# A Content Analysis on Fitspiration and Thinspiration Posts on TikTok

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## Abstract

Anorexia nervosa and bulimia nervosa, two common eating disorders that affect young women, are becoming quite prevalent in recent years as social media gains popularity. Certain forms of content circulating on social media may be correlated to negative body image and eating disorders. Recent research has investigated forms of content referred to as fitspiration and thinspiration posts, as many of these posts promote specific body ideals typically involving a very thin body type. This exploratory study aims to investigate the relationship female adolescents have with TikTok in relation to body type, the development of negative body image, and eating disorders. The goal of this research is to further understand how social media influences these body image and disordered behavior among teenagers in America. A content analysis was conducted on a sample of 80 videos and 1,200 comments taken from TikTok under the hashtags of #fitspiration, #th1nspõ, and #kcaltok. The findings show that thinspiration content has the potential to induce negative body image disorder habits, as these types of posts had a heavier emphasis on unrealistic body ideals and sparked more conversations surrounding eating disorders. Fitspiration posts were found to have less of an emphasis on promoting skinniness, however, still induced comments surrounding negative body image and weight loss. Future research should continue to monitor and further investigate this content as well as understand the communities of users on other similar content types such as meanspiration, sweetspiration, and bonespiration.

## Introduction

In our increasingly digital age, much of the media we consume is coming from social networking sites. In more recent years, TikTok, a platform that allows users to share short video content, has become quite popular among users around the world. TikTok has gained a lot of traction due to its immersive platform design and personalized content which results in prolonged user stay (Montag et al., 2021). It has also been discovered that TikTok's audience consists of mostly young users and is more female dominated rather than male (Montag et al., 2021). More specifically, TikTok's U.S. demographic consists of 32.5% users who are 19 years old and younger (Sun et al., 2020). While many young teenagers rely on networking sites such as TikTok to keep up with their friends and find entertainment, it is important to take into consideration the types of content they are consuming and the effects they may have. For instance, many users are exposed to content on the app such as images or videos that visually promote excessively thin or extremely toned and muscular female body types. These forms of content often referred to as thinspiration or fitspiration posts, are viewable on most types of social media platforms and may be correlated to eating disorders and weight loss (Talbot et al., 2017).

For this paper, anorexia nervosa and bulimia nervosa are the primary eating disorders that will be referred to. Researchers define anorexia nervosa as a psychiatric disorder that primarily affects young females and involves extreme overvaluation of shape and weight (Morris & Twaddle, 2007). On the other hand, bulimia nervosa is characterized by uncontrolled binge-eating episodes, an extreme preoccupation with weight, and other extreme measures to compensate for the fear of overeating (Hay & Claudino, 2010). It is also important to note that this study focuses on teenage girls around the ages of 13-19. This is due to the high prevalence of eating disorders in females that have developed during the end of the 20th century as female beauty standards shifted to a thin ideal portrayed in the media (Sharan & Sundar, 2015). Thus, the platform for TikTok was used

for this analysis due to its heavy teenage female audience as well as the lack of research performed specifically in this field and on this platform. Moreover, this topic is alarming because of the high mortality rates associated with these disorders. Those with eating disorders have a notably high mortality rate, and studies have shown that anorexia specifically has the highest rate (Arcelus et al., 2011). Thus, by analyzing fitspiration and thinspiration posts and their respective comments on TikTok, this study looks at the relationship between body type, the development of negative body image, and eating disorders.

## Literature Review

When looking into past literature, researchers have found correlations between body dissatisfaction and social networking sites. In an article by Richard Perloff, he touches on social comparison theory and how viewing social media posts involving thin female body types can trigger self-comparisons that result in negative body image when a user values thinness in body type (Perloff et al., 2014). This is important to keep in mind since self-comparison to those perceived as more attractive or more desirable than oneself can affect the way one views their own body, especially if the individual has low self-esteem or suffers from depression. Perloff's article really emphasizes this idea, as he discusses how those who already struggle with body image may find themselves spending more time online contemplating how they feel about their own bodies when exposed to this type of content which may thus lead to further body dissatisfaction (Sharan & Sundar, 2015).

