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Skinny Is Not Enough: A Content Analysis of Fitspiration on Pinterest

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ABSTRACT

Fitspiration is a relatively new social media trend nominally intended to promote health and fitness. Fitspiration messages are presented as encouraging; however, they might also engender body dissatisfaction and compulsive exercise. This study analyzed fitspiration content (n = 1050) on the image-based social media platform Pinterest. Independent raters coded the images and text present in the posts. Messages were categorized as appearance- or health-related, and coded for Social Cognitive Theory constructs; standards, behaviors, and outcome expectancies. Messages encouraged appearance-related body image standards and weight management behaviors more frequently than health-related standards and behaviors, and emphasized attractiveness as motivation to partake in such behaviors. Results also indicated that fitspiration messages include a comparable amount of fit praise (i.e., emphasis on toned/defined muscles) and thin praise (i.e., emphasis on slenderness), suggesting that women are not only supposed to be thin but also fit. Considering the negative outcomes associated with both exposure to idealized body images and exercising for appearance reasons, findings suggest that fitspiration messages are problematic, especially for viewers with high risk of eating disorders and related issues.

Media (i.e., television, movies, magazines, and Internet content) are the principal sources of information and reinforcement regarding the societal beauty ideal, its importance, and strategies for its achievement (López-Guimerà, Levine, Sánchez-carracedo, & Fauquet, 2010). The majority of women depicted in mass media are extraordinarily thin (Jett, Laporte, & Wanchisn, 2010). These images often reflect a body mass index (BMI) consistent with the diagnostic criteria for anorexia; however, consumers view them as real and normative (Wiseman, Gray, Mosimann, & Ahrens, 1992).

Considerable research, including multiple meta-analyses, documents that viewing thin mass media images conveys unrealistic ideals of female beauty, and repeated exposure to media pressure for thinness is a risk factor for body dissatisfaction, weight concern, thin-ideal internalization, and disordered eating behaviors in young adult women (Grabe, Ward, & Hyde, 2008; López-Guimerà et al., 2010). The majority of research investigating the effects of mass media on body image has focused on print and television sources (Perloff, 2014). However, the Internet is increasingly the primary media source used by young adults (Jones & Fox, 2009). Indeed, young adult women spend significantly more time viewing appearance-oriented media online than on other media source (i.e., print and television; Bair, Kelly, Serdar, & Mazzeo, 2012). This is likely due to the fact that the Internet presents a unique way for users to obtain information from like-minded peers and to communicate with others more personally than in conventional mass media (Perloff, 2014).

Social networking sites, in particular, provide a consistent, interactive place for young adult women to engage with others who portray and reinforce the thin ideal (Mabe, Forney, & Keel, 2014). Indeed, time spent on social networking sites is positively associated with thin ideal internalization, body surveillance, dieting, and lower body esteem in women (Tiggemann & Slater, 2014).

Pro-eating-disorder social networking sites typically include "thinspiration" content (sometimes referred to as thinspo for short; Lewis & Arbuthnott, 2012). Thinspiration refers to images, quotes, and advice intended to inspire weight loss and motivate disordered eating (Borzekowski, Schenk, Wilson, & Peebles, 2010; Lapinski, 2006). Thinspiration includes graphic, triggering images (e.g., emaciated models) and actively promotes eating disordered behaviors by presenting numerous tips for fasting, purging, and excessive exercise (Lewis & Arbuthnott, 2012). Exposure to thinspiration messages is linked with a range of detrimental health outcomes for young adult women, including extreme weight control behaviors, eating-disorder pathology, negative affect, and body dissatisfaction (Bardone-Cone & Cass, 2007; Custers & van Den Bulck, 2009; Jett et al., 2010; Peebles et al., 2012).

A related and similarly concerning media trend is that the current ideal feminine body is not only very thin, but also exceedingly fit (Boepple & Thompson, 2014; Thompson, van Den Berg, Roehrig, Guarda, & Heinberg, 2004). Young adult women increasingly report a preference for broad shoulders and muscular arms (Thompson et al., 2004). "Fitspiration"

(a blend of fitness and inspiration) is a social media phenomenon that has recently emerged to inspire individuals to exercise (Abena, 2013). Inspirational fitness images and slogans are presented, ostensibly to motivate weight loss, healthy eating, and fitness. Fitspiration messages are often displayed with images of an extremely fit person engaging in strenuous activity (Hausenblas, 2015). These images are accompanied by quotes like "strong is the new skinny" and "think of the consequences if you do nothing.'

