Objectifying Fitness: A Content and Thematic Analysis of #Fitspiration Images on

Social Media

Nova Deighton-Smith, Leeds Beckett University, Leeds. United Kingdom.

Beth T. Bell, York St. John University, York. United Kingdom.

Correspondence concerning this article should be addressed to:

Nova Deighton-Smith. Department of Psychology, School of Social Sciences,

Leeds Beckett University. Leeds. LS1 3HE, UK.

Contact: n.l.deighton-smith@leedsbeckett.ac.uk

Abstract

Research suggests that exposure to #fitspiration content can result in increased body dissatisfaction. Employing a data-driven approach, the present study examines the nature of images and text contained within #fitspiration posts on social media. First, a content analysis of images labelled as #fitspiration on popular site Instagram ($N = 1,000$) was performed. People featured in 52% of images, of which nearly 90% of individuals were coded as having low body fat and 55% were coded as muscular. Individuals were typically presented in sexually objectified ways, which varied as a function of gender. Second, a thematic analysis of text from the same set of images ($N = 400$) was conducted to identify common themes and underlying meaning embedded within the messages. Six themes were developed: (1) Fit is sexy, (2) A fit physique requires commitment and self-regulation, (3) Your choices define you, (4) Pleasure and perseverance through pain, (5) Battle of the selves: You vs. You, and (6) Here's to Us! A celebration of a community. In combination, the analyses demonstrate how text and images found in #fitspiration posts perpetuate pervading sociocultural appearance ideals for men and women, positioning exercise as means to achieving these ideals. Furthermore, #fitspiration sexually objectifies the fit body, with text and images encouraging self-objectification and the distancing of the self from internal bodily functions in physical activity settings. Future research should focus on how #fitspiration content influences individuals in relation to how they think and feel about their body and physical activity.

Keywords: Social media, #Fitspiration content, Objectification, Body image, Fitness

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Fitspiration (an amalgamation of the words fitness and inspiration) refers to media

content, predominantly found online and ostentatiously designed to inspire fitness amongst

those who encounter it (Boepple & Thompson, 2016). On social media, such content includes

images, video, and text that are mostly user-generated and can be easily accessed and shared

amongst a vast and diverse social media user-base. Users may accidently encounter

fitspiration content as part of their everyday social media use (e.g., a friend posting) or they

may belong to a dedicated online group or network. Perhaps the most novel way users may

encounter fitspiration content is through metadata tagging, wherein users use such tags to

label their post (normally a hashtag, e.g., #fitspiration). This allows users to add their post to

or search within a larger, co-created, online repository of all content posted with this hashtag

on a particular site. Given the ubiquity of #fitspiration on social media, concerns have been

raised regarding its focus on themes of weight loss, high proportion of thin-idealizing

imagery, and problematic dietary advice (Boepple & Thompson, 2016). Such themes

previously found in more traditional media types (e.g., TV and magazines), have been linked

to negative body image and disordered eating (Grabe, Hyde & Ward, 2008; van den Berg,

Neumark-Sztainer, Hannan, & Haines, 2007). Consequently, recent analyses of #fitspiration

content have been limited by a focus on searching for themes present in other media (Boepple

& Thompson, 2016; Tiggemann & Zaccardo, 2015) and thus may have overlooked some of

the more nuanced elements of #fitspiration content. The present research aims to adopt a

more comprehensive understanding of #fitspiration content by examining both images and

text, using a data-driven approach.

Sociocultural Influences on Conceptualizations of Fitness and Attractiveness

Within health sciences, fitness is commonly defined as the body's ability to respond to the demands of physical activity without undue fatigue (Vanhees et al., 2005). Being physically fit is associated with positive health outcomes (Ortega, Ruiz, Castillo, & Sjöström, 2008; Sawada, 2014) and can typically be achieved through the adoption of a balanced diet and regular participation in physical activity (Vanhees et al., 2005). That said, the findings from research on exercise motivations are equivocal. Though many regard fitness as desirable and cite fitness as an important motivator for engaging in physical activity (e.g., Melillo et al., 1996), some have diverse, and often nebulous, conceptualizations of fitness (Ingledew & Markland, 2008).

Sociocultural agents (including family, friends, and media), help shape the beliefs, values, attitudes, and behaviors of individuals in relation to fitness (Dutta-Bergman, 2004; Paek, Reber, & Lariscy, 2011). The media is key to shaping conceptualizations of fitness, serving as a prominent source of information, however content analyses have found that this information may be misleading, inaccurate, or conflicting (Campo & Mastin, 2007; Ellison, White, & McElhone, 2011). Physical activity is often presented as means to an attractive body, rather than a fit and healthy one (Aubrey, 2010; Willis & Knobloch-Westerwick, 2014). Given the unrealistic nature of media-endorsed body ideals, which emphasize a thin, yet toned and curvaceous body shape for girls and a muscular, yet lean body shape for boys (Wasylkiw, Emms, Meuse, & Poirier, 2009; Jankowski, Fawkner, Slater, & Tiggemann, 2014), this is cause for concern. Furthermore, fitness magazines emphasize appearance, over health and fitness, as the goal of physical activity (Willis & Knobloch-Westerwick, 2014). Hence, consumption of such media can increase appearance-related motivations to exercise over health (Pankratow, Berry, & McHugh, 2013).