Additionally, there has been some past research done on fitspiration and thinspiration posts where it was found that these types of content on Instagram, Twitter, and Tumblr focused heavily on physical appearance, sexually suggestive poses, and restrictive eating habits (Alberga et al., 2018). This is important to consider when thinking about how these posts shape the way in which teenagers perceive themselves. Researchers have also found that certain subsets of fitspiration content, as well as thinspiration posts, could potentially invoke disordered behavior and negative body image due to the wide acceptance and popularity of the idealization of thin body types (Talbot et al., 2017). There has also been mention of pro-eating disorder communities, or groups of users who support and promote disordered behaviors and strive towards an idealized standard as an attempt to make themselves happier (Crowe & Watts, 2014). These findings suggest that when users are exposed to these types of content on social networking sites, there may be a correlation between the development of negative body image. This creates major concern, especially if users are viewing this type of content quite often. These studies are valuable when trying to understand the current environment of various social media platforms and how this specific content type can affect users.

## Methods

To analyze this topic, a content analysis of images and comments was conducted on TikTok. Multiple hashtags such as #fitspiration, #thinspiration, #thinspo, etc. were inputted in the TikTok search engine. When using these search terms, most hashtags relating to thinspiration content were blocked, as the algorithm appeared to be attempting to restrict users from viewing this type of content, and instead, the phone number for the National Eating Disorder Association showed up as the only result.

By using alternative spelling, thinspiration content was found under different hashtags. By clicking on other related hashtags that users would tag along with #thinspo, alternative tags such as #kcaltok appeared where the same community of users posting thinspiration content was discovered. Twenty posts were taken from the hashtags #fitspiration, #fitspo, #th1nspõ, and #kcaltok. To ensure standardization, each video was required to have at least 300 likes, 10 comments, and been posted within July 2021-December 2021. The videos taken from the hashtags #fitspiration and #fitsp0 were analyzed and grouped together as fitspiration content, whereas #th1nspõ and #kcaltok represented thinspiration content. A total of 80 videos and 1,200 comments were coded for. The amount of content under these hashtags were limited due to many videos not meeting the standard for engagement (likes and comments). TikTok also prioritizes the highest performing videos for each hashtag and displays them as the top results for a search. Across each of the four hashtags, only the top 20 videos met the engagement standard, thus, the sample size of 80 was chosen considering the limited

population of videos that were on the platform. Searches were conducted throughout the month of November and December 2021, and all the videos and comments coded for had been posted within a 6-month time frame.

While watching each TikTok video, the variables shown in the table below were coded for (Figure 1). The codebook shown below was adapted from previous research (i.e., themes of weight and specific body parts were included from an existing coding scheme), and new codes relating to disordered behavior were created to reflect categories most prevalent in comments (Alberga et al., 2018). The codes were separated by post and comments, to analyze both elements of the video separately. Posts were coded for physical features and body parts shown in videos as well as mention of eating disorders, where-

as comments were coded for message content relating to body image and disorder/body type praise. All variables were hand-coded for either yes or no, depending on whether each variable was present in the video or comment. For instance, under #fitspiration, thin body type was marked as present 3 times out of the 20 videos. Codes involved looking at body type, presence of body parts, weight loss, and eating disorders. When coding for comments, only the top 10 comments were analyzed, which also meant each video had to have a minimum of 10 comments. Due to space constraints, this paper focuses on the codes relating to the themes of body type, body image, and eating disorders. Lastly, codes were analyzed by performing a chi-square test on the pairs of variables (e.g., rib cage and midriff) sorted by category (e.g., body type).

