



SOCIAL MEDIA AND ITS CONNECTION TO THE DEVELOPMENT OF EATING  
DISORDERS

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## **Abstract**

Despite seeming ubiquitous, social media has only been around for about 20 years. Many people around the world are now logging into social media communities, which are communities online where people can interact with others and share, create, and trade ideas and information (Ghaznavi & Taylor, 2015). While such communities can be useful, they have had a negative impact on the development of eating disorders. There has been growing understanding and increased interest in the complexity of eating disorders in recent years (Costa, Maroco, Gouveia, & Ferreira, 2016), and it is clear that social media and pro-eating disorder websites promote body idealized images that may influence the development of eating disorders, although media has had an impact on this issue prior to social media. While women are most often associated with the topic of eating disorders, men are also at risk. In addition, adolescents and children use the Internet more than other groups, so they are at a higher risk for being impacted by these websites. Beyond the United States, different cultures around the world have different body ideals and are also impacted by social media, but in different ways. The problems associated with the relationship between social media communities and eating disorders demands solutions. Both policy and practice are being developed, but there remains work to be done.

## Social Media and its Connection to the Development of Eating Disorders

With the popularity of social media in today's world, it seems as though it has been around for many decades. Social networking websites, though, have only been around for about twenty years. The first known social media website, Six Degrees, was created in 1997 by Andrew Weinreich (Hendricks, 2013; Prssa, 2012). This website allowed users to construct a personal profile and form friendships with other users (Hendricks, 2013). The first blogging website was created in 1999, and this form of communication is still popular today (Hendricks, 2013). MySpace and LinkedIn were up and running in the early 2000s, and YouTube was created in 2005. Facebook and Twitter became available to the public in 2006, and Tumblr and Pinterest were not far behind (Hendricks, 2013).

With the growing popularity of social media, social media websites were not far behind. Social media websites are communities online where people can interact with others and share, create, and trade ideas and information (Ghaznavi & Taylor, 2015). Today, many of these social media communities are linked together and allow users to post across them (Hendricks, 2013). For example, if an individual likes a pin on Pinterest, they have the option to post this pin on Facebook or Twitter and share it with their peers. The increasing utility of social media communities in the past years has led to an increasing number of people who are plugging into the phenomena. Many individuals around the world are using social media on a daily basis, so it is important to understand what it is and the consequences to those who use it.

One of the most dangerous consequences of visiting these websites is the fact that social media has a significant impact on the development of eating disorders. There are different types of eating disorders, but in general, they are life threatening psychological conditions that are characterized by a consuming drive to be thin, losing control over eating, and having a fear of gaining weight (Costa et al., 2016). The ideal for body image in today's culture tends to be an extremely thin one (Van Vonderen & Kinnally, 2012). Thin women, and men who are muscular and handsome, are common portrayals in the media (Russello, 2013). Social media specifically is filled with pictures that promote the thin ideal (Perloff, 2014). These images are usually of thin models, athletes, everyday people, and celebrities (Ghaznavi & Taylor, 2015). The most popular images plastered on these websites represent women who are sleek and slender (Perloff, 2014). These websites are powerful influencing factors for body image concerns, and they can be associated directly with body dissatisfaction; eventually, these websites can influence people to accept or follow what is being depicted (Singh, Parsekar, & Bhumika, 2016). In addition to photos of thin women, accompanying quotes, song lyrics, and poetry may add to the promotion of disordered eating and behavior (Ghaznavi & Taylor, 2015).

There is much to talk about when combining the topics of social media and eating disorders. Many theories have been proposed, and a number of them explain how social media communities are involved in developing eating disorders. In addition, not only do popular social media platforms like Facebook and Twitter contribute to eating disorders, but websites that are dedicated to promoting eating disorders exist as well (Ghaznavi & Taylor, 2015). There is the pro-anorexic community and the fat acceptance community

(Marcus, 2016). Pro-eating disorder websites and *fatosphere* communities are online, and these different websites offer support and tips on how to change and accept one's body. *Thinspiration* content that promotes the thin ideal is found on these pro-eating disorder websites, but it has also started to make appearances on more mainstream social media platforms (Ghaznavi & Taylor, 2015). Another contributing factor of social media to eating disorders involves tagging photos on social media, which gives users even more access and opportunity to view harmful content online.

Women tend to be the group that society thinks about when discussing eating disorders. A double standard of aging between men and women continues to exist, with women looking for more validation of their worth to society (Prieler & Choi, 2014). Validation is particularly hazardous when body image and women come together, and women may not always realize that they have internalized the thin ideal (Russello, 2013). The connection between body dissatisfaction and internalization is only one risk factor associated with body image issues. Other risk factors associated with body image are low self-esteem, perfectionism, depression, and low self-worth (Perloff, 2014). The problems may be widespread with approximately 50% of young women having intense concerns about their bodies (Perloff, 2014).

Other groups have problems with eating disorders as well. For example, many people do not think about men in regards to these issues; however, men make up 25% of anorexia nervosa and bulimia nervosa cases (Dakanalis et al., 2016), and 36% of those with binge eating disorder are male ("Research on males and eating disorders," n.d.). Adolescents and children may also be at risk. These groups are the biggest users of social

media, and they are logging onto the Internet more than watching television and reading magazines (Perloff, 2014). They are also preoccupied by how others view them, so they are going to be impacted the most out of all other age groups (Koutamanis, Vossen, & Valkenburg, 2015). The implications of eating disorder content, then, may be the most harmful for this age group. Being more vulnerable means that these youthful individuals are more susceptible to believing they need to look like what the Internet depicts and tells them what to look like (Ghaznavi & Taylor, 2015).

In addition to a concern with people of different ages being affected by social media, there are concerns with regard to people around the world and the impact of social media more broadly. Different sub-cultures and races have their own body ideals within the United States, and in a very real way, those different body ideals can be seen more generally in individualistic and collectivistic cultures around the world. An example of this is that the body ideal for African American women is different than the body ideal for European American women (Prieler & Choi, 2014).

With all of the concern about social media and its impact on body image and eating disorders, there has been an increasing call for government action and policies (Puhl, Neumark-Sztainer, Austin, Luedicke, & King, 2014). School age children and adolescents especially need to be educated on the dangers of exploring these websites. Discussions in the United States have centered on the issues of passing the “Federal Response to Eliminate Eating Disorders Act of 2013, Pub. L. No. 6256- 6260, S 3260, 156 Stat. 2101 (2016)” (Puhl et al., 2014). In addition, policies in different counties have

tried to address how thin a model can be when displayed on media content (Puhl et al., 2014).

Social media, body image, and eating disorders are topics that are complicated when taken individually. When combined, it is challenging to get a clear picture of what is happening and whether or not there is a solution to the problems that exist.

Nonetheless, this paper will discuss some of the major issues mentioned previously in more detail. Social media, including its different uses will be explored. The negative aspects of using social media will be discussed, and an overview of the differences between mass media and social media will be provided. In addition to an overview of social media, the types of eating disorders, the health effects of them, and issues of comorbidity will also be addressed. Connections between social media and eating disorders will be explored using different theories to explain why connections exist. Specific websites that promote eating disorders will also be detailed, including thinspiration. The effects of social media on women, men, and young people will examine how these three different groups are impacted by these websites and why these websites have such an impact on them. Of course, users of social media communities are not just limited to different races and cultures in the United States; social media has an impact on users around the world in regards to this issue, and this paper will explore these impacts. Finally, an overview of policies and procedures that are in place around the globe to hinder the spread of eating disorders as enhanced by social media will be provided.

## **Social Media**

Social media websites are communities found online where people can interact, share, create, and exchange ideas and information with one another (Ghaznavi & Taylor, 2015). Many people of various ages are using social media every day, and the demographics of the users differ by gender, age, and other characteristics (Ghaznavi & Taylor, 2015). In the United States, 73% of all adults are using social media, and the use among young adults is significantly growing (Quinn, 2016). More than 80% of people between the ages of 18 and 29 in the United States are wireless Internet users, and 72% of them are on social media websites (Perloff, 2014). Individuals in this age group are more likely to use social media than any other age group, and women are more likely to visit these websites than men (Perloff, 2014).

Social media is used for many different reasons. Users log in to meet new people, pass the time, maintain relationships, keep up with current trends, and explore what other users are doing (Quinn, 2016). Social media allows the user to expand on his or her friendships and form new ones (Allen, Ryan, Gray, McInerney, & Waters, 2014). These communities also allow individuals to connect around the world (Kim, Wang, & Oh, 2016). College students especially benefit from using social media because it gives them a sense of community, which can affect their self- efficacy, socialization, and well-being (Kim et al., 2016). They are able to express themselves and their opinions and form and maintain relationships (Kim et al., 2016). College students also benefit from social media

because it allows them to interact and socialize with friends and family, regardless of their location (Kim et al., 2016). In addition to serving as a mechanism for communication and self-expression, social media can also be used for professional purposes. For example, educators can use social media to aid in their teaching and connect with their students in new ways (Cao, Ajjan, & Hong, 2013). In fact, use of social media in the classroom at the collegiate level has been growing rapidly, and research has found that one third of faculty members use social media while in the classroom, while 45% use it for professional purposes (Cao et al., 2013). All of these uses of social media are widely considered both positive and desirable.

