The Effect of Exposure to Fitspiration TikTok Videos on Consumer Well-being

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ABSTRACT

In today's world, physical inactivity is a serious concern. "Fitspiration" content on social media may have an impact on the behaviour of the consumer. A self-reporting online survey (n = 114) was conducted to investigate the differences between how men and women's attitudes, norms, intentions, and exercise behaviour are influenced by being exposed to Fitspiration content on TikTok. Using the Theory of Planned Behaviour (TPB) the results show that being exposed to Fitspiration TikTok videos did not directly impact one's exercise behaviour. However, exposure to Fitspiration affected men's subjective norms, whereas both exercise attitudes and subjective norms of women were impacted by viewing such content. These findings might suggest that men may be less susceptible to the impact of social media when it comes to engaging in physical activity. Furthermore, attitudes toward exercising impacted exercise intentions in both men and women, while subjective norms also significantly impacted exercise intention in women. Additionally, exercise intention was found to significantly predict exercise frequency in both men and women. These findings contribute to a better understanding of the role of social media in shaping exercise behaviour and highlight the importance of considering gender differences in future interventions and campaigns promoting physical activity.

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Keywords
Social Media, Fitspiration, TikTok, Theory of Planned Behaviour, Consumer Well-being.

1. INTRODUCTION

In the Netherlands, the average amount of time spent on social media is roughly 2 hours per day (114 minutes), with youngsters spending over 2,5 hours (161 minutes) on social media every day (Oosterveer, 2023). Social media platforms provide access to a range of trendy content related to health and fitness (Carrotte et al., 2015). A specific category of health and fitness-related content on social media platforms is "Fitspiration", the amalgamation of the words "fitness" and "inspiration". Fitspiration content consists largely of slim and athletic women, lean and muscular men, and content that promote healthy diets and exercising to achieve a certain look, instead of health-driven motivations (Berry et al., 2023; Boepple & Thompson, 2016). However, having external fitness objectives undermine physical activity levels and quality of life (Gillison et al., 2007). Additionally, Fitspiration posts are often found to emphasize appearance-related standards, sexual allusion, and promote restrictive food habits (Alberga et al., 2018).

In the last few decades, Western populations' health has been adversely affected by physical inactivity (Organisation, 2003). However, regular exercise is crucial as it boosts overall body health and promotes a general feeling of well-being (Abou Elmagd, 2016). The paradigm of weight-focused approaches to health has negative effects on psychological well-being and might lead to chronic physical harm, such as metabolic damage and weight fluctuations (Marks et al., 2020).

The effects of Fitspiration content via social media on women have been widely investigated (Choo, 2022; Fardouly et al., 2018; Prichard et al., 2020; Robinson et al., 2017; Tiggemann & Zaccardo, 2015), while Fitspiration exposure has rarely been researched in men (Fatt et al., 2019). Especially a comparative study between men and women has not been researched before. Nonetheless, Fitspiration content containing various statements may elicit different responses from men and women (Arigo et al., 2021).

Limited research has been done on the role of Fitspiration on exercise frequency (Pryde & Prichard, 2022). Thus far, the predominant focus of studies investigating Fitspiration content on social media have been primarily on Instagram (Arigo et al., 2021; Prichard et al., 2020; Robinson et al., 2017), since there is a significant amount of Fitspiration content available on the platform and its widespread usage.

Previous research shows that body image is often more negatively affected by graphic platforms like Instagram than by text-based platforms such as Facebook (Vandenbosch et al., 2022). However, since its debut in September 2016, TikTok has become a widespread phenomenon among young people (Yuan, 2021). TikTok, owned by Byte Dance, is a social network service for sharing videos and aims to encourage users' creativity while bringing them joy (TikTok, 2023). It is a platform that provides users with the ability to create content instead of the company itself (Yang & Zilberg, 2020). With over 1.7 billion active users globally in 2022, TikTok surpassed Instagram in terms of user count in 2021 (Buchholz, October 2022). This highlights the need for more insight into the effects of Fitspiration TikTok videos on consumers' well-being.

The present research addresses this gap in the literature by performing a comparative study, exploring the influence of Fitspiration TikTok videos on exercise frequency. Inspired by the Theory of Planned Behaviour (TPB) (Ajzen, 1991), the present research models the role of exposure to Fitspiration TikTok videos on attitudes toward exercising, norms toward exercising, and perceived behavioural control as predictors of exercise intention, which impacts exercise frequency.

The paper is divided into 7 sections. The second section provides a review of the relevant literature. Next, a conceptual model is presented, and several hypotheses are formulated. In section four the research methodology will be provided, after which the findings of the study based on the conceptual model are outlined. Section six focuses on the discussion, the theoretical and practical implications, and suggestions for future research. Finally, the last section presents the conclusion.