Table 1. Codebook and the definitions of each code used in the content analysis divided by post and comments.

| Post | Definition |
| --- | --- |
| Thin body type | Body that is presented as bony, minimal fat, with a small frame |
| Muscular body type | Body that is toned/bulky/presence of muscles |
| Rib cage | Rib cage is visible in picture |
| Weight | Post makes mention of the user's weight or weight loss |
| Midriff | Midriff/stomach area is shown in the picture |
| Eating disorder | Post makes mention of currently or previously having an eating disorder/ post makes mention of disordered behavior such as binging, purging, over-exercising, or restrictive eating |
| Comments | Definition |
| Weight loss | Comments are promoting unhealthy weight loss, mentioning their goal weight or current weight |
| Self-comparison | Comments mentioning the user wishes they had a certain body type/comparing themselves to a person, body type, or specific weight that is mentioned in the post |
| Skinny praise | Comments praising those who are skinny/ using skinniness as an indication of success |
| Disorder praise | Comments praising others or themselves for engaging in disordered habits such as binging, purging, over-exercising, or restrictive eating |
| Body positivity | Comments are praising body positivity and healthy eating/exercising habits |
| Eating disorder | Comments make mention of currently or previously having an eating disorder/ mentions disordered behavior such as binging, purging, over-exercising, or restrictive eating |

# Results and Analysis

## Body Type

When looking at the difference in body types shown in thinspiration and fitspiration posts, there was quite a difference between the two content types. Of the entire sample, 43 videos were coded for thin body type. Of the content that presented a thin body type, 74.42% of the videos were from thinspiration posts, and 25.58% of videos were from fitspiration posts. 30 videos were coded for a muscular body type which consisted of 16.67% thinspiration posts and 83.33% of fitspiration posts. Based on a chi-square test that compared the frequency of thin body type and muscular body type, there was a significant relationship between these two variables, X2 (1, N = 73) = 23.6, p <.05 (Figure 2). This finding shows a prominent difference between the two content types, which may have a correlation with thinspiration posts being slightly more impactful on developing a negative body image due to their emphasis on thin body ideals.

*The graph below shows posts that were coded for either thin body type or muscular body type on fitspiration and thinspiration posts.*
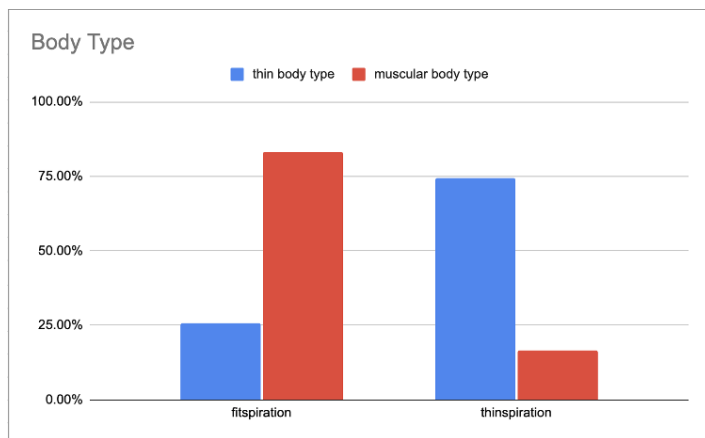


Figure 2. Thin and Muscular Body Type

On the other hand, when looking at body parts shown in the posts, both fitspiration and thinspiration posts had similar body parts shown in the videos analyzed. A chi-square test found that the coded variables for the presence of rib cage and midriff did not significantly differ between fitspiration and thinspiration posts, $X_2$ (1, $N$ = 75) = 0.05, $p$ =.828382 (Figure 3). Fitspiration content showed slightly more of both rib cage and midriff in comparison to thinspiration posts. From the total of 80 fitspiration and thinspiration posts, 23.75% of videos had a presence of rib cages and 70% of posts had a presence of midriff. This indicates that both forms of content are revealing around the stomach and torso area, which may affect users' perception of their own body image especially if they are subject to having an eating disorder, as having a thinner waist is part of what is typically perceived as ideal when aiming to be skinny.

