#Fitspiration: The Effects of Fitness-related TikTok Content on Young Users

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Abstract

Concerns regarding the impact of fitness-related content on mental and physical health have gained more attention as a result of TikTok's explosive growth among young people. This research examines the impact of fitness-related TikTok content, #fitspiration, and #WhatIEatInADay, particularly, on the body image, exercise behavior, and nutrition behavior of young users between the ages of 18 and 25. Using a quantitative online survey (N=164), the research studies how exposure to this content is modified by perceived social norms, personality traits, and gender. Regression and moderation studies indicated that TikTok fitness content did not significantly influence body image; instead, a positive body image exerted a substantial, favorable impact on exercise behavior. Additionally, the influence of body image on nutrition habits was mitigated by perceived social standards, indicating that societal expectations significantly shape nutrition behavior. No substantial moderation effects were observed for gender or personality factors, and perceived social norms were not directly affected by exposure to fitness content. These findings imply that rather than immediately changing behavior or self-image, fitness-related TikTok content may subtly reinforce preexisting body standards. Other approaches, including longitudinal designs or implicit association, should be investigated in future studies to gauge perceived social norms. Qualitative research may also shed more light on how people react emotionally and cognitively to fitness-related content. The moderating factors that remained unclear in this study might also be clarified with the use of improved personality tests and a more balanced gender sample. These results highlight the necessity of public health messaging and media literacy initiatives that critically examine social norms and online fitness material, particularly for vulnerable youth groups.

Introduction

Social media use has grown rapidly, especially among young people, with concerns about its psychological impact gaining attention. According to the book of Haidt (2024), society has neglected children's online safety while overprotecting them offline, which has led to an increase in mental health problems. According to Haidt (2024), a social media ban is needed for young users: no smartphone before 14, no social media before 16. Additionally, recent discussions in the Netherlands advocate raising the minimum age for social media channels to a minimum of 15 years old, because the mental and physical health of young children could be at risk. They thus want to ensure that younger children are not exposed to addictive social media, which also contains a lot of harmful content and disinformation (NOS, 2025). However, all social media get lumped together, as it is assumed that every social media channel is harmful. This raises a lot of discussion. It needs to be studied which specific platforms are the most harmful. In this research, TikTok will be studied.

Over the years, the popularity of TikTok has grown considerably. This phenomenon is due to its algorithmic recommendations, which adjust to users' preferences and perpetually enhance suggestions based on their actions (Harriger et al., 2023). Recent research suggests that a better understanding of algorithms can reduce addictive behaviors on platforms like TikTok. Meaning algorithm-driven platforms, for instance TikTok, are considered more addictive (X. Wang & Guo, 2023). Contrarily, algorithm-driven platforms can guide youth to valuable resources, promote self-discovery, and connect with like-minded peers (Draper & Neschke, 2023).

Imagine opening TikTok and first seeing a video demonstrating exercises that are perfect for giving the most sculpted legs. The next video is a #WhatIEatInADay clip, which provides a detailed description of someone’s daily food intake. Exploring further, the

algorithm displays even more fitness and nutrition videos under the hashtag #fitspiration. This term, a mix of ‘fitness’ and ‘inspiration’, aims to motivate people into having and maintaining a healthier lifestyle (Pryde et al., 2024).

Exposure to this content can have several effects on people. Looking at all these ‘picture-perfect’ videos causes people to have a certain image of what someone is supposed to do or look like. This all has to do with (perceived) social norms and, therefore, the body image of the user. Fitspiration TikTok can also positively affect people. It can inspire people to start exercising. Next to that, it can be used as an example of how to perform a certain exercise or technique. The study of Klier et al. (2022) highlights the significant impact of social media on young people's body image and sport-related behavior, with both positive and negative effects.

Previous research on social media and body image has primarily examined how viewing images of women who align with societal beauty standards affects young women's body image (Gurtala & Fardouly, 2023). However, there is not much research on the effect on men’s body image. Additionally, body image is not only influenced by social media; there are several other factors as well. In turn, body image can influence several aspects, such as exercise and nutrition habits. This research will study these effects. Next to that, personality traits may influence outcomes, considering, for example, the Big Five personality model (neuroticism, extraversion, openness, agreeableness, and conscientiousness) (Costa & McCrae, 1995).

Considering all these variables, a research question has been formed, to identify the effect of exposure to fitness-related TikTok content on body image, exercising, and nutrition habits of both young women and men between 18 and 25 years old. Personality traits and perceived social norms are also taken into consideration. The research question that arises from this is: “What is the effect of exposure to fitness-related TikTok content on the body

image, exercise habits, and nutrition habits of young users between 18 and 25 years old?”

Theoretical framework

Social media exposure

To comprehend the mechanisms underlying these effects, it is essential to analyze user engagement with social media and the processes of content production and consumption. One aspect of social media is user-generated content. The term, which gained widespread popularity in 2005, is commonly used to describe the various types of media content that are publicly accessible and created by end users (Kaplan & Haenlein, 2010). Instagram and TikTok are some of the most popular social media platforms, which are based on user-generated content. Both platforms are dominated by content related to physical appearance (Flores Mata & Castellano-Tejedor, 2024). Adolescents in the Netherlands spend an average of six hours a day on their mobile phones. Two and a half hours of which are spent on social media (Siebers et al., 2024). There is also a gender difference in the use of social media. Adolescent girls typically use social media to connect with peers and strengthen existing relationships, while boys tend to use it to make new friends. (Barker, 2009).

The term Problematic Social Media Use (PSU) has become popular in this digital age. PSU is defined as a person's inability to control their smartphone use, which results in impaired daily functioning (Elhai et al., 2017). The intensity of PSU can differ among individuals. Those who experience a high level of PSU are prone to use social media excessively and engage in extended and frequent usage sessions, compared to individuals who experience low levels of PSU (Pivetta et al., 2019; Świątek et al., 2023). It shows that the excessive amount of social media use creates several problems. PSU can lead to inter alia sleep problems, anxiety, or other mental health problems. Combining this with exposure to fitness content could negatively affect an individual. Research by Ahmed et al. (2024)

suggests that younger individuals tend to spend more time on social media and are more susceptible to its effects. However, this does not count for all individuals. Additionally, social media not only affects individuals negatively. Research by Kyei-Gyamfi (2024) suggests that children report positive effects including engaging in social interactions, talking to family and friends, and entertainment.

Algorithm-driven vs. social network-driven platforms

The architecture of social media platforms, whether algorithmic or network-based, significantly affects how content is discovered and assimilated, alongside usage patterns. Adolescents' use of social media has increased the potential risks they face. The risks stem not only from increased screen time but also from the fact that algorithms often influence it. With first-generation social media including Facebook, Instagram, and Twitter, the adjective ' social' alluded to the logic of ' social networking' based on personal connections with other users (Boyd & Ellison, 2007). This resulted in ‘networked publics’, which meant that your exposure to online content was strongly determined by who you 'friended' or 'followed' (Gerbaudo, 2024).

Because of TikTok, a new type of online public has emerged: clustered publics, and is therefore the second generation of social media. Clustered publics are groups of users, sometimes referred to as 'neighbors', who have gathered around items deemed interesting by recommender systems, such as those powering TikTok's famed 'For You' tab. They are generated using complex statistical calculations that determine the similarity between different users by examining their responses to various items to which they are exposed. In the case of TikTok and TikTok-like features, this is increasingly accomplished through the use of implicit signals, including the amount of time spent watching a video, rather than explicit user choices, as occurs when joining a Facebook group or subreddit. This is all based on an algorithm (Gerbaudo, 2024). Therefore, viewers who interact with fitness-related content

frequently will see an algorithm that favors this content.

Earlier research suggests that platforms like TikTok, which are algorithm-driven, are more harmful than platforms that are social-network driven, for instance, Instagram. TikTok's algorithm aims to provide users with videos that will increase their engagement and retention on the platform. These have been proposed as attempts to encourage addiction, while also yielding an uncanny recursive mechanism of "knowing" users (including their interests, illnesses, sexuality, etc.) before or better than they know themselves (Avella, 2023). This can cause users to become trapped in their bubble, which can worsen certain thoughts or behavior.