2. LITERATURE REVIEW

The conceptual framework is based on a review of the literature on Fitspiration and the Theory of Planned Behaviour. The effects of engaging with Fitspiration via social media on consumers' mental well-being will be discussed as well as its impact on exercise behaviour. Additionally, a review of the existing literature will be conducted on TPB to provide justification for its relevance to exercise behaviour.

2.1 Exposure to Fitspiration

Fitspiration involves sharing or consuming images, quotes, and tips related to fitness and nutrition (Tiggemann & Zaccardo, 2015), which connects individuals who share their interest in Fitspiration on social media (Carrotte et al., 2017). Fitspiration content is aimed to motivate individuals to adopt healthy and active lifestyles (Boepple et al., 2016). Engaging with Fitspiration content enhances social support and acts as a source to obtain information related to health (Raggatt et al., 2018). However, findings suggest that although exposure to Fitspiration images may enhance viewers' motivation to participate in healthy behaviours, it may also portray possible harmful themes (Carrotte et al., 2017).

Tiggemann and Zaccardo (2015) indicated that Fitspiration images might have a negative impact on body image, as exposure to such images resulted in increased negative mood and body dissatisfaction, while confidence in one's appearance decreased as compared to exposure to travel images. More literature (Fatt et al., 2019; Griffiths & Stefanovski, 2019; Prichard et al., 2020) explore these effects. The study conducted by Fatt et al. (2019) analysed the correlation between how often one engages with Fitspiration content on Instagram, and men's discontentment with their bodies, extrinsic fitness motivation, and fitness to increase their health. Based on the findings, it was concluded that while the frequency of consuming Fitspiration content did not have an immediate correlation with body contentment or motivation to workout, there were notable indirect effects through increased internalisation of the muscular ideal and the tendency to compare one's looks with others (Fatt et al., 2019). Viewing content of ideal male physiques may have a detrimental impact on the body satisfaction of young men (Blond, 2008). In addition, the meta-analysis by Barlett et al. (2008) indicated that being exposed to muscular ideals was linked to decreased levels of body satisfaction and self-esteem, as well as increased levels of negative psychological and behavioural consequences among men. Fardouly et al. (2018) found that a higher levels of exposure to Fitspiration images on Instagram was linked to increased concerns regarding body image in women, and this correlation is affected by factors such as internalisation, propensity to compare one's overall looks, and comparing one's looks to females depicted in Fitspiration content.

Further research explored that being exposed to fit-normative content on Instagram can potentially promote unhealthy reasons for working out (Wood & Pila, 2022) and may lead to compulsive exercising (Wu et al., 2022). Specifically, Raggatt et al. (2018) conducted a survey (N=180) where 17.7% of the respondents were categorised being at a heightened risk for the development of an eating disorder, 17.4% stated they were experiencing a significant degree of psychological distress, and

10.3% were identified as being sensitive to compulsive fitness behaviours. Gender could be a significant factor in Fitspiration, affecting both the chances of being exposed to Fitspiration, as well as the influence of such exposure (Griffiths & Stefanovski, 2019). Choo (2022) conducted a review of relevant literature investigating the influence of Fitspiration on young women, suggesting that the existing literature does not support the idea that interacting with Fitspiration reduces the harmful consequences of comparison with others and self-objectification.

However, only a few studies explore the impact of Fitspiration content on exercise frequency. On one hand, Welker et al. (2019) found that students who had access to fitness pages demonstrated higher levels of exercise more than students who did not. On the other hand, Chasler (2016) demonstrated that those who viewed Fitspiration images actually showcased lower levels of exercise than those who did not. The present study complements these studies by examining the influence of exposure to Fitspiration TikTok videos on the antecedents of exercise intentions and its impact on exercise frequency.

2.2 Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB) has been extensively discussed in the literature. TPB explains how attitude, subjective norms, and perceived behavioural control, affect the end consumers' behaviour (Ajzen, 1991). Attitudes refer to one's general assessment about engaging in a certain behaviour, while subjective norms evaluate the influence of others on a person to behave in a certain way or not (Ryan E Rhodes & Kerry S Courneya, 2003). Perceived behavioural control involves an individual's assessment of their ability to engage in the behaviour (Eng et al., 2022).

In general, empirical studies indicate that TPB has strong predictive power for various behaviours (Kautonen et al., 2013; Tonglet et al., 2004), including exercise and physical activity (Eng et al., 2022; Hagger et al., 2002). Hausenblas et al. (1997) discovered significant effect sizes in various relationships: intention and exercise behaviour, attitude and intention, attitude and exercise behaviour, perceived behavioural control and intention, and perceived behavioural control and exercise behaviour were all characterized by large effect sizes. The connection between subjective norm and intention was moderate, whereas the relationship between subjective norm and exercise behaviour was found to be negligible (Hausenblas et al., 1997). Furthermore, Boudreau and Godin (2007) used the TPB to predict exercise intention among obese adults and revealed that TPB accounted for 66% of the variation in exercise intentions, where perceived behavioural control and attitude significantly influenced intention. Moreover, the results by Mok and Lee (2013) demonstrated that the subjective norm and perceived behavioural control were found to significantly predict intention to exercise (53.1%), while TPB was responsible for 26.6% of the variance in predicting exercise behaviour.

