

Pinterest or Thinterest?: Social Comparison and Body Image on Social Media

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Abstract

Social media have become increasingly popular mechanisms for communication. Past research suggests a link between using social media, upward social comparison, and negative affect. This online experiment of US women ($N = 118$) takes a media psychology approach to understanding how fitness images on the social networking website Pinterest contribute to social comparison as well as intentions to engage in extreme weight-loss behaviors. Findings suggest that individuals who follow more fitness boards on Pinterest are more likely to report intentions to engage in extreme weight-loss behaviors. Additionally, endorsement of an ideal female body type was positively related to both social comparison and intentions to engage in extreme weight-loss behaviors. Findings are discussed in light of social comparison theory, and suggestions are made for future experimental work.

Keywords

social media, body image, women, social comparison theory

The proliferation of social media in recent years has introduced new social and psychological issues to the media landscape, as well as exacerbated existing phenomena. While psychologists and media scholars have given much attention to body image over the last several decades, they are just now starting to explore these issues in new media environments. Certainly, a quick search on social media websites such as Twitter, Tumblr, Instagram, or Pinterest may lead a user to view “thinspiration” images, communiqués which encourage and enable eating disorders. The extent of “thinspiration” messages and images on Pinterest, or “thinspo” for short, has even earned it the nickname “Thinterest,” perhaps providing impetus for the company to write a disclaimer in certain areas of the website. Pinterest is an image-based website on which individuals curate content from websites and blogs and organize it on virtual corkboards (Mittal, Gupta, Dewan, & Kumaraguru, 2013). Content which contains messages promoting self-harm is not allowed on the website, although it is still possible to encounter these types of images.

For example, when one searches the word “thinspiration” using the search tool on Pinterest, the following message appears at the top of the website page:

Eating disorders are not lifestyle choices, they are mental disorders that if left untreated can cause serious health problems

or could even be life-threatening. For treatment referrals, information, and support, you can always contact the National Eating Disorders Association Helpline at 1-800-931-2237 or www.nationaleatingdisorders.org

In addition to this warning, Pinterest also has an acceptable use policy, which forbids users from posting content that “Promotes self-harm, eating disorders or hard drug abuse.” Notably, Pinterest does allow fitness inspiration posts, also dubbed “fitspo” in the blogging world. Tiggemann and Zaccardo (2015) defined fitspiration as an online trend that is meant to promote healthy fitness and nutrition goals, but at its worst it can have adverse effects on body image and affect.

To illustrate, users can post images of idealized body types on Pinterest as long as the post promotes fitness or health and not self-harm. Thus, many of the same or similar images that would not be allowed as “thinspiration” posts are shared as “fitspiration” posts. In fact, Ghaznavi and Taylor (2015) asserted that the ability to use additional tags

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and labels on platforms such as Pinterest allows users to categorize thinspiration content in a variety of contexts, which can include health and wellness content. Notably, health and fitness pinboards are among some of the most popular with approximately 5.37 followers per pin and the majority of Pinterest users are female (87.15%) (Mittal et al., 2013). The popularity of these categories along with the popularity of thin-ideal content in online communities allows for overlap in the sharing of content (Ghaznavi & Taylor, 2015).

Numerous academic articles as well as popular press have speculated that social media, and Pinterest in particular, may contribute to body dysmorphia, upward social comparison, and other phenomena associated with eating disorders (CBS News, 2013; Chrisler, Fung, Lopez, & Gorman, 2013; Ghaznavi & Taylor, 2015; Perloff, 2014). Communication and social psychology researchers have only begun to investigate the unique interplay between social media, social comparison, and body image. Of course, the idea that media use may induce negative body esteem and other related issues is not new. An abundance of research has produced a body of literature on the negative effects of thin-ideal images on female body image, and it is possible that similar thin-ideal images on social media platforms produce similar effects. For example, Tiggemann and Zaccardo (2015) demonstrated that while the goal of fitspiration posts may be to inspire healthier lifestyles, they can also have unintended negative consequences on body image.