Objectification Theory

Objectification theory (Fredrickson & Roberts, 1997) provides a useful theoretical framework for understanding how and why appearance-focused media representations of exercise may be problematic. According to this theory, certain forms of media encourage individuals to adopt an external viewer's perspective of their own body by portraying media models as an often dismembered (i.e., depicted with removed or obscured faces), sexual, or physical object that can be acquired for the use and pleasure of others. Consequently, for women, who are typically presented in a more objectified manner than men within the media, it has become normative for their bodies to be viewed as objects to be evaluated, desired, and commented upon and for potential negative outcomes to be minimized or dismissed (Calogero, Tantleff-Dunn, & Thompson, 2011). For example, self-objectification (e.g., self-surveillance and body monitoring) occurs when individuals internalize the view of themselves through an objectified lens and place a greater emphasis on appearance attributes over bodily competencies and abilities (Szymanski, Moffitt, & Carr, 2011). Psychological consequences can include increased feelings of body shame and decreased sensitivity to essential bodily cues (e.g., feelings of hunger) (McKinley & Hyde, 1996; Moradi & Huang, 2008). Risks to health may reach clinical levels when negative body image leads to low self-esteem and self-worth, depression, and disordered eating (Calogero et al., 2011; Fredrickson & Roberts, 1997).

Exposure to sexually objectifying media have been found to induce self-objectification tendencies and result in numerous negative outcomes, such as weight-related appearance anxiety, negative mood, and body dissatisfaction (Harper and Tiggemann, 2008), engagement in unhealthy muscle-building practices or weight-management strategies, such as vigorous exercise regimes and fasting (LePage, Crowther, Harrington, & Engler, 2008), anabolic steroid use (Smolak, Murnen, & Thompson, 2005), and increased drive for muscularity (Daniel & Bridges, 2010; Slater & Tiggemann, 2014). Understood within the

lens of objectification theory, it is plausible then that exposure to fitness media, which promotes the attractiveness of the body over its function, may be more harmful than media which promotes the function of the body. In support of this, objectified images have been shown to contribute to greater negative self-evaluations than non-objectified / performance shots (Farquhar & Wasylkiw, 2007).

Social Media

Social media is a popular form of internet-based communication that allows the creation of user-generated content (Kaplan & Haenlein, 2010). Concerns have been raised however, regarding the legitimacy of health- and fitness-related content given that social media is fast now becoming an increasingly pervasive sociocultural source of user-generated and unregulated information and advice (Vaterlaus, Patten, Roche, & Young, 2015). In one study, 59% of adults looked for health information online in the previous year (Fox & Duggan, 2013). This is largely due to global increases in internet access, availability, and usage. The sheer numbers of Internet users in developed countries is staggering, with 77% of U.K. and 85% of U.S. users reporting use on a regular basis (Perrin & Duggan, 2015). Sites such as Twitter report 302 million active monthly users (Twitter, 2015). Sites centred on image-based communication, such as Instagram and Pinterest, have also experienced a popularity surge (Duggan & Page, 2015) and it is estimated that over 1.8 billion images are now shared daily on social media (Meeker, 2015). Instagram now boasts an active monthly user base of 400 million, 75% of those being outside the US (Instagram, 2016) and is considered by young, U.S. adolescents to be their 'most important social network' (Meeker, 2015). Moreover, using hashtags on Instagram, which is interoperable with multiple social networking sites (e.g., Facebook, Flickr, Tumblr, and Twitter), users can assert online individual and group identities (Schlesselman-Tarango, 2013), as they can optimize access to content and increase visibility even further.

#Fitspiration Content

One particular metadata tag that has become hugely popular across social media is #fitspiration. As of June 2016, over 7.8 million publically-available images have been posted on Instagram using this hashtag. Concerns have been raised however due to similarities found between #fitspiration and #thinspiration (Boepple & Thompson, 2016) given that #thinspiration content includes both excessively thin and objectified images (Ghaznavi & Taylor, 2015), negative portrayals of persons who are overweight (Boepple & Thompson, 2016), and weight-loss advice (Borzekowski, Schenk, Wilson, & Peebles, 2010; Lapinski, 2006). Together this content appears to inspire users to achieve their desired thinness levels.

Image analyses. In contrast to #thinspiration, little research has explored the images featured in #fitspiration posts on social media. Notable exceptions include Tiggemann and Zaccardo (2015) who found that acute exposure to #fitspiration images of thin and toned women on Instagram, led to lowered body image among young women, in comparison to travel-related images. Such findings are consistent with a small, yet growing number of studies that have found a link between exposure to social media images more broadly and negative body image (Mabe, Forney, & Keel, 2014; Meier & Gray, 2014; Tiggemann & Miller, 2010; Tiggemann & Slater, 2013). That said, the extent to which #fitspiration posts are typical of social media images and akin to #thinspiration content remains unclear. Boepple and Thompson (2016) found that 42% of #fitspiration websites featured women posed to appear thinner or smaller. However, #fitspiration images feature both male and female models that also have muscle tone and definition (Tiggemann & Zaccardo, 2015). A systematic investigation of #fitspiration images therefore, focusing on the individuals featured, is warranted.

Text analyses. It is also important to explore the text featured within #fitspiration posts, in addition to the images (Willis & Knobloch-Westerwick, 2014). Given the ubiquitous accessibility of exercise- and fitness-related information on social media, it is surprising that to date, empirical work examining #fitspiration messages is only in its infancy. Specifically, Boepple and Thompson (2016) examined the images and text contained in the top 50 #fitspiration internet sites to assess whether themes identified as being potentially dangerous in #thinspiration content were also present in #fitspiration. They found that 42% of #fitspiration websites contained messages about weight loss and 36% contained objectifying messages. By solely focusing on identifying similarities between #fitspiration and #thinspiration content however, using a framework derived from existing media (#thinspiration), some of the unique aspects of #fitspiration content may have been overlooked. A more in-depth analysis of #fitspiration text is therefore warranted to understand how it is used to inspire fitness.

