# Original Paper

# A qualitative study exploring young people’s experiences of viewing the Fitspiration social media trend

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## Abstract

### Background

Social media use has become ubiquitous in the lives of many people, especially young adults. A popular recent trend emerging on social media is that of posting and following ‘Fitspirational’ content - material that purports to motivate and showcase healthy lifestyle habits, particularly relating to exercise and diet. There is very limited existing literature on how engaging with this type of content influences people’s psychological and physical heath. Initial studies have focused on concerns over potential negative effects on psychological wellbeing including body image, self-esteem and eating disorders.

### Objective

We aimed to address a gap in the literature for exploratory research on this topic from the perspective of users. We used a qualitative approach to explore how people experience viewing Fitspiration on social media including why and how they engage with this material and how they perceive that it affects their thoughts, emotions, behaviour and health.

### Methods

We recruited 20 young adults (14 females, 6 males, aged 18-25) who self-declared themselves to be Fitspiration followers to participate in either focus groups or individual interviews. We asked detailed, open-ended questions about their motivations for following Fitspiration, experiences of viewing this content and its perceived impact. We used inductive thematic analysis to derive themes that represented common and salient features of the data set.

### Results

Four main themes were developed: 1) A tool with some potential to support behaviour change, 2) Unrealistic, untrustworthy content, 3) Negative effects on emotional wellbeing, and 4) Vulnerability and protective factors. Following Fitspirational posts on social media can provide young people with knowledge and motivation that may support behaviour change. However, a range of harms also appeared to arise from Fitspiration viewing ranging from minor annoyances and frustrations to more meaningful negative effects on psychological & physical health. These negative effects seemed to persist despite individuals acknowledging that the material can be unrealistic, and believing that they are personally equipped to minimise harms to themselves.

### Conclusions

This study suggests that Fitspiration on social media can be attractive and compelling for young people but may bring about negative as well as positive effects, though it is possible some users may come to Fitspiration with existing negative emotional wellbeing. Future research should aim to confirm the scale and intensity of positive and negative effects and investigate ways of harnessing desirable outcomes and minimising undesirable outcomes.

Keywords:Social media; Fitspiration; behaviour; health; body image; self-esteem; eating disorders; qualitative research; focus groups; interviews

## Introduction

In 2017, 66% of UK adults (16yrs+) used the Internet for social networking, with 96% of young adults (16-24 yrs) reported to be active users of social networking sites [1]. Social media platforms allow users to create personal profiles and to share content (typically photos and text) and view and comment on the posts of users in their network of friends or ‘followers’ who opt to receive updates on the individual’s social media postings.

A trend on social media that has emerged over the last few years is that of posting and following ‘Fitspirational’ content - material that purports to motivate and showcase healthy lifestyle habits, particularly relating to exercise and diet. ‘Fitspiration’ is a portmanteau, blending ‘fitness’ and ‘inspiration’ and is particularly common on image-based social media platforms such as Instagram as well as other platforms including Facebook, Twitter, Tumblr and Pinterest. It’s important to be aware that anyone can create a Fitspiration post, simply by using the #Fitspiration hashtag, meaning that some posts are created by celebrities and fitness and nutrition professionals, whilst others are created by members of the public who may or may not have relevant knowledge or experience. As of February 2018, the authors identified 14.3 million public posts under the metadata #Fitspiration hashtag on Instagram in comparison to the 1.8 million noted in January 2014 [2], demonstrating a rapid growth in the popularity of this trend.

Fitspiration emerged within the fitness community as an allegedly healthy alternative in response to previous trends such as ‘Thinspiration’ and ‘Bonespiration’ (images that idealise thin bodies and protruding bones) [3]. Tiggemann & Zaccardo [4] report that social media content tagged with the “#Fitspiration” hashtag tends to feature people (often women) taking part in exercise or dressed in sportswear, or healthy food. These are sometimes overlain with (ostensibly) inspirational quotes or slogans advocating strength, fitness, personal effort, challenge and empowerment. Examples include ‘healthy is sexy’, ‘eating well is a form of self-respect’ or ‘be stronger than your excuse’. Some social media accounts attract thousands or millions of followers with some of the most popular posters making money via merchandise and product placement [5]. Social media users encounter Fitspirational content either deliberately, by linking with and following users known for posting this type of content or inadvertently through the posts and shares of other people already in their network [4].