In fact, Perloff (2014) has theorized that the effects of thin-ideal representations in new media may be just as powerful, if not more, than those of traditional media. After all, social media are accessible at any time to any individual who owns a device that can access the Internet. The Internet allows for reiterations of the same images or variations of the same images, and Pinterest, in particular, is an interesting locus for exploring this exact phenomenon. The website is consistently updated with user “pins,” and it is also possible to encounter the same image across many different categories, depending on how users decide to categorize a pin. New media researchers have also specifically called for more research on overlapping content categories, such as “thinspiration” and “fitspiration” images (Ghaznavi & Taylor, 2015; Tiggemann & Zaccardo, 2015).

It makes sense that Pinterest has evolved into a website which largely focuses on appearance of the presentation of “do-it-yourself” crafts, photography, fashion, health and wellness and so on. Actually, researchers have found that the most popular categories for pinboards included the words home, style, recipes, food, wedding, or crafts (Mittal et al., 2013) and, in fact, image-based websites such as Pinterest, Tumblr, and Instagram have risen in popularity over the last several years (Vong, 2012). Many individuals describe themselves as visual learners (approximately 65%), which is perhaps another reason for the appeal of image-based rather than text-heavy social media (Vong, 2012).

Because of the complex nature of image-based media and women’s relationships to body ideals on traditional and new media platforms, this study seeks to investigate the potential effects of appearance-focused fitness images on the popular website Pinterest and the implications for women and social comparison.

Women’s Media Use and Body Image

Researchers have long investigated the ways in which women are depicted in the media, and a body of feminist literature has also explored the ways women use new and traditional media. In particular, scholars have recognized social media as sites of identity exploration and expression, as well as loci for creativity (e.g., Shepherd, 2013; Wilson & Chivers Yochim, 2015). Feminist media scholars have also established that, while social media websites may serve as platforms for self-promotion, they ultimately serve corporations who seek profit. For example, Shepherd’s (2013) analysis of gender and social media stated, “At the same time that immanent commodification works to turn users into commodities or products for exchange, mechanisms like target marketing and behavioral advertising classify these user-commodities differentially” (p. 158). To illustrate, Facebook is known to collect data on users, and Shepherd (2013) argues that the resulting target marketing “naturalizes heteronormative gender roles” (p. 163).

Other critical/cultural scholars have also acknowledged that, traditionally, feminized media and popular culture have been perceived as threatening to hegemonic masculinity. However, feminist media scholars have argued that feminized media are also spaces for empowerment. For instance, Hunting (2015) acknowledges that fashion blogging has been criticized for perpetuating cultural body standards and consumerism, but that, “These blogs create spaces where women, and ‘women’s interests’, can be valued as part of fan culture but without having to follow familiar scripts of self-erasure or self-objectification” (p. 133). In other words, feminized spaces typically criticized in popular discourse are recognized as activist, entrepreneurial, intellectual, and worthwhile endeavors (Levine, 2015).

Pinterest is one form of feminized social media, and scholars are beginning to explore it as a site of pleasure, empowerment, and optimism. As mentioned in the introduction, Pinterest is a content curation website where users collect and organize various online content which interest them. For example, Wilson and Chivers Yochim (2015) noted that Pinterest may serve as a site for taking notes on others’ sources of happiness, specifically mothers. They argue that marketers profit from feminized social media, but that mothers who find pleasure in using Pinterest also benefit, perhaps from feelings of hope. They stated “Feminized social media sites and, more specifically, the practice of pinning happiness, garner much of their cultural power in the affective context of precarity” (p. 245). Although they acknowledge

that some may view the nature of Pinterest as “cruel optimism,” Wilson and Chivers Yochim (2015) argue that Pinterest consists of women and their engagement in popular media as a configuration of community. It is also possible that women who use Pinterest curate images as a source of upward social comparison, which will be discussed in a forthcoming section.