Compared with thinspiration, fitspiration is often considered "healthier" because it encourages engagement in seemingly positive health behaviors (Dahl, 2013; Neporent, 2012). However, most fitness models are conspicuously thin (Conlin & Bissell, 2014; Homan, Mchugh, Wells, Watson, & King, 2012). Indeed, most fitspiration images look very similar to thinspiration ones (Boepple & Thompson, 2015). This is perhaps not surprising, as a content analysis of health-related messages comparing women's fashion and fitness magazines found no differences between magazine types regarding their models' degree of thinness. Further, health and fitness magazines placed a large emphasis on appearance and overall beauty, suggesting that thinness is a sign of health and that appearance is the primary rationale for exercise, reinforcing societal beauty ideals (Conlin & Bissell, 2014).

Another study of popular women's health and fitness magazines revealed that appearance-related reasons were cited more frequently than health related reasons as motivations to exercise or lose weight (Willis & Knobloch-Westerwick, 2014). This is concerning, as exercising for appearance rather than health reasons is associated with body dissatisfaction, low self-esteem, and disordered eating in young adult women (Gonçalves & Gomes, 2012).

Moreover, experimental research suggests that exposure to ultra-fit images is only associated with negative body image when paired with thinness (Homan et al., 2012). In one study, young adult women viewed thin and athletic models, normalweight athletic models, or a control condition consisting of neutral objects. Body dissatisfaction was increased only in the group that viewed thin and athletic models (Homan et al., 2012). This would not be concerning if the women depicted were of average weight; however, as mentioned previously, health and fitness models are typically very thin (Conlin & Bissell, 2014).

Fitspiration is particularly prominent on image-based social media. Pinterest is a relatively new social networking site on which women can search for "pins" (i.e., visual bookmarks) and create "boards" (i.e., collections). Users can "follow" friends and like-minded individuals to see what others are interested in; pins and boards are easily shared through "repinning." In 2014, Pinterest was the second most popular social media site in the United States (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015). Women dominate Pinterest; 42% of online women use this platform. Further, the majority of users are women ages 18-29 years (Duggan

Media reports suggest fitspiration might fuel an unhealthy fitness obsession (Dahl, 2013; Hausenblas, 2015). Experts in the field of eating disorders have also spoken out about this new trend, noting that it promotes body image standards that can only be achieved by a very strict diet and exercise routine (Dahl, 2013; Hausenblas, 2015). However, despite these concerns, no empirical study has investigated fitspiration content on Pinterest.

Social Cognitive Theory

The influence of fitspiration messages can be understood in terms of Social Cognitive Theory, which posits that humans learn by observing people's actions and their consequences (Bandura, 2001a). Applied to mass communication, Social Cognitive Theory asserts that information regarding human values, thinking patterns, and behaviors is retrieved from the substantial modeling present in the media. Electronic mass communication presents unique opportunities for learning, as modeling transmits new ways of thinking and behaving to large numbers of people and thus can have a significant social impact (Bandura, 2001b). Through modeling, individuals learn the societal rules of behavior and ascertain personal standards for regulating conduct. As such, attitudes and behaviors portrayed in the media influence self-regulation. Therefore, since unrealistic body ideals are frequently modeled in social media, this likely influences values, thinking patterns, and behaviors involving food, eating, and body shape (Levine & Smolak, 2006; Perloff, 2014).

Further, Social Cognitive Theory postulates that modeling influences exhibit strong motivational effects (Bandura, 2001a). Outcome expectancies for meeting media standards are important for self-regulation, as the rewarding and punishing outcomes of the modeled courses of action are presented. Exposure to individuals achieving desired outcomes creates outcome expectancies that function as positive incentives (Bandura, 2001a). Thus, viewing messages linking physical activity with attaining the societal standard of beauty might motivate exercise behavior.

Finally, individuals are more likely to imitate modeled behaviors when the behavior is rewarded socially. On social media, quantitative displays of engagement (e.g., "likes," "comments," or "repins") are displayed to all users, serving as a social reward, and further facilitating acceptance and adoption of the modeled behaviors and attitudes (Bandura, 2001b). Individuals might be more likely to engage in and adopt modeled behaviors and attitudes regarding fitness and beauty accompanied by visible social rewards in the form of endorsement by peers (Borzekowski et al., 2010).