On the surface, the Fitspiration trend could appear benign or even positive. Efforts to motivate and support young people to develop and maintain healthy lifestyle habits are welcome and may appear refreshing in comparison to some more obviously worrying online trends & issues (e.g. ‘thinspiration’). If people are indeed motivated and supported in making healthy lifestyle changes through Fitspiration, the scope for benefits to health outcomes could be huge given the wide reach of these social media platforms. However, there is no clear evidence demonstrating these positive effects. Whilst Talbot (2017) found that Fitspiration does appear to be less objectifying than Thinspiration and Bonespiration, it was still concluded that there were enough similarities between these trends to cause concern [3]. The existing literature is limited, given the newness of the trend. A number of studies using content analysis have concurred in finding that Fitspiration posts perpetuate pervading body image ideals (very lean females, very muscular men), are sexually objectifying, and tend to emphasise appearance over health [6-11]. However, Deighton-Smith’s [11] analysis also identified some potentially positive features including the emphasis placed on personal control and commitment, and the building of a sense of community and social support. Concern has also been raised about the posters of Fitspirational material, with one study showing that women who post Fitspirational content have higher scores on measures of disordered eating and compulsive exercise than control women [12]. The study also showed these women to be at higher risk of eating disorders based on scores from the clinical Drive for Thinness measure. A content analysis of Fitspirational blogs (in which people write about their experiences of living a healthier lifestyle) found evidence of problematic eating, negative attitudes towards food and body image [13].

There is mixed evidence regarding how people react to Fitspiration posts. One experimental study found that exposing female students to Fitspirational images provoked more short-term negative mood and body dissatisfaction and reduced appearance-related self-esteem compared to control images [3]. During the study participants exposed to Fitspiration engaged in more comparison based on appearance than control participants, and this comparison activity appeared to mediate the effects of Fitspiration exposure on mood and body dissatisfaction. The participants viewing Fitspiration did show increases on a measure of inspiration about healthy eating and exercise [4]. A qualitative study interviewed young male Fitspiration followers and found that they used the content purposefully (to educate themselves on workout techniques). Although Fitspiration could make them feel inferior in terms of physical appearance, they engaged in downwards comparison on traits other than appearance and fitness; attributing negative personality traits and neediness to the posters which seemed to help maintain their self-esteem [14].

In summary, although there have been only a limited number of studies to date, the emerging evidence is mixed suggesting that Fitspiration may have a negative impact, although certain aspects may be inspiring and support behaviour change. Further research is needed on users’ experiences of following Fitspiration. In the current study we used an inductive qualitative approach to address this gap in the literature. Qualitative studies are helpful in emerging fields of research, allowing rich data relating to a range of viewpoints and experiences to emerge, rather than constraining data collection to specific anticipated issues [15]. The aim of the current study was to explore how people experience viewing Fitspiration on social media, including why and how they engage with this material and how they perceive that it affects their thoughts, emotions, behaviour and health.

## Method

### Design

This study used a qualitative design and collected data using focus groups and individual interviews. Ethical approval was obtained from the University of Southampton Psychology Department Ethics committee (Study ID: 24273).

### Sampling and Recruitment

Participants were eligible if they were young adults (aged 18-25; as this age group are key consumers of social media in general [1], and of Fitspiration specifically [16]) who self-defined themselves as followers of Fitspirational content on social media.

Participants were opportunistically recruited using posters and social media, and course credits were offered to undergraduate students in exchange for participation. All participants were entered into a prize draw for a chance to win a gift voucher (£15). After viewing adverts, participants contacted the researchers to express interest, read an information sheet, had an opportunity to ask questions and then signed a consent form before a focus group or interview was arranged.

### Data collection procedure

Focus groups were used to promote the opportunity for participants to share anecdotes and interact with each other’s experiences and perspectives. A total of four focus groups were held, comprised of four, two, five and three participants respectively. In addition, six face-to-face individual interviews were also undertaken to accommodate participants who were unable to attend any of the focus groups.

Each focus group was facilitated by two researchers (SE, ZT or DF, who were all psychology students) and began with a welcome statement. To enable us to define our sample, each participant then completed a short questionnaire covering demographics and brief questions about social media use, and health-related lifestyle behaviour. Participants were shown handouts with a selection of 9 examples of Fitspiration to clarify what is meant by Fitspiration on social media and to act as a starter activity to prompt their thoughts around the topic. One example included a picture of a female in active-wear with text overlay “how bad do you want it”. A question schedule (appendix 1) was used to elicit in depth accounts, stories or opinions about; motivations for viewing/following Fitspirational posts on social media, how Fitspiration is used, aspects that are liked and disliked and perceptions of the ways in which it may affect their behaviour, health, thoughts and feelings. Neutral prompts were used to probe further and to encourage participation from all focus groups members. Individual interviews followed the same procedure and used the same question schedule as the focus groups.