In addition to the ways women use new and traditional media, there is extensive literature on the ways in which women are affected by media representations. One subset of the media effects literature addresses depictions of women and their impacts on body image. For decades, researchers have explored the prevalence of the thin-ideal in mass media, as well as their effects on female body image, body dissatisfaction, and self-esteem. Scholars have found that in Western culture, the ideal body has changed over the decades, and that female bodies have increasingly been portrayed in magazines and advertisements as below-average weight (Luff & Gray, 2009). Even women’s health magazines focus on appearance as frequently as they do for health-related issues, potentially suggesting to readers that appearance is as important as health (Aubrey, 2010). Although researchers are hesitant to claim that media exposure causes body dissatisfaction, it is clear that exposure to the thin-ideal contributes to negative affect, lowered self-esteem, and body dissatisfaction (Bessenoff, 2006).

For example, Bessenoff’s (2006) study found that college students’ social comparison with pictures of thin women in commercials contributed to depression, body dissatisfaction, and lowered mood as compared with students who were exposed to commercials without pictures of women. Traditional forms of media, such as film, television, magazines, and print advertisements, have most often been explored in research on the effects of thin-ideal internalization. Essentially, this concept involves a complex combination of cultural pressures to conform to standards of physical attractiveness, including standards of female beauty (Bandura, 2009). Scholars have consistently demonstrated that thin-ideal representations in the media can influence body image concerns (Grabe, Ward, & Hyde, 2008; Groesz, Levine, & Murnen, 2002; Levine & Harrison, 2009).

Perloff (2014) theorized that many body dissatisfaction effects found with traditional media would likely transfer to social media contexts. Very few studies have investigated the effects of social media use on female body image. However, scholars have begun to explore online content and potential effects of the thin-ideal in these contexts. For example, studies have shown that women generally use social media more often than men in order to stay in touch with friends and family (Clipson, Wilson, & DuFrene, 2012). Survey data have also shown that women who report using Facebook more than men are also more likely to report feeling stressed from using Facebook than men (Thompson & Loughheed, 2012). It is also possible that women who

access Pinterest, and fitness boards specifically, may be more likely to report intentions of engaging in body modification behaviors. Therefore, the researchers posed the following hypotheses:

Hypothesis 1a (H1a): Users who follow fitness-focused pinboards will report higher levels of appearance social comparison when recalling their overall Pinterest habits.

Hypothesis 1b (H1b): Users who follow fitness-focused pinboards will report higher levels of appearance social comparison after viewing Fit Pin examples.

Social Comparison Theory and Social Media

Although social comparison theory originated in the field of social psychology, developmental psychologists have since refined the major tenets by empirical investigation. Festinger (1954) first posited that individuals compare themselves to one another as a means of self-exploration; in other words, most people have a natural desire to gain an accurate evaluation of the self. This applies to both individuals encountered in their actual lives and media models. Essentially, this means of exploration helps individuals to confirm or deny aspects of their own identities as they compare themselves to similar and dissimilar others (Eyal & Te’eni-Harari, 2013; Festinger, 1954).

Psychologists have found that children begin comparing themselves to their peers as early as age 7 and 8; comparisons generally occur in task-related circumstances, rather than appearance-oriented situations (Ruble, Boggiano, Feldman, & Loebel, 1980). Scholars have stipulated that social comparison serves as a process of self-socialization, whereby one can compare their own abilities and limitations to others in their peer group (Ruble et al., 1980). Although comparison of abilities and limitations becomes salient for older children, appearance-based comparisons typically begin to occur in early adolescence for both boys and girls (Chen & Jackson, 2009; Mueller, Pearson, Muller, Frank, & Turner, 2010). Since early theorizing in the 1950s, psychologists have expanded upon the theory by introducing the concept of upward and downward comparison and exploring other motivations for social comparison.

In fact, psychologists have identified several underlying motivations for social comparison, including self-enhancement (upward comparison) and maintenance of a positive self-evaluation (downward comparison). Generally, individuals may have different motivations for engaging in upward and downward comparison (Eyal & Te’eni-Harari, 2013). Self-evaluation occurs by appraising one’s status in relation to others who appear to be worse off in comparison with the appraiser. By contrast, self-enhancement, a form of upward comparison, occurs by evaluating one’s status in comparison with others may serve as a source of self-improvement. While self-enhancement resulting from upward comparison

may produce positive outcomes, researchers have found that they may contribute to negative effects longitudinally (Tiggemann, Polivy, & Hargreaves, 2009).