Hypothesis and Research Questions

Although some research has examined body image content on social media, few studies have investigated characteristics of fitspiration messages on social networking sites (Ghaznavi & Taylor, 2015; Tiggemann & Zaccardo, 2015). Considering the influence social media platforms have on perceptions of health and beauty, it is essential to learn more about their

Research demonstrates that media portrayals of body ideals and behavior encourage women to eat a healthy diet and engage in physical activity for health reasons just as much as appearance reasons (Willis & Knobloch-Westerwick, 2014;



Aubrey, 2010). Given that fitspiration content emphasizes weight loss and displays images similar to thinspiration, a greater emphasis on appearance was anticipated. The primary hypothesis of this study was that fitspiration pins would reference appearance more frequently than health.

The current study uses Bandura's (2001b) Social Cognitive Theory of Mass Communication to examine the standards and behaviors conveyed through social modeling, verbal messages, outcome expectancies, and social rewards in fitspiration messages. The study examined the following research questions:

- (1) What body image standards (values) does fitspiration promote?
- (2) What behaviors for achieving body image ideals are encouraged?
- (3) What outcome expectancies are conveyed?
- (4) What model characteristics (i.e., ethnicity, body type, age) are depicted?
- (5) How do users engage with fitspiration content on Pinterest?

Method

Sample

Pinterest posts (n = 1,050) were selected for analyses by identifying every fifth pin as determined by a random-number generator. This is a standard sample size for analysis of social media content (Saxton & Waters, 2014).

This study used three keywords to select the pins for inclusion in the sample: "fitspiration," "fitsporation," and "fitspo." These terms were selected to represent the different spellings of fitspiration. On March 25 and 26, 2015, each fifth post for each keyword search was selected by scrolling down the search results page. Screenshots captured a picture of each post and links to the posts were documented; 350 posts were selected for each keyword, for a total of 1050 posts in the sample. This methodology is comparable to other research investigating Pinterest content (Guidry, Carlyle, Messner, & Jin, 2015).

Coding Instrument

A coding protocol for posts relating to fitspiration was developed, tested, and implemented for use in this study. Initial coding categories were selected from previous research investigating appearance content in the media (Conlin & Bissell, 2014; Eisenberg, Carlson-Mcguire, Gollust, & Neumark-Sztainer, 2014; Guidry et al., 2015; Willis & Knobloch-Westerwick, 2014). Multiple iterations of the coding instrument were tested and modified prior to finalization. Three rounds of pilot coding were conducted using posts captured in February 2015; 40 posts were analyzed each time. Coders evaluated the posts independently and then met to discuss what was coded. Challenges with coding were addressed until agreement was reached. The coding instrument was revised as needed.

For each post, engagement was documented, including the number of repins, likes, comments, and the total amount of

times the post was engaged (Guidry et al., 2015). Posts were categorized as primarily an image, primarily text, a mix of image and text, or an infographic (graphic visual representations of complex information). If the post included a picture of a person, then his or her gender, race/ethnicity, weight, amount of the body shown, amount of clothing worn, and the activity he or she was doing were coded. Approximate weight was classified into the following categories: very underweight (the person is emaciated; obvious clavicle, facial, rib cage, or other bones protruding), thin and athletic (toned muscles and BMI below 20), thin and not athletic (absence of toned muscles and BMI below 20), average weight and athletic (toned muscles and BMI between 20-25), average weight and not athletic (absence of toned muscles and BMI between 20-25), overweight (appears to have excess body fat and BMI between 26-30), obese (extreme excess of body fat and BMI 30 or above), or undeterminable (adapted from Eisenberg et al., 2014). Amount or part of the body shown was categorized into whole body, body but not the face, back, specific body part, or before and after picture. Amount of clothing worn was classified into swimsuit or tight workout equivalent (twopiece), moderately covered (skirt/shorts and t-shirt), fully covered (long pants and long shirt), or naked (Conlin & Bissell, 2014). The activity in which the person was engaging was categorized into exercising/engaging in physical activity, eating or drinking, posing or taking a picture, or other.