Current Research

The aim of the present research was to systematically analyze images and text found in #fitspiration posts on Instagram. Study 1 aims to identify the types of images featured, whereas Study 2 aims to explore the messages contained within the image (e.g., a mantra or slogan); thus presenting a more composite understanding of the #fitspiration phenomena, compared to using single methods alone (Creswell & Plano Clark, 2011). In both studies, we adopted a two-pronged, inductive-deductive approach to analysis (Jankowski et al., 2014). We first identified common content and themes within the dataset (rather than apply a coding criteria derived from previous examinations of media images or messages) and then contextualized coding categories and themes within a wider, sociocultural perspective and pre-existing body of knowledge (e.g., objectification framework). Such an approach has been used effectively to explore and understand themes present in other understudied media

content, such as men's magazines (Jankowski et al., 2014) and pro-muscularity websites (Murray et al., 2016). The project received ethical approval from Leeds Beckett University.

Study 1

To examine the different types of imagery included in #fitspiration posts, we employed a method of quantitative content analysis. Previous evidence has found dietary and fitness messages in #fitspiration websites (Boepple & Thompson, 2016) and objectified and appearance-ideal bodies in #fitspiration images (Tiggemann & Zaccardo, 2015). We chose to employ a largely data-driven approach, open to identifying any category which appeared prominent within the data set, whilst acknowledging evidence from previous literature. Therefore, our first research question was as follows:

RQ$_1$. What are the most common types of imagery featured in #fitspiration posts on Instagram?

Given concerns that have been raised about the high proportion of appearance-ideal and objectified bodies in #fitspiration images (Tiggemann & Zaccardo, 2015), we sought to examine the ways in which people were depicted in #fitspiration images and the extent to which their bodies were presented in appearance-ideal and objectified ways. As with RQ$_1$, we were mindful of previous literature, whilst remaining open to the unexpected and nuanced ways in which individuals may be presented in #fitspiration that are not captured elsewhere. The second research question was formulated as follows:

RQ$_2$. How are people's bodies portrayed in #fitspiration posts and to what extent are they objectified?

Finally, in light of evidence indicating that women are more objectified than men in the mainstream media (Calogero et al., 2011), we also aimed to examine gender differences within this, as per our third research question:

RQ$_3$. Are there any gender differences in the way individual's bodies are portrayed and objectified in #fitspiration posts?

Sample

On January 17, 2014, we entered the term "#fitspiration" into the metadata tag search engine of Instagram, finding 1.8 million images (in June 2016, this figure exceeded 7.8 million). The full term (#fitspiration) was used as a search term rather than any derivative (e.g., #fitspo), as this was consistent with previous research (Boepple and Thompson, 2016; Tiggemann & Zaccardo, 2015). The 1,000 most recent posts using #fitspiration were downloaded, printed, and numbered by both the current authors. Of these posts, we removed fifty-six as they were screenshots of videos. As an Instagram user would normally view the complete video containing more content than depicted in the screenshot, we considered it unwise to include them. There were also occasions whereby material was duplicated, however a decision was taken to include multiple images to reflect the consistency of the image / message portrayed, in contrast with Boepple and Thompson (2016). The final sample consisted of 944 Instagram posts.

Method

Both lead authors conducted an initial phase of data familiarisation to inductively identify different categories of image content within the dataset (e.g., food, drink, exercise equipment, exercise clothing). From these initial categories, we developed four overarching content categories that most of the images would fit within (exercise-related, diet related, people, and text), along with a corresponding coding strategy. These categories were not

mutually exclusive so an image could be coded into more than one category if needed, and content that did not fit within the categories was coded as 'other' and a note made about the kind of content featured in the image (e.g., animal, cartoon, scenery etc.). Working collaboratively, both lead authors coded the images first. Subsequently, two research assistants also worked collaboratively to code, but were naïve to the aims of the study. The two groups of researchers agreed on coding for 98.10% of images and any disagreements were resolved through discussion and further refinement of the coding strategies (see Table 1 for coding categories and their respective definitions). Finally, a third research assistant, also naïve to the aims of the study, coded a sub-sample ($n = 200$) and inter-coder reliability was found to be good ($k = .91 – .99$).

<INSERT TABLE 1 HERE>

Both lead authors then extracted images of people and subjected them to a further coding strategy (see Table 2). This was developed through a process of initial data familiarisation, then, once initial coding categories were developed, we consulted existing literature to refine these (see Table 2 for explanations of how previous research informed coding strategies) and apply them to the whole sample. The same two research assistants, working collaboratively and naïve to the aims of the study, then coded the images. The two groups of researchers agreed on coding for 90.22% of images and disagreements were resolved through discussion and further refinement of the coding strategies (see Table 2 for coding categories and definitions). Finally, a subsample of images ($n = 200$) was coded by the third naïve research assistant and inter-coder reliability was good ($k = 0.80$-1.00, see Table 3).

<INSERT TABLE 2 HERE>

Results

First, we identified common types of content found in #fitspiration posts (RQ$_1$). Table 1 displays the frequency with which the categories of content featured within the sample and describes the nature of all categories, including that of 'other'. The most common types of content found in #fitspiration posts included people (52.01%; $N = 491$), text (42.37%; $N = 400$), exercise-related imagery (31.67%; $N = 299$) and diet-related imagery (25.21%; $N = 238$).

Images of People

Next we aimed to understand how people were presented in #fitspiration posts (RQ$_2$). There were 709 people featured within the 490 #fitspiration images of people, excluding children ($N = 5$) and people deemed too small to code ($N = 12$). Gender could not be determined for two individuals and they were excluded from subsequent analyses. Table 3 displays the frequencies of bodily characteristics overall and by gender, with specific percentages included.

