

10 The Role of Digital Media in Adolescents' Body Image and Disordered Eating

Savannah R. Roberts, Anne J. Maheux,
Brianna A. Ladd, and Sophia Choukas-Bradley

Social media is a normal part of life for adolescents in the United States. According to nationally representative data, the majority of adolescents (83%) use social media, and of those who do, 70% of teen girls and 56% of teen boys check it every day (Rideout & Robb, 2018). Research on social media has been rapidly increasing, as scholars attempt to understand how social media could both help and harm adolescents' well-being. Prior research suggests that social media has an effect on users' body image, with individuals simultaneously sharing images of themselves at their most attractive while experiencing preoccupation over how their appearance will be perceived by others. The effects of social media on body image may be heightened during adolescence, a developmental stage in which individuals often prioritize their physical attractiveness over other domains of self-worth. In this chapter, we first describe the developmental features of adolescence, and how they intersect with social media, with implications for body image and disordered eating. Next, we provide an introduction to relevant theoretical frameworks for considering social media's effect on body image. Then, we examine how specific features of social media affect adolescents' body image and disordered eating. Finally, we explore specific social media platforms and content devoted to body image concerns and disordered eating.

The Adolescent Developmental Period

Adolescence is a developmental period marked by substantive changes in interpersonal relationships, identity, and autonomy (Dahl et al., 2018). Biological, interpersonal, and sociocultural factors intersect to increase adolescents' concerns about body image and physical appearance. These concerns may take the form of body dissatisfaction, when individuals dislike some element of their appearance, or disordered eating, when individuals engage in eating pathology in an attempt to modify their weight or shape. One key developmental feature of adolescence is the heightened focus on peer relationships (Brechwald & Prinstein, 2011). Increased sensitivity to social

reward makes adolescents highly attuned to their peers (Kilford et al., 2016). Importantly, social status among peers is closely tied to appearance, as adolescents perceived to be the most attractive are often also the most popular (Kennedy, 1990; Lease et al., 2002). Concomitantly, adolescents experience increased self-focus and self-consciousness, including the *imaginary audience* – a sense that one’s peers are watching one’s every move (Elkind, 1967). When peer evaluation centers on appearance, the imaginary audience may increase adolescents’ body image disturbances.

Gender differences in sociocultural and biological factors produce differences in adolescents’ body dissatisfaction and disordered eating. Girls in particular are socialized to prioritize physical appearance (Daniels et al., 2020; Fredrickson & Roberts, 1997), and adolescent girls experience higher levels of body dissatisfaction and disordered eating than do boys (Neumark-Sztainer et al., 2006). Although ideal beauty standards differ by cultural context and by race/ethnicity, the average ideal body type for women in the USA is unattainably thin yet curvy, while the average ideal body type for men is muscular (Deighton-Smith & Bell, 2018; Edwards et al., 2016). Biologically, patterns of weight gain and fat distribution during adolescence bring girls on average further from the thin beauty ideal, while increased muscularity brings boys on average closer to the muscular beauty ideal. Many girls experience body dissatisfaction due to the perceived discrepancy between one’s body and the ideal feminine body, and may engage in disordered eating in an effort to reduce this discrepancy (Halliwell & Harvey, 2006). Adolescent boys may engage in muscle-building behaviors or excessive exercise in pursuit of the masculine ideal (Calzo et al., 2016). These developmental features considered together, adolescence is a period marked by increased risk for body image disturbances and disordered eating. Social media may increase the likelihood of these phenomena by allowing for social support and connection, while leaving adolescents vulnerable to exposure from negative social influences (Dahl et al., 2018). At a time when peer approval and status are of the utmost importance, social media allows for more frequent peer interactions, leading to increased appearance-related feedback (de Vries et al., 2016). Indeed, among adolescents, more frequent social media use is associated with higher investment in one’s appearance (de Vries et al., 2014). With increased frequency of appearance-related feedback and higher investment in this feedback, social media use may lead to increased body image concerns.

These concerns occur on a spectrum, ranging from low levels of body dissatisfaction to extreme preoccupation with weight and shape. Body dissatisfaction can be conceptualized as negative evaluations of one’s body, typically resulting from a discrepancy between one’s ideal and perceived appearance (Grogan, 2016). Body dissatisfaction has been identified as the most powerful predictor and risk factor for the development of disordered eating (Stice et al., 2011). Once disordered eating reaches the level at which it significantly impairs an individual’s physical health or daily functioning, that person may meet

criteria for an eating disorder, such as anorexia nervosa (AN), bulimia nervosa (BN), or binge eating disorder (BED) (American Psychological Association, 2013). While few adolescents may receive a diagnosis of an eating disorder, the prevalence of body dissatisfaction and disordered eating is relatively common (Swanson et al., 2011). Across three large population-based studies, approximately 81% of adolescent girls and 63% of adolescent boys report body dissatisfaction (Kelly et al., 2018; Lawler & Nixon, 2011; Neumark-Sztainer et al., 2006). Further, population-based studies indicate that disordered eating is highly prevalent among adolescents, estimating that approximately 54–57% of adolescent girls and 30–33% of adolescent boys engage in at least one disordered eating behavior (Croll et al., 2002; Neumark-Sztainer et al., 2011). This chapter will focus primarily on how social media contributes to body dissatisfaction and disordered eating across the general adolescent population.

Relevant Theoretical Frameworks

There are a number of psychological theories relevant to understanding associations among social media use, body image disturbances, and disordered eating. While many of these theories were developed before the advent of social media, they nonetheless explore concepts that are implicated in social media use. The following section details leading theoretical frameworks for the development of body image disturbances and disordered eating, all of which have robust empirical support. Further, we explore a newly developed psychological theory, the transformation framework, which describes the ways in which social media has transformed adolescents' lives and further increased the importance of physical appearance.

Objectification Theory

Objectification theory was proposed as a framework for explaining the psychological consequences women experience from growing up in a society that sexually objectifies the female body (Fredrickson & Roberts, 1997). It argues that women and girls in Western society learn to adopt an observer's perspective of their own bodies – a process called *self-objectification* – after being exposed to frequent sexual objectification, which reinforces the societal message that a woman's interpersonal value is based primarily on her physical appearance (Fredrickson & Roberts, 1997). Self-objectification is linked to body shame, depression, anxiety, and the development of disordered eating (Butkowski et al., 2019; Calogero et al., 2011; Erchull et al., 2013). Research now suggests that boys and men also experience self-objectification, as they are also exposed to sociocultural appearance pressures and may experience sexual objectification (Vandenbosch & Eggermont, 2013). The act of curating one's social media profile can be thought of as a behavioral manifestation of

self-objectification, as the user is specifically creating content about one's identity that is meant to be consumed by others (Choukas-Bradley et al., 2019, 2020, 2021). In this way, social media users are encouraged to adopt an observer's perspective of themselves and post social media content that will elicit positive feedback from their social media audience. Later in this chapter, we discuss specific behaviors and experiences on social media that are associated with self-objectification.