*The graph below shows posts that were coded for the presence of the rib cage and midriff in fitspiration and thinspiration content.*
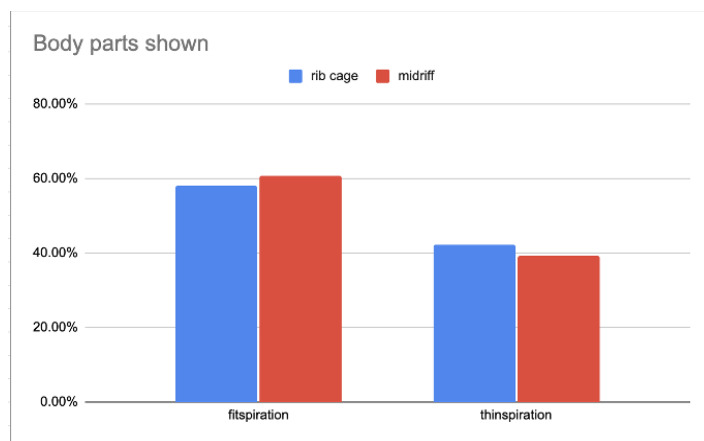


Figure 3. Body Parts Shown: Rib Cage and Midriff

## Body Image

When taking a closer look at the comments sections of these posts, we can see how this type of content was perceived by users. From the 80 fitspiration and thinspiration posts, 73.75% of posts had comments involving self-comparison and 75% of posts had comments related to weight loss. Based on a chi-square test, the presence of self-comparison and weight loss in comments were not significantly different between fitspiration and thinspiration posts, $X_2$ (1, $N$ = 116) = 0.08, $p$ =.779507 (Figure 6). This finding indicates that both forms of content provoked thoughts where users were comparing themselves to either the weight measurements discussed in the post or the body type of the person. Additionally, out of the 56 posts coded for self-comparison, 62.5% of posts were thinspiration videos whereas 37.5% were fitspiration videos. From the 60 posts that were coded for weight loss, 65% of posts consisted of thinspiration videos and 35% of posts were fitspiration videos. While fitspiration and thinspiration posts both have the potential to negatively impact body image, both self-comparison and weight loss were coded for less frequently in fitspiration posts, which may indicate that thinspiration posts are more likely to induce more negative thoughts

around body image. Some examples of comments that were coded for self-comparison or weight loss on thinspiration posts are shown below in Figure 4 and Figure 5. In one of the examples shown in Figure 5, a couple of the comments on one of the fitspiration posts had thousands of likes which is quite alarming considering this may be indicative that thousands of other viewers relate to having a negative body image and feeling terrible about themselves after watching this type of content about weight loss.

Based on the way weight loss was defined in the codebook, its high prominence indicates that many users are discussing the actual weight they are currently at and/or talking about how much weight they want to lose. These comments can be triggering to others who view them especially if they are talking about a particularly extreme amount of weight the user is trying to lose. Additionally, the notion of promoting weight loss especially seen in thinspiration posts may encourage a negative body image, since many of the users viewing this type of content appear to be young girls who are already at healthy weights and are attempting to lose weight to achieve an unrealistic body standard to fit an aesthetic. Many of the comments on thinspiration posts mentioned wanting to lose weight to look good while wearing certain styles of clothing, or to gain validation from their peers. A large majority of thinspiration posts were uploaded by users posting videos of female Korean pop music stars (celebrities who are typically extremely thin and follow very restrictive diets) and stating that they wished they looked like them. Some posts involved the body measurements of the Korean celebrities, as well as a breakdown of their diet which included their daily caloric intake.

