, Belle 2004	Media consumption, body image	The association between media consumption and bodily concerns	In a sample of 89 college men, they read male-directed magazines	Reading male-directed magazines was associated with concerns about muscularity and general fit-ness, beauty product use, and dietary supplement	Men's media exposure was also associated with their standards for women's bodies: the more male-directed magazines a man read and the more movies he saw,	Low self-esteem was linked to weight concerns	[Didn't Discuss]

				use to build muscle.	the more he valued thinness in women.		
Blond, 2008	Literature review on exposure to images	Review of experimental studies in young men body dissatisfactio n correlated with images of attractive muscular men	Impacts on body dissatisfaction were evaluated by calculating and analyzing effect sizes from 15 studies	images of idealized male bodies	3 studies suggest that young men who are dissatisfied with their bodies are at increased risk for negative self-evaluatio ns when exposed to idealized images	Research in other cultures to establish if men's body dissatisfaction is generally affected by idealized images or if this is a phenomenon restricted to certain societies	[Didn't Discuss]
Dittmar, 2009	Body image and negative exposure effect	Identifying diverse factors that make individuals more or less vulnerable to body perfect ideals in media	Critical analysis of the evidence base for a causal link between media and body image	It presents new findings which support a qualified and complex picture of media effects or influences, highlighting the importance not only of individual differences, but also psychologica l processes, related to self and identity.			[Didn't Discuss]
Smink, Hoeken, Hoek	Eating Disorder incidence,	Review on the literature of the	Used Medline/Pub med, Embase,	The occurrence of bulimia	All eating disorders have an	Research in diverse, marginalized	[Didn't Discuss]
2012	prevalence, and mortality rate	incidence, prevalence, and mortality	and PsycINFO databases	might have decreased	elevated mortality risk; anorexia	communities	

	T					<u> </u>	1
		rates of eating	using several key terms	since the early nineties	nervosa the most striking.		
		disorders	relating to	of the last	Compared		
		disorders	eating	century.	with the other		
			disorders and	Century.	eating		
			epidemiology	•	disorders,		
			epideimology		binge eating		
					disorder is		
					more		
					common		
					among males		
					and older		
					individuals		
Strother,	Eating	Underdiagno	Provides a	Men with	Currently,	Further	Promotion of
Lemberg,	disorders in	sis,	survey of	eating	most body	evaluation of	awareness of
Stanford,	men	undertreatme	eating	disorders are	image/dissati	the areas of	these issues
Tuberville,		nt, and	disorders in	currently	sfaction	concern for	is a crucial
2012		misunderstan	men,	underdiagnos	assessments	males would	aspect to
		dings of	highlights the	ed,	tend to place	likely	advance
		eating	dramatic rise	undertreated,	emphasis on	improve the	this field; as
		disorders in	in eating	and	feminine	validity and	awareness
		men	disorders,	misunderstoo	ideals and	effectiveness	may, in turn,
			identifies	d by many	focus on	of body	promote
			issues	clinicians	areas of	image	environments
			specific to	who	importance	assessment	in which men
			males	encounter	for females;	scales for	are able to
				them	as a result, there is an	men	talk about
					invalid		their food and body
					approximatio		issues.
					n of body		issues.
					image		
					dissatisfactio		
					n levels in		
					males due to		
					traditional		
					focus on		
					weight		
Eisenberg,	Eating	Examining	Eating	56% students	Symptoms of	Brief screens	[Didn't
Nicklett,	disorder	the	disorder	completed	Eds were	can identify	Discuss]
Roeder,	symptoms	prevalence,	symptoms	the baseline	prevalent and	a large	
Kirz		correlation,	were	survey.	persistent	number of	
2011		persistence,	measured	Among	among	students with	
2011		and	using the	undergraduat	college	untreated	
		treatment-see	SCOFF	es, the	students in	eating	
		king related	screen and	prevalence of	this study	disorders	
		to symptoms	adjusted for	positive			