But while there are many positive aspects to social media, engaging in it also has potential negative features associated with it. For example, finding a sense of belonging is not always easy. Individuals on social media can be ignored, rejected, or excluded by peers (Allen et al., 2014), and there are challenges in finding the balance between independence and fitting in (Allen et al., 2014). Adolescents and children are at the point in their lives where they want to seek independence but feel connected at the same time, and social media can help them do this (Barth, 2015), but if one cannot find this balance, it may cause him or her to experience loneliness, which can then lead to reducing their psychological well-being (Allen et al., 2014).

Another potential problem with social media can occur with negative comments made by peers. These can negatively impact a user of social media (Rim & Song, 2016), and there are reasons why online feedback is more harmful than face-to-face communication. The first reason concerns the lack of audio and visual cues online



(Koutamanis et al, 2015). This is an issue because the lack of visual and audio cues may make users feel less inhibited, and potentially more cruel in their feedback. The second reason that online feedback is more harmful is the fact that the feedback is publicized, and potentially other people can see the opinions and criticisms an individual is receiving, which may be embarrassing for the recipient of negative feedback (Koutamanis et al., 2015). The last reason online feedback is more harmful is that the content is visible longer than feedback that is given face-to-face (Koutamanis et al., 2015). If someone is being verbally victimized, it is not available to be viewed repeatedly, compared to a comment typed online.

These problems may become more of an issue in the future because some researchers believe that traditional forms of media are losing the dominance they had before social media came along (Prieler & Choi, 2014). There are many differences between social media and traditional forms of media with the first difference involving interactivity (Perloff, 2014). Because of the interactive nature of social media platforms, they have different psychological outcomes in regards to body image concerns (Ghaznavi & Taylor, 2015). With social media websites, people can interact with each other in many ways, including sending messages, liking a photo, and commenting on someone's post. Other, more traditional forms of media, are considerably more limited in their opportunities for interactivity.

A second way social media differs from mass media is in terms of autonomy and self-efficacy (Perloff, 2014). Users of these social communities can shape the way they interact with other people and be independent (Perloff, 2014). For example, users of

social media can pick to whom they wish to talk, whose profiles to look at, and whose posts pop up on their feed. Users also have the independence to post what they want others to see.

The third way social media websites differ from mass media is that the content can revolve around the self. Users of social media communities make personal profiles on Facebook, personal YouTube channels, and post selfies on their Instagram. Having the ability to self-disclose has always played a huge role in the use of social media. Individuals even have the ability to give people a look into their daily lives with the help of the Story feature on Snapchat (Perloff, 2014).

The final way social media platforms differ from traditional media is the fact that they can cater to communities that host individuals with the same beliefs. This idea offers easy and frequent access to other people who are similar to them; in contrast, mass media is usually tailored to a heterogeneous audience (Perloff, 2014), and serving a heterogeneous audience means that many people may not agree with what is being portrayed. When social media content is tailored to specific audiences, though, the members of that specific audience are more likely to concur with that content.

Despite the fact that these four things differentiate mass media and social media, it is important to acknowledge that not all of these social media communities are the same; they are going to vary in how they are used, and the users will have different characteristics (Ghaznavi & Taylor, 2015). The way individuals use social media is going to differ when it comes to selecting, endorsing, and promoting content (Ghaznavi & Taylor, 2015). Use can be driven by information sharing, self-status seeking,

entertainment, or a need for socializing (Prieler & Choi, 2014). Demographic characteristics, such as age and gender will also differ. For example, users of Facebook and Pinterest tend to be older than Twitter and Instagram users (Ghaznavi & Taylor, 2015).

## **Eating Disorders**

There has been growing understanding and increased interest in the complexity of eating disorders in recent years (Costa et al., 2016). For example, more people are now recognizing that there is an underlying psychological pathology to eating disorders (Costa et al., 2016). This recognition has led to the discoveries that there are pathways to developing and maintaining eating disorders in somewhat predictable ways (Costa et al., 2016). Eating disorders are life threatening pathological conditions, and they are characterized by a drive that overwhelms individuals to be thin, to have a fear of gaining weight, and to lose control over their own eating (Costa et al., 2016).

### **Types of Eating Disorders**

Two well-known eating disorders are anorexia nervosa and bulimia nervosa. These disorders result from having obsessive worries about body image and weight (Castro & Osorio, 2012). Such fears and fixations can lead to dangerous diets that include starving to death or binge eating habits that result in weight loss or weight gain (Castro & Osorio, 2012). The 12-month prevalence rate for anorexia nervosa is 0.4% (Costa et al., 2016). Individuals with this disorder have high rates of mortality, moderate recovery rates, and some remain chronically ill (van Son, van Hoeken, van Furth, Donker, & Hoek, 2009). Anorexia nervosa is dangerous because it is difficult to treat, draining on the body; has the highest mortality rate of all psychiatric illnesses; and it has social, biological, and psychiatric consequences, such as depression and anxiety (Castro & Osorio, 2012). While

anorexia nervosa refers to the medical condition that is eventually diagnosed as a mental illness (Castro & Osorio, 2012), another related term is ‘Ana,’ which can be found online on platforms that promote disordered eating. ‘Ana’ is described as a life style choice, where the choices involve anorexic behaviors.

In contrast to anorexia nervosa, bulimia nervosa is characterized by episodes of repeated binge eating and compensating actions, such as self-induced vomiting, use of laxatives, fasting, and excessive exercise (Castro & Osorio, 2012). The 12-month prevalence rate for this disorder is between 1 and 1.5% (Costa et al., 2016). People with bulimia nervosa usually have recovery that is long term, and they have lower mortality rates compared to anorexia nervosa (van Son et al., 2009). Just like the anorexic nervosa community has the term ‘Ana,’ the bulimia nervosa community has the term ‘Mia’ (Castro & Osorio, 2012).

A third eating disorder that may be influenced by social media is binge eating disorder. This disorder is characterized by recurrent episodes of eating extremely large amounts of food due to distress and feelings of losing control. Generally, there are no compensatory behaviors, and as a result, obesity is a possible physical health problem for individuals with this disorder. Interestingly though, not all individuals with binge eating disorder are obese (Vancampfort et al., 2014). Even though only three eating disorders have been discussed, it is important to discuss the health effects of eating disorders as a whole in order to understand why these types of disorders are so dangerous.

## **Health Effects of Eating Disorders**

The long-term health effects of eating disorders are generally problematic. Many parts of the body are affected, such as the skeleton, the brain, and the reproductive system (Treasure, Claudina, & Zucker, 2009). There is the possibility of bone loss in the femur, radius, and lumbar spine within a year of having an eating disorder, and this loss can lead to fractures and chronic pain (Treasure et al., 2009). Fortunately, gaining weight back can improve the density of the bone, and a number of treatments have been investigated, such as insulin growth factor and calcium supplements (Treasure et al., 2009). In addition to skeletal issues, poor nutrition also takes a toll on the function of the brain. The brain uses about 20% of one's calorie intake, and it is dependent on glucose. The brain will be affected by poor nutrition because there will not be a significant number of calories going into the body to maintain brain function (Treasure et al., 2009). Starvation also shrinks the brain, and there are psychosocial and behavioral issues, such as social difficulties and deregulation in emotion (Treasure et al., 2009).

The fertility of a woman also decreases when she has an eating disorder, and the birth weight of an infant is lower when the mother suffers from anorexia nervosa but higher when the mother has bulimia nervosa (Treasure et al., 2009). In addition, mothers with bulimia nervosa are twice as likely to have two or more miscarriages compared to mothers who do not have bulimia nervosa (Treasure et al., 2009). Of the infants who survive birth to a mother with an eating disorder, feeding difficulties can be an issue, and this may reduce infant growth (Treasure et al., 2009). Other types of medical problems can also result from eating disorders. These issues include, but are not limited to,

endocrine, cardiovascular, and gastrointestinal disorders, dental issues, obesity, and deficits in nutrition (Puhl et al., 2014).

In addition to the physical issues associated with eating disorders, there are also possible social, personality, and emotional processes (Perloff, 2014). For example, eating disorders can lead to dangerous behaviors, such as cutting, drug abuse, and suicidal behavior, and they can be associated with psychiatric problems, such as anxiety and depression (Castro & Osorio, 2012).

### **Comorbidity**

Even more concerning than eating disorders themselves is the possibility of comorbidity, which means having two or more psychological disorders at the same time; 70% of individuals who have an eating disorder also have a comorbid psychiatric illness (Cousins, Freizinger, Duffy, Gregas, & Wolf, 2015). The prevalence rate of someone with an eating disorder and a comorbid diagnosis is between 20 and 90% (Ulfvebrand, Birgegard, Norring, Hogdahl, & von Hausswolff-Juhlin, 2015). The reason for the wide range is because there are many methodological differences in studying this topic. For example, the use of interviews versus other screening methods, the type of sample used, and whether both men and women were included all influence the results of an individual study (Ulfvebrand et al., 2015). The most common psychiatric comorbidities with eating disorders are mood disorders (between 20 and 98%), anxiety disorders, with social phobia and obsessive-compulsive disorder being the most common (between seven and 65%), and substance use disorders, which is between six and 55% (Ulfvebrand et al., 2015). One study has shown that men with eating disorders are more likely to have a

comorbid diagnosis than women with eating disorders (Ulfvebrand et al., 2015). Many of these patients will seek treatment for their comorbid condition, but only about 50% will receive treatment or seek help for their eating disorder (Cousins et al., 2015). The patients with eating disorders are often difficult to spot because they will hide their symptoms from psychiatric and medical clinicians, friends, and family due to shame and embarrassment (Cousins et al., 2015).