Social Comparison Theory

Adolescents who derive self-esteem from their physical attractiveness are likely to engage in social comparison, evaluating their attractiveness by comparing it to other social media users. Festinger's (1954) *social comparison theory* argues that individuals engage in social comparison in order to estimate their own social status relative to others. While this is a natural process, it can be problematic in the case of physical attractiveness. Festinger's seminal paper on social comparison theory (1954) argues that individuals have a tendency to make upward appearance comparisons when evaluating physical attractiveness (i.e., individuals tend to compare themselves to people they perceive as more attractive than themselves), resulting in worse body image. Furthermore, when engaging in social comparison, people try to compare themselves to similar others. Taken together, peers on social media may be perceived as realistic comparison targets, but by presenting highly edited images, these "similar" comparison targets may in fact serve as upward comparison reference groups depicting unattainable attractiveness. Regardless of whether adolescents compare themselves to individuals perceived to be more or less attractive, engaging in social comparison is associated with body dissatisfaction, especially among adolescent girls (Jones, 2001). Indeed, social appearance comparisons appear to be a primary mechanism through which social media exerts influence on body image disturbances and disordered eating during adolescence. Later in this chapter, we describe specific features of social media that encourage social comparison.

Tripartite Influence Model

A third theory relevant to understanding social media's influence on adolescents' body image and disordered eating is the *tripartite influence model* (Thompson et al., 1999), which was developed to explain the mechanisms through which body dissatisfaction originates. This model proposes that through peers, parents, and the media, adolescents are frequently exposed to unattainable standards of beauty. After encountering such exposure, adolescents internalize an unattainable appearance ideal and, like in social comparison theory, engage in appearance comparisons, processes known to lead to greater body dissatisfaction (Keery et al., 2004; Thompson et al., 1999).

Internalization of an appearance ideal (often the “thin ideal” for adolescent girls and the “muscular ideal” for adolescent boys) refers to the extent to which an individual ascribes to culturally defined standards of beauty. Social media perpetuates these unattainable ideals and encourages social appearance comparisons through comments, images, and interactions that communicate societal expectations for adolescents’ bodies, ultimately fostering body dissatisfaction because these appearance ideals are unattainable for the majority of individuals (Thompson & Stice, 2001). Given its ubiquity, social media has become a primary source of appearance pressure in adolescents’ lives.

The Transformation Framework

The aforementioned theories were all developed before the advent of social media. However, scholars have recently identified features of social media directly implicated in the development of body image disturbances. The *transformation framework* argues that widespread adoption of social media among today’s adolescents has fundamentally changed the ways in which they are interacting with one another (Choukas-Bradley et al., 2021; Nesi et al., 2018a, 2018b). Here, we discuss three of the seven specific features of the transformation framework that are most relevant to understanding social media’s effects on body image: visualness, publicness, and quantifiability.

First, social media is characterized by *visualness* and *publicness*, meaning that users rely on photographs and videos to communicate to broad, public audiences (Nesi et al., 2018a). This reliance on visual forms of communication can make adolescents hyperaware of their own physical appearance. Currently, highly visual social media (HVSM) – such as Instagram, Snapchat, and TikTok – is the most popular type of social media among adolescents (Anderson & Jiang, 2018). When adolescents use HVSM, they increase their focus on others’ attractiveness, are exposed to unattainable beauty standards, and may engage in appearance-driven self-presentation techniques to elicit positive peer feedback in the form of “likes” or comments. These “likes” and comments represent *quantifiability*, or the Numerical indicators of popularity and attractiveness indicated by one’s peers and social media audience. We have provided a specific section later in the chapter describing how quantifiability of appearance-based feedback influences adolescents’ body image and disordered eating. Collectively, these features of social media may encourage self-objectification and social comparison.

Social Media Behaviors

The unique features of social media offer opportunities to engage in new, social media-specific behaviors, some of which have been linked to body image disturbances and disordered eating. The visual, public, and quantifiable aspects of social media contribute to a heightened focus on appearance and

peer feedback. Below we discuss how specific behaviors on social media, including taking, posting, and editing “selfies,” and giving and receiving “likes” and comments on one’s content, may be implicated in adolescents’ body image and disordered eating.

Selfies

Social media offers adolescents the opportunity to take, edit, and post photos of themselves – “selfies” (Lim, 2016). Selfie behaviors, including taking and posting selfies, are relatively common among adolescents (Dhir et al., 2016; McLean et al., 2019), with nationally representative US data reporting that 45% of adolescents often or sometimes post selfies (Anderson & Jiang, 2018). The association between selfie behaviors and body image and disordered eating outcomes is not yet fully understood. Some evidence from adolescent girls and young adult women in China and Australia suggests an association between selfie posting and body dissatisfaction, overvaluation of shape and weight, greater internalization of the thin ideal (McLean et al., 2015), greater engagement in appearance comparisons (Mingoia et al., 2019), self-objectification (Meier & Gray, 2014; Zheng et al., 2019), and restrained eating (Niu et al., 2020). Among samples with both adolescent boys and girls, posting a selfie is associated with self-objectification (Meier & Gray, 2014), body shame (Salomon & Brown, 2019), and restrained eating (Wilksch et al., 2020). Interestingly, other research has found that disordered eating behaviors are associated with greater *avoidance* of posting selfies among adolescent boys and girls (Loneragan et al., 2020), and that Singaporean adolescent girls with greater body esteem are more likely to post selfies than those with lower body esteem (Chang et al., 2019). Some research with adolescent boys and girls in the USA (Nesi et al., 2021) and China (Wang et al., 2019) has found no association between selfie posting and body esteem. Experimental research with adolescent girls and adult women in lab settings shows that those assigned to take and post a selfie to social media report heightened anxiety, less confidence, and feeling less physically attractive afterwards (Mills et al., 2018). Notably, these outcomes were found whether participants were uploading an unedited selfie or had the opportunity to edit and choose a preferred selfie, highlighting that simply focusing on one’s appearance and posting it to a semi-public audience may help explain this association. The somewhat conflicting results suggest a need for more research in this area, particularly with mixed-gender samples.

Photo Editing

Social media allows for adolescents to manage their online self-presentation by editing and applying filters to photos before posting. Editing one’s photos and selfies, including applying filters, cropping, and modifying one’s appearance directly, is not uncommon among adolescents and is more common

among girls than boys (see McLean et al., 2015). Qualitative work suggests that adolescent girls engage in “meticulous backstage planning,” spending hours planning and editing their photos to meet societal beauty norms, a practice that many consider “necessary” to be “pretty enough” online (Chua & Chang, 2016, p. 193). Editing one’s own photos may exacerbate the deleterious effects of social media by encouraging self-objectification, social comparison, and internalization of the thin ideal. Research with adolescents has shown that editing one’s photos is associated with self-objectification, which in turn is linked to appearance anxiety, body shame, negative appearance evaluation (Terán et al., 2020), and body image concerns (Wang et al., 2019). Photo-editing encourages social appearance comparisons (Mingoa et al., 2019) and disordered eating behaviors (Lonergan et al., 2020), even when controlling for time on social media and internalization of the thin ideal (McLean et al., 2015). Additionally, some qualitative work suggests that, especially for girls, the curation of one’s photos and selfies happens before the editing phase, including scrupulous photo planning and taking of multiple photos to ensure a desired outcome (Chua & Chang, 2016; Mascheroni et al., 2015), processes that some adolescent girls describe as “work” (Yau & Reich, 2019, p. 203).