3. HYPOTHESES DEVELOPMENT

In the following section, the conceptual model developed for this research will be presented with a brief discussion of each hypothesis.

3.1 Conceptual Model

The present study examines the impact of exposure to Fitspiration TikTok videos on the exercise intentions and exercise frequency of the consumer, based on the constructs of the TPB. In line with Eng et al. (2022), this research conceptualizes the influence of exposure to Fitspiration TikTok videos on the attitudes toward exercising, subjective norms toward exercising, and perceived behavioural control toward exercising. This in turn has an impact on the intention to exercise, which predicts exercise frequency. In the following section, a

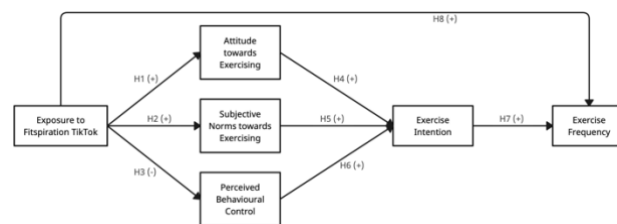detailed discussion is provided on the proposed relationships and hypotheses.

Figure 1: Conceptual Model

3.2 Exposure to Fitspiration

Fitspiration refers to photos and videos on social media that aim to encourage viewers to adopt a healthier way of living (Tiggemann & Zaccardo, 2015). Eng et al. (2022) demonstrated that exposure to Fitspiration content was linked to greater perceptions of affective attitudes toward exercising and descriptive norms, which was in turn positively related to actual engagement in exercise. However, Fitspiration exposure did not seem to influence perceived behavioural control toward exercising (Eng et al., 2022). This research proposes that greater exposure to Fitspiration TikTok videos will be positively related to Attitudes toward Exercising and Subjective Norms toward Exercising, while Exposure to Fitspiration content will be negatively associated with Perceived Behavioural Control toward exercising.

H1: Exposure to Fitspiration content is positively related to attitudes toward exercising.

H2: Exposure to Fitspiration content is positively related to subjective norms toward exercising.

H3: Exposure to Fitspiration content is negatively related to perceived behavioural control.

3.3 Antecedents of TPB

Attitudes toward exercising, norms toward exercising, and perceived behavioural control affect behavioural intention, this in turn significantly predicts actual behaviour (Armitage & Conner, 2001). In a study conducted by Kerner et al. (2001) attitudes toward fitness were significantly associated with intentions to exercise. Furthermore, Rhodes et al. (2006) found that people's attitude toward exercise and their perceived behavioural control had an influence on their intentions, which is in line with the study of Hausenblas et al. (1997). In addition, social norms of friends and family members have a great impact on one's intentions to perform a certain behaviour (Rivis et al., 2009). Research by Mok and Lee (2013) demonstrated that subjective norms together with perceived behavioural control were significant factors influencing physical activity levels. Prior research has demonstrated that perceived behavioural control had a significant positive impact on the intention to adopt a healthy way of life (Banerjee & Ho, 2020). In particular, Lu et al. (2022) found that perceived behavioural control was the most potent predictor in children's exercise and Armitage (2005) illustrated that perceived behavioural control substantially predicted both intentions to exercise and actual exercise behaviour. Based on these findings, the following hypotheses are developed.

H4: Attitudes toward exercising are positively related to exercise intention.

H5: Norms toward exercising are positively related to exercise intention.

H6: Perceived behavioural control is positively related to exercise intention.

3.4 Exercise Intentions

Increasing one's intention to engage in a behaviour will increase the probability of actually carrying out that behaviour (Ajzen & Madden, 1986). Rhodes et al. (2006) employed the TPB to explore the exercise domain. The results showed that individual's intention to exercise was a strong predictor of their actual participation in physical activity (Rhodes et al., 2006). This is consistent with Rivis and Sheeran (2003) who investigated TPB in young people and found significant correlations between intentions and exercise behaviours. Therefore, it is hypothesized that Exercise Intentions are positively related to Exercise Frequency.

H7: Exercise intention is positively related to exercise frequency.