<INSERT TABLE 3 HERE>

Women (68.27%; $N = 484$) featured more than men (31.45%; $N = 223$). Of the sample, 88.12% ($N = 623$) of persons were thin or had low body fat and 55.73% ($N = 394$) were muscular. Around half of individuals ($N = 378$; 53.47%) showed their full body, one third showed half of their bodies ($N = 242$; 34.18%) and just 12.59% showed their head and shoulders only ($N = 89$). Arms were the most on-show body part ($N = 464$; 65.63%), followed by faces ($N = 456$; 64.64%), abdomen ($N = 239$; 33.80%), chest ($N = 221$; 31.26%), legs ($N = 176$; 24.89%), back ($N = 46$; 6.51%), and buttocks ($N = 28$; 3.96%). A higher proportion of individuals ($N = 181$; 25.60%) were depicted taking a 'selfie' than were

depicted active in physical activity ($N = 124$; 17.54%) and 6.65% of individuals were involved in transformation shots ($N = 47$). In terms of clothing, half ($N = 357$; 50.59%) wore exercise-related clothing, 14.29% ($N = 101$) wore sexualized clothing, 5.09% ($N = 36$) wore no visible clothing, and 30.69% ($N = 217$) wore other types of clothing.

Gender Analyses

To examine whether there were any gender differences in the bodily characteristics of individuals portrayed in the sample (RQ$_3$), we performed a series of chi-square analyses. Men were significantly more likely than women to be visibly muscular / toned ($\chi^2 (1) = 63.04$, $p < .001$), display half their body ($\chi^2 (1) = 33.67$, p <.001), be showing their arms ($\chi^2 (1) = 12.38$, $p < .001$), face ($\chi^2 (1) = 10.19$, $p < .01$), and chest ($\chi^2 (1) = 13.82$, $p < .001$), and wear no visible clothing ($\chi^2 (1) = 21.24$, $p < .001$). In contrast, women were found to be significantly more likely than men to be showing their full body ($\chi^2 (1) = 20.98$, p <.001), their legs ($\chi^2 (1) = 19.37$, $p < .001$) and buttocks ($\chi2 (1) = 10.56$, $p < .01$), and wear sexualized clothing ($\chi^2 (1) = 5.99$, $p < .05$). Non-significant gender differences were found for low body fat / thinness ($\chi^2 (1) = 3.52$, $p = .06$), displaying head and shoulders only ($\chi^2 (1) = 3.88$, p = .05), showing of back ($\chi^2 (1) = 0.03$, $p = .87$) or abdomen ($\chi^2 (1) = 0.38$, $p = .54$), type of pose adopted (Selfie $\chi^2 (1) = 0.89$, $p = .35$; Active $\chi^2 (1) = 1.18$, $p = .28$; Transformation $\chi^2 (1) = 1.54$, $p = .21$), and the likelihood of wearing exercise-related clothing ($\chi^2 (1) = 2.95$, $p = .09$) and clothing defined as other ($\chi^2 (1) = 1.32$, $p = .25$).

Discussion

People, text, exercise, and diet content featured prominently in the sample of #fitspiration posts from Instagram. Analysis of the bodily characteristics of the individuals featured found them to be thin / low in body fat and muscular, thus conforming to pervading sociocultural ideals for attractiveness (Flynn, Park, Morin, & Stana, 2015; Jankowski et al.,

2014; Wasylkiw et al., 2009). Furthermore, male models were more likely to be muscular than female models, consistent with previous research documenting the higher centrality of muscularity to the male appearance ideal (Flynn et al., 2015; Thompson & Cafri, 2007). Thus #fitspiration posts serve to further perpetuate societal appearance ideals that emphasize low body fat and visible muscle tone for men and women.

Individuals featured in #fitspiration posts typically displayed a large proportion of their body (i.e., portrait shots of just heads and shoulders were rare). These individuals were frequently depicted in an objectifying manner (Frederickson & Roberts, 1997); exposing the flesh of their arms, chest, abdomen, legs, back and / or buttocks, omitting their faces or adopting passive poses (e.g., selfies). Gender differences emerged in terms of the way men and women were depicted, reflecting sociocultural sexual attractiveness stereotypes in popular media (Buysse & Embser-Herbert, 2004). Men were more likely than women to be featured in half body shots, revealing their arms and / or chest, and be wearing no visible clothing. In contrast, women were more likely than men to be in full body shots, wearing sexualized clothing and revealing their legs. Interestingly there were no gender differences in terms of pose adopted, which is inconsistent with existing content analyses of other media, such as music videos (Aubrey & Frisby, 2011) and sport cover images (Buysse & Embser-Herbert, 2004), where women were more likely to be depicted as passive objects. Men were significantly more likely to show their face than women: this is an important finding as bodies without faces are believed to be objectified (Fredrickson & Roberts 1997), and so, in this sense, women may be seen as more objectified than men in #fitspiration content.

Study 2

Study 2 is the first of its kind to use qualitative methodology to rigorously examine the messages embedded within #fitspiration posts. Whereas previous analyses of #fitspiration

text have applied pre-existing frameworks to quantify messages found (Boepple &

Thompson, 2016), Study 2 adopted a more data-informed strategy consistent with Study 1. In

contrast with Study 1 however, a different analytic technique, thematic analysis (Braun &

Clarke, 2006), was used to identify, analyse, and report on the more nuanced elements of

#fitspiration found across the data set. More specifically, we aimed to examine the following

research questions:

RQ$_1$. What textual messages are contained within #fitspiration messages?

RQ$_2$. How do these messages seek to inspire fitness in others?

Method

Of the 1,000 #fitspiration posts downloaded, 42.37% contained text ($N = 400$).

Following a process of text-screening, 392 posts formed the data set for analysis, since eight

contained illegible text or text in a language other than English. Braun and Clarke (2006)

detail five recursive phases of thematic analysis before a written account is prepared as phase

six. Following the first phase of data familiarisation, codes were identified by the first author

according to categories consistent with Study 1. This included any bodily or appearance-

related reference (e.g., weight, shape, fat, size) such as "*I've lost 30 pounds*". For diet and

nutrition, this included any reference to food, drink, or supplement (e.g., "*Powered by peanut

butter*") and for fitness, any reference to exercise or physical activity (e.g., "*It's a lifestyle –

train like there's no finish line*").