Cash, Theriault, Annis 2004	Body image in an interpersonal context: adult attachment, intimacy fears, and social anxiety	of eating disorders in college students Examine the relationships of specific faces of the multidimensi onal body image construct to interpersonal anxiety and adult attachment processes for both sexes	nonresponse using administrative data and a nonresponse survey College students completed standardized assessments of dimensions of body image as well as social-evaluat ive anxiety, fear of romantic intimacy, general adult attachment, and romantic attachment	3.6% for men. Significant associations of body image evaluation, investment, and affect with social-evalua tive anxiety for both sexes	Greater body image dysfunction was linked to less secure general attachment	the application of interpersonal therapy to body image problems warrants study, given its explicit focus on interpersonal relationships and experiences	[Didn't Discuss]
Diggan, McCreary, 2004	Body image, eating disorders, muscularity	Examined the relationship between consumption of muscle and fitness magazines and/or various indices of pornography and body satisfaction in gay and heterosexual men	Participants completed body satisfaction questionnaire s that addressed maladaptive eating attitudes, the drive for muscularity, and social physique anxiety	Viewing and purchasing muscle and fitness magazines correlated positively with levels of body dissatisfactio n for both gay and heterosexual men	As well, the results indicate that gay men are more concerned with thinness than are heterosexual men, as reported by scores on the EAT. On average, non-heterose xuals scored much higher than heterosexuals , which indicated	A larger sample size with a diverse population	[Didn't Discuss]

Berg,	Body	Examined	Participants	In females,	poorer eating attitudes and a greater desire to be thin.		[Didn't
Paxton, Keery, Wall, Guo, Neumark- Sztainer, 2007	dissatisfaction and body comparison	the role of media body comparison as a mediator of the relationships between psychologica I factors and sociocultural pressures to be thin and body dissatisfaction in both females and males	from diverse background completed a self-report questionnaire. Path analysis was used to test a cross-sectiona I model in which media body comparison mediated the impact of self-esteem, depressive mood, parent dieting environment, friend dieting, TV xposure, magazine message exposure, weight teasing and body mass index (BMI) on body dissatisfaction .	media body comparison partially or fully mediated relationships between self-esteem, depressive mood, friend dieting, magazine message exposure and BMI, and body dissatisfactio n. In males, media body comparison was not a significant predictor of body dissatisfactio n.	research provides a platform from which to further explore the nature of body comparison in young adults, especially in males.	The need to further examine processes that are involved in the development of body dissatisfaction in males.	Discuss

Olivondia	Mugaylanita	Examined	The	aantama =	The SMM	there is a	mid24
Olivardia, Pope Jr.,	Muscularity, self-esteem,	body image	comprehensiv	contemporar y American	generally	large and	[Didn't Discuss]
Borowieck	depression,	and	e battery of	men display	confirmed the	perhaps	Discussi
i III,	eating	associated	measures	substantial	hypotheses	widening	
· ·	disorder		included a		that	gulf be-	
Cohane, 2004		psychologica l traits in	novel	body dissatisfactio	American	_	
2004	symptoms			n and that		tween body	
		college men	computerized	this	college men would exhibit	reality and	
			test of body	dissatisfactio	substantial	body ideal in	
			image			contemporar	
			perception,	n is closely	lev-	У	
			the	associated	els of body		
			Somatomorph		dissatisfactio	young	
			ic Matrix, in	depression,	n. As	American	
			which	measures of	predicted, the	men.	
			subjects could		men		
			navigate	pathology,	perceived		
			through a	use of	themselves to		
			range of body	performance-	be slightly		
			images,	enhancing	fatter than		
			spanning a	substances,	their actual		
			wide range of	and low	body fat		
			body fat and	self-esteem.	measurement,		
			muscularity,		although,		
			to answer		contrary to		
			various		prediction,		
			questions		the men		
			posed by		perceived		
			the computer.		themselves to		
					be		
					slightly more		
					muscular		
					than their		
					measured		
					muscu-		
TT 11 1	D 1 :	т.,	A	A 1 1	larity.	1,1 1	ID: L M
Holland,	Body image	Literature	A systematic	As a whole,	A small	although	[Didn't
Tiggerman	and disordered	review on	search for	these	number of	there is a	Discuss]
n,	eating	mass media	peer-reviewed	articles	studies also	good deal of	
2015		effects on	articles on	demonstrated	addressed	correlational	
		body image	SNS use and	that use of	underlying	research	
		and	body image	SNSs is	processes	supporting	
		disordered	and eating	associated	and found	the	
		eating.	disorders	with body	that	maladaptive	
			resulted in 20	image and	appearance-b	effect of	
			studies	disordered	ased social	SNS use on	
			meeting	eating.	comparison	body image	
			specific	Specific SNS	mediated the	and	