All interviews and focus groups were audio-recorded. The recordings were transcribed verbatim, replacing participant names with pseudonyms. Transcripts were carefully checked against recordings.

### Data analysis

Inductive thematic analysis was used to analyse the transcripts with techniques from grounded theory such as constant comparison, to ensure the themes being developed remained close to the original data [17, 18]. Analysis was led by SE, an undergraduate psychology student and Fitspiration poster and follower, with regular supervision and analytic input from LD, an experienced qualitative researcher and health psychologist and KM (a trainee health psychologist with qualitative research experience). Analysis was inductive, meaning that themes were developed from the participants’ raw data ‘upwards’, rather than searching for material that fit with a pre-existing theory, model or structure. Analysis began with reading transcripts and listening to audio-recordings to become highly familiar with the data. Initial coding involved attaching descriptive labels by hand to parts of the transcripts which related to the research question. Analysis proceeded to develop themes from these codes that captured key patterns and features in the data. Theme development was achieved by an iterative process of clustering together similar codes into themes whilst engaged in a process of constant comparison with the original transcripts to check that themes were grounded in the data and were not being influenced by the researcher’s preconceptions or theoretical assumptions [18]. Themes were iteratively reviewed, refined, organised and relabelled until a set of rich, coherent themes and subthemes was produced in a coding manual (see appendix 2).

In line with grounded theory approach, analysis and data collection ran concurrently. This allowed us to a) adjust our sampling strategy to deliberately sample participants with characteristics that were under-represented in our sample and b) adjust the data collection to follow up on analytic insights and emerging ideas [19]. For example, early analysis of transcripts suggested that there may be some differences in how males perceive Fitspiration, but we only had very few male participants. In order to collect more data to explore this insight further we sought out more male participants. We ceased recruitment after data had been collected from 20 participants as it became apparent that significant repetition was occurring and adding little new insight to the ongoing analysis.

## Results

### Participants

20 people took part. Their characteristics are presented in Table 1. In summary, the sample included 14 (70%) females and 6 males (30%). Age ranged from 18 to 25 years with a mean of 20.7. The majority (n=14, 70%) were White British, 16 (80%) of the sample were students, of which 14 were undergraduates and 2 were post-graduates.

14 (70%) reported spending a minimum of 2 hours on social media each day, with 45% spending more than 1 hour per day on health and fitness-related content, and a minority (5%) spending in excess of 4 hours per day. The most popular social media platforms for health and fitness-related content were Instagram, Facebook and YouTube.

Most (90%) classified themselves as being of healthy weight, and most felt they led an active lifestyle (85%) and ate a healthy diet (85%).

### Themes

Four key themes were developed from the data; 1) *a tool with some potential to support behaviour change*, 2) *unrealistic, untrustworthy content,* 3) *negative effects on emotional wellbeing* and 4) *vulnerability and protective factor*s. These themes, and their subthemes are shown in Table 2. In the following section, each theme and subtheme is discussed alongside illustrative quotations. Participant names have been replaced with participant numbers; gender and age are also indicated (e.g. P1, F, 20).