All posts were also coded for Social Cognitive Theory constructs: standards, behaviors, and outcome expectancies (Willis & Knobloch-Westerwick, 2014). Body image standards were categorized based on engaging in weight management practices as a way to be thin (slender, skinny, slim), be fit (have toned/defined muscles), eat right/healthy, exercise, or be healthy overall. Behaviors for achieving body image ideals were categorized as exercising/eating well to improve shape, exercising/eating well to lose weight, exercising/eating well to look good, following a diet, reducing caloric intake, and exercising to improve health. Outcome expectancies serving as motivation to engage in behaviors were defined as feeling good about oneself/being happy, being attractive, being appealing to the opposite sex, or being healthy overall (Willis & Knobloch-Westerwick, 2014). All coding categories were mutually exclusive.

Finally, the standards and behaviors portrayed in the post were classified as appearance- or health-related (Willis & Knobloch-Westerwick, 2014). Appearance-related frames were operationalized as the extent to which the messages emphasized weight management as a way to be thin, fit, sexy, or beautiful (for an example see Figure 1). Health-related frames were operationalized as the extent to which the messages emphasized weight management as a way to stay healthy or improve overall health (for an example see Figure 2; Willis & Knobloch-Westerwick, 2014).

Interrater Reliability

Two coders were trained to establish intercoder reliability. The first coder coded all of the posts (n = 1050); the second coder coded 10% of the posts (n = 105) for the study variables. After pretesting and subsequent changes to the coding



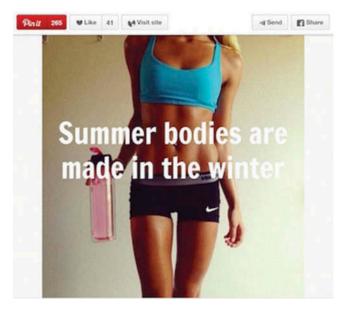


Figure 1. This figure is an example of a Fitspiration message on Pinterest that promotes appearance-related body image standards and behaviors. Amount and type of endorsement in the form of "repins" and "likes" by other users are shown above the message.



Figure 2. This figure is an example of a Fitspiration message on Pinterest that promotes health-related body image standards and behaviors. Amount and type of endorsement in the form of "repins" and "likes" by other users are shown above the message.

protocol, intercoder reliability was calculated with the ReCal statistical program (Freelon, 2010). Scott's pi was on average .95. The individual coefficients were all considered to be reliable (Nunnally & Bernstein, 1994).

Results

Appearance Versus Health Focus (H1)

The majority of pins, 71.8% (n = 755), promoted appearance-related body image standards (e.g., summer bodies are made in the winter); 21.5% (n = 226) encouraged health-related body image standards (e.g., sweat today smile tomorrow); and 6.7% (n = 71) did not promote either standard. Chisquared statistics indicated that the difference between appearance and health standards was statistically significant, $\chi^2(9, n = 979) = 966.85, p < .001$.

Further, the most commonly suggested behaviors for achieving body image standards were appearance related (43.5%, n=457; e.g., suck it up now and you won't have to suck it in later); 21.2% (n=223) encouraged health-related behaviors (e.g., if you skip a workout, you skip an opportunity to improve yourself); and 35.1% (n=369) did not promote either type of behavior. Chi-squared results indicated that the difference between appearance and health behaviors was statistically significant, $\chi^2(30, n=680)=684.82, p<.001$.

Body Image Standards (RQ1)

Among the pins promoting body image standards, 38.2% (n = 375) encouraged appearance-related weight management practices as a way to be thin, 37.4% (n = 367) to be fit, and 1.3% (n = 13), and to eat right/be healthy. Further, 16.7% (n = 164) encouraged health-related weight management practices as a way to exercise, 4.9% (n = 48) to be healthy overall, and 1.5% (n = 14) to eat right.

Behaviors for Achieving Body Image Standards (RQ2)

Among the pins that promoted behaviors for achieving body image standards, the frequency of appearance-related behaviors suggested was as follows: 30.7% (n=207) encouraged exercising to look good; 19.3% (n=131) promoted exercising to improve shape; 9.7% (n=18) encouraged exercising to lose weight; 5.3% (n=36) emphasized following a diet plan; and 2.6% (n=18) promoted reducing caloric intake. Further, the frequency of health-related behaviors promoted was as follows: 25.9% (n=175) encouraged exercising to improve health; 3.7% (n=25), promoted exercising to lose weight; 1.8% (n=12) stressed following a diet plan; and 0.9% (n=6) encouraged reducing caloric intake.