Social media trends

A consequence of algorithm-driven platforms such as TikTok is the amplification of trends, including those pertaining to nutrition and exercise. These trends can differ from dance trends to food-related trends. An example of such a food-related trend is ‘What I Eat In A Day (WIEIAD) videos, which started around 2021. Videos with the hashtag #WhatIEatInADay show users' daily food and drink consumption (Drivas et al., 2024). Previous research suggests that the amount of food consumed by others can influence an individual's eating habits (Polivy & Pliner, 2015). This is distinctly linked with descriptive norms. In other words, people use comparison to decide how much to eat, how they feel about their food, and how they view people who eat differently or similarly to them. (Polivy & Pliner, 2015). This can lead to a distorted picture of how much an individual should eat to remain healthy and be happy with their body and body image. This misconception may lead to detrimental eating habits or body dissatisfaction.

Another term that has become increasingly popular on social media is ‘fitspiration’. The #fitspiration is used to tag health, fitness, nutrition, and lifestyle-related content (Klier et al., 2022). Fitspiration depicts idealized bodies to viewers, emphasizing a fit ideal for women and a muscular ideal for men. The term consists of fitness and inspiration, intending to inspire

people to get fitter or eat healthier (Pryde et al., 2024). The idealization of particular body shapes is further facilitated by the role of influencers in these trends. Fitness influencers not only present a perfect body they also regularly promote branded clothing and nutrition/exercise products in their posts, presenting a perfect body image. This becomes clear from the research by Cwynar-Horta (2016), which is focused on fitspiration content on Instagram.

According to Klier et al. (2022), social media has a big impact on how young people feel about their bodies and how they play sports. It can inspire, but it also perpetuates irrational expectations. This is consistent with the findings of Jiotsa et al. (2021), who discovered that individuals aged 18 to 25 who have a negative body image frequently evaluate themselves against the ideals of beauty accessible on social media. Carrotte et al. (2017) also found that gender differences exist in fitspiration images: While 99% of photographs of men show average weight with a significant emphasis on the upper body, 75% of images of women show slim bodies, frequently with noticeable muscularity.

However, fitness influencers are extremely popular, with millions of followers receiving fitspo content. This content potentially influences how young girls learn about their bodies and health-related behaviors, effectively serving as a form of public pedagogy (Camacho-Miñano et al., 2022). Research by Frühauf et al. (2024) suggests that participants valued fitness influencers for motivating them, providing free exercise programs and food receipts, and giving them unlimited access to the content. Despite reporting negative effects from exposure to fitspiration content, participants were less reflective and focused on the positive aspects.

Furthermore, preliminary evidence suggests that viewing Fitness Social Media (FSM) may positively impact exercise behavior for some individuals. Young women often report that viewing "fitspiration" images motivates them to exercise (Raggatt et al., 2018). DiBisceglie

and Arigo (2021) discovered a positive relationship between exercise frequency and frequency of fitspiration use, specifically on Instagram, in a mostly female, young adult sample. Halliwell et al. (2007) also experimented on British men's exposure to muscular male models in advertisements. The study found that individuals who expressed a higher level of intention for exercise to increase strength and muscularity were more motivated to improve themselves after exposure. However, model attractiveness harms work-out intention, indicating that viewers are discouraged from imitating rewarding behaviors (Peng et al., 2019).

It is crucial to identify and discover if gender moderates the relationship between fitness-related TikTok content exposure and body image, which is formulated in the first hypothesis:

H1. The relationship between exposure to fitness-related TikTok content and body image is moderated by gender.

Social media and body image

The excessive use of social media raises questions. Early research suggests that social media such as TikTok and Instagram can create a distorted picture of reality (Jiotsa et al., 2021). In general, adolescent girls and young adult women frequently report feeling dissatisfied with their appearance (Swami et al., 2010). This is concerning as it is linked to a variety of negative outcomes, including impact on body image, mood, and self-objectification (Gurtala & Fardouly, 2023). Research by de Valle et al. (2021) suggests that viewing appearance-ideal images on social media can negatively impact body image.

Appearance ideals can be described as long legs, big lips, large eyes, and a toned and flat stomach (Bozsik et al., 2018). This means that those appearances are only achievable by a small number of women with a genetic predisposition for specific body shapes and appearances (Brownell, 1991). This inaccessibility fosters, in turn, emotions of inadequacy

and discontent among young women exposed to such material. Recent reviews and meta-analyses indicate that viewing appearance-ideal social media images results in poorer body image compared to viewing appearance-neutral images. This indicates that the nature of consumed material significantly influences users' bodily perceptions. Appearance-neutral images can be, for example, travel images or interior-design images (de Valle et al., 2021).

Furthermore, research on the impact of social media on body image has primarily focused on image-based platforms like Facebook and Instagram. However, recent studies are exploring the impact of video-based social media content on body image (Vandenbosch et al., 2022). TikTok, in particular, is a relatively new social media platform. This platform has contributed significantly to the rise of short-form video content (Anderson, 2020). TikTok's short-form video content is popular among young adults, making it a notable platform for studying social media and body image. Notwithstanding its increasing popularity, TikTok is still comparatively under-researched regarding its psychological and behavioral effects, such as exercise behavior and nutrition habits. TikTok has gained popularity among young adults worldwide due to its algorithm-driven recommendations that adapt to users' interests and continuously refine suggestions based on their behavior (Harriger et al., 2023).

Descriptive and injunctive norms

Beyond the effects of individuals and platforms, social norms have a big impact on how people behave regarding their bodies, exercise, and nutrition. Descriptive and injunctive norms are part of the social norms theory. Earlier research in psychology literature and health communication has focused on the way social norms shape human behavior (Mollen et al., 2010). This is based on the idea that those around them can influence individuals' behaviors and attitudes (Cialdini et al., 1990). There are several definitions describing norms. These definitions explain norms as a group's preferred and appropriate behaviors (Chung & Rimal, 2016). In a classic study by Sherif (1937), individuals were asked to make a perceptual

judgment on their own, in a group setting, and again on their own. It was found that the decisions made in the group setting, which differ from the decisions made alone, remained when leaving the group. This means group norms can influence an individual's perception and internalization of accurate information (Sherif, 1937). It can be linked to social media, in which a big group represents how an individual is supposed to look. As a result, the individuals' perceived norms can be influenced.

Injunctive norms are related to what is expected from our society. While descriptive norms reflect behavior that most people engage in in a situation, regardless of the injunctive norms, injunctive norms reflect behavior that the majority of people believe to be correct. In essence, descriptive norms are based on what other people are doing at the moment, whereas injunctive norms are what one "ought" to do (Kredentser et al., 2012). An individual in high need of closure, and situations with high ambiguity or threat, should result in more descriptive norm-consistent behavior (Gelfand & Harrington, 2015). People use descriptive norms to guide their behavior because they serve important identity functions (Gelfand & Harrington, 2015). Given their implications for impression management goals, the structure of social networks may also have an impact on the motivational force of descriptive norms. Denser, more interconnected networks with higher levels of interdependence and multiplexity among members may foster greater social monitoring, which would increase the alignment between descriptive norms and personal behavior (Gelfand & Harrington, 2015).

For injunctive norms to be effective, high elaboration conditions would be ideal. Additionally, since injunctive norms deal with values, the person will likely need to actively process messages in order to determine whether or not they align with their own values (Kredentser et al., 2012). This can be related to how a person can perceive fitness TikTok content. The research of Friedman et al. (2022) suggests that social norms on the web are an important aspect of changing young adults' health behaviors. Perceived social norms can have

an influence on how one should look, how one should act, and what one should eat to look like that. Therefore, it needs to be discovered if exposure to fitness content increases perceived social norms. Next to that, the relationship between body image and nutrition, and exercise habits is moderated by perceived social norms, needs to be discovered. Three hypotheses were formulated to identify this possible moderation and direct relationships:

H2. The relationship between body image and exercise habits is moderated by perceived social norms.

