

Social Media and Body Image Concerns: Current Research and Future Directions

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This paper provides an overview of research on social media and body image. Correlational studies consistently show that social media usage (particularly Facebook) is associated with body image concerns among young women and men, and longitudinal studies suggest that this association may strengthen over time. Furthermore, appearance comparisons play a role in the relationship between social media and body image. Experimental studies, however, suggest that brief exposure to one's own Facebook account does not negatively impact young women's appearance concerns. Further longitudinal and experimental research is needed to determine which aspects of social media are most detrimental to people's body image concerns. Research is also needed on more diverse samples as well as other social media platforms (e.g., Instagram).

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Decades of research has documented the negative impact that traditional media (such as magazines and television) has on people's body image concerns [1–3]. However, given the increasing popularity of social media, researchers are beginning to investigate the possible consequences that these new media formats have on body image. There are a number of unique features of social media that differentiate it from traditional media and that may contribute to any effects it has on body image. First, social media features the users themselves (as opposed to just models and celebrities). Second, people often present an idealized version of themselves on social media, uploading only the most attractive images of themselves (which can be edited and enhanced) to their profile and

removing any images that they deem to be unattractive [4,5]. Third, although social media contains images of a range of different types of people (e.g., friends, family, strangers, celebrities), it is generally used to interact with one's peers [6], and research suggests that appearance comparisons to peers may be particularly influential for body image [7]. Finally, in addition to images, people often post other appearance-related content and comments on social media, which could also impact how users feel about their appearance.

The current paper provides a concise overview of research investigating the relationship between social media usage and body image, and is organized by the research methodology employed (correlational studies, longitudinal studies, and experimental studies). Although social media encompasses a variety of different platforms (Twitter, Instagram, Pinterest, etc.), Facebook is currently the most popular social media platform in the world [8,9] and has therefore been the primary focus in body image research. In addition, given that body image concerns are particularly salient among young women [10–13], this demographic has been the focus of much of the research on social media and body image. Finally, the concept of “body image” has been defined a number of different ways in the literature, including body dissatisfaction, drive for thinness/muscularity, and self-objectification, and each of these constructs will be included in the review (for a review of the research on social media and eating disorders, see Keel, this issue).

Correlational Research

Several correlational studies have examined the relationship between social media usage and body image. Studies on pre-teenage girls [14] and female high school students [15,16] have found that Facebook users report more drive for thinness, internalization of the thin-ideal, body surveillance, self-objectification, and appearance comparisons than do non-users. Research also shows that spending more time on Facebook and/or Myspace is associated with higher levels of body dissatisfaction, drive for thinness, internalization of the thin-ideal, body surveillance, self-objectification, and dieting among pre-teenage girls [14], female high school students [16–18], and female undergraduate students [19–22]. A similar pattern has also been found among men, with one study showing a positive correlation between overall social media usage (a combination of Facebook, Twitter, Instagram, Tumblr, and Pinterest usage) and self-objectification [23].

The studies just described focused on overall social media usage, but other research suggests that specific types of activities on social media are particularly problematic [15*,24–26]. For example, studies have found that elevated appearance exposure on Facebook (e.g., posting, viewing, and commenting on images) was associated with greater weight dissatisfaction, drive for thinness, thin-ideal internalization, and self-objectification among female high school students [15*], and that online social grooming behaviors (e.g., viewing and commenting on peer's Facebook profiles) were significantly correlated with drive for thinness among both male and female undergraduate students [24]. In addition, the importance of Facebook for one's social life was associated with objectified body consciousness (i.e., appearance self-worth and body surveillance) and body shame among male and female undergraduate students [26].

The large number of images posted on some social media platforms (10 million new photographs are uploaded to Facebook every hour [27]) provides regular opportunities for users to make appearance-related social comparisons, and research shows that regularly comparing one's appearance to others (particular to those who are seen as more attractive than oneself) can lead to negative body image [28]. Studies on female undergraduate students have found that a tendency to compare one's appearance to others (particularly to one's peers) mediated the relationship between Facebook usage and body image concerns [21*], and between Facebook usage and self-objectification [20]. Similarly, appearance comparison tendency mediated the relationship between Facebook social grooming behaviors and drive for thinness among male and female undergraduate students [24]. Thus, appearance comparisons appear to play an important role in the relationship between social media use and body image concerns.

These correlational studies provide some initial evidence linking social media use (predominantly Facebook) with young people's body image concerns, but correlational studies are unable to determine whether people who spend more time on social media are more concerned about their appearance, or whether people who are more concerned with their appearance spend more time on social media. Longitudinal and experimental research is therefore needed to determine the impact that social media has on body image concerns.

Longitudinal Research

There are relatively few longitudinal studies of social media usage [29*,30*,31,32,33], but one study on male and female high school students found that greater social media usage (specifically Hyves.nl) predicted greater body dissatisfaction and increased appearance-related discussions with peers 18 months later [30*]. Importantly, body dissatisfaction did not predict social media usage,

suggesting that social media negatively impacts people's body image, rather than social media being sought out by those high in body dissatisfaction. Another study of female university students specifically examined maladaptive Facebook usage (which included seeking negative social evaluations from others and making general social comparisons) and found that this type of maladaptive use was associated with increased body dissatisfaction four weeks later [33].