### **Shame and Self-Criticism**

Shame is one of the central components to developing an eating disorder (Costa et al., 2016). Shame is painful, and it is linked to the perception of being judged in a negative way and feeling unattractive and subordinate to everyone else (Costa et al., 2016). People full of shame are often comparing themselves to others and fearing that they will not be either attractive enough, good enough, or both (Costa et al., 2016). Self-criticism also plays a role. When someone has an eating disorder, self-criticism can be used as a tool to cope with feelings of being inferior to everyone else. In turn, this self-destructive attitude may provoke more feelings of inferiority (Costa et al., 2016). Several studies have examined what happens to individuals with eating disorders and comorbid depression and found that they also experience higher levels of shame. The negative thoughts and feelings that come with depression are often geared toward their body and eating (Costa et al., 2016).

While eating disorders are not a new phenomena, there are reasons to believe that the development of social media has worsened many of the issues surrounding such



disorders. The following section will explore social media's connection to developing eating disorders.

## **Social Media and Eating Disorders**

Social media has been found to have different psychological outcomes for different users in terms of concerns about body image (Ghaznavi & Taylor, 2015). What makes social media a dangerous place for body image content is the fact that these platforms offer interactivity with like-minded users, and there are photos that can be viewed around the clock that show the body ideal (Ghaznavi & Taylor, 2015). The amount of damage done as a result of social media is going to depend heavily on the amount of time an individual is spending being exposed to the things that cause negative thoughts and emotions (Ghaznavi & Taylor, 2015).

Even though social media platforms help promote the body ideal more generally, there are websites that exist to promote pro-eating disorder and fat acceptance lifestyles specifically. These websites encourage individuals to change or accept their bodies. These different websites, as well as the term thinspiration, will be discussed in the next section.

### **Websites Promoting Eating Disorders**

Aside from the traditional social media platforms, such as Twitter and Facebook, there are websites that are dedicated to promoting eating disorders (Ghaznavi & Taylor, 2015). These websites are considered social media because they fit the criteria discussed previously for social media, including the interactivity of the members, the autonomy to post anything the user wants, the fact that an individual's profile can revolve around the

self, the social media changing beliefs and attitudes of users, and the catering to users who have the same beliefs (Perloff, 2014). These websites, under the umbrella of social media, unfortunately exist to promote anorexic, bulimic, and other disordered eating lifestyles. There are also websites that promote gaining weight, and these are referred to as the fat acceptance community. At present, about 400 such websites exist (Perloff, 2014). The purpose of pro-eating disorder websites is to encourage members of these communities to continue losing weight and maintaining their eating disorder (Marcus, 2016). Pro-eating disorder websites are shown to have harmful effects on thoughts about body image, quality of life, and mental health (Ghaznavi & Taylor, 2015). These websites can also decrease recovery rates and eventually lead to death for individuals suffering from an eating disorder (Castro & Osorio, 2012). What makes these websites and the content on social media even more dangerous is the fact that they are available anytime and anywhere on mobile devices (Perloff, 2014). Having social media obtainable at all times allows for more social comparisons, and more opportunities to view these harmful images (Perloff, 2014). Internet users tend to gravitate toward content that they agree with, find appealing, or agree with their attitudes, so users who are dissatisfied with their body and have disordered eating attitudes will most likely log onto these websites (Perloff, 2014).

Even though these websites are dangerous, they are popular because they enable communication, provide information, and offer a place where people can feel safe and have a sense of belonging (Castro & Osorio, 2012). A lot of the users turn to these websites for a non-judgmental area where they can express their feelings and find support

(Castro & Osorio, 2012). Individuals gravitate toward content online that they already agree with, are interested in, or those which are identical to their beliefs and attitudes. That being said, people with thin ideals, or even those suffering from an eating disorder themselves, are more likely to visit these pro-eating disorder websites or related content (Castro & Osorio, 2012). Other individuals who are more likely to visit are people who are perfectionists about their body or are highly dissatisfied with their body (Perloff, 2014).

Individuals who suffer from anorexia nervosa are likely to visit pro-anorexia websites and related content regularly; this fact is the same for someone suffering with bulimia nervosa. These individuals will visit pro-mia and related websites associated with bulimia nervosa (Perloff, 2014). Pro-anorexia websites are places where people suffering from an eating disorder can form relationships with those who understand their suffering, and talk with people who have attitudes about disordered eating but do not meet the diagnostic criteria. People may turn to their “ana buddies” for comfort (Castro & Osorio, 2012). Other visitors of these websites are *wanarexics*; these are individuals who have attitudes about disordered eating but do not meet the diagnosable criteria (Castro & Osorio, 2012). The main users of these websites are those who already suffer from an eating disorder and have body image problems (Perloff, 2014).

Existing members of this community usually reveal their food diaries and discuss their plans to lose weight (Marcus, 2016). They will also provide proof of their membership by disclosing their physical symptoms of anorexia nervosa, such as hair loss, tiredness, and weight loss (Marcus, 2016). New members of the pro-anorexic community

have to prove their position (Marcus, 2016). They have to perform in different ways in order to be accepted; one study found that new members had to discuss the psychological characteristics of their eating disorder in order to prove their legitimacy (Marcus, 2016). Policing may come into play as a way to distinguish the people who have eating disorders with the ones who are faking (Marcus, 2016). The members will try to identify the fakers by seeing which individuals appear to not have knowledge about eating disorders and seem evasive of the anorexic lifestyle (Marcus, 2016).

Two studies using female undergraduates examined the impact of pro-anorexic websites. They showed that being exposed to these websites has a negative impact on self-esteem; these studies also concluded that individuals frequently visiting pro-anorexic websites perceived their attractiveness to have decreased (Perloff, 2014). These websites are harmful to their users; however, it should be noted that some of them do provide information or links to information on where to get help and recover from an eating disorder (Singh et al., 2016).

On the opposite end of the eating disorder spectrum, communities also exist to promote fat acceptance. These communities also have websites with the goal of accepting one's body the way it is and eliminating the notion that it is not perfect if it is not thin (Marcus, 2016). This environment has coined the term fatosphere, and most of the users are overweight (Marcus, 2016). The fat acceptance community is less known than the pro-anorexic community, but it is starting to gain attention (Marcus, 2016).

The fatosphere movement may seem mentally healthier than the pro-anorexic one, but it is physically unhealthy because it is promoting the harmful lifestyle of being

overweight; many health magazines and bloggers have branded these websites unhealthy (Marcus, 2016). Research on fat acceptance communities discovered that users have a similar experience to those of their anorexic and bulimic peers in terms of being dissatisfied with their body at a young age (Marcus, 2016). These members will also share views of feminism and beauty ideals; these beliefs mean members will challenge cultural ideals about female beauty, and they will “come out as fat” as a way to tell society that they do not plan to change their physical shape (Marcus, 2016).

Much like the pro-anorexic community policing users, the fat acceptance community does this as well (Marcus, 2016). Someone who does not fit the criteria to be a part of this group will have internalized the idea that being unhealthy and fat is not socially acceptable; current members identify these individuals by looking for posts about self-loathing, and these types of messages will usually be removed. An individual’s unwillingness to campaign to change social norms with the community will also be taken as an indication of an individual not really belonging to the fat acceptance community (Marcus, 2016).

The pro-anorexic community and the fat acceptance community express their support in different ways (Marcus, 2016). Pro-anorexic website users motivate each other by showing images of thin individuals; they also use hashtags, such as #proana, #thinspoooo, and #anatips (Marcus, 2016). The fat acceptance community will tag their photos differently with labels like #bodypositive and #effyourbodystandards (Marcus, 2016). Members of both communities typically experience high levels of strain, low levels of social support, and low levels of self-esteem (Marcus, 2016). Both communities

can help raise an individual's low self-esteem, so that is why individuals are desperate to find a group where they can share their same values and beliefs and find a sense of belonging (Marcus, 2016).

### **Thinspiration**

The term thinspiration has been traditionally found on pro-eating disorder websites, but now it is making its appearance on social media and spreading to different platforms (Ghaznavi & Taylor, 2015). Thinspiration refers to media content that favors the thin ideal. It promotes losing weight in a way that encourages and glorifies dangerous methods and eating disorders (Ghaznavi & Taylor, 2015). Different social media platforms, such as Facebook, Pinterest, and Instagram, allow users to view, exchange, and create pro-eating disorder and thinspiration material (Perloff, 2014), and much of this content provides information, encouragement, and tips on how to lose weight and stay thin (Ghaznavi & Taylor, 2015; Singh et al., 2016). Thinspiration content on eating disorder websites is used to promote self and body acceptance, meaning it is used to convince individuals that a thin body is the ideal and users should aim to have a thin body and accept that as the norm. Triggers, reverse triggers, and distractors are three of the methods used for this purpose, and they usually appear in the form of images (Ghaznavi & Taylor, 2015). Triggers are used to motivate users to lose weight; these photos are of thin ideal bodies. The purpose of reverse triggers is to prevent the viewer from gaining weight by posting photos of individuals who are seen as being overweight. The last method is distractors; these are intended to distract the viewer from food and hunger (Ghaznavi & Taylor, 2015).

Other examples of thinspiration include photos of an individual's body before and after weight loss (Ghaznavi & Taylor, 2015). A typical thinspiration photo is one that is likely to increase self-objectification, encourage unhealthy beauty standards, and promote sexualizing women by pressuring them to appear in a more sexualized manner (Ghaznavi & Taylor, 2015).