As part of phase two, codes incorporated both semantic and latent aspects of the data

(i.e., informed by either surface meanings or underlying conceptualizations respectively). In

phase three, codes were grouped to form relevant themes where patterns were apparent (e.g.,

a body that exercises brings sex appeal; sexual appeal is a reward worth striving for). Codes

and extracts were then examined collaboratively by both lead authors. Decisions were made to review themes to ensure support for each candidate theme (i.e., sufficient data to form a coherent pattern) and to identify clear distinctions between themes (Braun & Clarke, 2006). During phase four, themes were refined to demonstrate the divergence and inconsistency of information. In phase five, themes were defined, clearly named, and again, related back to the research aims, with illustrative extracts selected for each. This final level of organisation created a timely opportunity to commence a written narrative to accompany each extract.

The purpose of thematic analysis is not to quantify content of messages, but to look for underlying, recurrent themes in the data set which may be more nuanced. Thus according to Braun and Clarke (2006), the importance of a theme should be judged on salience / relevance rather than frequency. That said, the authors have provided frequency counts in the findings to highlight the number of extracts that relate to each theme.

Findings

Six themes were generated from the dataset that collaboratively function to address both RQ_1 and RQ_2: (1) Fit is sexy ($N = 30$, 7.65%), (2) A "fit" physique requires commitment and self-regulation ($N = 41$, 10.45%), (3) Your choices define you ($N = 36$, 9.18%), (4) Pleasure and perseverance through pain ($N = 21$, 5.35%), (5) Battle of the selves: "You vs. You" ($N = 28$, 7.14%)', and (6) Here's to us! A celebration of a community ($N = 34$, 8.67%). Each theme is presented with illustrative extracts and a description of the background image is provided for each extract to add context.

1. Fit is Sexy

The first theme blurs the lines between physical fitness and physical attractiveness by explicitly idealizing the fit body and constructing it as something to be desired. A "*fit*" body was described as one which would be sexually attractive to others.

"Fit people have better sex" (Woman laid across man. Both kissing, wearing underwear).

"When you work out your body gets happy, and reward you by starting looking Sexy as f**k." (Two women in bikinis with backs to camera).

"Workout now so next year everyone be like holy shit!" (Woman wearing sports bra).

Exercise was positioned as a means to creating a sexually desirable body. Messages hinted at the importance of looking muscular and toned, rather than being just thin or achieving a low weight, suggesting a rejection of messages that solely focus on thinness and weight loss as means to body attractiveness:

"Some people want to grow old together. I just want to get swole[1] together." (Man and woman kissing).

"I never step on the scale…because the scale doesn't measure sexy." (Cartoon of woman holding oranges in front of her chest).

"…You can watch me walking away when I am 7% body fat, shredded[2] as fuck." (Man wearing shorts).

2. A "Fit" Physique Requires Commitment and Self-Regulation

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[1] The term "swole" originates from an urban definition for being extremely muscular (Urban Dictionary, 2004b).

[2] The term "shredded" originates from an urban definition for having well-defined muscles (Urban Dictionary, 2004a).

Improvements in physical appearance were presented as the desirable outcomes of fitness. Fitness and health were constructed as quantifiable goals; a fit physique could be measured through changes in physical appearance, such as weight loss and / or muscle gain, as illustrated in the extracts below:

"No time for games only gainz. Gym time" (Cartoon character)

"Building a bad ass body one rep at a time." (Text-only image).

"Can't wait for my abs to pop out." (Multiple images of a woman's body wearing underwear, taking a selfie).

Such results were described as only achievable through commitment and determination. Every excuse was regarded as a choice to fail. In effect, these extracts echo a neoliberal, mind-over-matter rhetoric:

"Don't complain about things you are not willing to work hard to change." (Woman wearing sports bra and shorts).

"A one hour workout is 4% of your day. No excuses." (Woman dressed in exercise clothing running on an open road).

"Your fitness is 100% mental. Your body won't go if your mind doesn't push it." (Silhouette of a woman running).

These extracts suggest that those who engage in physical activity exercise a sense of moral superiority over those who do not, believing they were more committed, determined, and motivated. Within these messages, a fit body is achievable through a process of self-regulation.

3. Your Choices Define You

Fitness was constructed as an individual's choice: a person who opts to be fit must make a number of healthy lifestyle decisions on a daily basis. These decisions were conceptualized as being more challenging to make than incorrect or "poor" choices:

"It takes 524 burpees to burn off 1 large fries. Burpees suck. Choose wisely." (Large portion of fries).

"YOU HAVE A CHOICE. You can throw in the towel or you can use it to wipe the sweat off your face." (Woman in sports bra and underwear).

Choices were explicitly self-defining. Poor choices were conceptualized as the easy / lazy option and indicative of a personal defect to feel shameful about. Conversely, messages suggested that a sense of pride and superiority could be gleaned from not making them. Hence, the responsibility to be fit (or not) lies solely with the individual. Quitting was constructed as the ultimate poor choice and a sign of personal weakness, especially if in the presence of others, which indicates that there is no real choice or option available:

"Thought about quitting. Then I noticed who was watching." (Man doing push-ups, watched by a young child).

"Crawling is acceptable, falling is acceptable, puking is acceptable, blood is acceptable, sweat is acceptable, pain is acceptable, quitting is not." (Text found twice: one text-only image, one featuring a punch bag).

"Quitters never win and winners never quit. Fall down 7 times, get up 8. If it is important to you, you will find a way. If not, you'll find an excuse. It's a lifestyle – train like there's no finish line." (Text-only image).

4. Pleasure and Perseverance through Pain

Some #fitspiration messages conceptualized pain as a source of motivation; an essential experience in order to gain the desired results of a 'fit' physique. Messages urged individuals to work their bodies hard during exercise, with little regard for any potential negative health outcomes that may occur as a result of pushing one's body over and above its physical limitations:

"Unless you puke, faint, or die, keep going[3]." (Text-only image).