In contrast to those two studies, a study examining female high school students' use of a range of different social media platforms (e.g., online games, blogs, Twitter, and Facebook) failed to find an association between social media usage and body image concerns at baseline or at 6 month follow-up [31]. Because social media platforms vary in the proportion of images and appearance-related content they contain, this study suggests that not all social media platforms impact people's body image concerns and that researchers need to consider the impact of each social media platform separately.

Experimental Research

Experimental work in this domain is challenging because it is difficult to capture the fluctuating and varied content on social media in a controlled environment. One approach that researchers have taken is to test the impact of exposure to pre-selected images in a platform similar to social media websites (such as Facebook) on men and women's appearance concerns [19,34,35*]. For example, one study found that male and female undergraduate students who were exposed to images of attractive same-sex strangers in mock social media profiles reported poorer body image and a less positive mood than did participants who were exposed to unattractive same-sex others [34]. Similarly, exposure to "fitspiration" images (images designed to inspire people to exercise and eat healthily in order to obtain an attractive fit body) taken from Instagram led to a more negative mood and body dissatisfaction among female undergraduate students than did exposure to appearance-neutral control images [35*]. Furthermore, these effects were mediated by how frequently participants compared their appearance to other women in the images that they were exposed to [35*], providing further evidence for the importance of social comparisons in the impact of social media on body image.

Rather than exposing participants to pre-selected images, two other studies used a more ecologically valid approach by asking participants to spend time on their own Facebook account and investigating what impact that has on their body image concerns. For example, one study had female undergraduate students spend 20 minutes browsing their Facebook account or an appearance-neutral website and found no increase in preoccupation with weight and shape after exposure to either website [22].

In fact, weight and shape preoccupation decreased after exposure to both websites, but the decrease was greater after exposure to the control website than to Facebook. Another study had female undergraduate students spend 10 minutes browsing either their Facebook account or an appearance-neutral website, and found no difference in body dissatisfaction ratings after exposure to Facebook or the control website [36^{*}]. That study did find an effect of Facebook exposure on face, skin, and hair-related concerns, but only for women who were high in appearance comparison tendency.

Although these experimental studies suggest that exposure to one's own Facebook account may not be detrimental to young women's body image concerns, it should be noted that the brief exposure in those studies (10–20 minutes) is much less than the amount of time that people typically spend on Facebook each day (around 2 hours [16,21^{*}]). Another reason for the lack of overall effect of exposure to one's own Facebook account may be that, as with traditional media [37–39], social media does not affect all women equally, and that certain individual difference characteristics (e.g., high appearance comparison tendency) may make women more vulnerable to the effect of social media usage (as was found by Fardouly et al., [36^{*}]). Finally, because participants in these studies were free to browse their own Facebook accounts as they normally do, there is a range of content that they could have viewed (e.g., pictures of friends, status updates), which is in contrast to the methods used in other experimental social media and body image research [19,34,35^{*}]. Thus, although these two studies used more ecologically valid methods, they also introduced more variability in content, which could have muddied any effects.

Gaps in Knowledge and Future Research

Overall, there is consistent evidence that social media usage (particularly Facebook) is associated with body image concerns among young men and women [14,16–18,20,21^{*},23,24], and that this association may strengthen over time [29^{*},30^{*}], however, brief exposure to one's own Facebook account does not appear to negatively impact young women's appearance concerns [22,36^{*}]. Social media and body image is an emerging field of research and there are several gaps in knowledge that need to be addressed. For example, correlational data has identified an association between social media usage and body image concerns among young girls [14]. Given that this demographic may be particularly vulnerable to the development of body image problems, longitudinal research is needed to investigate the impact that social media can have over time in this group. Correlational studies also indicate that specific aspects of social media use, such as comparing oneself to images of attractive peers [20,21^{*}], may be particularly important in the context of body image. Experimental research could test which aspects of social media (e.g., comparisons to specific people,

viewing specific content) are most detrimental to people's body image concerns. This research could also be enhanced by using eyetracking technology to examine what images, comments, and content are viewed when people are engaging with social media, and which elements have the greatest impact on the user's body image. Furthermore, more ecologically valid research methods (e.g., Ecological Momentary Assessments) could shed light on the impact of social media usage in people's everyday lives.

Facebook is the most popular social media platform in the world [8] and has been the focus of most of the research on social media and body image. However, other social media platforms are growing in popularity, particularly among young people (e.g., Instagram, Pinterest [8]). Some of these platforms, such as Instagram, are more image-based than Facebook, and thus may provide more opportunities for users to compare their appearance to others. Therefore, the impact of these image-focused platforms should be tested in future research. Furthermore, most research on social media and body image has been conducted on young female samples (for exception see [25,40–42]). Further research is needed with more diverse samples in order to provide a clearer picture of the effect that social media has on users' appearance concerns. Certain demographics might be more likely to use certain types of social media (e.g., young people may be more likely to use Snapchat or Instagram, and men may be more likely to use online video games). It would therefore be important to examine whether certain demographics are more influenced by certain types of social media.

Conclusions

Social media use is associated with body image concerns, particularly if the users are engaging in certain kinds of activities on social media, such as making appearance comparisons to others [20,21^{*},24,35^{*}]. These effects are similar to those found for traditional media (e.g., magazines [28]). Although more experimental evidence is needed, the available evidence suggests that body image and media literacy intervention programs should address the potential impact of social media on its users. For example, intervention programs could highlight the idealized nature of the images and content uploaded to social media and educate children and adolescents about the impact that comparisons to such content can have on their appearance concerns.

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