3.5 Fitspiration Effect

Looking at Fitspiration pages could be advantageous for people as it might inspire them to engage in more physical activity and strive for objectives associated with building muscle (Welker et al., 2019). Individuals have a tendency to assess themselves by making comparisons with others who have superior physical appearance, and then implement strategies to address any perceived deficiencies (Fardouly et al., 2017). Therefore, Fitspiration might promote unhealthy exercise motives related to appearance instead of health. Wu et al. (2022) discovered a notable positive correlation between involvement with Fitspiration and healthy eating content and higher levels of compulsive exercise. This is consistent with the findings of Holland and Tiggemann (2017) who investigated disordered eating and compulsive exercise in women exposed to Fitspiration. Although the motives for exercising might not be to improve one's health, it is hypothesized that exposure to Fitspiration TikTok videos is positively related to exercise frequency.

H8: Fitspiration TikTok videos are positively related to exercise frequency.

The present study examines the difference in impact of the proposed model between men and women. Men and women spend different amounts of time online (Cataldo et al., 2022). Further research shows that men tend to have higher behavioural intentions than women (Mok & Lee, 2013). Arigo et al. (2021) found that as a reaction to both traditional Fitspiration messages and pictures free from text, men exhibited higher exercise motivation and behaviour compared to women. Another study conducted by Newson and Kemps (2007) found that women primarily engaged in exercise for health-related purposes, whereas men emphasized the importance of challenge as their primary motivator. This study aims to discover any difference in influence of Fitspiration TikTok videos on exercise behaviour between men and women.

4. METHODOLOGY
4.1 Population and Sampling

A self-report online questionnaire was distributed for this quantitative study. The survey aimed to explore the influence of TikTok videos on exercise behaviour. Therefore, the present study found 50 men (43.9%) and 64 women (56.1%) who use TikTok. Since these individuals may be difficult to identify and to recruit, the snowball-sampling method has been used which means that current respondents recruit new respondents from their own network of acquaintances (Berndt, 2020). However, random sampling, identifying participants at random from the relevant population, is preferred to minimize bias caused by shared factors among study participants (Emerson, 2015). Therefore, to reach the aimed number of participants while at the same time limiting the potential bias,

this research used both snowball-sampling as well as random sampling. The respondents ranged from all kinds of ages, with the biggest age group being 19-22 years old (57.0%). Most of the population spend around 1-2 hours a day on TikTok (46.5%). Further information on the demographics can be found in Table 1.

Table 1: *Demographic Information of the Participants (n = 114)*

Variable	Value	Count	%
Gender	Male	50	43.9
	Female	64	56.1
Age	< 16 years old	1	0.9
	16-18 years old	12	10.5
	19-22 years old	65	57.0
	23-26 years old	23	20.2
	27-30 years old	11	9.6
	> 30 years old	2	1.8
Weight	< 50kg	4	3.5
	50-59kg	14	12.3
	60-69kg	31	27.2
	70-79kg	29	25.4
	80-89kg	23	20.2
	90-100kg	5	4.4
	> 100kg	8	7.0
Time Spent on TikTok	None	3	2.6
	< 1 hour a day	30	26.3
	1-2 hours a day	53	46.5
	3-4 hours a day	25	21.9
	5-6 hours a day	1	0.9
	> 6 hours a day	2	1.8

4.2 Survey Instruments and Measures

The items used in the survey have been drawn from existing literature. A cover page with the necessary information has been provided. The first section included several opening questions regarding TikTok usage, which were used to screen out any participants who did not use TikTok. The subsequent sections of the survey focused on the variables outlined in the conceptual model. In the last section, the participants were asked to provide their socio-demographic information.

4.2.1 Frequency of Exposure to Fitspiration

To measure the frequency of exposure to Fitspiration, two items are adapted from Pasko and Arigo (2021). To gain a deeper comprehension of the exposure to Fitspiration, the survey included items that evaluate intentional and unintentional TikTok viewing separately, in terms of the number of days per week. The available answers included "less than one day per week," "1-2 days per week," "3-4 days per week," "5-6 days per week," "once per day," and "more than once per day."

4.2.2 Exercise Attitudes

Four 5-point semantic differential scales were obtained from Lowe et al. (2002) to measure attitudes toward exercise. Contemporary research differentiates attitudes into *affective*, perceptions toward behaviour based on emotions and affect, and *instrumental* components, the perceived costs and benefits related to a certain behaviour (Hamilton & Johnson, 2020). Therefore, to create an effective attitudes scale, the two items unenjoyable-enjoyable and boring-interesting were combined. Additionally, an instrumental attitudes scale was created by combining the two items, harmful-beneficial and

unhealthy-healthy. The statement "Exercising in my leisure time over the next 6 months would be . . ." was displayed after which four 5-point attitude measures were presented.