			inclusion criteria.	activities, such as viewing and uploading photos and seeking negative feedback via status updates, were identified as particularly problematic.	relationship between SNS use and body image and eating concerns. Gender was not found to be a moderating factor.	disordered eating, more longitudinal and experimental studies are needed.	
Sidani, Shensa, Hoffman, Hanmer, Primack, 2016	Eating disorder etiology and social media usage	Examine the association between social media use and eating concerns in a large, nationally representative sample of young adults	Cross-section al survey w/ 1,765 young adults aged 19 to 32 years. Random selection.	participants in the highest quartiles for social media volume and frequency had significantly greater odds of having eating concerns (adjusted odds ratio 2.18, 95% CI 1.50 to 3.17 and adjusted odds ratio 2.55, 95% CI 1.72 to 3.78, respectively). There were significant positive overall linear associations between the social media use variables and eating concerns (P<0.001).	Results indicate a strong and consistent assoc. between social media use and eating concerns in a nationally rep. sample of young adults; it was apparent whether social media use was measured as volume or frequency	Examine more closely the influence of specific characteristi cs of social media use, including content-relat ed and contextual features	[Didn't Discuss]

Hand	Datina	A	106 -4-14	The area 1-41-	17a a4 aa a i a ai t	D 1 - 1 - 1	To diagram
Hunt, Rothman, 2005	Eating disorders, mental models	Assessment of mental models of anorexia/buli mia nervosa	106 students from lower-level psych classes were sampled, though majority weren't psych majors. They were recruited for a study on health beliefs, and randomly assigned to complete a questionnaire assessing their knowledge and beliefs about either AN or BN in small group sessions	The analytic approach tested for differences in responses as a function of eating disorder and participant gender; used ANOVA to examine the use of different types of info and log-linear analysis to evaluate the use of specific categorical items	Vast majority of students believed that the primary characteristic of AN is restrained eating and the primary of BN is cyclic eating. They believed AN and BN are more likely to stem from psychological or social factors than from bio factors.	Research in diverse, marginalized populations that typically aren't in research	Indicate a need for additional education on eating disorders, particularly among populations likely to encounter them (high school, college).
Gigi, Bachner-M elman, Lev-Ari, 2016	Disordered eating, social messages, sexual orientation	Hypothesize d that disturbed body image and eating attitudes in gay and bisexual men wouldb e partially explained by susceptibility to social messages	260 men bet. 18-35 y/o participated in the study. They completed measures of disordered eating, body image, internalization of attitudes toward appearance, and concern for appropriatene ss.	Gay and bisexual men reported higher levels of disordered eating and dissatisfactio n w/ their bodies than het. Men. Gay and bi men were more susceptible than het men to social messages, and reported being significantly more	Results provide support for the hypothesis that sensitivity to social messages about appearance explains, partially, the link bet sexual orientation and disordered eating in men	[Didn't Discuss]	[Didn't Discuss]