**Tagging.** Tags are labels that can be placed on photos that users post. When a media user searches these specific labels, the photos with these labels will appear on the screen. If an individual uses multiple tags on their photo, they increase the chance of the photo appearing on someone's result list. If people are looking up tags, it is possible for them to come across thinspiration photos when they were looking for health and fitness images (Ghaznavi & Taylor, 2015). Thinspiration, as well as another famous tag, "thinspo," are two widely used tags on the Internet, and they are usually associated with the most harmful content, such as images of dangerously thin bodies. Both tags can be used individually or synonymously (Ghaznavi & Taylor, 2015). Research has revealed that images that are tagged with thinspo, instead of thinspiration, are more sexualized and characterized by thinness that is extreme; this term is associated with a thin ideal that is even more extreme than the average thin ideal tagged with thinspiration (Ghaznavi & Taylor, 2015). Thinspiration can also be shown on various social media platforms in different ways. On Pinterest, for example, the images with thinspiration tags show individuals that have muscular bodies and are less objectifying. In contrast, when thinspiration tags are found on Twitter, the images are of extreme thinness (Ghaznavi & Taylor, 2015).



Ghaznavi & Taylor (2015) conducted a study to research images of thinspiration, as well as other text designed to inspire weight loss on websites that promote eating disorders. They collected a sample of 150 images from Pinterest and 150 images from Twitter through systematic random sampling. These two social media platforms were chosen, in part, because of their popularity. After Facebook, these two social media platforms are the next two most popular platforms. In addition, both were chosen because of their features, function, and popularity. The functions and features of Pinterest and Twitter were important for the study because users can easily type in words to retrieve the content they want to view. Images will pop up if they have the labels and tags that the individual types into the search bar. The data that were collected consisted of any image that had the tags thinspiration or thinspo; other information collected included usernames and profile pictures. Duplicates were excluded from the study. Eight variables were coded during their study: image type, image purpose, image content, body depiction, additional tags, explicitness of clothing, sexual suggestiveness, and social endorsement (Ghaznavi & Taylor, 2015).

The results of the study indicated that images that were tagged either with thinspiration or thinspo showed women with bony bodies who were usually posed in sexually provocative ways; the central point of focus was usually on the pelvis and abdomen. The researchers also discovered that a majority of these pictures were females (89%), two percent depicted figures that were not human, such as an animal cartoon or a statue of a male, and nine percent were tweets or text messages that did not have an accompanying image. The examiners concluded that thinspiration content is most likely

content that increases self-objectification, encourages sexualizing women, promotes standards of beauty that are unhealthy, and contributes to the pressure on individuals to appear more sexual in their attire and appearance. The researchers also noted that while women are not the only victims of these websites, they recognize that it is mostly women who are being depicted (Ghaznavi & Taylor, 2015).

The research examining the relationship between social media communities and the development of eating disorders suggests that these communities have negative influences on the attitudes, beliefs, and behaviors of the people who view them (Ghaznavi & Taylor, 2015). The likelihood of these effects depends on the amount of exposure and what the content is revealing (Ghaznavi & Taylor, 2015). Depending on the individual and the content of a social networking site, damage to the individual can occur in many ways. There are a number of theories that can be utilized to help explain the connections of social media to developing eating disorders. Those theories that seem the most relevant to aiding an understanding of this connection will be discussed in the following section.

## **Theories**

### **Uses and Gratification Approach**

The uses and gratification approach is one reason individuals may entertain themselves with these online communities. This approach says that people are actively seeking out gratification to fulfill particular motives (Perloff, 2014), and individuals may then be reinforced if they receive such gratification (Quinn, 2016). For example, if an individual is seeking validation for how their body looks and he or she receives the desired gratification through positive feedback, they will continue to post images of their body in order to continue getting the attention they desire. Individuals who are vulnerable to body image disturbances will seek different types of gratification from social media as compared to people who are less concerned with their body image (Perloff, 2014).

It is unlikely that uses of Facebook versus those of pro-eating disorder websites have the same goals. For example, a woman may be on Facebook to socialize and come across photos posted by her friends. What happens in terms of the effects of the photo depend on the woman's self-esteem level and self-worth (Prieler & Choi, 2014). Social media communities, like Facebook and Twitter, are going to have different impacts on body dissatisfaction than the websites that are geared specifically toward encouraging eating disorders. However, these types of social media platforms still allow the possibility of an individual to have insecurities about their body depending on the self-esteem level the person holds. In general, though, individuals who value the thin ideal may use social

media as a way to seek validation of their beliefs, and they may come across pro-eating disorder websites. These websites are home to like-minded individuals who will provide support and gratification to individuals prizing thinness above all else (Prieler & Choi, 2014).

There are three categories of media gratification. These categories are: the content the media provides, the experience of using media, and social validations that come from interacting with other people online (Quinn, 2016). Whether these categories are working together or separately, each one plays a role in the gratification received when viewing social media websites. Individuals who are struggling with body image may turn to social media to seek attention and reassurance. There is then the possibility of a feedback loop being created. Obtaining attention for an online post may motivate the individual to spend increased time online in order to seek more attention. This motivation causes the person to spend additional time on social media, and they are exposed to more content that can be damaging. As a result of viewing this material, individuals will compare themselves to the online content and fixate on negative thoughts about themselves. These thoughts may cause the individuals to change things about themselves in order to again receive the gratification they seek (Perloff, 2014). Continually seeking the approval of others online for one's body may cause continuing negative social comparisons and unrealistic ideals about body image. Ultimately, enough of this feedback loop can lead an individual to develop an eating disorder (Perloff, 2014).

### **Cultivation Theory**

The cultivation theory states that the effects of social media will increase over time through viewing that is repeated and recurrent (Van Vonderen & Kinnally, 2012). This viewing does not always create the initial body dissatisfaction thoughts, but it can reinforce them. The more an individual continuously views images of body ideals, the more the images will become accessible. Viewers tend to gravitate toward content that supports their beliefs and opinions. Looking up content that supports the same things an individual believes is comfortable and familiar. Resonance plays a role in this theory; resonance is the idea that the viewer's life experiences will affect the way they perceive the content, so viewers whose life experiences are similar to the content they are viewing will be more affected than viewers whose experiences are not similar. From this perspective, someone with an eating disorder will search for content concerning the same or a similar disorder. This individual will be compelled to look up eating disorder content and gravitate towards those types of images, which can motivate them to start or continue an eating disorder (Van Vonderen & Kinnally, 2012).

### **Social Comparison Theory**

This theory states that people will compare themselves with others who are similar to them; for instance, African American individuals will identify strongly with models who are African American compared to models of a different race (Prieler & Choi, 2014). The comparisons made are going to be self-relevant, and these comparisons are then processed more deeply and have a greater psychological impact (Perloff, 2014). The more time individuals spend engaging in social comparisons between themselves and

ideal bodies posed on social media, the more negative influence there will be because such comparisons start a link between social media's effects and self-esteem, and the social media users internalizes the thin ideal, thus increasing their body dissatisfaction (Russello, 2013).

Because this theory states that people will compare themselves with others who are similar, this will exert a psychological impact that is strong (Perloff, 2014). This strong impact occurs as people process the comparisons more deeply because these similarities are related to the self (Perloff, 2014). According to this theory, if the individual in the image has similar traits to the person viewing the photo, the viewer will compare him or her self more intensely than if the person in the photo had traits that were different (Perloff, 2014).

Self-construal is a key component when discussing this theory. This concept has to do with the way a person defines him or herself, in terms of independence or interdependence with others (Prieler & Choi, 2014). To be independent means the individuals perceives themselves as autonomous, and being interdependent means the individuals sees themselves as relying on others. Differences in self-construal and the underlying motives of social comparisons may lead individuals to respond in different ways to social media, which will lead to different consequences in body image (Prieler & Choi, 2014). Previous studies note that individuals who have more of an interdependent self-construal will have a greater need to be accepted by others, and interdependent self-construal takes place when an individual engages in social comparisons for the sake of determining whether or not they are filling obligations to their relationships. Being a part

of a group is important to those with an interdependent self-construal (Prieler & Choi, 2014). By contrast, if an individual has independent self-construal, they are more autonomous and independent (Prieler & Choi, 2014). While those with an independent self-construal have less need to engage in social comparisons, individuals with interdependent self-construal will engage in more social comparisons because they are going to view their peers as a reference for how they should be (Prieler & Choi, 2014). Not only do random peers have an influence, but close friends do as well. In addition, having interdependent self-construal means that these individuals may accept body image ideals and norms more easily than individuals with independent self-construal (Prieler & Choi, 2014). This becomes an issue because social media helps form communities; these groups are likely to host individuals with strong opinions. People who have interdependent self-construal will likely be more strongly influenced by these group members more than individuals with independent self-construal (Prieler & Choi, 2014).

Even more concerning is that individuals with more interdependent self-construal are also more likely to imitate the behaviors they view. This imitation is potentially dangerous because it may cause an individual to develop an eating disorder if they are trying to copy the look of someone's body. Social comparisons can impact body image concerns for social media users (Perloff, 2014). Images on social media may make a person question who they should be. What an individual finds to be physically important is going to have a greater impact on disturbances in body image. For example, if a thin body is important to a woman, she will compare herself strongly with images that show thin body ideals (Perloff, 2014). It is expected that social comparisons about appearance

on social media platforms will cause individuals to have body dissatisfaction both online and offline if appearance is a major factor in self-worth, and that dissatisfaction can lead to greater imitation of behaviors found online that seem to hold the key to an ideal body (Perloff, 2014).