H3. The relationship between body image and nutrition habits is moderated by perceived social norms.

H4. Exposure to fitness-related TikTok content reinforces perceived social norms.

Personality traits and body image

Individual characteristics, including personality factors, significantly impact how body image is viewed and acted upon, in addition to societal and technological influences. Young adults often strive for beauty ideals, with women aiming for thinness and men for muscularity. This can lead to higher self-esteem and body satisfaction (Aparicio-Martinez et al., 2019). Body dissatisfaction affects 11 to 72 percent of women and eight to 61 percent of men, indicating a widespread issue in our society (Fiske et al., 2014). Earlier research suggests that body dissatisfaction is a risk factor for a variety of mental health conditions (Han & Chee, 2025). However, personality traits can also play a role.

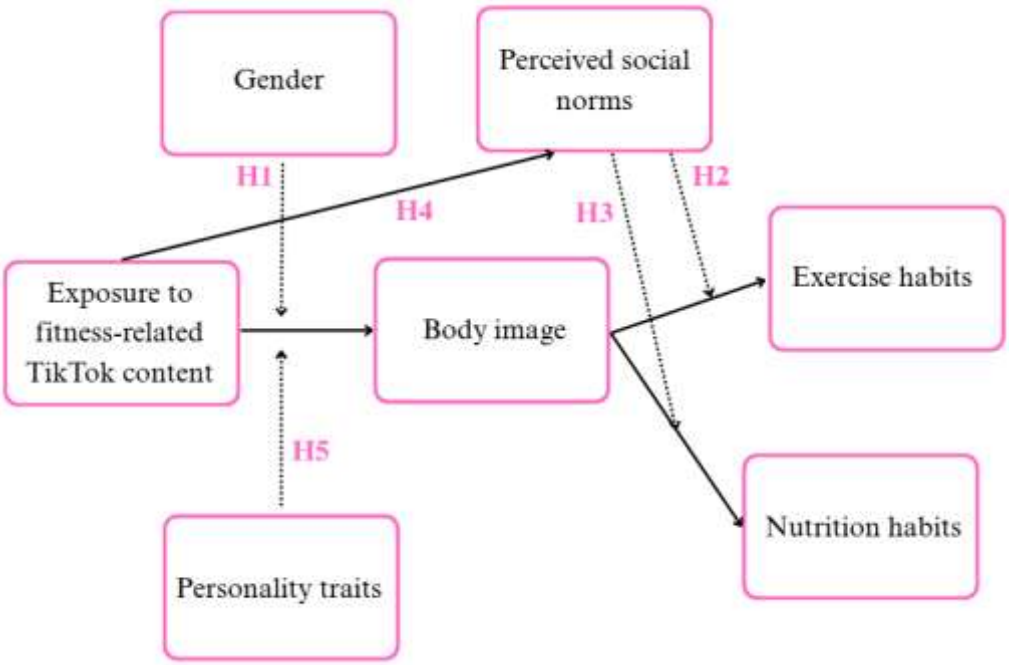
Body image refers to an individual's perception of their physical appearance, but it is not limited to this. In a broader sense, body image includes experiences related to physical functional competencies and biological integrity, including health, fitness, athletic skills, and coordination. Appearance-related experiences include perceptions of size, shape, and facial characteristics, as well as attitudes toward one’s appearance (Cash, 2012). Therefore, it can be said that a person’s image can strengthen the effect of exercising more or eating healthier.

Research suggests that negative body image is influenced by personality traits, with neuroticism being a key factor (S. Wang & Chen, 2024). To add, personality traits such as narcissism, perfectionism, obsession, avoidance, and low self-esteem may contribute to body dissatisfaction (Han & Chee, 2025). Research using the Big Five personality model (neuroticism, extraversion, openness, agreeableness, and conscientiousness) consistently shows that high neuroticism and low extraversion are linked to negative body image (Dalley et al., 2009).

According to the research of Han and Chee (2025), females have higher body dissatisfaction scores than males, indicating a more negative perception of their appearance. Women are more likely than men to be dissatisfied with their bodies due to their tendency to scrutinize themselves, experience body shame, have lower body esteem, and lack the ability to enhance desirable features (Dalley et al., 2009). Individuals with a sanguine personality, which includes extroversion, conscientiousness, and positive interpersonal relationships, may have a less negative perception of their bodies (Han & Chee, 2025). Therefore, it has been proven that personality traits can influence body image. The hypothesis that relates to this is **H5.** The relationship between exposure to fitness-related TikTok content and body image is moderated by personality traits.

Conceptual model

Based on the research question, a conceptual model was developed. The independent variable is the exposure to fitness TikTok content, which affects or does not affect the dependent variables, body image, and therefore other effects, such as motivation to exercise or eating healthy. The independent variables, personality traits, and gender modify the relationship between fitness TikTok exposure and body image. Perceived social norms moderate the relationship between body image, exercise habits, and nutrition habits.



Methods

Design

To address the research question: "What is the effect of exposure to fitness-related TikTok content on the body image, exercise habits, and nutrition habits of young users between 18 and 25 years old?" a quantitative approach was chosen. For this specific research, a survey was used (*see Appendix A*). There are several reasons to use a survey as a data collection method. This method uses an appropriate sampling method to investigate an individual's attitudes, beliefs, using an appropriate sampling method. Data is collected from a sample and then generalized to the target population. As a result, this segment of the population reflects the entire population's beliefs, viewpoints, and opinions (Taherdoost, 2022).

In this specific context, it is important that the participants feel comfortable in providing data, as it can be a vulnerable topic. Furthermore, anonymity can reduce social desirability bias and make participants feel more at ease sharing honest responses. It is

essential to clarify that completing the survey is entirely anonymous, and no information can be traced back to an individual. Next to that, the participant can withdraw at any time, without any risks involved. Tourangeau et al. (2007) emphasize that in face-to-face settings, participants may be afraid of being judged or embarrassed, resulting in underreporting of personal or sensitive experiences. Using an online, anonymous survey helps to alleviate these concerns.

The questions within the survey could be answered based on a five-point Likert scale. One of the most important and widely used psychometric instruments in social science and educational research is the Likert scale (Joshi et al., 2015). It has been chosen to operate with a five-point Likert scale because the answer options on a seven-point Likert scale are more substantially different than a five-point Likert scale (Joshi et al., 2015). In the context of this study, it is logical to present the response possibilities in this format.

Measures

The measured aspects are demographics, including age and gender, exposure to TikTok fitness content, perceived social norms, personality traits, body image, exercise habits, and nutrition habits. Next to that, a filter question was added in which the participant could indicate whether they use TikTok. If the participant indicated that they did not have a TikTok account, they were sent out of the survey. Table 1 displays the number of items measured per scale, including the source of the scale and its Cronbach's alpha.

Table 1

Measurement characteristics per scale

		Source	Number of items	Cronbach's α
Validated scales	Body image	Cash et al. (2002)	6	.87
	Exercise habits	Sniehotta et al. (2005)	7	.93
	Nutrition habits	Guertin et al. (2020)	10	.76
	Personality traits [a)]	Rammstedt and John (2007)	10	-
Unvalidated scales [b)]	Exposure to fitness TikTok content	-	3	.69
	Perceived social norms [c)]	-	2	-

Note. [a)] Five personality traits were measured, 2 items per personality trait. [b)] The unvalidated scales were compiled by the researcher and therefore have no scientific source. [c)] Split into descriptive and injunctive norms

Demographics

It is significant to identify the gender and age of the participants. The disparity in effects can be elucidated by this data. It is chosen to focus on young users between 18 and 25 years old, as this fits with the mean age of TikTok users.