	1	T		· a 1		T	
				influenced			
				than het men			
				by ads			
				focusing on			
				physical			
				appearance			
Kim,	Social .	Examine the	Cross-section	Results of	The results of	Future	[Didn't
Chock,	comparison	relationships	al survey	this study	this study	research	Discuss]
2016	theory	between	where 186	indicated that	contribute the	needs to	
		young men	participants	simple	relatively	investigate	
		and women's	were	exposure	small number	the	
		social media	randomly	(time spent	of studies	differences	
		use and body	sampled.	on social	examining	between	
		image		media) was	the	these two	
		attitudes		not related to	relationships	types of	
				body image	between	body image	
				concerns.	social media	concerns and	
				Online social	and body	their	
				grooming	image	relationship	
				behaviors,	concerns.	to social	
				such as	Given the	grooming	
				viewing and	growing use	behaviors.	
				commenting	of social		
				on peer's	media sites,		
				profiles,	particularly		
				however,	by young		
				were	adults, it has		
				significantly correlated	become		
				with the	increasingly		
				drive for	important to		
				thinness for	develop an understandin		
				both female	g of how		
				and male	these		
				participants.	relationships		
				participants.	work.		
Bardone-C	Biopsychosoci	This study	Male (n =	Perceived	Findings	[Didn't	[Didn't
one, Cass,	al factors in	examined	111) and	pressure	indicate that	Discuss]	Discuss]
Ford	body	biopsychosoc	female (n =	from the	applying a	Discussi	Discussi
2008	dissatisfaction	ial factors	236)	media was	biopsychosoc		
2000	dissanstaction	related to	undergraduate		ial		
		body	s filled out	related to	framework to		
		dissatisfactio	self-report	body	the		
		n in young	questionnaire	dissatisfactio	study of body		
		men within	s assessing	n in men	dissatisfactio		
		multivariate	body mass	whereas	n in men is		
		main variance	index (BMI),	multiple	useful and		
	<u> </u>	<u> </u>	mack (Divil),	manipic	aperar and	<u> </u>	

		and moderator contexts	media influence, a history of weight-relate d teasing, and socially prescribed perfectionism , along with various indices of body dissatisfaction .	biopsychosoc ial variables accounted for body dissatisfactio n in women. Socially prescribed perfectionism and a history of weight teasing each moderated the relationship between BMI and male body dissatisfactio	suggest the need for including other factors, such as male peers and sports involvement, in understandin g contributors to male body image.		
Fardouly,	Literary	An overview	Correlational,	n, identifying men low in body dissatisfactio n	Further	Diverse	[Didn't
Vartanian, 2015	review on social media usage and body image concerns	of research on social media and body image concerns in young adults	experimental, appearance comparisons, and longitudinal studies were analyzed	studies consistently show that social media usage (particularly Facebook) is associated with body image concerns among young women and men, and longitudinal studies suggest that this association may strengthen over time.	longitudinal and experimental research is needed to determine which aspects of social media are most detrimental to people's body image concerns.	population and on other SNS platforms (i.e., Instagram)	Discuss]

	T	1	T		Т	Г	
				Furthermore,			
				appearance			
				comparisons			
				play a role in			
				the			
				relationship			
				between			
				social media			
				and body			
				image.			
				Experimental			
				studies,			
				however,			
				suggest that			
				brief			
				exposure to			
				one's own			
				Facebook			
				account does			
				not			
				negatively			
				impact young			
				women's			
				appearance			
				concerns.			
Griffiths,	Social media,	If social	A nationwide	A pattern	Previously	Additional	[Didn't
Murray,	Body image,	media's	sample of	of	documented	research	Discuss]
Krug,	Eating	association	2,733 sexual	small-sized	associations	with sexual	Discussi
McLean,	disorder	with body	minority men	and positive	of social	minority	
Wickean,			•	associations		•	
2010	symptoms	image	completed an		media use	men is	
2018		dissatisfactio	online survey	emerged	with body	needed to	
		n and eating	advertised to	between	dissatisfactio	elucidate the	
		disorder	Australian	social media	n and related	distinctions	
		symptoms	and New	use and body	variables	between	
		can be	Zealand users	dissatisfactio	among	adaptive and	
		generalized	of a popular	n, eating	women and	maladaptive	
		to minority	dating	disorder	girls appear	social media	
		men	app.	symptoms,	to generalize	use in the	
			Participants	and thoughts	to sexual	context of	
			answered	about using	minority	body	
			questions	anabolic	men. Social	dissatisfactio	
			about how	steroids.	media	n, eating	
			frequently	Facebook,	platforms that	disorders,	
			they used 11	Instagram,	more	and anabolic	
			different	and Snapchat	centrally	steroid use.	
			social media	evidenced	involve		
Ì			platforms in		imagery may		
					i iiiiaoery may		l l