4.2.3 Subjective Norms

To assess subjective norm, five items adapted from Ryan E Rhodes and Kerry S Courneya (2003) have been used. *Injunctive* norm refers to the belief that significant others approve or disapprove of one's behaviour, while *descriptive* norm involves the influence of other people's behaviour in particular situations (Schultz et al., 2007). Participants responded to items such as "My friends would approve if I exercised regularly in the next 6 months" for injunctive norm and "Most of my family members exercise regularly" for descriptive norm. It was measured on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

4.2.4 Perceived Behavioural Control

The measurement of perceived behavioural control included three items of Ryan E. Rhodes and Kerry S. Courneya (2003). The following items have been assessed on a 5-point scale with 1 (*strongly disagree*) and 5 (*strongly agree*): "Whether or not I exercise regularly in the next 2 weeks is entirely up to me" and "Exercising in the next 2 weeks feels beyond my control". The third item, "How much personal control do you feel you have over exercising in the next 2 weeks", has been assessed on a 5-point scale with 1 (*no control*) and 5 (*complete control*).

4.2.5 Exercise Intentions

Three items on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) obtained from Zhu et al. (2017) were used to assess exercise intentions of the participants. The items consisted of the statements "I am highly motivated to exercise regularly within the next month", "I have a strong intention to exercise regularly within the next month," and "I am fully dedicated to exercising regularly within the next month."

4.2.6 Exercise Frequency

Three items adapted from Cho (2016) were used to measure the current frequency of exercise. The first question was "How often do you exercise for at least 30 minutes in your free time per week?" with answer given on a 5-point scale ranging from 1 (*never*), to 5 (*every day)*. The second question was "What is the average duration of a workout in your free time?", with answers ranging from 1 (*less than 30 minutes*) to 5 (*more than 120 minutes*). The third question was "How long have you already participated in exercising?", with answer ranging from 1 (*less than 1 month*) to 5 (*more than 6 months*).

4.3 Data Collection and Analysis

The data collection process involved distributing the survey link through group chats and sharing it on Instagram and LinkedIn. The data collection started in May and took approximately two weeks. For the data analysis, the statistical software SPSS (version 28) was used. Individuals who did not use TikTok were excluded from the dataset, after which an Exploratory Factor Analysis was conducted to explore the underlying factors. The reliability of the identified factors was assessed using Cronbach's Alpha. To investigate the conceptual model depicted in Figure 1, a Correlation Analysis was performed along with a Multiple Regression Analysis.

5. RESULTS

5.1 Exploratory Factor Analysis (EFA)

To assess the level of influence exerted by the items on the variable, an Exploratory Factor Analysis (EFA) has been performed. The stability of the factor loadings was assumed for factor loadings above .4, while suppressing of loadings below .3 (Guadagnoli & Velicer, 1988). All items displayed factor loadings above .3 and .4, indicating their stability. However, for Subjective Norms toward Exercising the two items SN2 (.450) and SN5 (.493) displayed significant low factor loadings compared to the other items, suggesting these items are suboptimal. Therefore, these items have been removed, resulting in acceptable results for further validity and reliability tests. To examine the construct validity, the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's sphericity test have been conducted. The KMO and Bartlett's test results provided moderate values, ranging from .5 to .76 (see Table 2). These results are considered satisfactory as they surpass the threshold of .5 (Chen et al., 2019). The reliability of the items was evaluated using Cronbach's Alpha (see Table 2). Following Seibert et al. (2020), a Cronbach's alpha above .5 is considered acceptable. All constructs exhibited scores exceeding the threshold of .5, suggesting reliability of the items. Furthermore, the Average Variance Extracted (AVE) was calculated. An AVE score exceeding .5 is typically deemed acceptable (Purwanto, 2021). All constructs displayed an AVE of .5 or higher.

5.2 Correlation Analysis

Before conducting the Correlation Analysis, all items belonging to a construct were coded into one variable. The Correlation Analysis (see Table 3) portrayed several significant correlations among the variables. There is a notable positive correlation between Exercise Intentions and Exercise Frequency (r = .561). Moreover, Attitudes toward Exercising (r = .515) and Subjective Norms toward Exercising (r = .460) exhibited significant positive correlations with Exercise Intentions. Additionally, Exposure to Fitspiration TikTok Videos displayed a positive correlation with Attitudes toward Exercising (r = .207), Subjective Norms toward Exercising (r = .267), and Exercise Frequency (r = .218).

5.3 Hypotheses Testing

Multiple Regression Analysis was employed to test the hypotheses derived from the conceptual model. The data file with the total population was split up between men and women. In the following section, the results of the Multiple Regression Analysis for the male and female population will be presented to demonstrate the differences in relationships between gender.