Exposure to Others’ Photos

Emerging evidence suggests photo-based social media activity, rather than total time spent on social media, contributes to adolescents’ body image disturbances (Choukas-Bradley et al., 2020; Cohen et al., 2017; Marengo et al., 2018; Meier & Gray, 2014). HVSM in particular allows adolescents unprecedented opportunities to view the idealized and edited photos of their peers. Viewing others’ photos on social media is thought to engender risk for disordered eating and body dissatisfaction through internalization of cultural appearance ideals and social appearance comparisons (see Rodgers et al., 2020). Indeed, recent research with adolescents has shown that engaging in social appearance comparisons with others’ photos on social media is associated with body dissatisfaction (Chang et al., 2019) and disordered eating (Zimmer-Gembeck et al., 2020), and that monitoring peers’ attractiveness on social media is associated with internalization of cultural appearance ideals (Vandenbosch & Eggermont, 2015). Further, adolescent girls high in trait social comparison (those who engage in greater social comparison than their peers) may be especially vulnerable to the deleterious effects of viewing others’ photos on body image (Kleemans et al., 2018).

Peer Approval: “Likes” and Comments

Adolescents are also highly attuned to quantifiable metrics of peer approval in the form of “likes,” comments, friends, and followers. Neuroimaging studies

have demonstrated greater activation in the brain's reward circuitry (e.g., the nucleus accumbens) when adolescents view photos that receive high numbers of "likes," especially when these were their own photos (Sherman et al., 2016; Sherman, Greenfield, et al., 2018; Sherman, Hernandez, et al., 2018), suggesting that quantifiable approval of one's online self-presentation may be especially rewarding. Among adolescent girls in Australia, number of friends on social media has been shown to positively correlate with body image concerns (Tiggemann & Slater, 2013) and dieting (Tiggemann & Slater, 2014).

Peer approval can also be conveyed through comments on adolescents' posts. As expected, longitudinal evidence suggests that social media use generally is associated with more appearance-related peer feedback (i.e., comments) on adolescents' social media posts, though the same study found that the reception of peer appearance-related feedback is unrelated to body dissatisfaction (de Vries et al., 2016). Interestingly, positive appearance-related comments (compliments) have been implicated in adolescent girls' self-objectification, possibly more so than negative comments or "teasing" (Slater & Tiggemann, 2015). However, negative appearance-related comments may be linked to adolescent girls' lower self-esteem and depression and to boys' tendency to act out (Berne et al., 2014). Some work with young adults suggests that the link between social media use and social comparison may be exacerbated by adolescents' viewing "likes" and comments on others' posts (Fardouly et al., 2017; Fox & Vendemia, 2016), to which they ostensibly compare their own peer feedback. Some longitudinal work also suggests that more liking and commenting on others' social media content is associated with decreased appearance self-esteem across development (Steinsbekk et al., 2021).

No prior work to our knowledge has examined the experience of receiving or giving likes on adolescents' disordered eating outcomes specifically, though research with adult women has demonstrated that Facebook use is implicated in the maintenance of disordered eating by providing reinforcement of shape and weight concerns (Mabe et al., 2014). Theoretically, if adolescents receive "likes" and comments on photos that have been edited, or promote an idealized version of their appearance, adolescents may infer that they receive positive feedback for altering their appearance, reinforcing their body dissatisfaction. For adolescents who engage in disordered eating, these "likes" and comments may provide reinforcement for disordered eating behaviors, though this should be studied directly in future research. Indeed, social reinforcement plays a role in adolescents' disordered eating behaviors, and research has demonstrated that adolescent girls in particular encourage dieting and disordered eating among one another, and that girls who engage in disordered eating are more likely to be perceived as popular by their peers, despite having lower body esteem (Lieberman et al., 2001).

Subjective Social Media Experiences

Although social media-specific behaviors clearly play a role in adolescents' body image and disordered eating, researchers are increasingly turning toward subjective, psychological experiences on social media to explain individual differences in these outcomes. Indeed, *investment*, or the degree of importance adolescents place on social media experiences, has been more strongly linked to negative outcomes than merely engaging in the behavior. Below we describe the roles of investment in one's appearance online, investment in peer feedback on one's posts, and heightened appearance-related social media consciousness (ASMC).

Investment in Appearance

Likely due to the sociocultural emphasis on appearance, aspects of adolescent development, features of social media, and, for girls, gender socialization, adolescents are highly invested in how they present themselves online. Although girls report generally placing more importance on appearing attractive online, boys report investment in their online appearance as well (e.g., de Vries et al., 2014; Mingoia et al., 2019; Yau & Reich, 2019). Investment in one's selfies, including putting in more effort to take and edit selfies, is associated with greater body dissatisfaction and dietary restraint, even after controlling for overall social media use and internalization of the thin ideal, among adolescent girls in Australia (McLean et al., 2015), and with greater appearance comparisons among adolescent girls and boys in Australia (Mingoia et al., 2019). Work with young adult women is more extensive and finds a similar pattern (e.g., Cohen et al., 2018; Lonergan et al., 2019). Importantly, photo editing and investment in photos are highly correlated among adolescents and young adults (Cohen et al., 2018; Mingoia et al., 2019; McLean et al., 2015), suggesting that photo editing may be a behavioral manifestation of appearance investment.

Investment in Peer Feedback

Adolescents are also often highly invested in receiving peer feedback on their social media posts in the form of "likes," followers, friends, and comments. Qualitative work suggests that adolescents, especially girls, post selfies for the primary purpose of appearing attractive or favorable to peers and ultimately receiving positive peer feedback (Burnette et al., 2017; Chua & Chang, 2016; Yau & Reich, 2019). Research also shows that adolescents and young adults engage in various behaviors to earn more "likes" on their content, including editing their photos, uploading photos at certain times of day, deleting photos when they do not get enough likes and reposting at a later time, purchasing followers and likes, asking their friends to like their photos, and liking others' photos in exchange for more likes (Dumas et al., 2017; Yau & Reich, 2019).

Among adolescents, this behavior is associated with negative mental and behavioral health outcomes (Nesi & Prinstein, 2019), problematic social media use (e.g., using social media to cope with negative emotions; Martinez-Pecino & Garcia-Gavilán, 2019), and lower global self-esteem (Meeus et al., 2019). Some preliminary work suggests that concern about peer feedback on one's selfies specifically is associated with worse body esteem (Nesi et al., 2021). Among young adult women, greater investment in selfie feedback from peers was associated with body surveillance, body dissatisfaction, and drive for thinness, but not bulimic tendencies (Butkowski et al., 2019). Notably, young adults who engage in negative feedback seeking (i.e., eliciting negative feedback to confirm negative perceptions of oneself) and who receive more negative comments on Facebook are more likely to report disordered eating concerns and behaviors a month later (Hummel & Smith, 2015).

Appearance-Related Social Media Consciousness

The visual nature of social media that leads to a focus on physical appearance, such as HVSM, may manifest as a broader preoccupation with one's social media self-presentation, even in offline spaces. *Appearance-related social media consciousness* (ASMC) has been proposed as a novel subjective experience among adolescents and adults, defined as a preoccupation with one's attractiveness to a real or potential social media audience (Choukas-Bradley et al., 2019, 2020). ASMC is common among both adolescents and young adults, especially among young women (Choukas-Bradley et al., 2019, 2020). In some ways, this experience reflects the extension of self-objectification to a social media audience, whereby adolescents and young adults imagine how their social media photos look to outside observers, overvalue their physical appearance on social media relative to other social media experiences, and even remain vigilant during in-person social interactions with the knowledge that at any moment a photo could be taken and posted to a larger social media audience (Choukas-Bradley et al., 2019, 2020). ASMC is correlated with self-objectification, body surveillance, body shame, body comparison, depressive symptoms, and disordered eating among adolescents (Choukas-Bradley et al., 2020). Additionally, even when controlling for body surveillance (a behavioral manifestation of self-objectification) and overall time on social media, ASMC is associated with greater disordered eating behaviors for adolescent girls (Choukas-Bradley et al., 2020), suggesting the unique effect of social media-specific appearance cognitions.