			. 1.15	41	1		
			addition to	the strongest	be of greater		
			questions	associations.	concern than		
			about their	The	non image		
			dating app	associations	centric		
			use, body	of social	platforms.		
			image, eating	media use			
			disorder	with both			
			symptoms,	muscularity			
			and anabolic	dissatisfactio			
			steroids.	n and eating			
			Facebook,	disorder			
			Youtube,	symptoms			
			Instagram,	were stronger			
			_	for			
			and Snapchat were the most				
				C			
			frequently	social media			
			used social	platforms			
			media	(e.g.,			
			platforms	Instagram)			
				than			
				non-image			
				centric			
				platforms			
				(e.g.,			
				Wordpress);			
				no			
				differences			
				were			
				observed for			
				body fat			
				dissatisfactio			
				n, height			
				dissatisfactio			
				n, or			
				thoughts			
				about using			
				anabolic			
				steroids.			
Sanftner,	Psychosocial	This study	A sample of	Results	comparisons	future	[Didn't
	risks for	examined	266 women	revealed that	between a	research	Discuss]
2011	eating	health-relate	and 114 men	women	generic and	exploring the	
	disorders	d quality of	from a	reported	an eating	relationship	
		life in	Midwestern	significantly	disorder-spec	between	
		relation to	university	higher levels	ific quality of	body	
		psychosocial	completed	of	life scale	dissatisfactio	
		variables	questionnaire	psychosocial	revealed that	n and quality	
		associated	s asking about		the eating	of life more	
<u> </u>	l	1	accut				

		1.1 .1	1 4 .	д т	1' 1	.1 11 .	
		with eating	both generic	than men. In	disorder-spec	thoroughly is	
		disorders.	and eating	addition, for	ific scale had	needed.	
			disorder-speci	-	higher		
			fic	but one of	sensitivity for		
			health-related	the	use in a		
			quality of life,	psychosocial	college		
			as well as	risk variables	student		
			body	was found to	population.		
			dissatisfaction		These results		
			, objectified	with lower	suggest that		
			body	quality of	women who		
			consciousness	life.	are at higher		
			,		risk for		
			internalizatio		developing		
			n of		an eating		
			sociocultural		disorder		
			ideals, and		suffer from		
			restrained		lower quality		
			eating.		of life, and		
					that eating		
					disorder-spec		
					ific quality of		
					life scales are		
					useful in		
					understandin		
					g women and		
					men in a		
					general		
					population.		
Murray,	Eating	Provides an	[Didn't really	Further,	The	[Didn't	Having a
Nagata,	disorders in	overview of	say their	males are	perception	Discuss]	better
Griffiths,	men	the history of	methodology]	significantly	that EDs		diagnostic
Calzo,		male EDs		more likely	occur solely		criteria
Brown,		and		to be	or primarily		
Mitchison,		synthesizes		diagnosed	among		
Blashill,		current		with a	females, and		
Mond		evidence		residual	the		
		relating to		"other ED"	consequent		
2017		the unique		diagnosis,	exclusion of		
		characteristic		further	males from		
		s of male		demonstratin	ED research		
		presentations		g the lack of	for much of		
		across the		applicability	the past five		
		diagnostic		of the current	decades has		
		spectrum of		classification	rendered key		
		disordered		s schemes to	gaps in our		
		eating.		males.	understandin		
							<u> </u>