*The set of comments pictured below shows users comparing themselves to the body and weight ideals defined in two different thinspiration posts.*
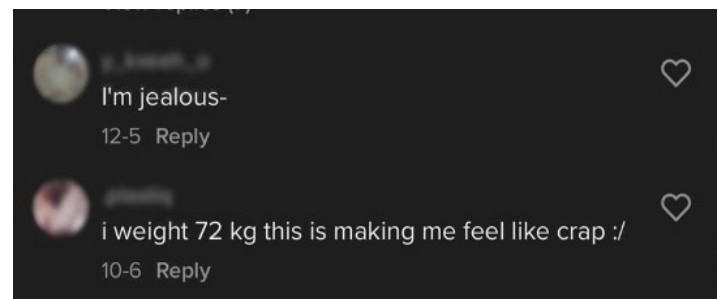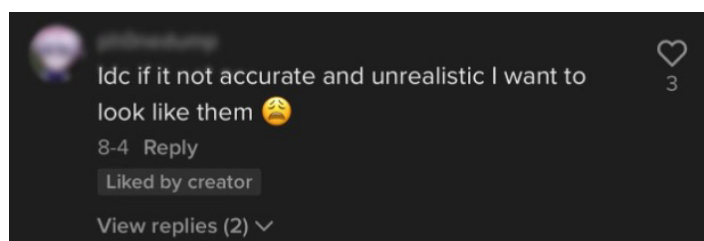




Figure 4. Example of Comments on Thinspiration Posts.

*The set of comments shown below also reflects users' self-comparison and discussion of weight loss in response to three different fitspiration posts.*



Figure 5. Example of Comments on Fitspiration Posts.

*The graph below shows comments that were coded for self-comparison and weight loss on fitspiration and thinspiration content.*
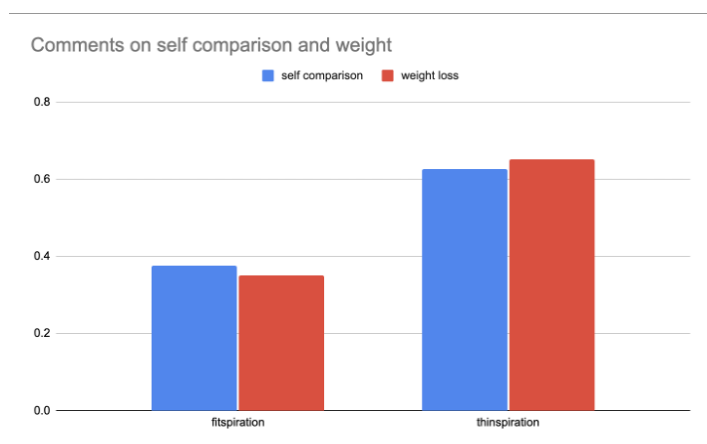


Figure 6. Self-Comparison and Weight Loss.

### Eating Disorders

Additionally, when looking at the comments in relation to disordered behavior and perceptions, thinspiration posts appear to induce greater conversations about eating disorders (Figure 7). Within the 30 posts that were coded for skinny praise, comments on thinspiration posts made up 93.33% of the content. In addition, 93.75% of the 16 videos coded for disorder praise was made up of comments on thinspiration posts as well. Examples of comments that were coded for skinny praise or disorder praise are shown in Figure 8 and Figure 9. These comments are quite alarming, as young girls are clearly viewing thinness as a measure of success, as well as disordered behavior to achieve those goals when having conversations on these posts.

On the 56 comment sections that were coded for self-comparison, only 6.66% came from fitspiration posts. Additionally, 6.25% of the 16 comment sections that were coded for disordered behavior made up of fitspiration posts. While this is a low number, there were still a portion of fitspiration content that made users think about eating disorders. Based on the findings it appears as though more users viewing thinspiration content already had eating disorders and were a part of a community of users who also had disorders, whereas users viewing fitspiration posts were preoccupied with losing weight to fit general societal body ideals that did not involve excessive thinness. Both types of content still seemed to stimulate users' thoughts of weight loss through unhappiness with their current body types

which may be perceived as unhealthy when thinking of the implications this could have on users' ability to develop an eating disorder if they did not already have one.