Social Media Devoted to Body Image Concerns

The prior sections demonstrate how social media plays a role in adolescents' body image and disordered eating. Adolescents may also turn to social media for guidance or inspiration on attaining their desired body

type. In addition to universal features such as edited photos, “likes,” and comments, social media includes content designed specifically for the purpose of encouraging users to attain a specific body shape or appearance, and influences users’ perceptions of body image.

Weight Loss and Fitness Social Media Content

“Thinspiration” and “fitspiration” refer to social media images meant to inspire viewers to be thin or fit, respectively. While social media users may believe this content teaches viewers healthy lifestyle and dieting techniques, it can be problematic if it encourages inaccurate, or even dangerous, health content (Carrotte et al., 2015). Thinspiration and fitspiration images frequently depict weight loss techniques or fitness regimens, though there is no guarantee that these messages come from certified health professionals. More likely, the images have been posted by celebrities, models, influencers, or peers. Moreover, teenage girls with preexisting body image concerns are especially likely to seek out this type of content, hoping to gain inspiration for changing their own weight or appearance (Carrotte et al., 2015). The presentation of these images on social media, where adolescents frequently see the personal life experiences of their peers, may make them appear more relatable and thus attainable, despite many negative outcomes related to viewing these images. Alarmingly, companies that manufacture “wellness” products such as FlatTummyShakes and FitTea hire popular social media influencers and celebrities to advertise their products, though these supplements contain appetite suppressants and laxatives, and thereby facilitate disordered eating (Auguste et al., 2019; Wong, 2018). Studies examining young adults’ exposure to and posting of such content consistently show associations with body dissatisfaction and disordered eating behaviors (e.g., Griffiths & Stefanovski, 2019; Holland & Tiggemann, 2017), often mediated by appearance comparisons (e.g., Tiggemann & Zaccardo, 2015). To our knowledge, only one study on the topic has included adolescents, finding that participants with a diagnosed eating disorder were more than twice as likely to view fitness-related social media content, and consumption of such content was highest among adolescent girls relative to boys and young adult women (Carrotte et al., 2015).

Social Media Content Encouraging Eating Disorders

Taken to the extreme, some social media content is dedicated to promoting and encouraging eating disorders. This content, often referred to “pro-ED” (pro-eating disorder), “pro-ana” (pro-anorexia nervosa), or “pro-mia” (pro-bulimia nervosa), facilitates community discussion by individuals with these disorders to maintain their disordered eating behaviors and cognitions. The majority of followers of pro-ED profiles are adolescent girls

(Bert et al., 2016). Content includes images of emaciated figures to inspire extreme thinness, challenges and competitions for caloric restriction, techniques for avoiding treatment, and anti-recovery messages (Arseniev-Koehler et al., 2016; Bert et al., 2016; Ging & Garvey, 2018). Eating disorders may be acquired or exacerbated through social learning processes. Indeed, research on group treatments for adolescent eating disorders demonstrates that patients may bond over their weight loss goals, share tricks for preventing effective care, vomit together, or compete with one another for the most severe case presentation (McGilley, 2006; Vandereycken, 2011). Whereas in clinical contexts, trained clinicians are able to monitor and address these phenomena, such an opportunity is unavailable on social media. Adolescents who are most at risk for disordered eating and who are more easily impressionable may be especially at risk for valuing the potential social support these pro-ED platforms provide (Arseniev-Koehler et al., 2016). At a developmental stage when peer evaluation and feedback is of paramount importance, these platforms pose a dangerous threat for encouraging and exacerbating adolescent eating disorders.

Body Positivity Social Media Content

In response to the increased popularity of appearance-focused photo and video sharing on social media (Anderson & Jiang, 2018), there has been an emergence of body positive content that focuses on challenging the unrealistic beauty standards depicted on social media by reconceptualizing body acceptance. More specifically, the social movement known as “the body positivity movement” has developed on social media with the intention of increasing body acceptance through broad definitions of beauty and the depiction of a greater range of body types and appearances, along with limited photo editing and manipulation (Cohen, Irwin, et al., 2019; Lazuka et al., 2020; Tylka & Wood-Barcalow, 2015; Webb et al., 2017). Indeed, content analyses indicate that posts related to body positivity present varying constructs of beauty (Lazuka et al., 2020), and have gained popularity on mainstream online communities (see Rodgers et al., 2020). Research has begun to examine the potential benefits of exposure to this content, with recent experimental studies finding associations between young women’s exposure to body positive images and boosts in body satisfaction and body appreciation, when compared to viewing thin-ideal images (Cohen, Fardouly, et al., 2019; Williamson & Karazsia, 2018). Despite this promising evidence, there is debate regarding how body positive content may continue to place value on physical appearance and may increase shame for individuals who have lower body acceptance (see Cohen et al., 2020). Consistent with this critique, studies have found that despite women’s frequently encouraging responses to body positive images, such exposure is associated with higher levels of self-objectification and salience of physical appearance (e.g., describing the self through the lens of

physical appearance rather than other attributes; Betz & Ramsey, 2017; Cohen, Fardouly, et al., 2019). The numerous negative outcomes associated with self-objectification (Fredrickson & Roberts, 1997) pose the possibility that body positive posts may have long-term negative impacts that need to be further investigated.

From a theoretical standpoint, there are also potential benefits of body positive social media. For example, the tripartite influence model (Thompson et al., 1999) offers another framework for evaluating the relationship between body positive social media content and body image concerns. Exposure to a more diverse range of bodies may lead to a decrease in the internalization of media's unrealistic appearance ideals (i.e., the thin and muscular ideals), improving viewers' body image. Additionally, it is possible that social media users' engagement in social comparisons with more inclusive and realistic social media targets may positively affect body image outcomes. Since much is currently unknown regarding the impacts of body positive content, future research should investigate the short- and long-term benefits and consequences associated with exposure to body positive social media content, especially among adolescent girls, who may be distinctly vulnerable to these associated effects.

Future Directions, Implications, and Conclusions

Social media has transformed the lives of adolescents. Although research is mixed regarding the overall effect of social media on adolescents' well-being, extant research suggests that the highly visual nature of social media may lead to body image concerns and disordered eating. It may be useful to assess the ways in which an adolescent is using social media, and whether it is causing disruption to their well-being or body image. Given the ubiquity of social media use among adolescents, it is imperative that scholars and mental health care providers consider the effect of social media on adolescents' body image and disordered eating.

While many novel social media behaviors have been linked to body dissatisfaction and disordered eating, social media is constantly evolving. New behaviors and opportunities beyond posting and viewing others' posts are rapidly becoming central for adolescent social media use. For example, many adolescents now have two Instagram accounts – one on which they post polished posts fit for a more public audience and another – a “finsta” or fake Instagram – where they post more private, personal topics and photos (McGregor & Li, 2019). Additionally, Snapchat, a social media site used by approximately 70% of adolescents (Anderson & Jiang, 2018), allows for ephemeral sending where, unlike on more permanent platforms, photos are seen by interaction partners but then immediately deleted (Bayer et al., 2016). With the increasing popularity of TikTok, video-based sites also require

increased research attention. It is unclear how these sites may affect adolescents' body image and disordered eating behaviors, and more research is needed to investigate the role of these novel behaviors.