"When your legs ache, your body burns, & there's sweat all over…you know you're doing something right. Don't give up." (Text-only image).

The experience of exercise without pain was positioned as worthless. Pain was normalized and perseverance through it was to be expected; accepted not only as part of the fitness journey, but also embraced as a source of pleasure and satisfaction:

"I push my body to the limit, then push it harder! I blast my music, I sweat, I ache, I love pain and I hate skinny." (Text-only image).

"Strength & discipline becomes my weapon, then the pain & agony become my pleasure" (Muscular man lifting weights).

"Sore is the most satisfying feeling" (Hand holding a dumbbell).

5. Battle of the selves: "You vs. You"

This penultimate theme, as illustrated by the extract "*You vs. You*" emphasized a mind-over-matter rhetoric and the pursuit of fitness as a battle against the self, whereby one's goal was to ultimately conquer the body using exercise, strength, and discipline as a weapon:

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[3] This quote has been made famous by a well-known, U.S. celebrity trainer.

"Take on your greatest rival, yourself." (Headshot of a man staring into the camera).

"Once you control your mind, you can conquer your body" (Muscular woman flexing her muscles, wearing sportswear).

In some instances, there was a sense of disparagement of one's former 'unfit' self that in some way required upgrading or discarding:

"FITNESS. It's not about being better than someone else. It's about being a better you." (Two silhouettes of a woman lifting a kettle bell).

"The goal is to Upgrade YOU. To be a better version of you every single day for the rest of your life...ONE POUND AT A TIME" (Exercise class).

6. Here's to Us! A Celebration of a Community

In the final theme, #fitspiration messages were used to foster a sense of community that should be celebrated, shared, and used as a source of inspiration for others:

"Surround yourself with people that inspire you." (Text-only image).

"If you can look yourself in the mirror and say you are proud and gave it 100% then fuck everyone else and keep kicking ass!" (Text-only image).

Hostility from those who were not a part of the #fitspiration community was inevitable and to be expected. This again implied a sense of superiority: many messages encouraged those who were seen to be part of the fitspiration community to look down upon those who were not; particularly those who do not conform to an 'ideal' body type:

"Fuck yeah, I'll show off the body I slaved for. You can cry all day about my so-called arrogance, but if you worked as hard as I did for what I have, you would be

flaunting it too. Enjoy your jealousy. I'll enjoy looking good." (Female using bar bell not facing the camera).

"When did eating healthy become an eating disorder? And training regularly become an 'unhealthy obsession'. I've heard lots of it directed at myself but I can't stand that lazy stupid people are putting my clients down." (Text-only image).

There was clear contempt for those who were negative about the #fitspiration way of life or those who criticized choices made, often described as 'haters', 'doubters' or 'critics':

"Fuck the haters" (Woman in sportswear, taking a selfie in the gym shower).

"Sometimes the people around you won't understand your journey. They don't need to, it's not for them." (Text-only image).

Discussion

The aim of Study 2 was to understand the messages embedded within #fitspiration posts and how the text was used to inspire fitness. The emergent themes are discussed in the relation to the research questions, as well as within the context of previous research and theory.

#Fitspiration text conflated physical fitness with attractiveness (Theme 1), consistent with messages typically found in other fitness media (Willis & Knobloch-Westerwick, 2014). A fit (and therefore attractive) body was defined as lean with visible muscle definition for both men and women. This was achievable through exercise and fitness was constructed as a worthy goal (Theme 2); yet one where set parameters and determination were mandatory. This is consistent with performance and perfection discourses found within sporting contexts whereby athletes' bodies are shaped by self-monitoring and self-regulation (McMahon & Dinan-Thompson, 2011; McMahon & Penny, 2013).

Poor choices (in relation to health and fitness) were represented as a sign of personal weakness (Theme 3) and those who made such choices were often vilified and ridiculed. Similar 'choice-promoting' discourses found in the obesity literature (i.e., 'eat less, move more') are argued to induce feelings of shame and proportion blame (Kirk et al., 2014). The role of individual responsibility in the pursuit of physical fitness was further emphasised in constructions of fitness as a battle against the self (Theme 5) which implies that one's sense of self-worth can be derived from exercise participation (Ryan & Deci, 2000). Furthermore, a person's former body was one to be disparaged, conquered, and ultimately replaced. Mantras within this theme tended to adopt 'you-can' discourses; typically gendered in their nature and on occasions, contradictory. Likewise, with Gill's (2008) research into contemporary media culture, women within the text were either positioned as active, strong, and sexually desirable objects (e.g., "*CrossFit: The one place where a gentleman does not ask a lady "Do you need help lifting that?"*") or subject to appearance-related scrutiny and bodily-inspection (e.g., "*Nothing tastes as good as skinny feels*").

Exercise without pain was positioned as insufficient (Theme 4). Relatedly, Boepple and Thompson (2014) found that healthy living blog messages bore little resemblance to credible health and fitness advice. Such messages directly contradict medical guidelines which outline the physical and psychological risks to health from excessive exercise (Department of Health, 2004) and state that physical activity ought not induce undue fatigue (Vanhees et al., 2005). The sport literature is clear; routinely overtraining the body can lead to burnout (Smith, 1986) or emotional and physical exhaustion (Cresswell, 2009). When #fitspiration messages urge the user to push the body beyond its limits, these conflict with the recommendation that an athlete must be aware of their physical limits in order to reach optimal performance and mind-body integration (Menzel & Levine, 2011).

Finally, #fitspiration text promoted a community where social support and inspiration for those engaging in physical activity could be found (Theme 6). These messages may be viewed positively: social support promoting self-efficacy across various age groups has been identified as important for exercise initiation and maintenance (Craggs, Corder, van Sluijs, & Griffin, 2011; Litt, Kleppinger, & Judge, 2002). Pro-eating disorder websites have similarly been found to be a source of social support and self-efficacy and provide a safe space in which individuals can interact with like-minded others (Borzekowski et al., 2010; Wooldridge, Mok, & Chiu, 2014). #Fitspiration text however, also facilitated a shared feeling of contempt towards those who did not belong or those who disapproved. Though this retreat from criticism may be welcomed by users, such messages can promote mistrust of those outside the community, including health professionals who may communicate more balanced advice (Borzekowski et al., 2010).