It is important to note that social comparison theory is going to be interpreted differently depending on culture. Individualistic cultures, such as the United States, focus more on the individual. People in this culture are going to define themselves as more unique. The opposite type of culture is the collective culture. People in these types of cultures, such as Japan, will build themselves in relation to others; they will center their self-esteem by their ability to be able to fit into a group (Prieler & Choi, 2014). It has been theorized that individuals in collective cultures will participate in social comparisons on social media more than people in individualistic cultures because they feel like they need to have a greater acceptance from others in order to fit into the norm (Prieler & Choi, 2014).

Comparisons are typically one of two types: downward or upward. When downward comparisons occur, a person is comparing his or herself with someone else and finds that person lacking. An upward comparison occurs when a person is comparing himself or herself with someone else and finds he or she is lacking (Van Vonderen & Kinnally, 2012). Upward comparisons are one of the strongest reasons for body dissatisfaction (Van Vonderen & Kinnally, 2012). People who upward compare are going to be more dissatisfied with their body because they are going to compare themselves to someone that they feel like they need to look like in order to be happy with their physical



appearance. This comparison can be dangerous, especially to someone with low self-esteem, because it is possible that he or she will feel like they are not as good as the images they are comparing themselves to. When someone cannot physically match what they see, body dissatisfaction occurs (Van Vonderen & Kinnally, 2012).

Upward comparisons are going to be more negative for people who compare themselves to peers and friends they find attractive. This comparison with peers is going to have a more negative impact, as opposed to upward comparisons of models or individuals they do not know because people tend to flock with others who are similar to them (Perloff, 2014). Revisiting the subject of self-construal, individuals who possess interdependent self-construal will more likely participate in upward comparisons (Prieler & Choi, 2014). This comparison is going to cause these specific individuals to be more vulnerable to the dangers of comparing, such as unhealthy eating behaviors, body dissatisfaction, or even cosmetic surgery (Prieler & Choi, 2014).

### **Social Identity Theory**

Social identity theory is one that is similar to the social comparison theory. One's identity is the person's knowledge that he or she belongs to a group, and this group shares similar worldviews, values, and qualities (Marcus, 2016). Forming a social identity usually begins with self-categorization (Marcus, 2016). People seem to get categorized into groups much like objects, and people in the same group usually have similar habits (Marcus, 2016). Engaging in social activities and wanting a sense of belonging is important to many people, and an individual's attitudes and beliefs begin to conform to those of the groups to which the person belongs (Marcus, 2016). That being said, social

media allows users to affiliate with like-minded social groups, which helps construction of their identities (Marcus, 2016). Anyone who uses social media for the purpose of looking at body ideal content will find and join with individuals having the same beliefs and attitudes about their bodies. Research has noted that pro-anorexia nervosa websites address members as a group, but each individual user is nonetheless trying to construct their own identity (Marcus, 2016). Each member is trying to build their sense of who they are as a person while maintaining ties to the group in order to feel like they are not alone.

### **Objectification Theory**

The objectification theory is another perspective on the body dissatisfaction that can occur while surfing social media communities. This theory discusses the conceptualization of an individual as an object, which can then be used for the pleasure of others (Ghaznavi & Taylor, 2015). It is more common for young girls and women to be viewed this way than it is for boys and men, and females can be socialized to adopt the idea that the way they are viewed by others physically is very important; they can be socialized to believe that this is the most meaningful way in which they are seen, and they can then internalize this idea (Ghaznavi & Taylor, 2015).

When a woman adopts the idea that she is an object to be looked at, it is called self-objectification. This phenomenon occurs when women will look at objectifying images of other women. These types of photos and images are ones that will emphasize a specific body part for the purpose of appearance or sex appeal (Ghaznavi & Taylor, 2015). Most images tend to be sexualized, objectifying, and contain tags and labels that describe these images (Ghaznavi & Taylor, 2015). Tags are labels that are added to

images with the purpose of making sure the photo shows up on the result list if someone types the tag in the search bar. People who self-objectify create a third-person perception of themselves when self-evaluating, and this self-assessing can create constant self-monitoring and self-evaluating with negative and damaging outcomes (Ghaznavi & Taylor, 2015). Research demonstrates that exposure to images that adopt the thin ideal will increase self-objectification (Ghaznavi & Taylor, 2015). Girls, and women, may come to view their bodies as objects to be looked at (Perloff, 2014). More negative outcomes from being exposed to these objectifying images include unhappiness with one's body and disordered eating. Mental health can also deteriorate, and an individual can have anxiety linked to weight and appearance, depression, or feel shame about their body (Ghaznavi & Taylor, 2015). Once one sees their body as an object to be looked at, surveillance of the body by the individual increases, which can lead to body disturbances and psychological consequences (Perloff, 2014).

### **Social Cognitive Theory**

This theory is another reason exposure to social media depictions of idealized bodies is harmful for users; it suggests that people learn from behavior that is modeled, and they are more likely to imitate the behavior when it is rewarded and if the viewer can relate to the model (Ghaznavi & Taylor, 2015). Perhaps one of the most famous experiments to demonstrate this theory is Albert Bandura's Bobo doll studies. In one version of these studies, Bandura, Ross, and Ross (1961) showed that modeled behavior, especially when the individuals are the same sex, would likely be imitated if the behavior was rewarded. One central part of his experiment was showing young children videos of

adults abusing a Bobo doll. The actions of the adults who received rewards for their aggressive behavior were more likely to be imitated by children who watched both adults' actions and their rewards for it (Bandura et al., 1961).

This theory relates to social media in cases where individuals see others online receiving social rewards for their body then try to imitate the way that person looks. This viewing and imitating has been shown to play a role in internalizing the thin ideal (Ghaznavi & Taylor, 2015). Examples of rewards include written comments, “retweets,” “repins,” and “likes” (Ghaznavi & Taylor, 2015). This imitation may lead to dangerous consequences, especially if the viewer is vulnerable. A vulnerable user is more likely to accept the thin ideal with repeated exposure to images of people who are perceived to be successful in the way they look; this success is shown through the praise other users give the image (Ghaznavi & Taylor, 2015). Individuals are more likely to accept the thin ideal if positive support is paired with repeated exposure (Ghaznavi & Taylor, 2015). If the individual in the photo has an eating disorder or is perceived by the viewer as more thin than they actually are, it can cause the viewer to head down a treacherous road with dangerous methods to achieve the body they want. By learning that a thin body is rewarded by others, the viewer's attitudes, behaviors, and beliefs will affect their eating, weight loss, and desirable body shape (Ghaznavi & Taylor, 2015). Seeing positive depictions of eating disordered lifestyles can influence individuals to perceive and strive for the thin ideal (Perloff, 2014).

All of these theories are useful in understanding how or why individuals, especially those active on social media, might start down a path to attaining a perfect

body, as depicted on social media communities. And, while all of these theories may initially seem to point to only females as vulnerable to eating disorders, other groups are vulnerable as well. The next section will discuss different groups, including women, men, and adolescents and children.

### **Effects of Social Media on Different Groups**

Certainly, when people think about eating disorders, women tend to be the individuals that come to mind. This is partially because there is a double standard of aging for men and women; society is more lax in judging aging men than aging women, and women may be seen as less attractive when they age (Prieler & Choi, 2014).

#### **Women**

The views on aging women can cause a woman to be dissatisfied with her body size, and she may want to modify her body because of this dissatisfaction. This dissatisfaction can be influenced by the thin ideal (Prieler & Choi, 2014). Approximately 50% of young women have intense concerns about their bodies (Perloff, 2014). Social media exposure predicts eating disorder symptomatology, thin body ideals, and body dissatisfaction among preadolescent girls and young women (Perloff, 2014). Exposure to these images can also lead to eating disorders or pathologies similar to eating disorders (Perloff, 2014).

Reasons for the impact of social media on womens' body dissatisfaction are many. For example, exposure to thin ideal images can create unrealistic expectations for female beauty and increase the displeasure felt by women about their bodies (Perloff, 2014). The feedback loop discussed previously is also applied here. Women expose themselves to images online and compare themselves to these photos. These comparisons trigger women to think about their body and ruminate about the parts they perceive to be

unsatisfactory. These thoughts cause them to have bad feelings about themselves and seek validation for their body; this idea can be related to the uses and gratification theory (Perloff, 2014).

Longing for validation is especially hazardous when talking about body image and women, because women can go to extreme lengths to get their body to look the way they want it to no matter the cost. Women who are vulnerable, have preexisting body image concerns, and have eating disorder symptomatology are likely to seek out pro-eating disorder websites (Perloff, 2014). All of these issues go along with the idea of seeking validation because these women are looking for a community where they can talk and connect to other people similar to them; they want to feel the validation and support that many women seek. Yearning for validation and gratification can cause a woman to check her social media profiles constantly and view content of her less attractive peers in order to feel more satisfaction (Perloff, 2014). Women can end up feeling hurt and disappointed because feeling ultimately satisfied comes from internal feelings as opposed to outward appearance (Perloff, 2014).

Another reason for the impact of social media on body dissatisfaction involves conformity. When it comes to female beauty, internalizing the thin ideal can create pressure to conform to the norm in society (Perloff, 2014). Internalizing images on social media can distort a woman's thinking, and it can lead to dissatisfaction in her body. Body dissatisfaction is one of the key predictors of disordered eating (Perloff, 2014). Women who have high body dissatisfaction will more likely feel pressure about their weight,

especially when they get praised for weight loss and criticized for weight gain (Van Vonderen & Kinnally, 2012).