Saiphoo, Vahedi, 2019	Body image Emotions,	researchers have started to investigate the relationship between social media use and various psychologica l wellbeing variables.	Quantitative review of cross sectional research, An analysis of sixty-three independent samples (N = 36,552)	using a random-effec ts model revealed an overall effect size of r = 0.169, CI [0.131, 0.206], indicating a small, positive, and significant relationship between social media use and body image disturbance.	g of the clinical presentation and management of ED in males, along with gaps in our understandin g of issues relating to classification and assessment. Type of social media use, body image dimension, country grouping, and age were all found to be significant moderators of this relationship.	[Didn't Discuss]	[Didn't Discuss]
Akkerman n, 2017	Emotions, binge eating	the associations between emotional fluctuations and regulation difficulties in predicting binge eating and	sampling method with 97 women and 61 men	Among women, fluctuations in negative emotion, emotion regulation difficulties, etc., predicted binge eating. Among men, trait	did not associate with aforemention ed aspects. Results suggest that fluctuations in negative emotions should be studied in the	A longer period of time to do the study, possibly with less methods that disrupt daily life.	Discuss]

	1		1		1	T	T
		overeating		impulsivity	context of		
		episodes		and	emotion		
				fluctuations	regulation		
				in negative	difficulties.		
				emotion			
				predicted			
				binge eating			
Carper,	Media	Explored the	78 college	Gay men	exual	Samples	Prevention
Negy,	influence,	relation	men	scored	orientation	from men in	program/serv
Tantleff-D	body image,	between	completed	significantly	also	racially	ices for those
			•		moderated	_	within the
unn,	eating	sexual	measures of	higher on		diverse	
2010	concerns,	orientation,	sexual	drive for	the relation	communities	LGBTQ/
2010	sexual	media usage,	orientation,	thinness,	between		other
	orientation	eating and	eating	body	perceived		vulnerable
		body image	disorder	dissatisfactio	media		communities
		concerns	symptoms,	n, and body	influence and		
			appearance-re	_	beliefs		
			lated anxiety,	anxiety than	regarding the		
			perceived	their straight	importance of		
			importance of	counterparts.	physical		
			physical	Additionally,	attractiveness		
			attractiveness,	perceptions	, as this		
			perceptions of		relation was		
			media	influence	significant		
			influence, and		for gay men,		
			media	for gay men,	but not		
			exposure.	and	straight men.		
			ехрозите.	significantly	The current		
				mediated the	findings		
					_		
				relation	suggest that		
				between	gay men's		
				sexual	increased		
				orientation	vulnerability		
				and eating	to media		
				and body	influence		
				image	partially		
				concerns.	accounts for		
					the relatively		
					high rate of		
					eating		
					pathology		
					observed in		
					this		
					population.		
Schoen,	Gender bias,	Examined	237	Multilevel	Gender bias	[Didn't	Eating
Brock,	Eating	perceptions	undergraduate		about eating	Discuss]	disorder
Hannon,	disorders	of eating	students went	showed that	disorders	Discussi	outreach and
maiiion,	disorders	or caulig	students wellt	SHOWEU HIAL	uisoiucis		ountach and