Exposure to fitness TikTok content

Exposure to fitness TikTok content was measured using three TikTok videos, including #fitspiration or #WhatIEatInADay. Every hashtag provided at least one TikTok video. These videos were as neutral as possible. Two #fitspiration videos were shown to represent both genders. One #WhatIEatInADay video was shown. The videos all took around 10 to 15 seconds to watch. Per TikTok video, the participant could indicate how often they are exposed to similar content. This is based on a 5-point Likert scale ranging from 1 = never to 5 = multiple times a day. By doing this, the amount of fitness TikTok content exposure of the participants became clear. (α .69.)

Perceived social norms

Perceived social norms were measured using the underlying norms: descriptive and injunctive norms. In other words, how do people look in the real world versus what appearance is expected by society? This was measured using a drawing of 5 different body types, ranging from 'skinny' to 'chubby' (*see Appendix B*). Female participants had to choose from female body types, and male participants had to choose from male body types. Participants had to choose which image would fit their descriptive norms and injunctive norms, asking the question 'Which body type fits best with your imagination of how people look in the real world (from left to right; 1, 2, 3, 4 or 5)?' The same type of question was applied to what society expects us to look like. In essence, participants selected the figure they thought was the most common by rating five distinct body types according to how "normal" they looked. This simplified scale has been used to reduce the length of the survey.

Personality traits

Personality traits can have an effect on the body image of young people; therefore, this needs to be taken into consideration. To measure personality traits, the simplified version of the Big Five Inventory (BFI-44) was used. This inventory is simplified to a 10-item version to

accommodate limited participant time (Rammstedt & John, 2007). Participants could answer the statements based on the 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. There was no Cronbach's alpha calculated, as every two items measured a different personality trait. However, a Pearson's r has been used to provide the inter-reliability between the two items. Extraversion r = .32, neuroticism r = .47, meaning a moderate positive correlation. For agreeableness, openness, and conscientiousness, the correlation was extraordinarily low.

Body image

Body image is a concept that can be hard to measure. To measure this properly, the Body Image State Scale from Cash et al. (2002) has been used. This scale contained six items written to tap into the following domains of current body experience: (1) dissatisfaction or satisfaction with one's overall physical appearance; (2) dissatisfaction or satisfaction with one's body size and shape; (3) dissatisfaction or satisfaction with one's weight; (4) feelings of physical attractiveness or unattractiveness; (5) current feelings about one's looks relative to how one usually feels; and (6) evaluation of one's appearance relative to how the average person appears. All statements started with 'Right now I feel', ranging from strongly disagree to strongly agree ($\alpha = .87$).

Exercise habits

The scale to measure the exercise habits of the participants was adapted from research by Sniehotta et al. (2005). The participants had to answer the statements based on the five-point Likert scale, ranging from strongly disagree to strongly agree. For example, *exercising is part of my weekly schedule* ($\alpha = .93$).

Nutrition habits

To measure the nutrition habits of the participants, the scale of Guertin et al. (2020) was used. The participants needed to respond to 10 statements regarding eating healthy. An

example of such a statement is *I eat vegetables regularly.* The five-point Likert scale was again used to respond to these statements (α = .76).

Procedure

In this research, the participants got access to an online survey. The survey link was shared on social media, but also distributed in person. TikTok was used as the main channel to promote the survey, which resulted in numerous responses from the target group. The first thing that was displayed was an informed consent, in which they could read the purpose and context of the research. It was made clear that there were no right or wrong answers, the participants were completely anonymous, and when they felt discomfort, they could withdraw at any time. The data is collected in one week.

Respondent sample

From the literature, it becomes clear that young women between the ages of 18 and 25 are particularly vulnerable to fitness-related TikTok content, for instance, fitspiration and nutrition (What I Eat in a Day) videos. However, there is not much literature on the effects of fitness content on young men's body image. Therefore, it has been decided to focus on the respondent sample of young TikTok users between the ages of 18 to 25. The respondents have mainly been recruited by using TikTok and the use of snowball sampling.

To stay focused on the specific target group, participants could be excluded from the survey. This happened when the participant answered that they were 17 or younger or 25 and older, when they identified themselves as the third gender or preferred not to say option, or when the participant did not use TikTok. Because women were shown women's body types and men were shown men's body types, it was not possible to include a third gender or to prefer not to say. The final sample consisted of 164 participants. The age of the participants ranged from 18 to 25 years, with a mean age of 21.2(SD = 1.96). The sample included 78.7 % female and 21.3 % male participants. Additional information is presented in Table 2.

Table 2

Respondent/sample characteristics

Demographics		N	%
Age:			
	18 years	14	8.5%
	19 years	21	12.8%
	20 years	31	18.9%
	21 years	32	19.5%
	22 years	21	12.8%
	23 years	20	12.2%
	24 years	16	9.8%
	25 years	9	5.5%
Gender:			
	Male	35	21.3%
	Female	129	78.7%

Note. N = 164

Analysis

RStudio was used to analyze the data that was collected. Firstly, all incomplete answers were removed from the dataset. After that, the demographics of the participants were analyzed, consisting of their age and gender. Before starting the analysis, the Cronbach's alpha was calculated per scale to establish the reliability of the scales, which are mentioned in the methods section. There were no items removed from any scale, as in all cases, it did not improve the Cronbach's alpha. Because almost all scales were already validated, no factor analysis was performed on these scales. Two other scales, Fitness TikTok Exposure and the Perceived Social Norms scale, were not suitable for a factor analysis, because there was no possibility to delete specific items. During the analysis, perceived social norms have been split into descriptive norms and injunctive norms, as it was also measured separately in the survey. Moreover, several items within the personality traits scale were reversed to optimize the scale. Lastly, the variable gender was transformed into a dummy variable to continue with the analysis.

To identify the possible relationships between the variables, simple linear regression was performed on one of the hypotheses. The effect of fitness TikTok exposure on perceived social norms was tested using a simple linear regression. This is the most direct way to quantify and understand the linear relationship between the independent and dependent variables. The other four hypotheses were tested using a moderation analysis. The hypotheses consist of three variables, including one variable that could possibly moderate the relationship between the other two variables. All of these analyses will provide the answer to the research question.

Results

This study explored the effects of exposure to fitness-related TikTok content on the body image, exercise habits, and nutrition habits of young users between 18 and 25 years old. Before starting the analysis, gender was coded as a dummy variable (female = 1, male = 0). The assumptions for linearity, independence of residuals, homogeneity of variance, and normality of residuals have been checked. There were no violations. The mean, standard deviation, and N per variable are displayed in Table 3.

Table 3

Mean, standard deviation (SD), and N per variable

		Mean	SD	N
	Fitness TikTok exposure	3.26	0.91	164
Perceived social norms	Descriptive norms	3.26	0.67	164
	Injunctive norms	2.83	0.47	164
Personality traits	Agreeableness	3.49	0.63	164
	Conscientiousness	3.45	0.63	164

	Extraversion	2.79	0.65	164
	Neuroticism	3.20	0.99	164
	Openess	3.41	0.71	164
Behavior	Exercise habits	3.39	1.11	164
	Nutrition habits	3.64	0.58	164

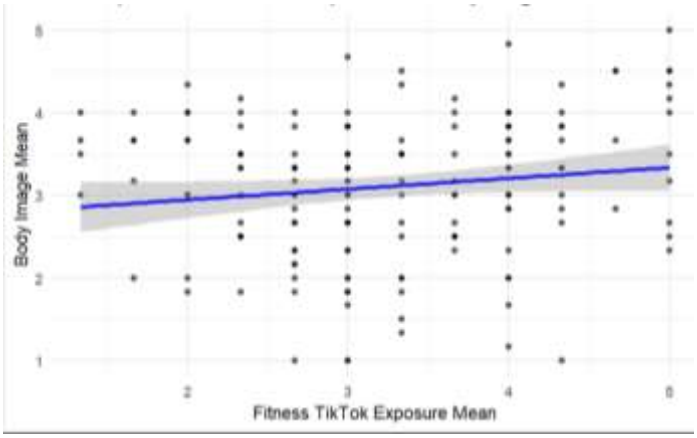
Gender as a moderator between TikTok exposure and body image

The first hypothesis predicted the relationship between *fitness-related TikTok exposure* and *body image*, moderated by *gender*. The *fitness-related TikTok exposure* was identified as the independent variable, and *body image* was identified as the dependent variable. A moderation analysis was conducted to examine whether the effect of *fitness-related TikTok exposure* on *body image* was moderated by *gender*. There was a significant positive effect of *fitness-related TikTok exposure* on *body image*, $b = 0.34$, $SE = 0.15$, $p = .029$, 95% CI [0.03, 0.64]. This is displayed in Figure 1.