In addition to social media, other factors that put women at risk for body image problems are low self-esteem, depression, perfectionism, internalization of the thin ideal, and low self-worth (Perloff, 2014). Depression, low self-esteem, and perfectionism primarily influence the way an individual perceives his or her body when they co-occur with concerns related to appearance, such as internalizing the thinness ideal (Perloff, 2014). An example demonstrating this idea is that low self-esteem should be the main influence on body image if appearance is a major aspect of self-esteem for an individual (Perloff, 2014).

Ultimately, young women with body image concerns and eating disorder symptomatology are likely to seek out pro-eating disorder websites (Perloff, 2014). A correlational study suggests that it is likely that young women who are frequently on these websites have higher levels of eating disorders and body image concerns (Perloff, 2014). Girls will usually have issues with their body image because they are stuck in the conflict of wanting to be liked and the desire to be their own person (Barth, 2015). Girls can feel like they will not be liked if they do not conform to the norm of being thin, which can cause concerns about one's body.

Verma and Avgoulas (2015) conducted a study looking at the way women view eating disorders. The researchers wanted to explore the views of young women who are recovering or suffering from an eating disorder. The researchers wanted people to understand the sufferers' lives, so that their views and beliefs could be heard. The



participants were ten female undergraduate students between the ages of 18 and 21. They were recruited using flyers and were chosen through purposive sampling, rather than being randomly selected. The subjects were asked questions individually in four core areas that included their perceptions of eating disorders, beliefs about healthy and unhealthy eating behaviors, the media's role in eating disorders, and their view on the way social media portrays eating disorders. Examples of these questions include "What is your understanding of an eating disorder?" and "Do you think that some young women are turning towards social media to talk about themselves going through an eating disorder?" (Verma & Avgoulas, 2015, p. 99).

In terms of the participant's perceptions of eating disorders, the responses ranged from participants believing they are just unhealthy ways of eating to recognizing them as a mental health condition. Participants noted that sufferers have a distorted view of themselves. Participants also said that if individuals can convince themselves that they do not need to change their body, then they could fight through the disorder, and they also understood that having negative thoughts about oneself could also be a contributor to the development of an eating disorder. In terms of attitudes toward eating disorders, subjects who had personal experience with eating disorders had responses that were more empathetic than participants who did not have personal experience; the ones who did not have experience seemed to be more judgmental toward those with eating disorders. The participants admitted to thinking about their body constantly and wanting to be thinner when asked questions about their perception of eating disorder information on social media. For example, they celebrated weight loss and experienced distress over weight

gain, which mirrors the celebrations and distress found on social networks (Verma & Avgoulas, 2015). This research study is important because it demonstrates that people do recognize that this is an issue that needs to be discussed. These female undergraduate participants showed that at a young age, they had experienced the same kind of thoughts as individuals with eating disorders and recognized these websites as a contributor to the problem.

It is important to understand women in terms of social media's connection to developing eating disorders. They are not, however, the only group affected by this connection. Men are also impacted by the content found on these platforms.

### **Men**

Young adult men are at the age of onset of eating disorders, but little is known about this group when it comes to this topic (Dakanalis et al., 2016). Being able to target existing recovery treatments and improve recovery rates in men are both extremely important since men make up 25% of anorexia nervosa and bulimia nervosa cases (Dakanalis et al., 2016) and 36% of binge eating disorder cases ("Research on males and eating disorders," n.d.). Studies on young college men have shown that not only are eating disorders prevalent for this population, but the symptoms are stable throughout the four undergraduate years of college (Dakanalis et al., 2016).

The effects that media has on men are likely to involve the internalization of a muscular body ideal (Perloff, 2014). Longitudinal studies with boys in late adolescence and young adult men show that body dissatisfaction can motivate dieting attempts in order to lose the fat that covers the muscle; these boys want to look like the ideal that has

been set in place for their gender, but this wanting can predict binge eating behaviors followed by intense compensatory actions, such as extreme exercise and self-induced vomiting (Dakanalis et al., 2016). Different experiments that have researched this phenomenon have demonstrated that exposure to images with muscular men caused male undergraduates to report being less satisfied with their bodies (Perloff, 2014).

Older adult men have also reported dissatisfaction with their bodies (Perloff, 2014). The body ideal for men is much different than the ideal for women. The idealized body for a man is thin, but he must also be strong, usually ripped, and have muscle and height (Perloff, 2014). There is not a lot of research on this side of the spectrum, but there are known media effects on men when it comes to magazines that emphasize health and fitness (Perloff, 2014). Being exposed to these images increases men's concerns about having a muscular body (Russello, 2013).

A stereotype about men is that they cannot publicly express their emotions and feelings. Because of this label, some men might find online communities welcoming and private. They can disclose their fears and concerns in a reserved setting, rather than being open about the way they feel in public (Perloff, 2014). This private expression will increase their social media effects because the uses and gratification approach will come into play. As noted previously, the uses and gratification approach involves individuals having motives for using social media, and by using social media, they are being active in meeting their needs (Perloff, 2014). Men may want a place where they can interact with other men about their thoughts on their body, and connect with other men who are feeling

the same emotions. This connection can be their motive for logging onto these website communities, and they are actively meeting their needs.

If a man anxiously longs for a brawny body, viewing social media content involving muscular models and athletes could have extremely negative effects (Perloff, 2014). This viewing allows for upward social comparisons to be made. Men who strive for a muscular body will compare themselves with these images and find they are lacking in what they see, and this comparison will cause them to be easily influenced to change their appearance (Perloff, 2014). These comparisons and characteristics can cause a man to become vulnerable to this type of content, in much of the same way as women. These social media communities can form and strengthen norms that surround the attainment of a perfect body, as well as enhance their social comparisons (Perloff, 2014).

Hobza, Walker, Yakushko, and Peugh (2007) conducted an experiment to figure out if viewing ideal body images lowered the self-esteem of men. They divided men into two groups. One group viewed idealized body images of men, and the other group viewed images that were neutral, meaning they were not photos of the men body ideal. Both groups took the Physical Condition and Physical Attractiveness subscales of the Body Esteem Scale. The researchers discovered that there were significant group differences, such that the group of men who viewed images of body ideals had lower self-esteem than the group of men who viewed neutral images.

Dakanalis et al. (2016) conducted a study to look at the factors associated with onset and maintenance of eating disorders among young men. Their study was part of an on-going longitudinal study looking at men's eating and issues with mental health during

the four years of undergraduate study. The first year students at an Italian University were identified through the registrar's database and were contacted through e-mail. Other information was provided through the database, such as age, residence before attending the university, family's socioeconomic status, and ethnicity. The students were asked to participate in an online survey in Fall of 2010, and 2,689 men responded to the survey. The college students also responded to the survey during their last year at university; 2,507 of them returned at this point in the study. At baseline, four percent of the sample met the Diagnostic and Statistical Manual of Mental Disorders (5<sup>th</sup> edition, 2013) criteria for an eating disorder. After the follow-up four years later, 3.3 percent met these criteria of having an eating disorder, and 48.2 percent of these cases showed onset of new eating disorders. The results of this study showed that increased body dissatisfaction, self-objectification, dieting, and internalization of the appearance ideal were associated significantly with future onset of eating disorders. The experimenters also observed that the tendency to self-objectify was a strong predictor of the onset and maintenance to an eating disorder. These findings were consistent with past research regarding adolescent girls and young college women, indicating that these factors are not limited to just one sex.

Men, then, can have some of the same results as women in terms of the impact on social media. In addition to the adult population and their risk of eating disorders, another concern is the possibility of such disorders occurring in younger populations. The next section will explain this issue.

## **Adolescents and Children**

Technology has become a normal part of everyday life for adolescents and children (Barth, 2015). There has been a drop in watching television and reading magazines, and much of this change is attributed to teenagers and young adults (Perloff, 2014). Instead of television watching and magazine reading, many people in this age group turn to social media in order to get their entertainment (Perloff, 2014). A national survey conducted by the Pew Research Center found that this age group is more likely than any other to be users of social media (Perloff, 2014). More than 80% of 18 to 29 year olds use the Internet, and 72% use social media websites (Perloff, 2014). Sixty percent of young people have at least one profile on a social network (Richards, Caldwell, & Go, 2015). In Australia, 2.2 million children between the ages of five and 14 report accessing the Internet, and this number has increased 89.4% from April 2012 (Richards et al., 2015). Individuals younger than 19 are the most prone to the negative effects of images online (Ghaznavi & Taylor, 2015).

Because adolescence is a time where these individuals are preoccupied with how others view them, they are highly sensitive to the way they are viewed, which makes them more sensitive to negative feedback (Koutamanis et al., 2015). Unfortunately, adolescents who are preoccupied with how others view them are more prone to receive negative comments and be victimized online; however, they can also receive positive feedback through comments and “likes” (Koutamanis et al., 2015). Research demonstrates that while positive feedback is more common than negative, there are still seven percent of adolescents primarily receiving negative criticism online (Koutamanis et

al., 2015). If an adolescent is receiving negative online feedback from online peers, it can have consequences that are negative to his or her psychosocial development and well-being (Koutamanis et al., 2015).

Adolescents and children are more likely to log onto Twitter instead of Pinterest. Because of this, they are going to be exposed to bonier, low muscular bodies (Ghaznavi & Taylor, 2015). This exposure is a problem because these are the images they are exposed to when they are still developing. It may cause youth to think they need to look like the individuals in these images. Body expectations from this form of media influence, along with peer and societal pressure convince this age group to attempt attainment of the bodies that are depicted online (Singh et al., 2016).