Outcome Expectancies (RQ3)

Outcomes related to body image standards were expressed 67.5% (n = 709) of the time. The most frequently highlighted outcome was increasing attractiveness (68.1%; n = 483), followed by improving overall health (26.7%, n = 189). Feeling good/being happy was promoted 3.7% (n = 26) of the time, and enhancing appeal to the opposite sex was identified as a motivator 1.0% (n = 7) of the time.

Characteristics of Behavior Models (RQ4)

Most fitspiration pins were accompanied by an image of a person (85%; n=893); 97.2% (n=868) were female and 67.9% (n=606) were White. Models of an undeterminable ethnicity were the next ethnic group most frequently depicted (28.4%; n=254). The majority of models were thin and athletic (72.2%; n=645); athletic and average-weight individuals were the next most commonly represented (16.9%; n=151).

The activity the models engaged in most frequently was posing/taking a photo (65.6%; n = 587); 31.4% (n = 281) of

¹Specific information on the coding reliability for all individual variables is available from the authors upon request.

Table 1. Characteristics of behavior models.

Characteristic	Frequency (n)
Gender	
Female	97.2% (868)
Male	1.4% (12)
Multiple genders	1.5% (13)
Race/ethnicity	
White	67.9% (606)
Black/African American	3.1% (28)
Asian	0.6% (5)
Other/undeterminable	28.4% (254)
Body part shown	
Whole body	50.7% (453)
Body but not face	38.7% (346)
Only face	0.6% (5)
Specific body part	5.4% (48)
Before and after picture	4.6% (41)
Amount of clothing worn	
Two-piece	65.7% (587)
Moderately covered	31.2% (279)
Fully covered	2.5% (22)
Naked	0.6% (5)
Approximate weight	
Very underweight	1.8% (16)
Thin and athletic	72.2% (645)
Thin and not athletic	5.6% (50)
Average weight and athletic	16.9% (151)
Average weight and not athletic	0.6% (5)
Overweight	0.3% (3)
Obese	0.1% (1)
Undeterminable	2.5% (22)

the models were exercising, and 2.2% (n = 20) were eating/ drinking. Half (50.7%, n = 453) of the images displayed the whole body; 38.7% (n = 346) presented a body without a face; 5.4% (n = 48) presented a specific body part; and 4.6%(n = 41) presented before and after pictures. Moreover, 65.7% (n = 587) of the people wore a two-piece, 31.2%(n = 279) were moderately covered, and 2.5% (n = 22) were fully covered. Table 1 provides more detail regarding model characteristics.

Engagement (RQ5)

Repinning was the most popular form of engagement; 99.8% (n = 1048) of the pins were repined at least once. Further, 98.2% (n = 1031) received at least one "like," and 36.8% (n = 384) received at least one comment. The mean number of repins was 853.70; the mean number of likes was 162.52; and the mean number of comments was 1.32. The highest number of repins for one pin was 15,644. The highest number of likes was 2,880, and the highest number of comments was 38. In addition, a "total engagement" variable was created, summing the number of repins, likes, and comments for a total number of times each pin was engaged. Mean total engagement was 997.63.

Discussion

Fitspiration is a relatively new phenomenon nominally intended to inspire individuals to achieve their fitness goals. Although fitspiration might encourage some viewers, it might also negatively impact body satisfaction and eating and exercise behavior. Experts in the field of body image have highlighted the potential adverse consequences of fitspiration, yet little research has examined the content of these messages

(Dahl, 2013). Fitspiration is particularly evident on visually focused social media platforms. Therefore, the current study examined the content of fitspiration pins on Pinterest through the lens of Social Cognitive Theory.

The majority of fitspiration content promoted weight management standards and behaviors as a way to be thin, fit, sexy, or beautiful. This indicates that fitspiration emphasizes appearance focused values and behaviors regarding physical activity. Findings are consistent with research suggesting that appearance is referenced more frequently than health as a motivation to engage in weight management behaviors (Willis & Knobloch-Westerwick, 2014). Further, results extend past literature by demonstrating that fitness content on social media websites emphasizes appearance. Young adult women view most of the appearance-oriented media they consume online (vs. print or television). Moreover, online media reach many more people than traditional print media outlets, transmitting societal attitudes and behaviors to a larger amount of individuals (Bair et al., 2012). Thus, women have a greater chance of encountering appearancefocused messages via social media, and this platform offers many opportunities for repeated exposures. In light of Social Cognitive Theory, it is plausible that the appearance focus of fitspiration messages influences numerous young adult women's self-regulatory behaviors and standards (Bandura, 2001a).