The interaction between *fitness-related TikTok exposure* and *gender* was not statistically significant, $b = -0.27$, $SE = 0.17$, $p = .118$, 95% CI [-0.62, 0.07]. The effect of *gender* on *body image* was also non-significant, b = 0.63, SE = 0.60, p = .292, 95% CI [-0.55, 1.81]. The model explained 5.2% of the variance in *body image,* $R^2 = .052$, adjusted $R^2 = .034$, $F(3, 160) = 2.93$, $p = .035$. Thus, the first hypothesis was partially supported. Users who watched more fitness-related TikTok content tended to feel better about their bodies. *Gender* did not influence this relationship.

Figure 1

Positive linear relationship between fitness TikTok exposure and body image



Perceived social norms as a moderator

The next two hypotheses predict the relationship between *body image* and *exercise habits* or *nutrition habits*, with *descriptive and injunctive norms* as the moderators. Using these as moderator variables, moderation analyses have been performed. Two moderation analyses for *descriptive and injunctive norms* on *exercise habits*, and two moderation analyses on *nutrition habits*. One analysis will be displayed, and the other outcomes of the analyses will be displayed in Table 4.

A moderation analysis was performed to examine whether the effect of *body image* on *nutrition habits* was moderated by *descriptive norms* (H3). There was a significant positive effect of *body image* on *nutrition habits*, b = 0.86, SE = 0.23, p = <.001, 95% CI [0.41, 1.32]. Additionally, there was a significant positive effect of *body image* on *exercise habits*, p = .017. This relationship is displayed in Figure 2

The interaction between *body image* and *descriptive norms* had a significant negative effect, b = -0.22, SE = 0.07, p = <.001, 95% CI [-0.36, -0.09]. The effect of *descriptive norms* on *nutrition habits* was also significant, b = 0.92, SE = 0.21, p = <.001, 95% CI [0.51, 1.34].

The model explained 16.33% of the variance in *nutrition habits,* $R^2 = .163$, adjusted $R^2 = .145$, $F(3, 160) = 10.41$, $p = <.001$. Therefore, there is partial support found for hypothesis 2. Hypothesis 3 can be accepted. This means that a positive body image is linked to more exercising (H2), however, there was no moderation of social norms. For hypothesis 3 these results reveal that users who had a more positive body image also had healthier nutrition habits. The moderation of the social norms revealed that the better someone felt about their body, the less it mattered what they thought others were eating. Meaning a negative body image could result in paying more attention to what others do. The relationship between The visualization of H3 is displayed in Figures 3 and 4.

Figure 2

Positive linear relationship between body image and exercise habits

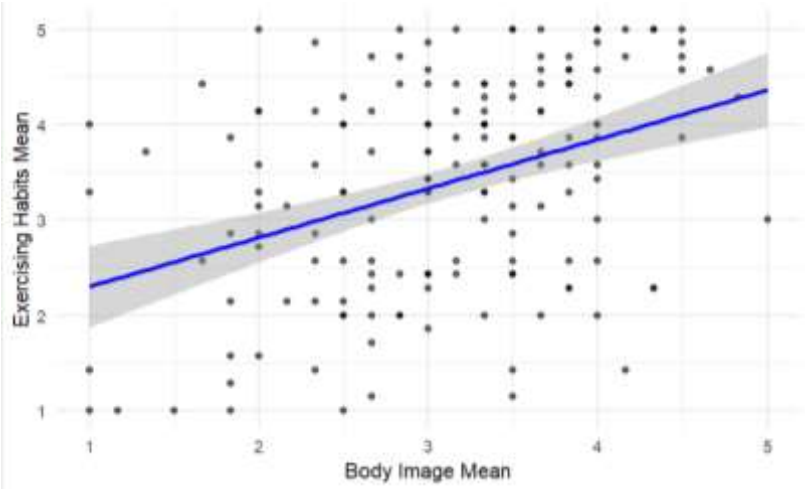


Table 4

Means, standard deviations (SD) and p-values of H2 and H3 for descriptive and injunctive norms

Social norms	**Mean**	**SD**	**p-value body image**	**p-value exercise habits (H2)**	**p-value nutrition habits (H3)**
Descriptive norms (H2)	3.26	0.67	.206	.224	-
Injunctive norms (H2)	2.82	0.47	.216	.412	-
Descriptive norms (H3)	3.26	0.67	<.001	-	<.001
Injunctive norms (H3)	2.82	0.47	.030	-	.005

Note. Dashes (–) indicate that the hypothesis was not tested for that variable.

Figure 3

Moderation effect of descriptive norms on the relationship between body image and nutrition habits

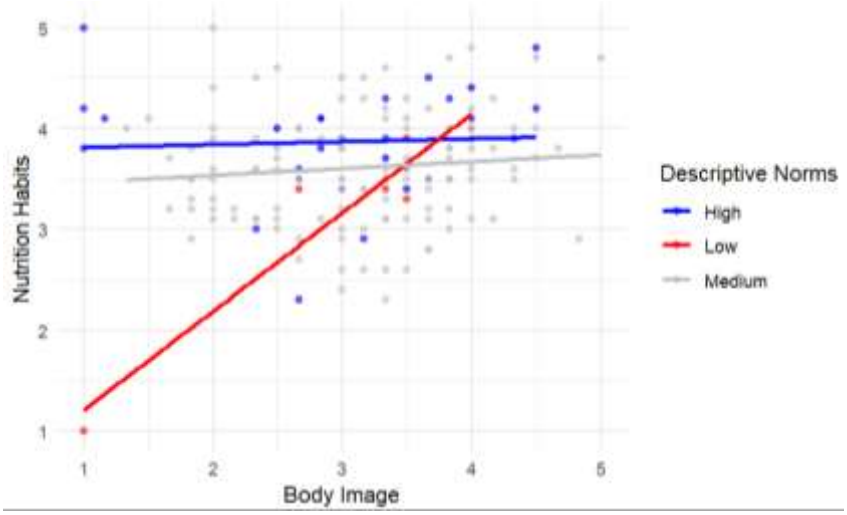
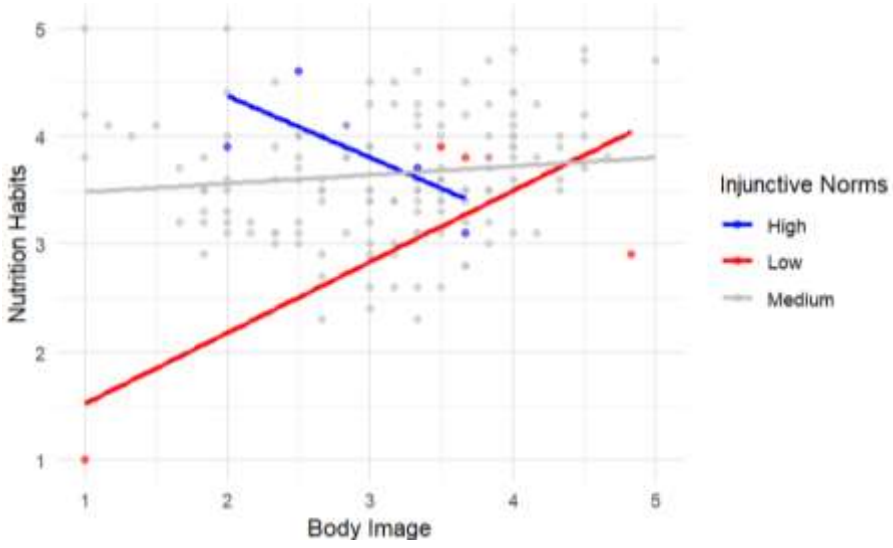


Figure 4

Moderation effect of injunctive norms on the relationship between body image and nutrition habits



Personality traits as a moderator

The fourth hypothesis predicted the relationship between the independent variable, *fitness-related TikTok content exposure,* and the dependent variable *body image*, with *personality traits* as the moderator variable. There were 5 different personality traits measured: extraversion, neuroticism, agreeableness, conscientiousness, and openness. This hypothesis was measured using a moderation analysis. For the result section, the output of one personality trait will be displayed; the other personality traits will be displayed in Table 5. Both means for each personality trait and the p-values for the relationship between the personality trait and the variable *body image* or *fitness-related TikTok exposure* are listed.