Disordered eating behaviors will often begin in adolescence, and the contribution of social media has will make it more prevalent (Ghaznavi & Taylor, 2015). Body image concerns are rising among adolescents; research suggests it may accumulate further (Singh et al., 2016). By age 15, girls are three times more likely than boys to display eating disorders (Singh et al., 2016). Adolescence is a time where bodies are beginning to change. It is important to take this into consideration because this is a time where adolescents will experience physical, psychological, and personality changes; these changes coexist with experiences in life that can cause anxiety and a lack of self-esteem and confidence (Castro & Osorio, 2012). Both anorexia nervosa and bulimia nervosa usually have the highest incidence in youth (Singh et al., 2016). Two-thirds of adolescent girls search online for information about how to lose weight (Castro & Osorio, 2012). Of this number of adolescent girls, 13% will participate in behaviors of bingeing and purging,

and many more will engage in dieting and other weight loss attempts (Castro & Osorio, 2012).

Other research shows that body image is an issue no matter what age an individual is, but adolescence is the time when body image is prominent due to puberty, developmental changes, and influences from culture and society (Singh et al., 2016). But while adolescence is a time period in terms of developing eating disorders, body size stereotypes and ideals about having a perfect body begin as young as age three in Western societies (Perloff, 2014). Little girls playing with Barbie dolls have a significant role in this thinking, and this is usually the point where this idealism of body image begins (Perloff, 2014). Barbie dolls depict thin, beautiful women, and this idealization of women can impact the youth who play with them. Playing with these dolls, and others, eventually will morph into these young girls viewing advertisements and television shows that promote thin bodies and this may eventually lead to adolescent and young adult girls viewing these same images on social media (Perloff, 2014).

The evidence suggests that social media and pro-eating disorder websites can have negative effects on young children. There are many reasons that these websites are so harmful to young people. The first reason is their risky content, which includes photos that are promoting eating disorders. This type of content is increasing (Castro & Osorio, 2012). A second reason pro-eating disorder websites are harmful to youth is the encouragement of eating behaviors that are destructive. The point of these websites is to promote eating disordered behavior, and if the younger demographic is viewing this type of information online, it can encourage a child or adolescent to begin eating behaviors



that are dangerous to their health (Castro & Osorio, 2012). Maintaining disordered eating is the third reason these websites are so threatening. An individual who already has an eating disorder may log onto these websites to seek validation for what they are already doing to their bodies, and they may want to feel satisfaction for the way they look (Castro & Osorio, 2012). The fourth reason pro-eating disorder websites are so harmful for youth is the fact that anytime an individual is online for long periods of time, he or she begins to be alienated from social ties offline. It can especially be unhealthy when this individual is on these types of websites because they begin to only be surrounded by people with unhealthy choices, and they are also going to be engaging with individuals who offer advice on how to lose weight and encourage behaviors that are unhealthy (Castro & Osorio, 2012). The fifth reason that these eating disorder-promoting websites are so dangerous is that the growth of these communities is increasing among children. This fact is dangerous because it shows that a growing number of individuals in this age group are so uncomfortable and insecure with their bodies that they feel the need to be a part of these communities in order to seek validation and possibly increase their self-esteem and self-worth (Castro & Osorio, 2012).

The differences in the way men and women view their bodies can be translated into the way young boys and girls look at their bodies. Girls focus on their external look, and boys focus on their muscular strength (Singh et al., 2016). Girls will focus on their outward appearance as opposed to inner qualities and self-objectify more than boys (Perloff, 2014). Looking muscular and athletic is what makes boys popular, while girls believe having a thin body will improve their physical appearance (Singh et al., 2016).

For both sexes, wanting an athletic body can be dangerous because this desire may cause one to use steroids and other drugs to change their body image, but this type of drug use is found mostly in boys (Singh et al., 2016).

All of these different groups are shown to be impacted by these websites online, and it is important to expand this idea to individuals around the world. The next section will explore this idea.

### **Social Media and Eating Disorders Around the World: Race and Culture**

The number of people having body image concerns is increasing worldwide, and research suggests that the number may continue to grow (Singh et al., 2016). It is vital to consider different cultures when considering eating disorders because different cultures have their own ideals about beauty and body image (Prieler & Choi, 2014). In the United States and other Western cultures, the body ideal for females is to be thin, but also to have curves (Prieler & Choi, 2014; Perloff, 2014). In the United States, specifically, the main focus has been on European Americans, but centering attention on this group only is a problem because it can create a bias (Prieler & Choi, 2014). If the focus is only on this one group, it may not be an accurate representation of the population, which has a diversity of people from different backgrounds with potentially different body ideals.

As an example, even within the United States, different races have their own preferences in terms of body ideal. African American women are more satisfied with their bodies than White women (Perloff, 2014), and prefer a body with more curves, breasts of medium size, and large buttocks (Prieler & Choi, 2014). In contrast, European American women prefer slender bodies with breasts of medium size. The research on African American women in the United States suggests that online content affects them differently than European American women. African American women report no change in the way they view their body when they are exposed to models that are European American (Prieler & Choi, 2014). This finding supports predictions made by the social

comparison theory. The theory states that people will compare themselves to others who are similar to them, and the research suggests that African American women will, in fact, compare themselves strongly to models who are of their same race as opposed to models of a different race (Prieler & Choi, 2014). Most of the research is on European Americans and African Americans. There is little research exploring the effects of this type of online content on Latinos and Asian Americans (Prieler & Choi, 2014).

It is important to not only look at how social media images are affecting individuals in the United States, but it is also appropriate to look at other countries around the world. Social media may convince young men and women in non-Western countries to look at their bodies in different ways (Perloff, 2014). Young men and women from non-Western cultures are exposed to social media websites, so it is easy for them to see the thin body ideal from Western cultures and perceive that as being the norm and experience pressure to be thin (Perloff, 2014). For example, research has discovered that people in Singapore are affected and influenced no matter the race of the individual they are looking at (Prieler & Choi, 2014). A study done in Portugal found that boys and girls between the ages of 13 and 19 use the Internet to meet people who have the same opinions; share tips on dieting and eating; view thinspiration material; and exchange information about self-harm, drugs, suicide, and fasting (Castro & Osorio, 2012). Studies conducted among adolescents from Brazil, Korea, and Malaysia showed that the prevalence of body image concerns was 24.1%, 51.8%, and 87.3% of adolescents in those countries respectfully (Singh et al., 2016). From this same study, 35.4% of the subjects overall participated in binge eating, and 36% used dietary restrictions to achieve a more

perfect body (Singh et al., 2016). Various studies from India revealed that there is a range of 27-81% of adolescents with concerns about their body image, depending the specific city being studied (Singh et al., 2016).

Abnormal eating attitudes in non-Western countries are also beginning to increase (Makino, Tsuboi, Dennerstein, 2004). In this sense, abnormal refers to attitudes that support the development of eating disorders. One survey revealed that 37.5% of African American female high school students had abnormal attitudes about eating (Makino et al., 2004). In Pakistan, Oman, and Turkey, 39.5% of female nursing students had similar abnormal attitudes about eating (Makino et al., 2004). In Oman, 10.9% of males have irregular attitudes about eating (Makino et al., 2004). In 1999, high school females in Japan had higher percentages of irregular eating than adults (Makino et al., 2004).

When the topic moves from attitudes to actual behavior, the research also notes problems in other countries. One study found that the prevalence of eating disorders in non-Western countries is lower than Western countries, but the number is increasing (Makino et al., 2004). The prevalence rate of anorexia nervosa in females in Western countries is between 0.1% and 5.7%. The prevalence rate in females in Western countries for bulimia nervosa ranges 0.3% to 7.3%, and in males the rates are 0% to 2.1%. In non-Western countries, the prevalence rate in females for bulimia nervosa is between 0.46% and 3.2% (Makino et al., 2004).

As noted, thinspiration content on social media lowers self-esteem. This feeling can also affect individuals around the world. Self-esteem impacts body dissatisfaction in Australian adolescents (Perloff, 2014). College women in the Netherlands who have low

self-esteem are influenced negatively by sexually objectifying content online (Perloff, 2014). A Westernized body of thinness has contributed to body dissatisfaction of women in Argentina, Malaysia, China, and Fiji (Perloff, 2014).

Because each culture has their view on the body ideal, it is important to look at two different types of cultures: individualistic and collective. Individualistic and collective cultures are going to have different views on this topic, and self-construal is going to play a significant role in terms of how individuals define their sense of self (Prieler & Choi, 2014). People in individualistic cultures, such as the United States, view themselves as being independent from everyone else. These individuals demonstrate their own uniqueness to maintain their self-esteem (Prieler & Choi, 2014). People in collective cultures, such as Japan, view themselves in relation to everyone else. These individuals will base their self-esteem on their ability to fit into a group (Prieler & Choi, 2014). The differences in self-construal in these different cultures are going to affect how individuals approach and respond to social media content, and in turn, how they will be impacted by body ideal comparisons.

People in collective cultures may engage in social comparisons online more than individualistic cultures because they have a bigger drive to conform to what others are doing and be a part of the group (Prieler & Choi, 2014). For example, one study showed that Asian Canadians engaged in more social comparisons than European Canadians (Prieler & Choi, 2014). In regard to upward comparisons, where people compare themselves to others and find themselves lacking, individuals from collective cultures will take part in more of these types of comparisons because they will feel like they

cannot match up to the crowd (Prieler & Choi, 2014). Another expectation for individuals in collectivistic cultures is that these individuals will adopt norms related to body image more easily than individualistic cultures. Because they want to be a part of a group, they will likely imitate other group members and adhere to group norms. In these situations, the opinions of others are going to have a large influence (Prieler & Choi, 2014).