General Discussion

Findings from Studies 1 and 2 collectively demonstrate how the images and text embedded within #fitspiration posts on Instagram are both appearance-potent and objectifying; representing a distorted and objectifying view of fitness. #Fitspiration posts perpetuate sociocultural appearance ideals that emphasis low body weight and visible muscle tone for both men and women (Flynn et al., 2015; Jankowski et al., 2014; Wasylkiw et al., 2009) through both images (e.g., high representation of appearance ideal bodies) and text (e.g., messages that emphasize weight loss and muscle tone as a goal of exercise). Individuals were often featured with a large proportion of their body in shot (and yet often faceless), their flesh exposed, and were involved in inactive poses (such as selfies); all of which may be seen as evidence of objectification (Aubrey & Frisby, 2011; Buysse & Embser-Herbert, 2004). Objectification was further emphasized within text; the 'fit' body was positioned as sexually attractive and exercise was presented as means to achieving this, overlooking health benefits.

Furthermore, some text explicitly encouraged the distancing the self from the internal needs of the body (e.g., messages emphasizing pain as a necessary component of exercise). Experimental research has suggested that objectified individuals may become less sensitive to pain (Loughnan et al., 2010) and are more likely to overlook, or fail to recognise, important bodily cues (Moradi & Huang, 2008). This has important implications in the domains of sport and exercise where sensitivity to pain and responding to bodily cues is important to avoid injury and achieve new levels of performance (Menzel & Levine, 2011). Understood within the lens of objectification theory (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996), the concentration of objectified images and text act as a continuous reminder to both men and women that one's body represents an object of desire, rather than an exhibit of athletic competence, even if that reminder is by means of momentary exposure only (Calogero & Tylka, 2014) whilst scrolling through social media.

By adopting a data-driven approach to analysis we were able to identify some of the more novel aspects of #fitspiration images and text. In Study 1, we identified some aspects of #fitspiration imagery that have not previously been documented (e.g., the high proportion of selfies / passive images relative to active poses). Importantly, in Study 2, messages focused on individual responsibility for both engaging in exercise and the acquisition of an idealized and sexually-desirable appearance. This has helped us to understand some of the more insidious ways in which objectification occurs within #fitspiration. Furthermore, #fitspiration text messages positioned #fitspiration as a community, similar to the way in which pro-anorexia and thinspiration sites function as a community for those experiencing eating disorders (Borzekowski et al, 2010).

#Fitspiration positions physical attractiveness as the central goal of exercise, which is a common theme across a wide range of fitness media (e.g., Willis & Knobloch-Westerwick, 2014; Murray et al., 2016), but it may have detrimental consequences. Acute exposure to

appearance-framed exercise messages (over health) can foster feelings of body shame and

heighten appearance goals for exercise (Aubrey, 2010) and for those highly motivated on

such goals (e.g., weight control, body tone, and attractiveness), the risks of negative body

image, depression, and eating disorder symptoms are increased (Strelan & Hargreaves, 2005;

Strelan, Mehaffey, & Tiggemann, 2003). Despite social media facilitating positive interaction

amongst users and support-seeking in relation to health behaviors (Oh, Lauckner, Boehmer,

Fewins-Bliss, & Li, 2013; McKinley & Wright, 2014), most of its content is unregulated and

exaggerated (Vaterlaus et al., 2015) and yet widely accessible. Hence, the authors raise

concerns regarding potentially harmful outcomes (see Vartanian, Wharton, & Green, 2012),

particularly for those who might already engage in disordered eating practices or experience

negative body image.

      In light of the appearance-potent and objectifying nature of #fitspiration posts,

negative effects of exposure to this form are likely. Furthermore, findings from the present

research indicate that men too are objectified in #fitspiration. That said, evidence of

problematic media content is not evidence of negative media effects. Hence, future research

should examine the specific impact of #fitspiration images and text on both men and women,

particularly in light of previous findings whereby objectification has been found to be more

gendered (Buysse & Embser-Herbert, 2004; Ghaznavi & Taylor, 2015). Future research

would also benefit from an analysis of comments attached to #fitspiration content, as this

may facilitate a much-needed understanding of how users interpret the hashtag. Given that

objectified images have already been linked with increased negative self-evaluations

(Farquhar & Wasylkiw, 2007), there is a continued need to educate young adults in media

literacy and advocacy skills (Marchand, Stice, Rohde, & Becker, 2011) and implement

strategies in order to reduce self-objectification tendencies and feelings of entitlement to gaze

upon the bodies of others (Tylka & Augustus-Horvath, 2011). This would seem more timely

than ever given that there is now evidence to suggest women and men's discontent with narrow ideals of attractiveness (Diedrichs, Lee, & Kelly, 2011).

As with many studies of media content, there are important limitations to note. First, data were collected from one social networking site (SNS) and the authors only examined the images labelled with one metadata tag, despite the numerous publically available SNS and hashtags variants. There may be subtle differences between posts labelled as #fitspiration on one site and others using various derivatives (e.g., #fitspo, #fitfam) or other SNS (as per Ghaznavi and Taylor, 2015 who found that some sites and hashtags were more associated with objectified imagery than others). It is also acknowledged that 1,000 #fitspiration posts cannot begin to represent the 1.4 billion images shared on a daily basis and as researchers, we must consider how we begin to capture and understand larger data sets.