A moderation analysis was conducted to examine whether the effect of *fitness-related TikTok exposure* on *body image* was moderated by *extraversion*. There was no significant effect of *fitness-related TikTok exposure* on *body image*, b = -0.18, SE = 0.29, p = .53, 95% CI [-0.75, 0.39].

The interaction between *fitness-related TikTok exposure* and *extraversion* was also not statistically significant, b = 0.11, SE = 0.10, p = .274, 95% CI [-0.62, 0.07]. The effect of *extraversion* on *body image* was also non-significant, b = 0.63, SE = 0.60, p = .620, 95% CI [-0.09, 0.32]. The model explained 4.7% of the variance in *body image,* $R^2 = .047$, adjusted $R^2 = .029$, $F(3, 160) = 2.65$, p = .051. Therefore, there was no support found for hypothesis 4 as neither the main effects nor the interaction effects were statistically significant. This means that any tested personality trait did not play a meaningful role in how *exposure to fitness-related TikTok content* relates to *body image*.

Table 5

Means, standard deviations (SD) and p-values of personality traits

Personality trait	Mean	SD	p-value body image	p-value exposure
Agreeableness	3.49	0.63	.620	.274
Conscientiousness	3.45	0.63	.077	.287
Extraversion	2.79	0.65	.142	.152
Neuroticism	3.20	0.99	.679	.432
Openness	3.41	0.71	.195	.494

Exposure to fitness-related TikTok content on perceived social norms

To test the effect of *exposure to fitness-related TikTok content* on both *descriptive and injunctive norms*, the fifth hypothesis was formulated and tested using a simple linear regression. During analysis, perceived social norms have been split up into *descriptive norms* and *injunctive norms*. *Exposure to fitness-related content* was used as the independent variable, perceived social norms, consisting of injunctive and descriptive norms were used as the dependent variables, adjusted $R^2 = .01$. There was no significant effect of *exposure on fitness-related TikTok content* on *descriptive norms* found, b = 0.10, SE = 0.06, t(162) = 1.73, p = .086, 95% CI [-0.014, 0.213]. The same analysis was performed with injunctive norms as the independent variable, p = .554. Therefore, hypothesis 5 can be rejected. This means that *exposure to fitness-related TikTok content* did not affect both *descriptive and injunctive norms.*

Additionally, women chose Figure 3 (*see Appendix B*) as the 'normal' body type for descriptive norms, meaning how women look in reality. For injunctive norms, what is expected from society, Figure 2 was chosen the most. For men, the results were the other way

around. For descriptive norms, body type 2 was frequently chosen, and body type 3 was chosen for injunctive norms.

Discussion

In this research, the research question "What is the effect of exposure to fitness-related TikTok content on the body image, exercise habits, and nutrition habits of young users between 18 and 25 years old?" has been studied using five hypotheses. This study aimed to examine the complicated relationships between these factors by considering personality trait research, social norms theory, and social comparison theory. In this section, the main findings of this research will be discussed using literature, research limitations will be discussed, and lastly, the answer to the research question will be provided. To provide a clear structure, the hypotheses will be restated.

- **H1.** The relationship between exposure to fitness-related TikTok content and body image is moderated by gender
- **H2.** The relationship between body image and exercise habits is moderated by perceived social norms.
- **H3.** The relationship between body image and nutrition habits is moderated by perceived social norms.
- **H4.** Exposure to fitness-related TikTok content reinforces perceived social norms.
- **H5.** The relationship between exposure to fitness-related TikTok content and body image is moderated by personality traits.

Presenting the main findings

Body image

The analysis revealed a significant positive linear relationship between *exposure to fitness-related TikTok content* and *body image.* Participants who reported higher exposure to fitness-related content also tended to report more positive feelings about their body. These

findings imply that it might also inspire or motivate young users. Contrary to concerns that fitness-related content might promote unrealistic standards, for instance, research by de Valle et al. (2021), this study implies that, depending on individual perception and involvement, such content may also have motivational effects. Additionally, these findings are in line with prior research showing that social media influences body image and exercise behavior positively (Klier et al., 2022; Jiotsa et al., 2021).

Gender did not moderate this relationship. Both male and female participants responded similarly in terms of how exposure to this content related to their body image. Therefore, H1 was partially supported, as the main effect was significant, but there was no moderation effect found. One reason for this could be the unequal division between males and females in the sample. Furthermore, no significant moderation effects were found for any of the personality traits, based on the Big Five, including extraversion, agreeableness, conscientiousness, neuroticism, and openness. This suggests that *personality traits* did not significantly influence how *body image* was associated with *exposure to TikTok fitness content*, which does not support Hypothesis 5. As personality traits are hard to measure, especially in a shortened scale, this could be the reason for showing no effects.

Exercise and nutrition habits

Regarding behavioral outcomes, the study discovered that both more exercise and healthier nutrition habits were linked to a positive body image. This implies that those who have a more positive body image are more inclined to exercise and follow a healthy diet, which partly supports H2. There was no evidence to support social norm moderation in this relationship, as neither descriptive nor injunctive norms significantly moderated the association between *exercise habits* and *body image*.

However, the relationship between *nutrition habits* and *body image* was adversely mediated by descriptive norms (H3), suggesting that those who have a poor body image are

more vulnerable to peer pressure about their food preferences. On the other hand, participants who had a more positive body image appeared to make nutrition decisions more independently of what their peers thought. *Injunctive norms* also played a role, but less significantly. This confirms the idea that perceived societal expectations can influence *nutrition habits*. These results support previous literature stating that negative body image is associated with increased sensitivity to social influences on eating behavior (Polivy & Pliner, 2015; Gelfand & Harrington, 2015).

Perceived social norms

The study also looked at how exposure to *fitness-related TikTok content* affected the *perceived social norms* of the participants. Hypothesis 4 was rejected because neither the descriptive nor the injunctive norms showed any noticeable effects. This implies that people's perceptions of what other people do or expect in terms of health practices are not reinforced by merely watching fitness material on TikTok. However, there were gender disparities in the perceived norms: men chose more muscular body types, reflecting usual gendered standards, while women tended to choose slimmer body types as normal. Gender differences show how social media may reinforce preexisting normative ideals, even when exposure did not alter perceived norms overall.

These results are consistent with previous literature arguing that social norms are not easily modified by one-time exposure to social media content (Chung & Rimal, 2016; Kredentser et al., 2012). Although social media, including TikTok, may contribute to norm reinforcement (Avella, 2023), watching fitness videos does not directly alter perceptions of what is socially desirable or normal behavior (Friedman et al., 2022). The perceived gender differences are consistent with the stereotypes described by Carrotte et al. (2017) and Bozsik et al. (2018), in which men are attributed a more muscular ideal image and women a leaner

ideal image. This also shows that the effects of social media are quite unstable and hard to measure.