*The graph below shows the comments coded for skinny praise and disorder praise on fitspiration and thinspiration content.*
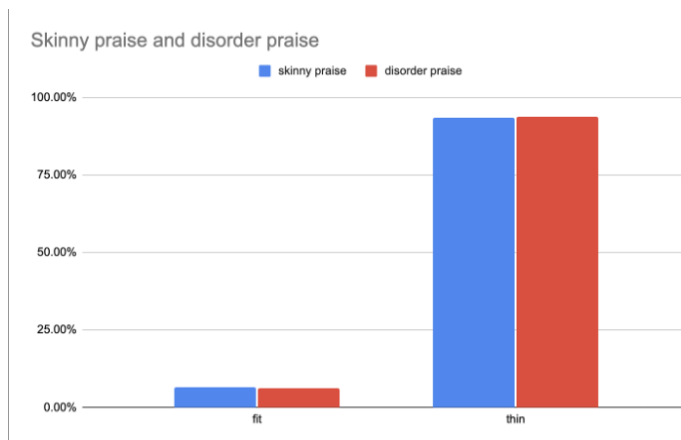


Figure 7. Skinny and Disorder Praise.

*The set of comments shown below shows users idolizing a skinny body type and disordered behavior as a measure of success in two different thinspiration posts.*
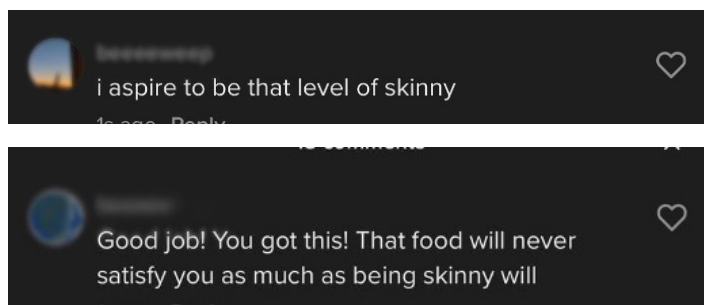


Figure 8. Examples of Comments on Thinspiration Posts.

*The set of comments shown below reflects users idolizing and praising the skinny body type in two separate fitspiration posts.*
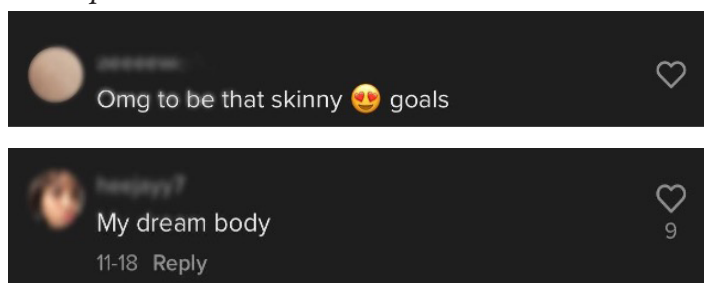


Figure 9. Example of Comments on Fitspiration Post.

# Results and Analysis

The findings in this study imply that fitspiration and thinspiration content differ when it comes to body type, however, the effects both content types have on users has a large impact on the development of negative body image. This research supports previous findings that thinspiration content and fitspiration content have many similarities particularly when it comes to weight loss and restrictive eating (Alberga et al., 2018). Thinspiration posts appear to be more impactful when it comes to triggering users' eating disorders as it promotes disordered behavior as well as unhealthy and unrealistic body ideals. This is similar to previous research that has compared the difference between fitspiration and thinspiration posts and have found that thinspiration posts may be perceived as an unhealthier type of content (Talbot et al., 2017). While fitspiration content does not appear to attract users who are already involved in the eating disorder community, thinspiration content seems to do so which brings up the concern of entirely removing this type of content on TikTok due to its ease of access. Despite the restrictions of hashtags TikTok has implemented, it is still quite easy for users to surpass this and create variations for these hashtags which defeats the purpose of the restrictions. Previous research has confirmed that these search constraints and alternative hashtags were also found on other social media platforms such as Instagram (Alberga et al., 2018). The high mortality rate of eating disorders makes this topic imperative to address, as there need to be better ways to encourage recovery, body positivity, and support for users on this app who need help.