5.3.1 Male

In case of the male population, the findings indicate that out of the eight hypotheses, only three were found to be statistically significant (see table 4). The regression analysis revealed a positive, but insignificant relationship between Exposure to Fitspiration TikTok and Attitudes toward Exercising (β = .112, p = 0.440) and Perceived Behavioural Control (β = .083, p = .567). However, Exposure to Fitspiration had a positive, significant relationship with Subjective Norms toward Exercising (β = .328, p = 0.020). Thus, H1and H3 are not supported, while H2 is supported. Furthermore, Attitudes toward Exercising (β = .511, p = < 0.001) was found to have a positive, significant impact on Exercise Intentions. However, Subjective Norms toward Exercising (β = .212, p = .086) and Perceived Behavioural Control (β = .028, p = .818) showed a positive, insignificant influence on Exercise Intention. Therefore, H4 is supported, while H5 and H6 are not supported. Additionally, Exercise Intention (β = .677, p = < 0.001) was found to influence Exercise Frequency significantly and positively. However, Exposure to Fitspiration TikTok (β = .030, p = .785) exhibited a positively insignificant effect on Exercise Frequency. Consequently, H7 is supported, while H8 is not supported.

5.3.2 Female

In the context of the female population, the findings demonstrate that five out of the eight hypotheses were found to be statistically significant (see Table 5). Exposure to Fitspiration TikTok and both Attitudes toward Exercising (β = .274, p = .028) and Subjective Norms toward Exercising (β = .338, p = .006), were found to be positively related. However, Exposure to Fitspiration TikTok had a negative but nonsignificant effect on Perceived Behavioural Control (β = -.061, p = .630). Thus, H1 and H2 are supported, while H3 is not supported. Furthermore, Attitudes toward Exercising (β = .403,

p = < .001) and Subjective Norms toward Exercising (β = .385, p = <.001) were found to have a positive and significant impact on Exercise Intentions, while Perceived Behavioural Control (β = -.001, p = .989) showed a negative and insignificant influence on Exercise Intention. Therefore, H4 and H5 are supported, while H6 is not supported. Moreover, Exercise Intention (β = .359, p = .005) was found to influence Exercise Frequency significantly and positively. However, Exposure to Fitspiration TikTok (β = .226, p = .073) exhibited a positively insignificant effect on Exercise Frequency. Consequently, H7 is supported, while H8 is not supported.

Table 2: *Item Loadings*

Constructs	Items	Item Loadings	KMO	α	AVE
Exposure to Fitspiration TikTok	ETF1	.864	.500	.654	.746
	ETF2	.864			
Attitudes toward Exercising	EA1	.648	.680	.673	.530
	EA2	.714			
	EA3	.740			
	EA4	.801			
Subjective Norms toward Exercising	SN1	.672	.606	.516	.516
	SN3	.765			
	SN4	.715			
Perceived Behavioural Control	PBC1	.724	.617	.628	.584
	PBC2	.830			
	PBC3	.734			
Exercise Intentions	EI1	.961	.760	.944	.901
	EI2	.935			
	EI3	.952			
Exercise Frequency	EF1	.803	.628	.616	.574
	EF2	.690			
	EF3	.776			

Table 3: *Descriptive Statistics and Pearson Correlation (n = 114)*

	M	SD	1	2	3	4	5	6
1. Exercise Frequency	9.4649	2.79120	-					
2. Exercise Intentions	15.1491	4.75084	.561**	-				
3. Perceived Behavioural Control	12.5439	2.29713	-.051	.023	-			
4. Subjective Norms toward Exercising	13.5351	3.36347	.291**	.460**	-.111	-		
5. Attitudes toward Exercising	16.3158	2.72100	.346**	.515**	.186*	.248*	-	
6. Exposure to Fitspiration TikTok	5.3333	2.88010	.218*	.282**	.042	.267*	.207*	-

* Note: Variable 1, 3, and 5 are measured on a 5-point Likert scale, variable 6 is measured on a 6-point Likert scale, and variables 2 and 4 are measured on a 7-point Likert scale.

** . Correlation is significant at the 0.01 level (2-tailed)

*. Correlation is significant at the 0.05 level (2-tailed)

Table 4: Multiple Regression Analysis Male (n = 50)

H#	Variable		Coefficient	t	p	Result
	Attitudes toward Exercising					
H1		Exposure to Fitspiration TikTok	.112	.779	.440	Not supported
	Subjective Norms toward Exercising					
H2		Exposure to Fitspiration TikTok	.328	2.404	.020	Supported
	Perceived Behavioural Control					
H3		Exposure to Fitspiration TikTok	.083	.576	.567	Not supported
	Exercise Intentions					
H4		Attitudes toward Exercising	.511	4.092	<.001	Supported
H5		Subjective Norms toward Exercising	.212	1.757	.086	Not supported
H6		Perceived Behavioural Control	.028	.231	.818	Not supported
	Exercise Frequency					
H7		Exercise Intentions	.677	6.295	<.001	Supported
H8		Exposure to Fitspiration TikTok	.030	.275	.785	Not supported

Table 5: Multiple Regression Analysis Male (n = 50)