Our research focused on publically-available images shared via Websta (public web-version of Instagram). Image-sharing however is also performed through private social media channels, between user-determined closed networks (e.g., WhatsApp and Snapchat). Thus, more sensitive or potentially harmful information may exist within private sites, as shown in examinations of #thinspiration websites (Curry & Ray, 2010) and future research should aim to understand these forms of communication also.

Conclusion

The present research sought to identify the type of content shared and uncover the underlying meaning embedded within the messages of #fitspiration posts. In two years, the number of posts on Instagram has risen by over 6 million. Findings indicate that #fitspiration content further promotes unrealistic body ideals beyond those that are achievable for most. Given that messages are persistently framed as sexually suggestive, objectifying, and focused on unrealistic appearance ideals, as found elsewhere (Boepple & Thompson, 2014, 2016;

Ghaznavi & Taylor, 2015) and studies have previously demonstrated the harmful influence of such online content (Homan et al., 2012; Slater & Tiggemann, 2014; Tiggemann & Zaccardo, 2015), researchers must continue to monitor these sources to better understand the messages and resources that are widely available online, in order to minimise the risks to users' physical and psychological health.

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Table 1

General Coding Category Definitions, Frequency of Occurrence and Inter-Coder Reliability

Category	Definition	Count	Percentage	Kappa
People	Images containing a person, excluding silhouettes and cartoon images.	490	52.01%	.99
Text	Images containing text, including brand-names on products and displays on fitness monitors/equipment.	400	42.37%	.93
Exercise	Images of exercise equipment or clothing, including people wearing exercise clothing or engaging in exercise.	299	31.67%	.92
Diet	Images of food, drink and/or dietary supplements (e.g., protein powder), including packing and equipment (e.g., blender).	238	25.21%	.97
Other	Images that contained content not included in the above categories:	117	12.39%	.91
	Cartoons and Silhouettes	37	3.92%	
	Scenery	27	2.86%	
	Jewellery	30	3.18%	
	Animals	16	1.69%	
	Clothing (non-exercise related)	5	0.53%	
	Religious Imagery	5	0.53%	

Table 2

Coding of People Featured in #Fitspiration Images

Categories of people	Definition
Gender	Coded as male, female, or unsure
Body type	Coded as (1) thin/low body fat or not and (2) muscular (i.e., visible muscle tone) or not[4]. Coders were told these categories were not mutually exclusive and bodies could be coded as both thin and muscular.
Body proportion	Coded as either head and shoulders (less than 25% of body including head and shoulders), half body (less than 50% of body) or full body (more than 50% of body)[5].
Body parts	Coded separately as to whether they were showing five different body parts including face, arms (bicep and shoulder on show, or more than 50% of forearm), legs (thigh or more than 50% of lower leg), chest (cleavage for females and pectoral muscles for males, abdomen, back, and buttocks[6]. Specific decisions as to which body parts to code were made by the authors based on their initial observations of the dataset.
Pose	Coded as either active (actively engaged in physical activity e.g., a yoga pose) or inactive (not actively engaged in physical activity). Images were also coded as to whether or not they were a selfie (an image of the self, taken by the self; Oxford Dictionary) or transformation shot[7] (image that shows progress towards attaining a particular appearance-related ideal/body type).
Clothing-type	Coded as either exercise-related (i.e., gym clothing, sportswear including sports/cropped tops or sports/utility swimwear), sexualized (i.e., lingerie, non-utility swimwear), no visible clothing, or other (i.e., clothing not covered in previous categories).

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[4] Both low body fat and muscularity have been identified as important feature of socio-cultural appearance ideals for both men and women (Wasylkiw et al., 2009; Jankowski et al., 2014).

[5] Representations of bodies that are more focused on the body than face are believed to be more objectifying than those which focus on the face (Fredrickson & Roberts, 1997; Aubrey & Frisby, 2011).

[6] Media representations that focus on the body as a collection of parts rather than the whole are regarded as objectifying, thus exposed body parts were coded (Fredrickson & Roberts, 1997; Aubrey & Frisby, 2011).

[7] Both selfies and transformation shots are relatively new, yet increasingly popular form of self-photography on health and fitness related social media (Vaterlaus et al., 2015) that may be understood as objectifying since they are indicative of the adoption of an external viewer's gaze.

Table 3

Content Analysis of Bodily Characteristics of Individuals Featured in #Fitspiration Images

Overall and by Gender

Characteristic	Kappa	Overall		Female		Male	
Gender	0.95	-	-	-	-	-	-
Body Composition							
Thin/Low Body Fat	0.84	623	88.11%	419	86.57%	204	91.48%
Muscular	0.92	394	55.73%	221	45.66%	173	77.58%
Body Proportion							
Full body	0.97	378	53.47%	287	59.30%	91	41.81%
Half body	0.87	241	34.09%	131	27.07%	110	49.33%
Head & shoulders	0.95	89	12.59%	69	14.26%	20	8.97%
Body Parts Visible							
Arms	0.97	464	65.63%	297	61.36%	167	74.89%
Face	0.93	457	64.64%	294	60.74%	163	73.09%
Abdomen	0.91	239	33.80%	160	33.06%	79	35.43%
Chest	0.91	221	31.26%	130	26.86%	91	40.81%
Legs	0.88	176	24.89%	144	29.75%	32	14.35%
Back	1.00	46	6.50%	32	6.61%	14	6.28%
Buttocks	-	28	3.96%	27	5.58%	1	0.44%
Pose							
Active	0.93	124	17.54%	90	18.60%	34	15.25%
Selfie	0.93	181	25.60%	129	26.65%	52	7.36%
Transformation	1.00	47	6.65%	36	7.44%	10	4.48%
Clothing							
Exercise	0.89	357	50.50%	255	52.68%	102	45.74%
Other	0.86	217	30.69%	142	29.34%	75	33.63%
Sexualized	0.90	101	14.29%	79	16.32%	22	9.42%
No Clothing	0.80	36	5.09%	11	2.27%	25	11.21%