An additional key priority for future research includes applying intersectionality theory (Crenshaw, 1989) when investigating the relationship between photo activity on social media and body image concerns. To this point, the majority of literature in this area focuses heavily on presumably heterosexual White cisgender girls, despite social media use being ubiquitous among all adolescents, regardless of gender, racial/ethnic identity, and sexual orientation. Future research should examine the unique intersection of marginalized identities across race/ethnicity, class, gender, and sexual identity to determine social media's particular effects on specific populations, such as Black girls and young women.

Conclusion

This chapter describes theoretical and empirical work on adolescents' social media use, body image, and disordered eating. Although a few examples highlight the potential benefits of social media for adolescents' body image, the majority of work in this area underscores the role of social media in perpetuating and encouraging body dissatisfaction and disordered eating behaviors, particularly among adolescent girls, by overemphasizing physical attractiveness and body ideals on HVSM. Many of the social media behaviors and experiences described in this chapter are normative and thus insidious in potentially causing harm. Others, such as pro-ED sites, are more flagrant. Adolescents, their parents, and clinicians should be made aware of the potential detriments and dangers of these platforms. Future research should continue to investigate these processes and develop intervention, prevention, and dissemination strategies to foster adolescents' healthy body image and eating behaviors across development.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>
- Anderson, M., & Jiang, J. (2018). *Teens, social media & technology 2018*. Pew Research Center: Internet, Science & Tech. <https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/>
- Arseniev-Koehler, A., Lee, H., McCormick, T., & Moreno, M. A. (2016). #Proana: Pro-eating disorder socialization on Twitter. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, 58(6), 659–664. <https://doi.org/10.1016/j.jadohealth.2016.02.012>
- Auguste, K., Bradshaw, A., Bajalia, A., et al. (2019). Detox tea advertising on social media: Examining the content of popular detox tea brands on Instagram.

- Journal of Nutrition Education and Behavior*, 51(7, Supplement), S125. <https://doi.org/10.1016/j.jneb.2019.05.581>
- Bayer, J. B., Ellison, N. B., Schoenebeck, S. Y., & Falk, E. B. (2016). Sharing the small moments: Ephemeral social interaction on Snapchat. *Information, Communication & Society*, 19(7), 956–977. <https://doi.org/10.1080/1369118X.2015.1084349>
- Berne, S., Frisén, A., & Kling, J. (2014). Appearance-related cyberbullying: A qualitative investigation of characteristics, content, reasons, and effects. *Body Image*, 11(4), 527–533. <https://doi.org/10.1016/j.bodyim.2014.08.006>
- Bert, F., Gualano, M. R., Camussi, E., & Siliquini, R. (2016). Risks and threats of social media websites: Twitter and the Proana movement. *Cyberpsychology, Behavior, and Social Networking*, 19(4), 233–238. <https://doi.org/10.1089/cyber.2015.0553>
- Betz, D. E., & Ramsey, L. R. (2017). Should women be “All About That Bass?”: Diverse body-ideal messages and women’s body image. *Body Image*, 22, 18–31. <https://doi.org/10.1016/j.bodyim.2017.04.004>
- Brechwald, W. A., & Prinstein, M. J. (2011). Beyond homophily: A decade of advances in understanding peer influence processes. *Journal of Research on Adolescence*, 21(1), 166–179. <https://doi.org/10.1111/j.1532-7795.2010.00721.x>
- Burnette, C. B., Kwitowski, M. A., & Mazzeo, S. E. (2017). “I don’t need people to tell me I’m pretty on social media:” A qualitative study of social media and body image in early adolescent girls. *Body Image*, 23, 114–125. <https://doi.org/10.1016/j.bodyim.2017.09.001>
- Butkowski, C. P., Dixon, T. L., & Weeks, K. (2019). Body surveillance on Instagram: Examining the role of selfie feedback investment in young adult women’s body image concerns. *Sex Roles*, 81(5), 385–397. <https://doi.org/10.1007/s11199-018-0993-6>
- Calogero, R. M., Tantleff-Dunn, S., & Thompson, J. K. (Eds.). (2011). Objectification theory: An introduction. In *Self-objectification in women: Causes, consequences, and counteractions* (pp. 3–21). American Psychological Association. <https://doi.org/10.1037/12304-001>
- Calzo, J. P., Horton, N. J., Sonnevile, K. R., et al. (2016). Male eating disorder symptom patterns and health correlates from 13 to 26 years of age. *Journal of the American Academy of Child & Adolescent Psychiatry*, 55(8), 693–700. <https://doi.org/10.1016/j.jaac.2016.05.011>
- Carrotte, E. R., Vella, A. M., & Lim, M. S. (2015). Predictors of “liking” three types of health and fitness-related content on social media: A cross-sectional study. *Journal of Medical Internet Research*, 17(8), e205. <https://doi.org/10.2196/jmir.4803>
- Chang, L., Li, P., Loh, R. S. M., & Chua, T. H. H. (2019). A study of Singapore adolescent girls’ selfie practices, peer appearance comparisons, and body esteem on Instagram. *Body Image*, 29, 90–99. <https://doi.org/10.1016/j.bodyim.2019.03.005>
- Choukas-Bradley, S., Nesi, J., Widman, L., & Galla, B. M. (2020). The Appearance-Related Social Media Consciousness Scale: Development and validation with adolescents. *Body Image*, 33, 164–174. <https://doi.org/10.1016/j.bodyim.2020.02.017>

- Choukas-Bradley, S., Nesi, J., Widman, L., & Higgins, M. K. (2019). Camera-ready: Young women's appearance-related social media consciousness. *Psychology of Popular Media Culture, 8*(4), 473–481. <https://doi.org/10.1037/ppm0000196>
- Choukas-Bradley, S., Roberts, S. R., Maheux, A. J., & Nesi, J. (2021). The perfect storm: A developmental-sociocultural framework for the role of social media in adolescent girls' body image concerns and mental health. *PsyArXiv*. <https://doi.org/10.31234/osf.io/ju92a>
- Chua, T. H. H., & Chang, L. (2016). Follow me and like my beautiful selfies: Singapore teenage girls' engagement in self-presentation and peer comparison on social media. *Computers in Human Behavior, 55*, 190–197. <https://doi.org/10.1016/j.chb.2015.09.011>
- Cohen, R., Fardouly, J., Newton-John, T., & Slater, A. (2019). #BoPo on Instagram: An experimental investigation of the effects of viewing body positive content on young women's mood and body image. *New Media & Society, 21*(7), 1546–1564. <https://doi.org/10.1177/1461444819826530>
- Cohen, R., Irwin, L., Newton-John, T., & Slater, A. (2019). #bodypositivity: A content analysis of body positive accounts on Instagram. *Body Image, 29*, 47–57. <https://doi.org/10.1016/j.bodyim.2019.02.007>
- Cohen, R., Newton-John, T., & Slater, A. (2017). The relationship between Facebook and Instagram appearance-focused activities and body image concerns in young women. *Body Image, 23*, 183–187. <http://dx.doi.org/10.1016/j.bodyim.2017.10.002>
- Cohen, R., Newton-John, T., & Slater, A. (2018). 'Selfie'-objectification: The role of selfies in self-objectification and disordered eating in young women. *Computers in Human Behavior, 79*, 68–74. <https://doi.org/10.1016/j.chb.2017.10.027>
- Cohen, R., Newton-John, T., & Slater, A. (2020). The case for body positivity on social media: Perspectives on current advances and future directions. *Journal of Health Psychology, 26*(13), 2365–2373. <https://doi.org/10.1177/1359105320912450>
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum, 1989*(1), 139–167. <https://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8>
- Croll, J., Neumark-Sztainer, D., Story, M., & Ireland, M. (2002). Prevalence and risk and protective factors related to disordered eating behaviors among adolescents: Relationship to gender and ethnicity. *Journal of Adolescent Health, 31*(2), 166–175. [https://doi.org/10.1016/S1054-139X\(02\)00368-3](https://doi.org/10.1016/S1054-139X(02)00368-3)
- Dahl, R. E., Allen, N. B., Wilbrecht, L., & Suleiman, A. B. (2018). Importance of investing in adolescence from a developmental science perspective. *Nature, 554*(7693), 441–450. <https://doi.org/10.1038/nature25770>
- Daniels, E. A., Zurbriggen, E. L., & Monique Ward, L. (2020). Becoming an object: A review of self-objectification in girls. *Body Image, 33*, 278–299. <https://doi.org/10.1016/j.bodyim.2020.02.016>
- de Vries, D. A., Peter, J., de Graaf, H., & Nikken, P. (2016). Adolescents' social network site use, peer appearance-related feedback, and body dissatisfaction: Testing a mediation model. *Journal of Youth and Adolescence, 45*(1), 211–224. <https://doi.org/10.1007/s10964-015-0266-4>