Researchers and theorists have also posited that competition is often an underlying motivation for social comparison (Festinger, 1954; Garcia, Tor, & Gonzalez, 2006; Reaves, 2011). According to Reaves (2011), “the evolutionary roots of social comparison are similar to social rank in animal behavior (inferior–superior; weaker–stronger; upward and downward), and in humans this judgment of social rank is made quickly” (p. 122). In other words, social comparison is a means of quickly sizing up the competition.

Indeed, there is a wealth of literature on social comparison theory and body image (Borges, 2011; Carlson Jones, 2004). Researchers have also begun to explore these concepts in social media contexts (Chrisler et al., 2013; Fardouly, Diedrichs, Vartanian, & Halliwell, 2015; Tiggemann & Slater, 2013; Vogel et al., 2014). In fact, both qualitative and quantitative data have consistently demonstrated that both media and peer influences are particularly salient to social comparison among adolescents, and that theoretically competition is an important factor (Reaves, 2011). Although childhood and adolescence are popular developmental time periods for studying social comparison, there is evidence that this phenomenon occurs across the life span and should be investigated across different mediated contexts (Fardouly et al., 2015; Tiggemann, 2004; Tiggemann & Slater, 2013).

In fact, one study found that both physical fitness and appearance contexts were sources of upward social comparison and feelings of envy for both college-aged men and women. For women in particular, appearance contexts were more salient (Pila, Stamiris, Castonguay, & Sabiston, 2014). They also found that body-related envy was positively related to identified regulation, which was in turn associated with exercise behavior. As mentioned previously, although researchers tend to focus on adolescent populations when exploring body image constructs, evidence suggests that body dissatisfaction is fairly stable across the life span (Tiggemann, 2004). The inception of social media websites provides a unique opportunity to explore body image across the female life span, and researchers are beginning to add to the literature on various demographics.

For example, Tiggemann and Slater (2013) found that high-school girls who had a Facebook profile scored higher on all measured body image concerns than non-users in their study. Additionally, Fardouly et al.’s (2015) research set out to find out if social comparison effects were different between social media, a magazine website, or an appearance neutral website. Results of the experiment revealed that participants assigned to spend time on their own Facebook account reported being in a more negative mood than those who spent time on the control website. Furthermore, women high in appearance comparison tendency reported more appearance discrepancies after Facebook exposure than exposure to the control website. It is possible that, although

Pinterest has banned “thinspiration” posts, users still consult fitness images for social comparison purposes. Furthermore, because physical appearance, exercise motivation, and social comparison have had positive associations in prior research, the researchers posed the following hypotheses:

Hypothesis 2 (H2): Exercise motivation levels will predict levels of social comparison with the Fit Pin images.

Hypothesis 3 (H3): Endorsement of an ideal female body type will predict higher levels of appearance social comparison when recalling their overall Pinterest habits.

Hypothesis 4 (H4): Endorsement of an ideal female body type will predict the degree to which participants compare their own bodies with those of the Fit Pin images.

Method

This study was conducted using Qualtrics online survey software. The researchers obtained approval from the Institutional Review Board prior to collecting data. Participants were recruited by posting flyers at a large Midwestern university, as well as posting flyers to social networking websites, such as Facebook and Pinterest. Although the survey did not ask for the geographical location of participants, there was potential for the survey to reach individuals in the United States as well as transnationally. According to the IP addresses of participant surveys, participants were represented from the states of Alaska, Arkansas, California, Georgia, Illinois, Indiana, Kentucky, Maryland, Minnesota, Missouri, Ohio, Oklahoma, Pennsylvania, South Carolina, Texas, Virginia, and Wisconsin. Participants were also represented from the countries of Australia, Canada, Denmark, and Pakistan. Women over the age of 18 were recruited for participation, and all participants were offered the chance to be entered a draw for one of four \$25 gift cards.