Table 1. Participant Characteristics

|  |  |  |
| --- | --- | --- |
|  | | N (%) or Mean (SD) and range |
| Demographics |  |  |
|  | Age (years) | 20.7 (1.79) 18-25 |
| Gender |  |
| Female | 14 (70%) |
| Male | 6 (30%) |
| Occupation |  |
| Undergraduate student | 14 (70%) |
| Postgraduate | 2 (10%) |
| Non-student | 4 (20%) |
| Ethnicity |  |
| White-British | 14 (70%) |
| Black-African | 1 (5%) |
| Black-Caribbean | 1 (5%) |
| Asian-Indian | 1 (5%) |
| Other | 3 (15%) |
| Social media use |  |  |
|  | Daily hours spent on social mediaa |  |
| <1 | 2 (10%) |
| 1-2 | 4 (20%) |
| 2-3 | 10 (50%) |
| 4+ | 4 (20%) |
| Daily hours spent on health and fitness-related social mediaa |  |
| <1 | 11 (55%) |
| 1-2 | 7 (35%) |
| 2-3 | 1 (5%) |
| 4+ | 1 (5%) |
| Social media sites frequently used to view health and fitness related contenta |  |
| Facebook | 11 (55%) |
| Twitter | 1 (5%) |
| Instagram | 18 (90%) |
| Snapchat | 5 (25%) |
| Pinterest | 2 (10%) |
| YouTube | 11 (55%) |
| Wordpress | 1 (5%) |
| Other | 2 (10%) |
| Perceptions of  Health/lifestyle | Which would you consider yourself to be?a |  |
|  | “underweight” | 1 (5%) |
| “about right” | 18 (90%) |
| “overweight” | 1 (5%) |
| Would you say you lead an active lifestyle?a |  |
| Yes | 17 (85%) |
| No | 3 (15%) |
| Would you say you eat a healthy diet?a |  |
| Yes | 17 (85%) |
| No | 3 (15%) |

a self-reported estimates

Table 2. Themes and Subthemes

|  |  |
| --- | --- |
| Theme | Subtheme |
|
| A tool with some potential to support behaviour change | ·       Information and ideas |
| ·       Being inspired and motivated |
| Unrealistic, untrustworthy content | ·       Trust and deception |
| ·       Unrealistic unattainable lifestyles |
| ·       Inappropriate or abandoned goals |
| Negative effects on emotional wellbeing | ·       Feeling guilty about choices and behaviour |
| ·       Feeling low about my body |
| ·       Concerns about eating |
| ·       Feeling compelled to keep using Fitspiration |
| Vulnerability and protective factors | ·       Gender |
| ·       Age |
| ·       Mood |
| ·       Engaging in a critical way |
| ·       Filtering and choosing relevant content to follow |

#### A tool with some potential to support behaviour change

Participants spoke of benefits that could be gained from Fitspiration content which facilitated making changes to their behaviour.

##### Information and ideas.

Participants discussed following Fitspiration accounts on social media in order to get practical ideas and tips about healthy lifestyles. They discussed how Fitspiration content successfully provided them with ideas for healthy recipes, workouts, exercise techniques and gym merchandise.

*It is nice to see to get some ideas […] when they post exercises and I think ‘oh that might be something I haven’t tried before’.* (P1, F, 20).

##### Being inspired and motivated.

Participants described how Fitspiration content boosted their motivation to attend the gym, follow a nutritious diet and helped them to adopt a positive mind-set. They described how motivation can be explicitly triggered by written, inspirational quotes.

*It helps me to set targets [...] see what I need to be doing and then kind of get me the road to doing it.* (P3, F, 19).

Observing posters achieve their goals boosted motivation for working towards their own health targets, and the individuals posting Fitspiration content acted as aspirational figures and role models.

*I think they can be good for getting you motivated like definitely, […], if I try hard I could look like this.* (P5, F, 20).

#### Unrealistic, untrustworthy content

All participants discussed how they frequently find Fitspirational content to be unrealistic and difficult to relate to. As well as producing frustration and negative feelings towards Fitspiration posters, unrealistic content appeared to negatively influence their own goal setting and perseverance.

##### Trust and deception.

Some participants described difficulty determining which information could be trusted. With no evidence of qualifications, many participants were uncertain which Fitspiration posters possessed appropriate expertise to give valid advice. Participants were also conscious that Fitspiration posters mislead and deceive users with filtered content, good lighting and specific poses, and cherry-picked only the best parts of their lives to share.

*People are putting up their best photos for a reason and it’s not like real life*.(P2, F, 21).

Participants were concerned about Fitspiration posters having ulterior motives for posting material, particularly an awareness that certain posters may gain financially by supporting and endorsing brands.

*They might have some like agenda and maybe they’re not being so honest about that* (P14, F, 25).

Participants discussed the various types of products they had seen endorsed or advertised and a frustration that they were being sold products rather than being given valuable advice. They seemed to find it difficult to distinguish whether some Fitspiration posts had hidden intentions to promote products shown in the post, which made them wary of trusting the content of the post.

##### *They are just getting money out of it […] that is all they are doing it for.* (P1, F, 20).

##### Unrealistic unattainable lifestyles.

Participants also perceived many posters’ lives to be difficult or impossible to relate to and emulate. More famous posters were felt to possess luxuries that give an advantage over their followers, making the lifestyle less obtainable.