A similar proportion of messages encouraged weight management practices as a way to look thin and a way to look fit. This indicates that although fitspiration is thought to inspire exercise behaviors, it appears to include an equal amount of inspiration for the pursuit of thinness. Indeed, recent research comparing thinspiration and fitspiration websites revealed that fitspiration messages included positive comments about being thin and images of women posing in a way to appear thinner (Boepple & Thompson, 2015). Experimental research documents the hazardous effects of viewing thinspiration messages, including heightened body dissatisfaction and eating-disorder pathology (Bardone-Cone & Cass, 2007; Peebles et al., 2012). Thus, if fitspiration content is similar, it is likely to yield comparable detrimental effects.

Current results also indicate that the most frequently advocated behavior and motivation for achieving body image ideals was exercising to look good, followed by exercising to lose weight (in conjunction with being healthy) and to improve shape. This reveals that exercise in general is the most prominent body-shaping behavior encouraged and is consistent with the notion that fitspiration encourages physical activity. However, research suggests that a combination of nutrition monitoring and physical activity is necessary to achieve a healthy weight, and it is unrealistic to suggest that exercise alone will yield body image ideals (King, Hopkins, Caudwell, Stubbs, & Blundell, 2008). Therefore, fitspiration might motivate young adult women to engage in regular physical activity without modifying their diet. Yet if individuals do not alter their dietary behaviors, they might experience frustration when they do not achieve the desired results. This is likely to cause resentment and self-loathing, and to deter continued exercise behaviors (King et al., 2008).

The majority of messages that included an outcome expectancy promoted attractiveness as motivation to engage in weight management. Although the premise of the fitspiration trend is to motive people to achieve their fitness goals, findings suggest that these messages perpetuate the idea that the primary reason to engage in physical activity is to enhance appearance. This is consistent with previous research demonstrating that appearance is often the rationale given to encourage exercise in media communication (Conlin & Bissell, 2014). Indeed, fitspiration content appears to model physical attraction as a reward for engaging in physical activity. According to Social Cognitive Theory, this outcome expectancy serves as a positive incentive and motivates young adult women to participate in exercise (Bandura, 2001a).

Most messages included an image of a person, typically a thin, athletically built White woman. This finding is consistent with research demonstrating that the overall thinness of models in fitness and fashion magazines is similar (Conlin & Bissell, 2014). Further, it supports the notion that the new "fit ideal" of feminine beauty incorporates thinness (Homan et al., 2012). Fitspiration images are reported to model positive health behaviors; however, they appear to insinuate that a "healthy" body is one that is thin and athletic. Social Cognitive Theory proposes that young adult women are likely to accept the reinforced idea that a healthy body is one that is slender and toned.

The degree of engagement with fitspiration messages on Pinterest is notable. Almost all pins were repined at least once, and the majority received at least one like, highlighting the popularity of fitspiration and demonstrating that the unhealthy behaviors and attitudes promoted are highly endorsed by viewers. Interestingly, the degree of engagement found in this study is greater than that found for thinspiration content on Pinterest (Ghaznavi & Taylor, 2015). As the majority of Pinterest users are young adult women, it appears that this group is frequently engaging with fitspiration content on this platform (Duggan et al., 2015). The endorsement of fitspiration messages by like-minded peers serves as a social reward, and Social Cognitive Theory suggests that this visible display of engagement furthers the acceptance of unrealistic body image ideals and adoption of the idealized behaviors (Bandura, 2001b).

Public Health Implications

Fitspiration can pose serious public health consequences for young adult women. These messages cite appearance more frequently than health as a rationale for engaging in exercise. This is worrisome, as exercising for appearance reasons rather than health reasons is associated with body dissatisfaction, low self-esteem, and disordered eating in women (Gonçalves & Gomes, 2012; Vartanian, Wharton, & Green, 2012). Further, appearance-motivated weight loss is more often characterized by eating pathology (Putterman & Linden, 2004). Indeed, engaging in physical activity for weight and shape reasons is not always a positive health behavior (Gonçalves & Gomes, 2012). If young adult women adopt the standards and behaviors promoted in fitspiration, the consequences might be harmful.