The original sample included 122 participants; however, after eliminating those who did not qualify for the study, the final sample included 118 participants. The sample included the following: 28% ($n=33$) were between the ages of 18 and 24, 50.8% ($n=60$) were between 25 and 34, 7.6% ($n=9$) were between 35 and 44, 6.8% ($n=8$) were between 45 and 54, and 6.8% ($n=8$) were between 55 and 64 years old. The majority of participants were Caucasian (86.4%; $n=102$), followed by Asian/Pacific Islander (3.4%; $n=4$), Hispanic/Latino (2.5%; $n=3$), and Black (2.5%; $n=3$). One participant (0.8%) identified as Native American, while two (1.7%) identified as more than two races, two (1.7%) identified as other, and one (.8%) did not identify.

Measures

Ideal Body Stereotype Scale. This measure is designed to determine levels of thin-ideal internalization ($\alpha=.91$) (Stice & Agras, 1998). The scale consists of six items in

which participants rank the extent to which they agree with each statement (i.e., “Slender women are more attractive”). Higher scores indicate higher levels of thin-ideal internalization.

Exercise Motivations. The exercise motivations scale was developed from the perspective of self-determination theory and is used to measure levels of exercise motivations for exercise participation (Markland & Ingledew 1997). The questionnaire consists of 51 items; for this study, 25 of these items were used (i.e., “I exercise to prevent health problems”). Participants rank the extent to which they agree with each statement, and higher scores demonstrate higher motivation to exercise.

Social Comparison Extent Thoughts. The *Extent Thoughts Questionnaire* was taken from Bessenoff's (2006) study, which was designed to assess thoughts relating to social comparison, appearance, and weight. Participants were asked two sets of questions in which they were asked to rate the extent that they thought about extreme weight-loss tactics and their appearance when reflecting on (a) the images they were shown in the study and (b) their overall Pinterest use. Participants responded to eight items on a 5-point Likert-type scale ranging from 1 = *not at all* to 5 = *to an extreme degree*. Larger numbers indicate having experienced these thoughts to a greater extent while looking at the images (i.e., “To what extent did you think about thoughts related to aspects of body weight?”).

Moderators

Age. The variable *age* was measured as a moderator. Participants were asked to report their age in years. The value ranged from 18 to 64 years old, and the majority of participants (50.8%) were between 25 and 34 years old.

Body Mass Index. The variable *body mass index* (BMI) was used to measure participants' body fatness. BMI is currently recognized by the Centers for Disease Control and Prevention as a reliable indicator of body fatness for most individuals (Body Mass Index, 2015). For the current study, participants' BMI was calculated using the recommended formula: $\text{weight (lb)} / [\text{height (in)}]^2 \times 703$ (Body Mass Index, 2015). They self-reported their height and weight in the online survey, and the researchers calculated participants' BMI scores with the aforementioned formula ($M = 26.36$).

SCOFF. The SCOFF measure was developed in the United Kingdom and is designed to measure potential disordered eating behaviors (Morgan, Reid, & Lacey, 2000). It assesses symptoms of anorexia nervosa and bulimia nervosa. The measure consists of 5 items, and answering yes to two or more questions indicates a possibility of anorexia or bulimia (i.e., “Do you worry you have lost control over how much

you eat?”). Thus, higher scores on the SCOFF scale indicate a higher potential for having an eating disorder.

Results

Hypothesis 1a posited that the number of fitness-focused pinboards (Fit Pin Boards) followed by participants would predict appearance social comparison and intentions to engage in extreme weight-loss behaviors when recalling their overall Pinterest use. To answer H1a, a simple linear regression was used to test if the amount Fit Pin Boards accessed by participants significantly predicted social comparison and intentions to engage in extreme weight-loss tactics, such as crash dieting or a new exercise plan. The results of the regression indicated that the predictor explained a significant proportion of the variance, $R^2 = .158$, $F(1, 99) = 18.418$, $p < .0001$. It was found that following Fit Pin Boards significantly predicted that overall Pinterest habits influenced participants to want to engage in weight-loss behaviors, $b = .398$, $p < .0001$.