*You have a gym in your house! How is that like real life?* (P6, F, 20).

In particular, participants were especially distrustful of celebrities as they felt that cosmetic surgery and body-alteration made them unrealistic models for followers.

*They’ve all had surgery so people will be working towards a goal that’s not achievable* (P19, F, 22).

Many participants (whether students or employed) described cost as a barrier to living a healthy lifestyle, specifically due to the perceived cost of the food, gym memberships and clothing.

*I think something that’s not taken into account is that being fit is like money as well, like gym membership and gym clothes and healthy food, that’s so much money so if you can’t afford it you feel like, well I feel like there’s no point.* (P9, F, 18).

Participants also felt they lacked the time to adhere to the lifestyle presented, with one participant describing poster’s habits to be a full-time job.

*A lot of people I follow are quite into it and sort of do it every day and most of the time that’s all they do […] you don’t really know whether, if they have another job or not.* (P16, M, 22).

##### Inappropriate or abandoned goals.

Many participants discussed how Fitspiration, despite being recognised as untrustworthy and unrealistic, had influenced the types of goals they were aiming for and made them less achievable.

*It’s probably made my personal goals quite different because they [the Fitspiration figures] obviously look amazing… I wouldn’t have set goals that unrealistic if I didn’t follow them on social media.* (P15, F, 21).

It was recognised that this was associated with feelings of disappointment and pressure.

*They [the posters] put…’you can achieve this in 6 weeks’…and it’s physically impossible to achieve that kind of physique in that amount of time and I feel it puts an unfair pressure on.* (P18, M, 24).

Some participants felt that unrealistic content led to disengagement with goals which were too ambitious.

*It can make you give up quicker I think* (P11, F, 19).

Participants also commented that following fitspiration made their goals more focussed on appearance and gaining approval from peers, rather than health.

*You kind of lose sight of the goal of actually trying to become healthy rather than just looking good for pictures on social media.* (P16, M, 22).

One of the participants perceived this focus on image over health to be an issue with Fitspiration posters, implying that they have the wrong priorities:

*They don’t go to the gym and things because they want to be healthy and lead a healthy lifestyle, they want to have a body from which they can take pictures and post it to Instagram.* (P16, M, 22).

#### Negative effects on emotional wellbeing

Participants discussed a number of negative emotional experiences arising from viewing Fitspiration content. Much of this discussion was clearly about personal experiences and feelings, whilst other comments appeared more speculative and hypothetical.

##### Feeling Guilty about Choices and Behaviour.

One of the most frequently discussed feelings was guilt about not following a similar lifestyle to those advocated within Fitspiration posts. Viewing Fitspiration posts appeared to provoke participants to compare these with their own health and fitness-related habits and to feel guilty when they did not match up.

*It makes me feel quite guilty sometimes, if you’re just not really in the mood to um, like be productive or proactive […] and then you see all these posts and it’s telling you that you should.* (P13, F, 20).

Some participants exhibited ambivalence around this guilt response as they knew that guilt was not appropriate or logical due to their awareness of the unrealistic nature of the posts.

*I feel so guilty if I see all this, but then I’m like why am I feeling guilty? Because what I have just done is normal.* (P1, F, 20).

##### Feeling low about my body.

Participants described being left with negative feelings about their body when comparing themselves with Fitspirational images.

*It makes me not enjoy things like going to the beach and like taking photos on holiday because you don’t look like the photos on Instagram.* (P15, F, 21)

*When I see fitness accounts where all the girls are like svelte and toned, I’m like oh, it’s hard to love me when I look like this.* (P6, F, 20).

One participant highlighted that those who particularly differ from the typical body type within Fitspiration content may be at a heightened risk of experiencing these negative feelings.

*If you’re of a bigger size, it can make you feel horrendous, it can make you feel completely alien and that you shouldn’t look like that.* (P15, F, 21).

Failure to make rapid progress towards the ambitious appearance-related goals that they had set themselves could also provoke negative feelings about themselves.

*You can’t have this tiny waist and massive bum, […] you may if you did it [exercise] for a few years, a long time, […] but it can make you feel kinda down about yourself.* (P8, F, 20).

##### Concerns about eating.

Participants suggested that Fitspiration has had both positive and negative effects on their eating habits. More awareness about food choices was described by some participants but some found following the eating plans advocated by posters impossible to sustain and were aware of rebounding to extremes of unhealthy eating, or even binge eating.