Research limitations

Although this study offers valuable insights into how users are affected by exposure to fitness-related TikTok content, it is crucial to recognize some limitations that could influence how the results are interpreted and applied more broadly. Firstly, the division between male and female participants in the sample was not equal. Conclusions about gender moderation effects need to be regarded with caution because of the differential distribution of male and female individuals. Future research should strive for gender-balanced samples. Additionally, snowball sampling was used in order to gather participants. One significant downside of snowball sampling is that it frequently produces a non-representative sample since participants tend to refer individuals from their own network. This can result in sampling bias and reduce the generalizability of the findings.

Next to that, the survey participants needed to fill in a self-reporting survey. Especially, a self-reporting survey about social media exposure can be problematic. First of all, people do not accurately remember how much or how often they used social media. People might alter their answers to appear more health-conscious, balanced, or responsible. There can be a lack of specificity. It does not capture, for example, the duration or engagement level of the participant. Therefore, the data can be distorted. The responses might not accurately reflect the participants' true viewpoints or behaviors, which could compromise the validity of the results.

Additionally, perceived social norms were measured using five different body types. For future research, perceived social norms should be measured in a different way to establish reliable results. For example, using seven different body types to include more body types. When it comes to using single-item scales, there can be some problems. If the respondent

misunderstands the question, there is no backup question. Next to that, single-item scales may not detect subtle differences between participants.

Lastly, three out of five personality traits had an extraordinarily weak correlation between the two items. It has been checked if the items were reversed correctly, and there was dispersion present between the items. This implies that respondents might not view the two items as evaluating the same concept. Some possible factors are different item phrasing, misinterpretation of the reversed wording, or a general lack of reliability when applying only two items to describe and measure complicated personality traits. Both elements per personality traits were kept in the study because there were only two available, and eliminating one would compromise construct coverage.

To increase internal consistency, future studies could consider rewording the items or adding more indicators. For example, *does a thorough job* that measured *conscientiousness*, could be interpreted wrong by the respondents, leading to a weak correlation between the two items. Therefore, only the results from the personality traits *Extraversion* and *Neuroticism* can be seen as reliable results.

Practical implications

Since *exposure to fitness-related TikTok content* seems to affect *body image* and is entwined with *perceived social norms*, media literacy education must be implemented. Young people should be taught in schools and colleges how media-driven social comparisons and cultural expectations might impact their body image and health-related habits. Critical viewing abilities may encourage healthier material engagement and lessen the impact of negative social norms.

The results imply that *perceived social norms* have a greater influence on *nutrition habits* than on *exercise habits*. *Descriptive and injunctive norms* should therefore be addressed in public health campaigns and dietary education initiatives aimed at young people,

particularly for those with poorer body image. Normalizing a wider variety of eating habits, for example, may lessen the pressure to follow unrealistic or rigid dietary guidelines that are frequently seen online.

Contrary to popular belief, this study revealed no proof that *exposure to fitness TikTok* negatively impacts *body image*. Therefore, generalizations concerning social media's negative effects should be avoided in public debate and policy. Individual vulnerability and certain content types, for instance, users who already struggle with a negative body image or those who are impacted by perceived norms, should be the main focus instead. There is no need to overgeneralize in social media discourse. In contrast to the work of Haidt (2024) , the effects of social media are very complex, and not all social media platforms can be merged into one term.

Conclusion

This study explored the impact of fitness-related TikTok content on young users' body image, exercise, and nutrition habits. No direct effect on behavior was identified; however, *body image* surfaced as a significant mediator, indirectly influencing health practices via internalized ideals and *perceived social norms*. These effects were not moderated by *personality* or *gender*. Interestingly, rather than changing social norms, fitness material seems to strengthen them.

These findings highlight the significance of media literacy and norm-based public health communication in addressing the intricate role of social media in influencing well-being. As demands to limit young users' access to sites such as TikTok intensify, this study indicates that a more nuanced strategy is required. Given the diversity of content, user engagement across platforms, and the instability of the effects of social media, a social media ban would not be necessary. To support evidence-based solutions, future studies should instead look into platform-specific characteristics and user experiences.

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Appendices

AI Statement

During the preparation of this work, the author used ChatGPT-4 in order to structure the paper, provide RStudio codes and fix errors, interpret outputs from RStudio, and summarize results to be able to write a clear conclusion. Quillbot has been used to paraphrase certain sentences, and Mendeley Reference Manager has been used for in-text references. It will be explained per section what tool is used and for which purpose:

- Abstract: ChatGPT to help summarize the most important aspects into one text.
- Introduction: Quillbot for paraphrasing sentences, ChatGPT to check for repetitive sentences.
- Theoretical framework: Quillbot for paraphrasing sentences, ChatGPT to check for repetitive sentences, and connecting sentences between paragraphs to make it coherent.
- Methods: Quillbot for paraphrasing sentences
- Results: ChatGPT to help academically report the output of RStudio
- Discussion: Quillbot for paraphrasing sentences, ChatGPT to help summarize and interpret the results.
- References: Mendeley Reference Manager

After using this tool/service, the author reviewed and edited the content as needed and takes full responsibility for the content of the work.

Appendix A: Questionnaire

#Fitspiration: The effects of fitness TikTok content on young users

Start of Block: Default Question Block

InformedConsent You are being invited to participate in a research study titled #Fitspiration: The effects of fitness TikTok content on young users. This study is being done by Simone Russchen from the Faculty of Behavioural, Management and Social Sciences at the University of Twente. The survey takes 3–5 minutes and explores how fitness TikTok content may impact body image and excercising and nutrition habits. Your participation is anonymous and voluntary — you may skip any question or withdraw at any time. Data will be used for research and educational purposes and deleted by September 1, 2025. There are no known risks, but as with all online studies, data breaches are possible. We will protect your privacy by keeping data anonymous, securely stored, and accessible only to the researcher and supervisor. For questions, contact Simone Russchen: s.russchen@student.utwente.nl. Do you understand and agree to participate in this study?

- ○ Yes, I understand and want to participate (1)
- ○ No, I do not wish to participate (2)

Skip To: End of Survey If InfCons = No, I do not wish to participate

End of Block: Default Question Block

Start of Block: Demographic questions

IntroDem The following questions are about you as a person. The responses will remain anonymous and will not be identifiable.

Age What is your age (in years)?

- ○ 17 or younger (1)
- ○ 18 (2)
- ○ 19 (3)
- ○ 20 (4)
- ○ 21 (5)
- ○ 22 (6)
- ○ 23 (7)
- ○ 24 (8)
- ○ 25 (9)
- ○ 26 or older (10)

Skip To: End of Survey If Age = 17 or younger

Skip To: End of Survey If Age = 26 or older

Gender What is your gender?

- ○ Male (1)
- ○ Female (2)
- ○ Non-binary / third gender (3)
- ○ Prefer not to say (4)

Skip To: End of Survey If Gender = Non-binary / third gender

Skip To: End of Survey If Gender = Prefer not to say

TikTokAccount Do you have a TikTok account?

- ○ No (1)
- ○ Yes (2)

Skip To: End of Survey If TikTokAccount = No

End of Block: Demographic questions

Start of Block: Main Survey Scales

FitnessTikTokExpo The following questions are about the exposure to fitness TikTok content. Please watch the three TikTok videos. You have to indicate the frequency in which you see similar content when scrolling on TikTok.

FitnessTikTokExpo How often do you see similar content?

	Never (1)	Once a week (2)	A few times a week (3)	Once a day (4)	Multiple times a day (5)
Video 1 (1)	○	○	○	○	○

Page Break

FitnessTikTokExpo How often do you see similar content?

	Never (1)	Once a week (2)	A few times a week (3)	Once a day (4)	Multiple times a day (5)
Video 2 (1)	○	○	○	○	○

Page Break

FitnessTikTokExpo How often do you see similar content?