Each hypothesis was explored using Hayes' (2013) PROCESS procedure in order to estimate potential interactions. The researcher used PROCESS model 1 with 5,000 bootstrap estimates for the construction of 95% confidence intervals (CIs). For H1a, using Hayes' Process (2013) did not yield an interaction between Fit Pin Boards and age, BMI, or presence of an eating disorder.

Similarly, Hypothesis 1b posited that the number of Fit Pin Boards followed by participants would predict appearance social comparison and intentions to engage in extreme weight-loss behaviors when recalling the Fit Pin Images they were exposed to in the experiment. To answer H1b, a simple linear regression was used to test if the amount of Fit Pin Boards followed by participants significantly predicted intentions to engage in extreme weight-loss tactics when reflecting on the Fit Pin Images they saw in the experiment. The results of the regression indicated that the predictor explained a significant proportion of the variance, $R^2 = .05$, $F(1, 102) = 6.391$, $p < .05$. It was found that following Fit Pin Boards significantly predicted Fit Pin-influenced intentions to engage in weight-loss behaviors, $b = .244$, $p < .05$. Hayes' Process (2013) revealed that age, BMI, and presence of an eating disorder did not significantly moderate this relationship.

Next, the second hypothesis predicted that exercise motivations would influence social comparison when recalling exposure to the Fit Pin Images. To investigate H2, a simple linear regression analysis was conducted to test if higher exercise motivation levels would influence social comparison with the images the participants were shown. The model demonstrated that a sizable proportion of variance was explained by the predictor, $R^2 = .117$, $F(1, 107) = 14.016$, $p < .0001$. Results indicated a direct relationship between exercise motivations and social comparison, $b = .342$, $p < .0001$. Hayes' Process (2013) did not yield an interaction

between exercise motivations and age, BMI, or likelihood of an eating disorder. It should be noted that the interaction between exercise motivations and age approached significance, $b = -.19$, $p = .0549$.

The third hypothesis posited that endorsement of an ideal female body type would predict higher levels of social comparison and intention to engage in extreme weight-loss tactics when recalling overall Pinterest habits. A simple linear regression analysis revealed that endorsement of an ideal female body type accounted for a significant proportion of variance in the overall model, $R^2 = .095$, $F(1, 103) = 3.33$, $p < .05$. Endorsement of an ideal female body type significantly predicted Pinterest-influenced intentions to engage in extreme weight-loss behaviors, $b = .231$, $p < .05$. The results identified BMI as a significant moderator of ideal body type and weight-loss intentions, $\Delta R^2 = .048$, $b = -.055$, $\Delta F(3, 95) = 5.068$, $p < .05$, 95% CI = [0.0238, 0.3869]. Age and presence of an eating disorder were not significant moderators of this relationship.

Finally, the fourth hypothesis predicted that endorsement of an ideal female body type would predict the degree to which participants compared their own bodies with those of the Fit Pin images. A simple linear regression analysis revealed that endorsement of an ideal female body type accounted for a significant proportion of variance in the model, $R^2 = .045$, $F(1, 104) = 4.822$, $p < .05$. Endorsement of an ideal female body type significantly predicted the degree to which participants compared their own bodies with those of the models in the Fit Pins, $\beta = .211$, $p < .05$. Users who endorsed an ideal body type likely engaged in upward social comparison with the Fit Pin images they viewed in the survey. Age, BMI, and presence of an eating disorder were not significant moderators of this relationship.