*I’m a lot more aware of food groups, the whole ideal food groups plate arrangement, it’s like half vegetables, a quarter of protein, a quarter of carbs, I’m very aware of doing that when I have my dinners.* (P6, F, 20)

*I think it has made me a lot more wary of what I put into my body but then I will have blow out days and just like literally shove food down.* (P5, F, 20).

Other participants discussed that viewing Fitspiration posts had encouraged their obsession with calorie counting. A few also believed some of the diet-related material could even instigate an eating disorder, particularly if they were unable to recognise that habits were becoming unhealthy.

*If I followed their food account where they tell me to eat healthily and I couldn’t, I’d probably end up with an eating disorder.* (P6, F, 20).

##### Feeling compelled to keep using Fitspiration.

Many participants described experiencing conflict as they knew that Fitspiration posts could elicit a range of negative thoughts, behaviours and moods yet they still found themselves viewing it regularly.

*In one way you’re like really attracted to it but in some ways you find it really annoying and it puts you down*. (P14, F, 25).

Some participants described how they had initially followed Fitspiration content for a specific purpose and felt that it hadn’t successfully served that purpose, but having got involved in the social and community aspect of it they felt compelled to continue engaging with it. Many participants appeared to find this type of social media usage compelling or even addictive.

#### Vulnerability and Protective Factors

Participants perceived that a range of contextual factors influenced the degree to which they and others experienced negative impacts from Fitspiration content.

##### Gender.

Many participants (both men and women) described their beliefs that women tended to be more vulnerable than men to the negative effects of exposure of Fitspiration, and indeed mass media more generally.

*Females tend to be more sensitive […] it can have a bit more of a deeper effect on them, whereas men tend to be a bit more hard-headed.* (P16, M, 22).

In line with this, the majority of talk about guilt, body image and concerns about eating and compulsive viewing came from females (see Negative effects on emotional wellbeing theme above). Participants perceived that Fitspiration perpetuated a long-standing pressure to conform to existing female body ideals.

*For years there’s been this problem with media, especially girls like feeling they need to look a certain way.* (P8, F, 20).

Yet one male participant also described negative emotions associated with failing to meet appearance-based expectations that had been generated by following Fitspiration posts.

*I think mentally, it’s quite stressful sometimes if you put yourself up to a task that you can’t achieve […] looking at yourself in the mirror […] you’re just not really seeing results, it can definitely have a negative impact (*P16, M, 22)

Furthermore, there was speculation that males are negatively affected but may not express their feelings due to gender norms.

*I reckon it probably negatively affects boys but they don’t express it […] If a boy did he’d probably be called a wimp.* (P6, F, 20).

##### Age.

Participants speculated that younger users than themselves would be more likely to be deceived by unrealistic content, consumed by the lifestyle and therefore be most likely to experience negative effects.

In line with this, one participant suggested that her maturity allowed her to control how much the content influenced her behaviour.

*I am old enough, wise enough to know that it is cool too if I have had Uni all day [and therefore not had time to exercise] then that’s fine.* (P2, F, 21).

##### Mood.

Participants talked about their affective state influencing how they responded to Fitspiration posts. They described how if they were in a bad mood, Fitspiration could intensify their emotional state. Conversely, if they were viewing Fitspiration whilst already in a good mood, this seemed to buffer against negative effects and allow the material to intensify their motivation to emulate healthy behaviours they have seen online.

*Let’s say I’m already feeling up for some workout […] then I see some Fitspiration post, I might be like more inclined to go and do it and then feel more like, positive about it but if I’m in a bad mood then I don’t want to see that, I just get grumpy* (P14, F, 25)

More worryingly, participants spoke about how distress associated with life events, such as the end of a relationship, could render them particularly sensitive to negative effects of Fitspiration content.

*Combined with just being broken up with, it just like destroyed my self-esteem seeing all these really fit people.* (P5, F, 20).

##### Engaging in a critical way.

Participants appeared to adopt certain approaches to Fitspiration viewing that they believed enabled them to follow this content with reduced risk of psychological harm. One technique was to use the content purposefully but step back from becoming too immersed.

*It’s kind of best to keep them at a distance […] use them for inspiration now and then but I don’t think it’s healthy to be completely immersed* (P1, F, 20,).

Others felt they had specific knowledge or education that helped them to critically assess the messages and images being presented.