	Never (1)	Once a week (2)	A few times a week (3)	Once a day (4)	Multiple times a day (5)
Video 3 (1)	○	○	○	○	○

Page Break

PersonalityTraits The following questions are about your personality traits. Please respond to the following statements. I see myself as someone who…

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
…is reserved (1)	○	○	○	○	○
…is generally trusting (2)	○	○	○	○	○
…tends to be lazy (3)	○	○	○	○	○
…is relaxed, handles stress well (4)	○	○	○	○	○
…has few artistic interests (5)	○	○	○	○	○
…is outgoing, sociable (6)	○	○	○	○	○
…tends to find fault with others (7)	○	○	○	○	○
…does a thorough job (8)	○	○	○	○	○
…gets nervous easily (9)	○	○	○	○	○
…has an active imagination (10)	○	○	○	○	○

Page Break

Display this question:

If Gender = Female

PerSocialNormsWomen The following questions are about perceived social norms. You will get to see 5 body types per question; you have to indicate which body type fits best to your opinion. Which body type fits best with your imagination of how people look in the real world (from left to right; 1, 2, 3, 4 or 5)? ..... fits with my imagination of how people look in the real world

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Picture 1 (1)	○	○	○	○	○
Picture 2 (2)	○	○	○	○	○
Picture 3 (3)	○	○	○	○	○
Picture 4 (4)	○	○	○	○	○
Picture 5 (5)	○	○	○	○	○

Display this question:

If Gender = Male

PerSocialNormsMen The following questions are about perceived social norms. You will get to see 5 body types per question; you have to indicate which body type fits best to your opinion. Which body type fits best with your imagination of how people look in the real

world (from left to right; 6, 7, 8, 9 or 10)? ..... fits with my imagination of how people look in the real world

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Picture 6 (1)	○	○	○	○	○
Picture 7 (2)	○	○	○	○	○
Picture 8 (3)	○	○	○	○	○
Picture 9 (4)	○	○	○	○	○
Picture 10 (5)	○	○	○	○	○

Display this question:

If Gender = Female

PerSocialNormsInWom Which picture fits best with your imagination of what we are supposed to look like as expected from society (from left to right; 1, 2, 3, 4 or 5)? ..... fits with my imagination of what society expects us to look like

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Picture 1 (1)	○	○	○	○	○
Picture 2 (2)	○	○	○	○	○
Picture 3 (3)	○	○	○	○	○
Picture 4 (4)	○	○	○	○	○
Picture 5 (5)	○	○	○	○	○

Display this question:

If Gender = Male

PerSocialNormsInMen Which picture fits best with your imagination of what we are supposed to look like as expected from society (from left to right; 6, 7, 8, 9 or 10)? ..... fits with my imagination of what society expects us to look like

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Picture 6 (1)	○	○	○	○	○
Picture 7 (2)	○	○	○	○	○
Picture 8 (3)	○	○	○	○	○
Picture 9 (4)	○	○	○	○	○
Picture 10 (5)	○	○	○	○	○

Page Break

BodyImage The following questions are about body image. Please indicate how you feel right now, at this very moment. On the dots you need to fill in the answer e.g: Right now I feel *extremely satisfied* with my weight. Right now I feel…

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
…satisfied with my physical appearance (1)	○	○	○	○	○
…satisfied with my body size and shape (2)	○	○	○	○	○
…satisfied with my weight (3)	○	○	○	○	○
…satisfied with my attractiveness (4)	○	○	○	○	○
…more satisfied with my looks than I usually feel (5)	○	○	○	○	○
…satisfied with my looks compared to an average person (6)	○	○	○	○	○

Page Break

ExercisingHabits These questions are about your exercising habits and motivation. Please respond to the following statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I plan exercise sessions during my week (1)	○	○	○	○	○
I follow a consistent routine for physical activity (2)	○	○	○	○	○
I exercise, even if I do not feel like it (3)	○	○	○	○	○
I make time for exercise, even when I am busy (4)	○	○	○	○	○
I engage in physical activity most days of the week (5)	○	○	○	○	○
Exercising is part of my weekly schedule (6)	○	○	○	○	○
I prioritize physical activity in my daily life (7)	○	○	○	○	○

Page Break

NutritionHabits The last questions are about your nutrition habits. Consider your eating habits in an average week. Please respond to the following statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I eat fruits regularly (1)	○	○	○	○	○
I eat vegetables regularly (2)	○	○	○	○	○
I eat whole grains regularly (3)	○	○	○	○	○
I use natural sweeteners in my diet (4)	○	○	○	○	○
I drink water regularly (5)	○	○	○	○	○
I eat low-fat dairy products regularly (6)	○	○	○	○	○
I eat legumes regularly (e.g beans, lentils, peas (7)	○	○	○	○	○
I eat foods that are low in saturated fats and cholesterol regularly (8)	○	○	○	○	○
I eat food such as fish, avocado, nuts and seeds regularly (9)	○	○	○	○	○
I eat foods that are boiled, steamed, grilled, or poached regularly (10)	○	○	○	○	○

End of Block: Main Survey Scales

Start of Block: End

ClosingNotes Thank you for participating in this survey. This survey was about identifying the effects that fitness TikTok content can have on young users. If you have any questions or comments about the survey, please enter them below.

_____

_____

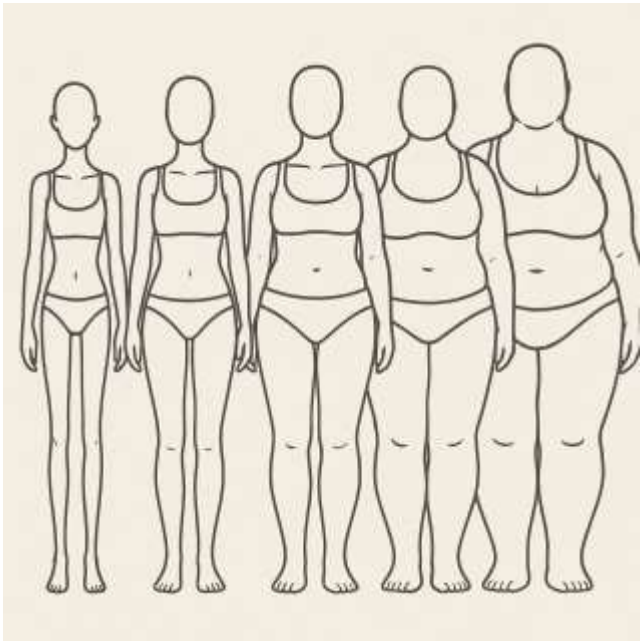
_____

_____

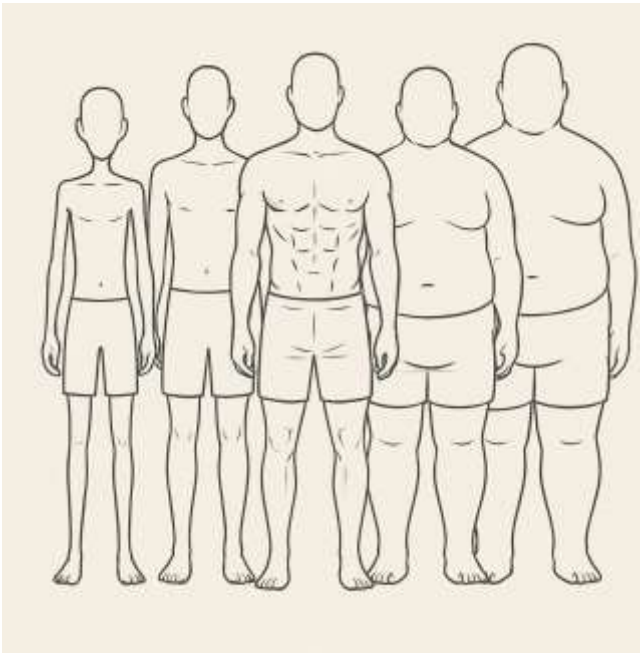
_____

End of Block: End

Appendix B: female and male body types



Women body types from 1 to 5



Male body types from 1 to 5