1		1					,
2010		disorders in	through	female	affected men		prevention
2019		their peers	vignettes	characters	and women		work on
				received	differently in		college
				stronger	this study		campuses
				endorsements			needs to
				of eating			be both
				pathology			gender-inclus
				than male			ive and
				characters for			gender-sensiti
				similar			ve.
				symptom			
				presentations			
				. College			
				men were			
				more likely			
				than college			
				women to			
				rate female			
				characters as			
				having eating			
				disorders.			
Stanford,	eating	examining	a qualitative	A binary	To ensure	This	Further
Lemberg	disorder	experiences	interview	logistical	proper	instrument	development
Lemoerg	etiology/symp	with	study with 78	regression	diagnosis and	has potential	of the EDAM
2012	toms	help-seeking	men and 30	was used to	to facilitate	to become a	and
2012	toms	men	women	investigate	more	valid eating	continued
		inicii	Wollien	whether the	efficacious	disorder tool	research on
				Eating	treatment of	for males;	men with
				Disorder	men, the	however, to	eating
				Assessment	present study	be effective,	disorders will
				for Men	examined the	it requires	help to
				(EDAM)	preliminary	further	*
				` . ′	•	_	ensure proper
				total score	Eating	research.	assessment
				was able to	Disorder		and
				discriminate	Assessment		diagnosis,
				between men	for Men		and will lead
				with eating	(EDAM) to		to more
				disorders and	determine the		comprehensi
				men without	extent to		ve and
				eating	which the		efficacious
				disorders.	EDAM		treatment of
				The EDAM	predicted		men with
				total score	eating		eating
				was	disorders in		disorders.
				developed to	males and to		
				predict one's	evaluate the		
				risk of	factors most		

Dalaina				having an eating disorder. Logistic regression was conducted to assess if it could significantly predict an eating disorder in males. The omnibus test of model coefficients resulted in χ2 = 36.026, df = 1, N = 78, p < .001. The model was significant 432 S. C. Stanford and R. Lemberg at predicting an eating disorder correctly at an overall percentage of 82.1% of the men.	specific to men with eating disorders.	The months	
Robinson, Mountford , Sperlinger 2012	eating disorders	aimed to explore experiences of men currently using eating disroder services	Eight men from two eating disorder services were interviewed about their experiences of seeking and receiving treatment.	Two superordinate themes emerged from Interpretative Phenomenolo gical Analysis: (1) difficulty seeing self as having an eating	Difficulty admitting the eating disorder may link with eating disorder psychopathol ogy as well as gender-specif ic issues.	The results reinforced the importance of individual formulation when considering a male service-user' s maleness and its impact on	The findings also demonstrate the need to raise awareness of EDs in men: among professionals to facilitate detection, within society to

				disorder; and (2) experiences of treatment: how important is gender? The underlying themes varied in their specificity to men, with some echoing findings from the female eating disorder literature		his ED presentation and treatment preferences	decrease men's fears of a negative response and among the men themselves to assist in the process of admitting that there is a problem.
Hunt, Räisänen 2014	gender constructions, eating disorder etiology/symp toms	To understand how young men recognise eating disorder (ED) symptoms and decide to seek help, and to examine their experiences of initial contacts with primary care.	10 men aged 16–25 years with various EDs including anorexia nervosa and bulimia nervosa	The widespread perception of EDs as uniquely or predominantly a female problem led to an initial failure by young men to recognise their behaviours as symptoms of an ED. Many presented late in their illness trajectory when ED behaviours and symptoms were entrenched, and some felt	Although increasingly common in young men, widespread cultural constructions of EDs as a 'women's illness' mean that men may fail to recognise ED symptoms until disordered behaviours become entrenched and less tractable to intervention	Until information resources are made more appropriate for men with EDs, health service providers need to be particularly sensitive to men's needs in relation to an illness so strongly associated with women. Raising awareness of EDs morewidely in society is also crucial to help men (and women)	Findings from this study highlight these stark differences between men and women and emphasize the need to cultivate a clinical community willing to advocate for accessible, gender-speci fic eating disorder treatment for men.

	that	to recognise	
	opportunities	and seek	
	to recognise	help before	
	their illness	their	
	had been	symptoms	
	missed	and	
	because of	behaviours	
	others' lack	become	
	of awareness	intractable.	
	of EDs in		
	men.		