*I kind of have got the knowledge to know that your abs just aren’t going to just appear* (P1, F, 20).

Some were particularly aware and well-informed about tricks and influences of the media and believed that their less naive and more critical approach gave them some protection against negative effects of Fitspiration.

*I study marketing […] I’m a lot more knowledgeable and less naive to the content being advertised to me.* (P19, F, 22).

However, interestingly, participants who felt they were protected by their knowledge still gave accounts of the various ways that Fitspiration viewing had negatively affected them personally.

##### Filtering and choosing relevant content to follow.

Some participants carefully chose and filtered the content that they followed and engaged with to get the most from it. For example, a few participants described selecting content to view that was in line with their goals and minimizing exposure to material perceived as irrelevant.

*When they put up their personal life and things…I’m not interested in them as a person which is probably quite bad but I just want to see the videos of what they do in the gym.* (P15, F, 21).

Furthermore, many participants discussed being selective in following Fitspiration posters that they felt they could relate to in order to ensure their goals are more realistic to obtain.

*I always like to follow normal people as well […] these things are actually achievable.* (P19, F, 22).

## Discussion

### Key findings

A number of important insights emerged from this in-depth qualitative study exploring the experiences and perspectives of Fitspiration followers. In line with Palmer [14] we found that participants described desire to gain information as a key driver of consumption of Fitspirational material; specifically, our participants were interested in information that related to exercise techniques, healthy recipes and workouts. Similar to Tiggeman & Ziccardo [8] we also showed that participants could feel inspired and motivated by Fitspirational content. However, our findings showed that this does not seem to routinely translate into positive dietary change and physical activity; a finding also reported by Palmer [14]. The majority of our findings, however, pointed towards concerning aspects of Fitspiration use. Our participants described a number of negative impacts ranging from the minor (frustration about the deceptive nature of posts, jealousy regarding unachievable body appearance or lifestyles, feeling that their usage had become out of control, guilt about not following the lifestyles advocated, frustration in being encouraged towards inappropriate goal-setting) to the more disconcerting (negative feelings towards their own bodies and indications of some concerning eating habits). The issues of frustration, guilt and feeling addicted to viewing Fitspirational posts are novel insights emerging from the current study. Negative effects of exposure to Fitspiration on self-esteem, body image and disordered eating have been demonstrated [4] and speculated upon [6-13] previously and the accounts of our participants are in line with these studies and also the proposition that social comparison on the basis of appearance is one of the routes by which Fitspiration produces negative psychological effects [4].

We found that our participants were critical, cautious and questioning of Fitspirational content, highly aware of authenticity and credibility issues and that some made mindful decisions about who and what to follow and what aspects of posts to pay attention to. This was also found in Palmer’s [14] sample of young men. Some participants in the current study felt that their age, gender, education or approach to using Fitspiration protected them from negative psychological impact. What was striking, however, was that negative psychological effects appeared to persist despite participants possessing characteristics and capabilities that they believed would buffer them against harm. Furthermore, our participants displayed considerable conflict and ambivalence around Fitspiration. They persisted in viewing content despite feeling it could be frustrating or even harmful. They also reported feeling guilty and comparing themselves unfavourably to posters despite articulating how guilt is unwarranted as posters are offering edited versions of themselves and providing invitations to lead unviable lifestyles and meet unreachable appearance and health-related goals. Finally, participants discussed female gender as a factor associated with vulnerability to negative impacts from using Fitspiration; however, this talk may have been driven by stereotypes and gender norms; when inspecting males’ descriptions of impact there was evidence within this study that males as well as females could be negatively affected by content and were similar in the ways they thought and felt about the material they were seeing.

### Study Strengths and Limitations

A number of study strengths and limitations must be considered when interpreting the current study findings. One issue relates to sample composition. Our sample size was relatively small (n=20). However, we attained saturation with this number of participants. We were also successful in sampling participants with a range of views and experiences. We achieved variability in age, gender and ethnicity and included participants that varied in their intensity of engagement with social media generally and Fitspiration specifically. The sample also included participants who reported being both committed and uncommitted to healthy eating and exercise, although the majority reported being committed. Most participants perceived their weight as ‘about right’, although it’s important to note that the questionnaire only captured self-reported perceptions of weight and not actual Body Mass Index (BMI). As an exploratory qualitative study we did not seek to assess participants’ objective weight, though this might be an interesting avenue for further research on the impact of Fitspiration.