- de Vries, D. A., Peter, J., Nikken, P., & de Graaf, H. (2014). The effect of social network site use on appearance investment and desire for cosmetic surgery among adolescent boys and girls. *Sex Roles, 71*(9–10), 283–295. <https://doi.org/10.1007/s11199-014-0412-6>
- Deighton-Smith, N., & Bell, B. T. (2018). Objectifying fitness: A content and thematic analysis of #fitspiration images on social media. *Psychology of Popular Media Culture, 7*(4), 467–483. <https://doi.org/10.1037/ppm0000143>
- Dhir, A., Pallesen, S., Torsheim, T., & Andreassen, C. S. (2016). Do age and gender differences exist in selfie-related behaviours? *Computers in Human Behavior, 63*, 549–555. <https://doi.org/10.1016/j.chb.2016.05.053>
- Dumas, T. M., Maxwell-Smith, M., Davis, J. P., & Giulietti, P. A. (2017). Lying or longing for likes? Narcissism, peer belonging, loneliness and normative versus deceptive like-seeking on Instagram in emerging adulthood. *Computers in Human Behavior, 71*, 1–10. <https://doi.org/10.1016/j.chb.2017.01.037>
- Edwards, C., Tod, D., Molnar, G., & Markland, D. (2016). Perceived social pressures and the internalization of the mesomorphic ideal: The role of drive for muscularity and autonomy in physically active men. *Body Image, 16*, 63–69. <https://doi.org/10.1016/j.bodyim.2015.11.003>
- Elkind, D. (1967). Egocentrism in adolescence. *Child Development, 38*(4), 1025–1034. <https://doi.org/10.2307/1127100>
- Erchull, M. J., Liss, M., & Lichiello, S. (2013). Extending the negative consequences of media internalization and self-objectification to dissociation and self-harm. *Sex Roles, 69*(11–12), 583–593. <https://doi.org/10.1007/s11199-013-0326-8>
- Fardouly, J., Pinkus, R. T., & Vartanian, L. R. (2017). The impact of appearance comparisons made through social media, traditional media, and in person in women's everyday lives. *Body Image, 20*, 31–39. <https://doi.org/10.1016/j.bodyim.2016.11.002>
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7*(2), 117–140. <https://doi.org/10.1177/001872675400700202>
- Fox, J., & Vendemia, M. A. (2016). Selective self-presentation and social comparison through photographs on social networking sites. *Cyberpsychology, Behavior, and Social Networking, 19*(10), 593–600. <https://doi.org/10.1089/cyber.2016.0248>
- Fredrickson, B. L., & Roberts, T.-A. (1997). Objectification theory. *Psychology of Women Quarterly, 21*(2), 173–206. <https://doi.org/10.1111/j.1471-6402.1997.tb00108.x>
- Ging, D., & Garvey, S. (2018). 'Written in these scars are the stories I can't explain': A content analysis of pro-ana and thinspiration image sharing on Instagram. *New Media & Society, 20*(3), 1181–1200. <https://doi.org/10.1177/1461444816687288>
- Griffiths, S., & Stefanovski, A. (2019). Thinspiration and fitspiration in everyday life: An experience sampling study. *Body Image, 30*, 135–144. <https://doi.org/10.1016/j.bodyim.2019.07.002>
- Grogan, S. (2016). *Body image: Understanding body dissatisfaction in men, women and children*. Taylor & Francis.
- Halliwell, E., & Harvey, M. (2006). Examination of a sociocultural model of disordered eating among male and female adolescents. *British Journal of Health Psychology, 11*(2), 235–248. <https://doi.org/10.1348/135910705X39214>

- Holland, G., & Tiggemann, M. (2017). “Strong beats skinny every time”: Disordered eating and compulsive exercise in women who post fitspiration on Instagram. *International Journal of Eating Disorders*, 50(1), 76–79. <https://doi.org/10.1002/eat.22559>
- Hummel, A. C., & Smith, A. R. (2015). Ask and you shall receive: Desire and receipt of feedback via Facebook predicts disordered eating concerns. *International Journal of Eating Disorders*, 48(4), 436–442. <https://doi.org/10.1002/eat.22336>
- Jones, D. C. (2001). Social comparison and body image: Attractiveness comparisons to models and peers among adolescent girls and boys. *Sex Roles*, 45(9), 645–664. <https://doi.org/10.1023/A:1014815725852>
- Keery, H., van den Berg, P., & Thompson, J. K. (2004). An evaluation of the Tripartite Influence Model of body dissatisfaction and eating disturbance with adolescent girls. *Body Image*, 1(3), 237–251. <https://doi.org/10.1016/j.bodyim.2004.03.001>
- Kelly, Y., Zilanawala, A., Booker, C., & Sacker, A. (2018). Social media use and adolescent mental health: Findings from the UK millennium cohort study. *EclinicalMedicine*, 6, 59–68. <https://doi.org/10.1016/j.eclinm.2018.12.005>
- Kennedy, J. H. (1990). Determinants of peer social status: Contributions of physical appearance, reputation, and behavior. *Journal of Youth and Adolescence*, 19(3), 233–244. <http://doi.org/10.1007/BF01537889>
- Kilford, E. J., Garrett, E., & Blakemore, S. J. (2016). The development of social cognition in adolescence: An integrated perspective. *Neuroscience & Biobehavioral Reviews*, 70, 106–120. <https://doi.org/10.1016/j.neubiorev.2016.08.016>
- Kleemans, M., Daalmans, S., Carbaat, I., & Anschutz, D. (2018). Picture perfect: The direct effect of manipulated instagram photos on body image in adolescent girls. *Media Psychology*, 21(1), 93–110. <http://dx.doi.org/10.1080/15213269.2016.1257392>
- Lawler, M., & Nixon, E. (2011). Body dissatisfaction among adolescent boys and girls: The effects of body mass, peer appearance culture and internalization of appearance ideals. *Journal of Youth and Adolescence*, 40(1), 59–71. <https://doi.org/10.1007/s10964-009-9500-2>
- Lazuka, R. F., Wick, M. R., Keel, P. K., & Harriger, J. A. (2020). Are we there yet? Progress in depicting diverse images of beauty in Instagram’s Body Positivity Movement. *Body Image*, 34, 85–93. <https://doi.org/10.1016/j.bodyim.2020.05.001>
- Lease, A. M., Kennedy, C. A., & Axelrod, J. L. (2002). Children’s social constructions of popularity. *Social Development*, 11(1), 87–109. <https://doi.org/10.1111/1467-9507.00188>
- Lieberman, M., Gauvin, L., Bukowski, W. M., & White, D. R. (2001). Interpersonal influence and disordered eating behaviors in adolescent girls: The role of peer modeling, social reinforcement, and body-related teasing. *Eating Behaviors*, 2(3), 215–236. [https://doi.org/10.1016/S1471-0153\(01\)00030-7](https://doi.org/10.1016/S1471-0153(01)00030-7)
- Lim, W. M. (2016). Understanding the selfie phenomenon: Current insights and future research directions. *European Journal of Marketing*, 50(9/10), 1773–1788. <https://doi.org/10.1108/EJM-07-2015-0484>
- Lonergan, A. R., Bussey, K., Fardouly, J., et al. (2020). Protect me from my selfie: Examining the association between photo-based social media behaviors and self-reported eating disorders in adolescence. *International Journal of Eating Disorders*, 53(5), 755–766. <https://doi.org/10.1002/eat.23256>