Discussion

Both feminist media scholars (e.g., Levine, 2015) and social science researchers (e.g., Perloff, 2014) have acknowledged that discursive spaces such as social media have the potential to allow for more fluidity in gender expression; however, these environments also carry the potential to perpetuate stereotypes, including beauty standards and body ideals. Overall, the results of this study reveal that certain factors in a social media environment, such as Pinterest, may influence women to engage in social comparison or intend to try self-enhancing tactics such as extreme dieting or exercise. This study also corroborates predictions made by other scholars, in that the sharing of idealized female images on spaces such as Pinterest may contribute to feelings of inadequacy or upward social comparison (e.g., Alperstein, 2015). Again, H1a and b explored whether the sum of fitness-focused pinboards followed by participants would predict whether they were influenced to engage in extreme weight-loss tactics, such as fad dieting. H1a confirmed that the amount of fitness pinboards followed by participants predicted intentions to

engage in these behaviors when reflecting on their general Pinterest use. Similarly, H1b confirmed that the sum of fitness pinboards followed by participants predicted intentions to engage in these behaviors when reflecting on the fitness images they were exposed to in the experiment.

Because Pinterest is a content curation website analogous to an online vision board, users may be collecting images as a means of self-improvement and upward social comparison. Again, researchers have stated that upward social comparison may be a source of inspiration temporarily, but over time, it can be detrimental as individuals inevitably fail to achieve the impossible standards to which they are aspiring (Tiggemann et al., 2009). For example, individuals looking to achieve their health and fitness goals may seek content as sources of inspiration and find thin-ideal content as a by-product of their search. Scholars have also found that searches including the word “fitness” or “fitspo” may also lead users to thinspiration content (Ghaznavi & Taylor, 2015).

As mentioned previously, health and fitness is among one of the most popular categories for users on Pinterest, and most of the content curated on Pinterest is sourced from popular image-based websites (Mittal et al., 2013). While it is possible that users who follow more Fit Pinner Boards engage with the images and content in order to make lifestyle changes, it is also possible that some of the idealized images paired with health and wellness content may induce upward social comparison and may also influence intentions for extreme weight-loss tactics. These findings are consistent with prior image-based social media research in that idealized images are often paired with text suggesting a drive for thinness or perfection, even in the context of health and fitness (Ghaznavi & Taylor, 2015).

Again, the results of the second hypothesis confirmed that exercise motivation levels predicted social comparison with the Fit Pin images. This finding is consistent with prior research that has explored upward social comparison in the contexts of physical fitness and appearance-induced exercise behaviors (e.g., Pila et al., 2014). According to Festinger (1954), individuals engage in social comparison with similar others, and upward social comparison occurs when individuals believe it is possible to attain the same status as the similar other. In this particular context, individuals who were more motivated to exercise may identify with these images and perceive them as attainable goals. Similarly, Fardouly et al.’s (2015) study found that women who ranked higher on appearance comparison tendency reported more appearance discrepancies after Facebook exposure than exposure to a control website. The media effects and body image literature would benefit from research on other image-based social media with niche audiences, such as those with fitness and fashion interests.

Additionally, the interaction between age and exercise motivations approached significance. Although these data cannot confirm this, it is possible that younger women are

more likely to exercise for appearance-related goals, whereas older women exercise for health-related reasons. Prior studies have found that although body dissatisfaction is a relatively stable trait, body monitoring and appearance anxiety tend to dissipate over time (e.g., Tiggemann & Lynch, 2001). These findings would explain the negative slope of the interaction term in this study, such that women who were younger and highly motivated to exercise reported higher levels of social comparison to the Fit Pin Images. Future research focused on constructs such as exercise motivations, and social comparison in social media contexts may benefit from a sample with a wider age range. It is possible that image-based social media may change the relationships between age, exercise motivations, and social comparison over time.