Social media's influence, then, also extends beyond the United States. The number of worldwide cases of eating disorders and the life threatening nature of these disorders makes it imperative that something be done. Fortunately, there are many things that can be done about this issue, and different countries have adopted different strategies to decrease the number of people with eating disorders.

### **What Can Be Done?**

There are a number of things that need to be done about social media's connection to developing eating disorders. For example, because there has been growing concern about eating disorders, and because of their high prevalence, there have been increasing calls for a variety of government policies (Puhl et al., 2014). There are policies that examine just eating disorders, and there are policies that examine the impact of social media on eating disorders. For example, professionals working with eating disorders and other related fields have suggested policies and recommendations mandating screening at schools for eating disorders and related behavior, restricting access to over the counter drugs that control weight, and executing legal protections against weight discrimination (Puhl et al., 2014).

In the United States, there are currently some legal remedies in place. Congress has been pushed to pass the Federal Response to Eliminate Eating Disorders Act (FREED Act). This act was passed in December 2016 ("The eating disorder coalition," n.d), and it provides funding for eating disorders by requiring treatment coverage that is consistent with the coverage of medical benefits (Puhl et al., 2014). This is the first time in history that the federal government passed legislation that was written directly to help individuals with eating disorders ("The eating disorder coalition," n.d). State laws to help with eating disorders have been more patchwork. For example, in 2013, Virginia passed a law that requires schools to promote early detection of eating disorders in youth (Puhl et al.,



2014). In California, it is a misdemeanor for coaches to provide laxatives to their youth athletes in order to lose weight (Puhl et al., 2014). Michigan is the only state that has laws against weight discrimination (Puhl et al., 2014).

In other countries, policies have been enacted to control some of the factors that influence body dissatisfaction. These factors have mainly included media as a whole. For example, in Israel, Madrid, and Spain, there are legal bans on fashion models that are extremely thin (Puhl et al., 2014). In Victoria, Australia, there are codes of conduct in place that establish how a thin model can be portrayed in the media (Puhl et al., 2014).

While legal action can be useful in helping to address the problems of body dissatisfaction and eating disorders, other remedies are also being implemented. For example, campaigns that encourage youth to appreciate their body shape can serve as a psychological buffer that can protect society from accepting unhealthy body image ideals (Perloff, 2014). Campaigns can be helpful in publicizing the problems associated with body dissatisfaction and getting people with eating disorders to understand the danger they are in. These campaigns will be the most effective if a spokesperson is chosen who has suffered from an eating disorder and has overcome their problems with health care professionals rather than a person who has not met these requirements (Perloff, 2014). It is more credible when someone who has conquered an eating disorder is an advocate for eating disorder awareness; the individual will have better credibility attached to their view. A spokesperson who is around the same age as the target viewers will also increase the effectiveness of the message. These types of campaigns often occur online, and online interventions are having an increasing role in health campaigns for young adults;

generally, such campaigns aim to change their attitudes about disordered eating and body image (Perloff, 2014).

More local “campaigns” can involve parents and other adults who should be involved in educating children and adolescents on eating disorders and the harmful content that can be found online. Teachers and health care providers should talk to their children and adolescents, especially about the negative effects of having excessive concerns about dieting and body image (Singh et al., 2016). One of the important tasks for clinicians is to aid children and adolescents to become smarter when using technology and social media. This assistance, it is hoped, will help young people become self-reflective and also be self-aware on the Internet as they are in the real world (Barth, 2015).

Parents should also be educated on what their child is doing online and be aware of the content at which they are looking (Barth, 2015). Parents and other adults also need to educate their children on the dangers that can take place while exploring the Internet (Barth, 2015). One of the important ideas to keep in mind while talking to and educating youth is to make sure adults do not take a judgmental tone because this may cause the young person to feel attacked and less willing to get help (Barth, 2015).

Because parents are one of the most important influences when it comes to a child’s attitude about body development (Van Vonderen & Kinnally, 2012), they should also educate their children about the negative effects of being obsessed with their body structure and dieting (Singh et al., 2016). In addition, parents need to be aware that the comments they make about their child’s body when he or she is growing up can lead to negative thoughts and norms about body shape (Van Vonderen & Kinnally, 2012).

Parents who place emphasis on dieting and weight control can have an impact on their child's body dissatisfaction (Van Vonderen & Kinnally, 2012).

It is important to understand that there is not only one way to approach youth about the hazards that manifest online. Each user is different, so it is important for educators, clinicians, and parents to find a balanced approach that is specific to the individual (Barth, 2015). In one case that should not be replicated, an anorexic girl's parents micromanaged her time online, and the result was an adolescent who felt controlled and stifled by her parents (Barth, 2015). In another observation, the parents took a more hands-off approach, and they gave their daughter so much independence that she felt unprotected. She proceeded to visit pro-eating disorder websites that encouraged intense exercise and starvation (Barth, 2015). Interventions need to be targeted to the individual and to start early in adolescence to help deter youth away from adopting the idea that their appearance defines their self-worth (Perloff, 2014).

As a final thought, the concern for people with eating disorders should extend to individuals who care for people with eating disorders. Caregivers can be greatly affected by their experiences with people who have eating disorders. Someone who is caring for a sick individual may experience high levels of burden and psychological distress (Coomber & King, 2010). This distress is the reason that caregivers need to have knowledge about eating disorders and develop ways to cope with illness and practice how to provide support (Coomber & King, 2010). Organizations are put into place for caregivers to go to and get educated, and these need to continue to be provided (Coomber & King, 2010).

### **Conclusion**

The purpose of this review was to examine the effects of social media on the development of eating disorders. While traditional media generally plays a role in the development of eating disorders, social media differs from traditional forms of media in a number of ways. For example, members of social media communities interact with one another, and they do so with relative anonymity. In addition, social media communities allow individuals to choose how they present themselves, as well as allowing people to self-select into social media communities where everyone shares similar beliefs.

Anorexia nervosa, bulimia nervosa, and binge eating disorder are three eating disorders that can be affected by participation in social media communities. In fact, many websites exist online that specifically promote eating disorders. Four hundred exist in the cyber community, and the purpose of these websites is to encourage members to continue losing weight and maintain their eating disorder (Marcus, 2016). The fatosphere is also found online, and this forum encourages individuals to accept their body (Marcus, 2016). Thinspiration websites especially favor the thin ideal and promote losing weight in ways that are encouraging and glorify dangerous methods and eating disorders (Ghaznavi & Taylor, 2015). Ultimately these websites can also decrease recovery rates and eventually lead to death for individuals suffering from an eating disorder (Castro & Osorio, 2012).

Women tend to be the individuals that come to mind when thinking about eating disorders as they often report being dissatisfied with their body and weight (Perloff,

2014). Exposure to the thin ideal can create unrealistic expectations for female beauty and create displeasure in one's body (Perloff, 2014). In addition, men are also at risk for eating disorders, but much less is known about this group (Dakanalis et al., 2016), although men make up 25% of anorexia nervosa and bulimia nervosa cases (Dakanalis et al., 2016), and they make up 36% of binge eating disorder cases ("Research on males and eating disorders," n.d.). Little attention has been given to non-Western ideals of beauty and how eating disorders begin and are maintained in non-white groups in the United States and those in other countries.

A number of theories help to explain social media's connection to eating disorders. The uses and gratification approach states that people have motives for using social media, and they are active in meeting their needs and seeking gratification to fulfill their motives (Perloff, 2014). The cultivation theory notes that the effects of social media will increase over time through viewing that is repeated and recurrent (Van Vonderen & Kinnally, 2012). The social comparison theory explains that people will compare themselves with others who are similar to them. The social identity theory is similar to the social comparison theory but adds that one's identity is the person's knowledge that they belong to a group, and their group members share similar worldviews, values, and qualities (Marcus, 2016). The objectification theory points to the conceptualization of an individual as an object that can be used for the pleasure of others, with women being more likely to fill this role for others (Ghaznavi & Taylor, 2015). Finally, the social cognitive theory states that people learn from behavior that is modeled, and they are more

likely to imitate the behavior when it is rewarded and if the viewer can relate to the model (Ghaznavi & Taylor, 2015).

Ultimately, social media is an important type of media to discuss because men, women, and children around the world have been, and continue to be, affected by the unrealistic body images that appear online. Additional policies need to be put into place, and society needs to be educated on these types of dangers that appear online. The FREED was a big step toward helping individuals who suffer with these disorders Act ("The eating disorder coalition," n.d.). Public campaigns, as well as more local interventions by parents, teachers, and others are also part of the solution to the problem of eating disorders.

Finally, it should be noted that social media and specific websites can be harmful to users, but not everyone who is exposed to body ideal images develop eating disorders or experience body dissatisfaction and negative feelings, and many develop eating disorders without being exposed to social media (Singh et al., 2016). Research suggests two reasons why everyone exposed is not affected. The first reason is that those who are unaffected have bodies not much different than the individuals being portrayed in the media. The second reason is simply that physical attractiveness is not important to them because they are already confident (Russello, 2013). The effects of body ideal images are going to be based on what the viewer brings to the websites themselves, such as personality factors, needs, and social situational constraints; the psychological factors of the viewer are going to play a role in how the social media affects him or her (Perloff, 2014). This topic is an extensive one and should be explored in more detail by future research.

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