It is important to note that university students made up the majority of the sample. Our findings therefore represent the views and experiences of a highly educated group of young people. Furthermore, since our recruitment strategy led to the inclusion of a large number of psychology students our participants may, as a result of their education, have been particularly attuned to the negative effects of the media and possibly more likely to consider and discuss issues relating to eating disorders and body image. Nonetheless, whilst some of the talk was speculative and hypothetical, there was also considerable discussion of personal experiences and feelings. Overall, as a consequence of our sampling we suspect that our participants may have been more critical and careful with their social media use and plausibly better protected against negative impact than other young people who follow Fitspiration.

Another methodological consideration relates to data collection. The use of focus groups maximised opportunities to create discussion and allow participants to draw on, compare and contrast experiences and perspectives. However, it is possible that social desirability, gender norms or the effect of dominant individuals may have silenced dissenting opinions and made it more difficult to talk about certain personal experiences. Participants may have found that having young female students as interviewers and facilitators made them reluctant to mention specific issues. We did, however, find that many participants spoke about emotive and personal experiences and we were also reassured that individual interviews elicited similar issues to those raised in focus groups.

Lastly, it is important to consider that participants may have had concerns about their body image and eating habits before their exposure to Fitspiration. It is not possible from this study to understand to what extent Fitspiration leads to these negative outcomes. However, it remains interesting that participants perceive that Fitspiration is responsible for these feelings.

### Future research

The findings from this study suggest several useful directions for future Fitspiration research.

Experimental, quasi-experimental or observational studies could be conducted to achieve a quantitative, more objective assessment of the factors emerging as important from this exploratory qualitative study [20, 21] including short and longer-term emotional, cognitive and behavioural responses to Fitspirational material. This study suggests that frustration, guilt, compulsive social media use, self-esteem, body image and concerns with eating are relevant negative outcomes to measure and that health and fitness-related knowledge, motivation and behaviour change are relevant positive outcomes to try to capture. Our analysis also points towards the utility of examining possible moderators of the impact of Fitspiration including the realism and relatability of the poster and the posted material and the characteristics of the follower including age, gender, pre-exposure mood, and media-related literacy and critical appraisal skills. Our analysis confirms previous suggestions that social comparison could be investigated as one potential mediator of negative effects on body image and related outcomes [3]. Future studies could also consider focussing on different groups of Fitspiration followers. A slightly younger (i.e. teenage) group may have different motivations for following Fitspiration. This age group has been neglected in Fitspiration research so far.

Given that the emerging research literature on Fitspiration has suggested potential harm yet statistics show Fitspiration is a growing trend it appears useful to consider interventions to reduce or prevent harm from body and appearance-related images and content on social media. There have been previous suggestions that psycho-educational interventions could focus on raising awareness of the harms of this sort of content and increasing followers’ media literacy and critical appraisal skills [22, 23]. This study suggests young people believe that being armed with information and critical appraisal skills will protect them against possible negative effects. However, our findings also suggest that critical and careful consumption of Fitspiration may not actually be successful in averting negative psychological impact. Further exploration and evaluation of potential intervention approaches is needed.

An alternative direction for research is capitalising on the positive aspects of Fitspiration in social media. Researchers could develop or adapt theory-based behaviour change interventions to improve the diet and physical activity levels of young adults which make use of social media platforms to deliver appropriate health-related messages [24]. These platforms are clearly appealing, influential and draw in young women in particular [16]. A key challenge will be mimicking what is appealing, engaging and positive about Fitspiration whilst omitting what appears to be harmful.

### Conclusion

Overall, the current study suggests that following Fitspirational posts on social media can provide young people with knowledge and motivation to support healthy lifestyle behaviours, but following this type of content also appears to have some undesirable effects. Our results suggested various harms may be possible ranging from minor annoyances and frustrations to more meaningful effects on mental and physical health. These effects may persist despite users being aware of how unrealistic the material portrayed can be and despite users believing that they are personally well-equipped to minimise harms to themselves. Studies to confirm benefits and harms and investigate ways of harnessing positives and minimising negatives would be helpful additions to this field of research.

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Study concept and design: SE & LD. Data collection: SE, ZT, DF. Data analysis: SE, LD, KM, ZT and DF. Writing paper: SE, LD, KM. Revising and approving final draft: all authors.

### Conflicts of Interest

The authors have no conflicts of interest to declare.

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