- Lonergan, A. R., Bussey, K., Mond, J., et al. (2019). Me, my selfie, and I: The relationship between editing and posting selfies and body dissatisfaction in men and women. *Body Image*, 28, 39–43. <https://doi.org/10.1016/j.bodyim.2018.12.001>
- Mabe, A. G., Forney, K. J., & Keel, P. K. (2014). Do you “like” my photo? Facebook use maintains eating disorder risk. *International Journal of Eating Disorders*, 47(5), 516–523. <https://doi.org/10.1002/eat.22254>
- Marengo, D., Longobardi, C., Fabris, M. A., & Settanni, M. (2018). Highly-visual social media and internalizing symptoms in adolescence: The mediating role of body image concerns. *Computers in Human Behavior*, 82, 63–69. <https://doi.org/10.1016/j.chb.2018.01.003>
- Martinez-Pecino, R., & Garcia-Gavilán, M. (2019). Likes and problematic Instagram use: The moderating role of self-esteem. *Cyberpsychology, Behavior, and Social Networking*, 22(6), 412–416. <https://doi.org/10.1089/cyber.2018.0701>
- Mascheroni, G., Vincent, J., & Jimenez, E. (2015). “Girls are addicted to likes so they post semi-naked selfies”: Peer mediation, normativity and the construction of identity online. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 9(1), Article 5. <https://doi.org/10.5817/CP2015-1-5>
- McGilley, B. H. (2006). Group therapy for adolescents with eating disorders. *Group*, 30(4), 321–336. <http://www.jstor.org/stable/41719135>
- McGregor, K. A., & Li, J. (2019). Fake Instagrams for real conversation: A thematic analysis of the hidden social media life of teenagers. *Journal of Adolescent Health*, 64(2), S39–S40. <https://doi.org/10.1016/j.jadohealth.2018.10.088>
- McLean, S. A., Jarman, H. K., & Rodgers, R. F. (2019). How do “selfies” impact adolescents’ well-being and body confidence? A narrative review. *Psychology Research and Behavior Management*, 12, 513–521. <https://doi.org/10.2147/PRBM.S177834>
- McLean, S. A., Paxton, S. J., Wertheim, E. H., & Masters, J. (2015). Photoshopping the selfie: Self photo editing and photo investment are associated with body dissatisfaction in adolescent girls. *International Journal of Eating Disorders*, 48(8), 1132–1140. <https://doi.org/10.1002/eat.22449>
- Meeus, A., Beullens, K., & Eggermont, S. (2019). Like me (please?): Connecting online self-presentation to pre- and early adolescents’ self-esteem. *New Media & Society*, 21(11–12), 2386–2403. <https://doi.org/10.1177/1461444819847447>
- Meier, E. P., & Gray, J. (2014). Facebook photo activity associated with body image disturbance in adolescent girls. *Cyberpsychology, Behavior, and Social Networking*, 17(4), 199–206. <https://doi.org/10.1089/cyber.2013.0305>
- Mills, J. S., Musto, S., Williams, L., & Tiggemann, M. (2018). “Selfie” harm: Effects on mood and body image in young women. *Body Image*, 27, 86–92. <https://doi.org/10.1016/j.bodyim.2018.08.007>
- Mingoia, J., Hutchinson, A. D., Gleaves, D. H., & Wilson, C. (2019). The relationship between posting and photo manipulation activities on social networking sites and internalization of a tanned ideal among Australian adolescents and young adults. *Social Media + Society*, 5(1). <https://doi.org/10.1177/2056305118820419>
- Nesi, J., Choukas-Bradley, S., Maheux, A. J., et al. (2021). Selfie appearance investment and peer feedback concern: A multi-method investigation of adolescent

- selfie practices and psychosocial adjustment. *Psychology of Popular Media*, 10(4), 488–499. <https://doi.org/10.1037/ppm0000342>
- Nesi, J., Choukas-Bradley, S., & Prinstein, M. J. (2018a). Transformation of adolescent peer relations in the social media context: Part 1 – A theoretical framework and application to dyadic peer relationships. *Clinical Child and Family Psychology Review*, 21(3), 267–294. <https://doi.org/10.1007/s10567-018-0261-x>
- Nesi, J., Choukas-Bradley, S., & Prinstein, M. J. (2018b). Transformation of adolescent peer relations in the social media context: Part 2 – Application to peer group processes and future directions for research. *Clinical Child and Family Psychology Review*, 21(3), 295–319. <https://doi.org/10.1007/s10567-018-0262-9>
- Nesi, J., & Prinstein, M. J. (2019). In search of likes: Longitudinal associations between adolescents' digital status seeking and health-risk behaviors. *Journal of Clinical Child & Adolescent Psychology*, 48(5), 740–748. <https://doi.org/10.1080/15374416.2018.1437733>
- Neumark-Sztainer, D., Paxton, S. J., Hannan, P. J., Haines, J., & Story, M. (2006). Does body satisfaction matter? Five-year longitudinal associations between body satisfaction and health behaviors in adolescent females and males. *Journal of Adolescent Health*, 39(2), 244–251. <https://doi.org/10.1016/j.jadohealth.2005.12.001>
- Neumark-Sztainer, D., Wall, M., Larson, N. I., Eisenberg, M. E., & Loth, K. (2011). Dieting and disordered eating behaviors from adolescence to young adulthood: Findings from a 10-year longitudinal study. *Journal of the American Dietetic Association*, 111(7), 1004–1011. <https://doi.org/10.1016/j.jada.2011.04.012>
- Niu, G., Sun, L., Liu, Q., Chai, H., Sun, X., & Zhou, Z. (2020). Selfie-posting and young adult women's restrained eating: The role of commentary on appearance and self-objectification. *Sex Roles*, 82(3), 232–240. <https://doi.org/10.1007/s11199-019-01045-9>
- Rideout, V., & Robb, M. B. (2018). *Social media, social life: Teens reveal their experiences*. Common Sense Media. https://www.commonsensemedia.org/sites/default/files/uploads/research/2018_cs_socialmediasociallife_executive_summary-final-release_3_lowres.pdf
- Rodgers, R. F., Slater, A., Gordon, C. S., McLean, S. A., Jarman, H. K., & Paxton, S. J. (2020). A biopsychosocial model of social media use and body image concerns, disordered eating, and muscle-building behaviors among adolescent girls and boys. *Journal of Youth and Adolescence*, 49(2), 399–409. <https://doi.org/10.1007/s10964-019-01190-0>
- Salomon, I., & Brown, C. S. (2019). The selfie generation: Examining the relationship between social media use and early adolescent body image. *The Journal of Early Adolescence*, 39(4), 539–560. <https://doi.org/10.1177/0272431618770809>
- Sherman, L. E., Greenfield, P. M., Hernandez, L. M., & Dapretto, M. (2018). Peer influence via Instagram: Effects on brain and behavior in adolescence and young adulthood. *Child Development*, 89(1), 37–47. <https://doi.org/10.1111/cdev.12838>
- Sherman, L. E., Hernandez, L. M., Greenfield, P. M., & Dapretto, M. (2018). What the brain 'likes': Neural correlates of providing feedback on social media. *Social Cognitive and Affective Neuroscience*, 13(7), 699–707. <https://doi.org/10.1093/scan/nsy051>