H#	Variable		Coefficient	t	p	Result
	Attitudes toward Exercising					
H1		Exposure to Fitspiration TikTok	.274	2.246	.028	Supported
	Subjective Norms toward Exercising					
H2		Exposure to Fitspiration TikTok	.338	2.828	.006	Supported
	Perceived Behavioural Control					
H3		Exposure to Fitspiration TikTok	-.061	-.484	.630	Not supported
	Exercise Intentions					
H4		Attitudes toward Exercising	.403	3.809	<.001	Supported
H5		Subjective Norms toward Exercising	.385	3.619	<.001	Supported
H6		Perceived Behavioural Control	-.001	-.014	.989	Not supported
	Exercise Frequency					
H7		Exercise Intentions	.359	2.898	.005	Supported
H8		Exposure to Fitspiration TikTok	.226	1.824	.073	Not supported

6. DISCUSSION

The present study aimed to examine the relationship between Exposure to Fitspiration TikTok and Exercise Frequency, using Theory of Planned Behaviour in both men and women. The findings revealed interesting differences between the male and female populations, indicating varying patterns of associations.

Results from the Multiple Regression Analysis revealed that the impact of Exposure to Fitspiration on Attitudes toward Exercising differs between gender. In line with Eng et al. (2022), Exposure to Fitspiration was positively related to Attitudes toward Exercising among the female population. However, no significant relationship was found for the male population. These results indicate that female individuals who are exposed to Fitspiration content on TikTok tend to develop more positive attitudes toward exercise but may not significantly impact exercising attitudes among men. Mass media pressure might not contribute to men's desire to enhance their muscles (Ricciardelli et al., 2000), but specific individual characteristics can render women more susceptible to the influence of social media usage (Fardouly et al., 2015).

Previous research found that being exposed to Fitspiration content was associated with increased perceptions of subjective norms (Eng et al., 2022). The regression analysis demonstrated that Exposure to Fitspiration TikTok was found to have a significant, positive relationship with Subjective Norms toward Exercising in both men and women. Therefore, hypotheses 2 was found fully supported. Businesses, influencers, and celebrities have utilized Fitspiration content to foster a sense of community among individuals who share similar interests (Raggatt et al., 2018). This creates the perception that a significant group of people are actively participating in exercise, which might be interpreted as a signal of social acceptance. These findings suggest that individuals who are exposed to Fitspiration TikTok tend to perceive social expectations and greater social support for engaging in physical activity.

In contrast with the hypotheses, the data shows no significant relationships between Exposure to Fitspiration TikTok and Perceived Behavioural Control in both men and women. The female population portrayed a slightly negative but insignificant relationship, while the relationship was positive but insignificant among the male population. These results

indicate that exposure to Fitspiration content on TikTok may not significantly impact perceived control over exercising (Eng et al., 2022). To potentially enhance an individual's perceived behavioural control toward participating in exercising, Fitspiration content may need to foster fundamental skills and strategies for exercising regardless of external obstacles (Martinez & Lewis, 2016).

Consistent with the expectations, Attitudes toward Exercising was found to be a significant predictor of Exercise Intentions in both males and females. This echoes past research that positive attitudes toward exercise are associated with a greater likelihood of intending to engage in physical activity (Kerner et al., 2001), implying that personal attitudes play important roles in shaping their exercise intentions.

As previous research concluded, social norms established by friends and family members significantly influence an individual's intentions to engage in a particular behaviour (Rivis et al., 2009). Therefore, it was hypothesized that Subjective Norms would increase one's intention to exercise. The regression analysis in this study demonstrated that Subjective Norms toward Exercising had significant positive effects on Exercise Intentions among women, suggesting that perceived social support contribute to their intention to engage in exercise. However, Subjective Norms toward Exercising did not illustrate significant effects on Exercise Intentions among men, implying that opinions of others may not play substantial roles in shaping their exercise intentions. The different outcomes between gender might implicate that women have a greater perception of social benefits and place a higher value on social aspects compared to men (Koivisto & Hamari, 2014).

Furthermore, Perceived Behavioural Control did not demonstrate significant effects on Exercise Intentions among both men and women. This might indicate that PBC is not a good predictor of EI, which is in line with (Eng et al., 2022). However, Exercise Intentions was found to have a significant positive influence on Exercise Frequency in both males and females. Hence, hypothesis 7 is supported. The findings are in line with Rhodes et al. (2006), advocating that strong intentions to engage in exercise are likely to translate into more frequent participation in physical activity. Lastly, Exposure to Fitspiration TikTok did not show a significant impact on Exercise Frequency among men or women. These findings might suggest that although Fitspiration content might inspire people, it might not influence an individual's actual physical activity engagement (Robinson et al., 2017).