Additionally, most fitspiration models were both thin and athletic. This is concerning, as research demonstrates that exposure to thin and athletic models results in heightened body dissatisfaction (Homan et al., 2012). Indeed, viewing toned and muscular images does not produce negative feelings about the body unless paired with thinness (Homan et al., 2012). Thus, exposure to fitspiration models with extremely low body fat in addition to a well-defined, muscular appearance is particularly likely to increase body dissatisfaction for young adult women. Further, this body type is unattainable for the majority of women, and disappointment over the inability to achieve this ideal might induce negative affect (Krane, Stiles-Shipley, Waldron, & Michalenok, 2002).

Finally, results suggest that the feminine beauty ideal is now both unrealistically thin and extremely toned. The promotion of this body type in the context of perceived health information implies that only thin and toned bodies are healthy. Yet the pursuit of both thinness and muscularity can present health risks for young adult women who attempt to attain impractical beauty ideals via multiple unhealthy means (Grogan & Masterson, 2012; Homan et al., 2012). For example, women might aim to achieve muscularity through intense musclebuilding workouts while also striving to achieve thinness via extreme caloric restriction. Employing these behaviors in combination is dangerous, as women are not likely to take in the nutrients their bodies need to remain healthy and energized for physical activity. Thus, fitspiration might encourage young adult women to engage in multiple types of extreme unhealthy behavior, heightening the chance of detrimental outcomes.

Although potential detrimental consequences of fitspiration messages are discussed, it is also important to consider potential benefits of fitspiration. Rates of obesity and overweight are at an all-time high, and young adult women, who represent the majority of Pinterest users, are at high risk for experiencing a decline in physical activity and excessive weight gain (Duggan et al., 2015; Mokdad et al., 1999; Nelson, Neumark-Stzainer, Hannan, Sirard, & Story, 2006). Therefore, exposure to material encouraging regular exercise might motivate at-risk individuals to increase physical activity levels. Further, young adults are likely to experience unrealistic optimism and underestimate personal risk for experiencing health problems in the future (Weinstein, 1980). Thus, messages encouraging exercise for health-related reasons might not be relevant, and messaging promoting exercising for appearance-related reasons might be more salient and effective for this age group. Finally, some research does suggest that prolonged thin-ideal exposure enhances body satisfaction when woman engage in selfimprovement social comparisons (Knobloch-Westerwick, 2015). Indeed, if this is the case, repeated exposure to fit-ideal images might also increase body satisfaction when women are motivated to improve their health.

Despite possible advantageous outcomes, fitspiration content is still worrisome. Although it might motivate young adults to engage exercise and weight management, it might do so at a high cost. Young adult women are highly susceptible to internalizing media ideals, and thin-ideal internalization often leads to body dissatisfaction, the strongest and most consistent predictor of eating-disorder symptoms (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999).



Limitations and Future Directions

The current study has limitations. First, Pinterest does not list pins chronologically or provide a time stamp for each pin. This presents a challenge to more conventional content analysis sampling methods that select a sample based on a specific time frame. The paucity of research examining Pinterest means there is not a standardized method of sampling from this media type. However, the current study aimed to contribute to generalizable knowledge by using the same approach used in a prior study of Pinterest content (Guidry et al., 2015). Next, the present work only examined fitspiration messages; as such, it focuses exclusively on messages concerning appearance and health improvement. Yet conclusions cannot be drawn regarding body acceptance messages and the proportion of individuals who engage with body positivity content. Future work should compare engagement between fitspiration and body acceptance media messages. Further, this study cannot draw conclusions about the direct effects of fitspiration messages on body satisfaction and eating-related behaviors. Future research is needed to examine the direct effects of fitspiration content. Finally, this study focused only on fitspiration messages on Pinterest and cannot be generalized to other platforms. Future studies should examine other platforms on which fitspiration is common to provide a more comprehensive picture of this phenomenon.

Conclusion

The notion that fitspiration poses less risk to viewers than thinspiration seems unwarranted. Further, current results suggest that skinny is not enough. Rather, women must be both thin and athletic to achieve the feminine beauty ideal. Researchers and clinicians need to be aware of the potential hazardous effects of fitspiration content, and identify ways to motivate exercise and weight management for health reasons relevant to young adult women. An emphasis on health over appearance could protect against negative health outcomes associated with media messages and increase body acceptance. Moreover, young women should be warned about the dangerous implications of fitspiration content. Pinterest should consider placing the public service message regarding eating disorders that appears when users search for thinspiration on Pinterest on the fitspiration search results pages as well.

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