The results of the third hypothesis confirmed that endorsement of an ideal female body type would predict higher levels of social comparison and intentions to engage in extreme weight-loss tactics when recalling overall Pinterest habits. Again, the visual nature of Pinterest likely cues cognitive heuristics that may encourage individuals to endorse an ideal body type and resort to extreme measures for weight-loss. In their study of thin-ideal content on Twitter and Pinterest, Ghaznavi and Taylor (2015) suggested that social media searches for fitness information could expose users to thin-inspiration content and that, "Viewing such thin-ideal images could result in the belief that thin-ideal bodies were relatively more common in addition to providing targets for comparison, which has been found to contribute to disordered eating attitudes and self-discrepancy" (p. 59). Additionally, this study found a significant interaction between an ideal female body type and BMI; it is also possible that those with a higher BMI may have lower levels of self-efficacy in terms of weight-loss behaviors or attainment of an ideal body type. Research has demonstrated that individuals with higher BMI are likely to exhibit more depressive symptoms, emotional eating, and decreased self-efficacy for exercise habits (Clum, Rice, Broussard, Johnson, & Webber, 2013). In other words, participants who had a lower BMI may rank higher on thin-ideal internalization because the body types they encounter on Pinterest are perceived as more attainable for them.

Finally, the fourth hypothesis was also confirmed, suggesting that endorsement of an ideal female body type significantly predicted the degree to which participants compared their own bodies with those of the models in the Fit Pins. Research on social networking websites and social comparison has shown that individuals report negative body image after being shown beautiful profile pictures in online social networking contexts (Haferkamp & Krämer, 2011). Furthermore, standards for comparison in online social networking contexts may be presented by friends, relatives, or strangers. According to Haferkamp and Krämer (2011), Web 2.0 contexts offer unique situations whereby users are also active producers in the media environment. Regarding Pinterest users, the content with which they engage is likely

user-curated and may provide social comparison contexts that feel more like comparisons with peers or acquaintances rather than celebrities or models.

Additionally, it should be noted that age was not a significant moderator for any of the examined relationships in this study. Initially, the researchers considered that younger women may rank higher in endorsement of body ideals and social comparison, but this was not confirmed. In fact, this finding is consistent with prior research findings that suggest that body dissatisfaction is a rather consistent construct throughout the life span, and that drive for thinness does not vary across age groups in adult women, with the exception of elderly women (Tiggemann, 2004). Some researchers have suggested that as women age, they may compare their appearance to age-appropriate peers rather than youthful looking women. Because youthification trends and the thin-ideal have transferred to social media, these constructs should be re-examined longitudinally and in a sample with more variance in age. Studies have also determined that although trait body dissatisfaction is relatively stable, other variables such as body monitoring, self-objectification, and appearance anxiety may decrease in intensity over time (Tiggemann & Lynch, 2001). As more scholars investigate social media environments and their effects on body, it would be beneficial to examine these additional constructs.

Because this experiment was conducted online and not in a laboratory setting, one limitation of this study was a lack of control of the environment in which the participants viewed the conditions. Additionally, although researchers did not ask for participants to report their current area of residence, IP addresses revealed that there were participants from several regions in the United States, as well as some who were from other countries. However, one limitation of this study is that most of the women represented in the data are Caucasian, and there was not enough variance in racial identity to test whether this demographic variable moderates any relationships. Future studies should include more non-Western participants in order to investigate whether and how Western ideals influence women transnationally on social media platforms. Researchers should also continue to work to represent more racial demographics.

The examination of the influence of thin-ideal or fit-ideal images in a social media context is particularly important in an increasingly globalized world. Women, educators, and users of social media may be informed by this research and consider ways to educate young girls and women to engage with social media critically. Although some researchers believe media literacy should focus on younger audiences and heavier users of media (e.g., Lenhart, Purcell, Smith, & Zickuhr, 2010), the findings of this study suggest that these efforts may be relevant and useful throughout the life span. Although adolescents are acutely aware of the pressures and standards of society, which are often communicated in mediated messages, it appears that media models and peers may serve as targets for self-appraisal and

social comparison through various stages of life (Perloff, 2014; Tiggemann & Lynch, 2001).

In light of this, educators may consider adding a body image element to discussions of media literacy in order to help individuals recognize the risks of social comparison in online and social media contexts. While results of this study are consistent with others that have found consistency in body dissatisfaction through the life course, scholars should explore whether other constructs such as body monitoring, self-objectification, and appearance are impacted by social media use and age. As social media evolves, researchers should investigate the impact of image-based social media and body dissatisfaction, particularly digital natives who will be developing concurrently with these platforms in their lifetime.

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