- Sherman, L. E., Payton, A. A., Hernandez, L. M., Greenfield, P. M., & Dapretto, M. (2016). The power of the like in adolescence: Effects of peer influence on neural and behavioral responses to social media. *Psychological Science*, 27(7), 1027–1035. <https://doi.org/10.1177/0956797616645673>
- Slater, A., & Tiggemann, M. (2015). Media exposure, extracurricular activities, and appearance-related comments as predictors of female adolescents' self-objectification. *Psychology of Women Quarterly*, 39(3), 375–389. <https://doi.org/10.1177/0361684314554606>
- Steinsbekk, S., Wichstrøm, L., Stenseng, F., Nesi, J., Hygen, B. W., & Skalická, V. (2021). The impact of social media use on appearance self-esteem from childhood to adolescence: A 3-wave community study. *Computers in Human Behavior*, 114, Article 106528. <https://doi.org/10.1016/j.chb.2020.106528>
- Stice, E., Marti, C. N., & Durant, S. (2011). Risk factors for onset of eating disorders: Evidence of multiple risk pathways from an 8-year prospective study. *Behaviour Research and Therapy*, 49(10), 622–627. <https://doi.org/10.1016/j.brat.2011.06.009>
- Swanson, S. A., Crow, S. J., Le Grange, D., Swendsen, J., & Merikangas, K. R. (2011). Prevalence and correlates of eating disorders in adolescents: Results from the national comorbidity survey replication adolescent supplement. *Archives of General Psychiatry*, 68(7), 714–723. <https://doi.org/10.1001/archgenpsychiatry.2011.22>
- Terán, L., Yan, K., & Aubrey, J. S. (2020). “But first let me take a selfie”: U.S. adolescent girls' selfie activities, self-objectification, imaginary audience beliefs, and appearance concerns. *Journal of Children and Media*, 14(3), 343–360. <https://doi.org/10.1080/17482798.2019.1697319>
- Thompson, J. K., Heinberg, L. J., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment, and treatment of body image disturbance*. American Psychological Association. <https://doi.org/10.1037/10312-000>
- Thompson, J. K., & Stice, E. (2001). Thin-ideal internalization: Mounting evidence for a new risk factor for body-image disturbance and eating pathology. *Current Directions in Psychological Science*, 10(5), 181–183. <https://doi.org/10.1111/1467-8721.00144>
- Tiggemann, M., & Slater, A. (2013). NetGirls: The internet, Facebook, and body image concern in adolescent girls. *International Journal of Eating Disorders*, 46(6), 630–633. <https://doi.org/10.1002/eat.22141>
- Tiggemann, M., & Slater, A. (2014). NetTweens: The internet and body image concerns in preteenage girls. *The Journal of Early Adolescence*, 34(5), 606–620. <https://doi.org/10.1177/0272431613501083>
- Tiggemann, M., & Zaccardo, M. (2015). “Exercise to be fit, not skinny”: The effect of fitness imagery on women's body image. *Body Image*, 15, 61–67. <https://doi.org/10.1016/j.bodyim.2015.06.003>
- Tylka, T. L., & Wood-Barcalow, N. L. (2015). What is and what is not positive body image? Conceptual foundations and construct definition. *Body Image*, 14, 118–129. <https://doi.org/10.1016/j.bodyim.2015.04.001>
- Vandenbosch, L., & Eggermont, S. (2013). Sexualization of adolescent boys: Media exposure and boys' internalization of appearance ideals, self-objectification, and body surveillance. *Men and Masculinities*, 16(3), 283–306. <https://doi.org/10.1177/1097184X13477866>

- Vandenbosch, L., & Eggermont, S. (2015). The role of mass media in adolescents' sexual behaviors: Exploring the explanatory value of the three-step self-objectification process. *Archives of Sexual Behavior, 44*(3), 729–742. <https://doi.org/10.1007/s10508-014-0292-4>
- Vandereycken, W. (2011). Can eating disorders become 'contagious' in group therapy and specialized inpatient care? *European Eating Disorders Review, 19*(4), 289–295. <https://doi.org/10.1002/erv.1087>
- Wang, Y., Xie, X., Fardouly, J., Vartanian, L. R., & Lei, L. (2019). The longitudinal and reciprocal relationships between selfie-related behaviors and self-objectification and appearance concerns among adolescents. *New Media & Society, 23*(1), 56–77. <https://doi.org/10.1177/1461444819894346>
- Webb, J. B., Vinoski, E. R., Bonar, A. S., Davies, A. E., & Etzel, L. (2017). Fat is fashionable and fit: A comparative content analysis of Fatspiration and Health at Every Size® Instagram images. *Body Image, 22*, 53–64. <https://doi.org/10.1016/j.bodyim.2017.05.003>
- Wilksch, S. M., O'Shea, A., Ho, P., Byrne, S., & Wade, T. D. (2020). The relationship between social media use and disordered eating in young adolescents. *International Journal of Eating Disorders, 53*(1), 96–106. <http://dx.doi.org/10.1002/eat.23198>
- Williamson, G., & Karazsia, B. T. (2018). The effect of functionality-focused and appearance-focused images of models of mixed body sizes on women's state-oriented body appreciation. *Body Image, 24*, 95–101. <https://doi.org/10.1016/j.bodyim.2017.12.008>
- Wong, J. C. (2018, August 29). How Flat Tummy Co gamed Instagram to sell women the unattainable ideal. *The Guardian*. <https://www.theguardian.com/media/2018/aug/29/flat-tummy-instagram-women-appetite-suppressant-lollipops>
- Yau, J. C., & Reich, S. M., (2019). "It's just a lot of work": Adolescents' self-presentation norms and practices on Facebook and Instagram. *Journal of Research on Adolescence, 29*(1), 196–209. <http://dx.doi.org/10.1111/jora.12376>
- Zheng, D., Ni, X., & Luo, Y. (2019). Selfie posting on social networking sites and female adolescents' self-objectification: The moderating role of imaginary audience ideation. *Sex Roles: A Journal of Research, 80*(5–6), 325–331. <http://dx.doi.org/10.1007/s11199-018-0937-1>
- Zimmer-Gembeck, M. J., Webb, H. J., Kerin, J., Waters, A. M., & Farrell, L. J. (2020). Risk factors and temporal patterns of disordered eating differ in adolescent boys and girls: Testing gender-specific appearance anxiety models. *Development and Psychopathology, 33*(3), 856–867. <https://doi.org/10.1017/S0954579420000188>