Furthermore, there are some limitations to reflect on when interpreting the findings of this study. As stated previously, the total population of videos within this field on TikTok were rather limited, which restricted the total sample size the scope of this research could explore. It is also important to consider that each post had different amounts of engagement and viewership which could affect the types of comments on these posts, as the more traction a video receives, the more attention the comments will receive. Some of the fitspiration posts appeared to have more viewership, which is reflected in the high number of likes some of the comments received in Figure 4, whereas no other thinspiration post received the same level of engagement. Additionally, only 2 different hashtags for fitspiration content and thinspiration content were analyzed, which did not account for other variations such as #fittok #fitsp0, #thinsp0000, or #thintok.

Considering this study is one of the first to explore this constantly evolving topic, future research is necessary to understand more about the complexities of the eating disorder community. Other forms of content relating to motivational eating-disorder posts include bonespiration, meanspiration, and sweetspiration. Bonespiration involves idealizing thin body types with an emphasis on bone protrusions and is highly associated with the eating disorder community (Talbot et al., 2017). Meanspiration and sweetspiration, often referred to as meanspo and sweetspo on TikTok were mentioned quite frequently through the hashtags on thinspiration content. Meanspiration content involves promoting eating disorders through extreme criticism by encouraging disordered behaviors. On the other hand, sweetspiration content involves promoting eating disorders through reassurance and warmth.

Ultimately, the findings in this study on fitspiration and thinspiration posts imply that some users develop a negative relationship between body type, body image, and eating disorders when exposed to these types of content. While not all users experience a negative relationship, these forms of content should be monitored closely and the possibility of taking more in-depth action on restricting thinspiration posts should be considered.

# References

Alberga, A. S., Withnell, S. J., & von Ranson, K. M. (2018). Fitspiration and thinspiration: a comparison across three social networking sites. *Journal of Eating Disorders*, 6(1). https://doi.org/10.1186/s40337-018-0227-x

Arcelus, J., Mitchell, A. J., Wales, J., & Nielsen, S. (2011). Mortality rates in patients with anorexia nervosa and other eating disorders. *Archives of General Psychiatry, 68*(7), 724. https://doi.org/10.1001/archgenpsychiatry.2011.74

Crowe, N., & Watts, M. (2014). 'We're just like Gok, but in reverse': Ana Girls – empowerment and resistance in digital communities. *International Journal of Adolescence and Youth, 21*(3), 379–390. https://doi.org/10.1080/02673843.2013.856802

Hay, P. J., & Claudino, A. M. (2010). Bulimia nervosa. *BMJ clinical evidence, 2010*, 1009.

Montag, C., Yang, H., & Elhai, J. D. (2021). On the Psychology of TikTok Use: A First Glimpse From Empirical Findings. *Frontiers in Public Health, 9*. https://doi.org/10.3389/fpubh.2021.641673

Morris, J., & Twaddle, S. (2007). Anorexia nervosa. *BMJ, 334*(7599), 894–898. https://doi.org/10.1136/bmj.39171.616840.be

Perloff, R. M. (2014). Social Media Effects on Young Women's Body Image Concerns: Theoretical Perspectives and an Agenda for Research. *Sex Roles, 71*(11–12), 363–377. https://doi.org/10.1007/s11199-014-0384-6

Sharan, P., & Sundar, A. (2015). Eating disorders in women. *Indian Journal of Psychiatry, 57*(6), 286. https://doi.org/10.4103/0019-5545.161493

Sun, L., Zhang, H., Zhang, S., & Luo, J. (2020). Content-based analysis of the cultural differences between Tiktok and Douyin. *2020 IEEE International Conference on Big Data (Big Data)*. https://doi.org/10.1109/bigdata50022.2020.9378032

Talbot, C. V., Gavin, J., van Steen, T., & Morey, Y. (2017). A content analysis of thinspiration, fitspiration, and bonespiration imagery on social media. *Journal of Eating Disorders, 5*(1). https://doi.org/10.1186/s40337-017-0170-2