6.1 Theoretical Implications

The present study holds several important theoretical implications. Even though the exposure to Fitspiration content might not directly influence an individual's exercise behaviour, there is evidence that being exposed to Fitspiration content has a different impact on women than on men. As such, it might be valuable for researchers to take into account gender when considering the influence of social media, given that women might be more sensitive to the influence of social media (Fardouly et al., 2015). Particularly, being exposed to Fitspiration TikTok was a significant predictor of exercising attitudes and subjective norms, which in turn predicted exercise intentions among women. These findings highlight the importance of leveraging Fitspiration content on social media targeting women's exercise behaviours. For men, subjective norms were influenced by viewing Fitspiration content, and exercise intentions were more directly influenced by their attitudes toward exercising. The present study aims to add empirical support for the relationships suggested by existing literature, while also shedding new light on the topic of Fitspiration within the TikTok domain. It seeks to understand the impact of social media use on consumers' well-being. In addition, the study will contribute to existing literature by providing a comparative study exploring the different effects of Fitspiration between men and women. This study will fill the gap that exists on the effect of Fitspiration on exercise behaviour (Pryde & Prichard, 2022).

6.2 Practical Implications

The findings of this comparative study have several practical implications for various stakeholders, including businesses, social media influencers, and health organisations. The study highlights the need for tailored approaches between gender when using Fitspiration content to motivate individuals to adopt a healthy lifestyle. Content creators and influencers need to develop content that affect specific factors that influence each gender to engage in physical activity. In addition, the insights on the differential response between men and women allows marketers to deploy strategic marketing plans. By creating and promoting positive and empowering content, it is possible to enhance exercise motivation and intention among women, whereas interventions targeting men's exercise behaviours may focus more on shaping men's attitudes toward exercise.

6.3 Limitations and Future Research

Although this study gives insights into social media and exercise behaviour, several limitations should be kept in mind. The findings are specific to the present study and may be influenced by various factors, including sample characteristics, measurement instruments, and the specific nature of the Fitspiration TikTok content examined. The study did not control for potential confounding variables or external factors that could influence exercise behaviour, such as personal motivations, access to fitness facilities, or other social and environmental influences. Future research should further investigate the underlying mechanisms and contextual factors that contribute to the observed gender differences in the relationship between exposure to Fitspiration content and exercise-related outcomes. Additionally, on average, respondents in the sample reported low frequency of viewing Fitspiration videos on TikTok, with the majority of participants (n = 60) indicating that they view Fitspiration TikTok less than once a week. Future research could explore individuals who are intensive users of social media and are exposed more frequently to Fitspiration posts.

Furthermore, the data collected in this study relied on self-reported measures, including participants' exposure to Fitspiration TikTok and their exercise behaviour. Self-reporting introduces the potential for response bias (Donaldson & Grant-Vallone, 2002), as participants may provide socially desirable responses or inaccurately recall their actual behaviours. This could affect the accuracy and reliability of the reported associations. In addition, the study employed a cross-sectional design, acquiring data at a single point in time. This design limits the ability to establish temporal relationships or examine changes in behaviour over time. Future research could perform longitudinal studies, which would provide more robust insights into the causal relationships and changes in exercise behaviour. Moreover, the study focused specifically on the impact of exposure to Fitspiration TikTok on exercise behaviour among males and females. Future research might focus on different forms of social media or different demographic groups.

7. CONCLUSION

The present study investigating the relationship between Fitspiration TikTok and exercise behaviour among TikTok users was based on gender. The study showed that there is not a significant positive relationship between the exposure to Fitspiration on TikTok and exercise participation levels among men and women. Findings are aligned with the findings of Robinson et al. (2017). One of the goals of this study was predicting men and women's exercise behaviour using the Theory of Planned Behaviour. The findings showed that being exposed to Fitspiration content on TikTok positively influenced exercise attitudes, and that social norms toward exercising influenced one's intention to exercise among women, whilst there was no such a relationship found among men. This finding indicates that in terms of impact of social media and social expectations, women might be more sensitive to the influences of social media and put more value on perceived social support, while men are less prone to the impact social media can have and do not put significant value on the opinions of people around them to engage in physical activity. In addition, the study found that there is a positive significant relationship between being exposed to Fitspiration content on TikTok and subjective norms among both men and women. Findings are consistent with the findings of Eng et al. (2022). Consistent with Kerner et al. (2001) the data demonstrated that exercise attitudes positively predict one's intention to exercise in both men and women.

8. ACKNOWLEDGEMENT

9. APPENDIX

9.1 Appendix 1: The Survey

The Effect of Fitspiration on Exercise Behaviour

Dear Participant,

I am a third-year International Business Administration student at the University of Twente. For my bachelor thesis, you are invited to participate in a survey on social media use and well-being. The purpose of this survey is to collect information and insights on the effects of fitness inspiration TikTok videos on actual exercise behaviour.

All your responses will be kept completely anonymous and confidential. This survey consists of six components and should take approximately five minutes to complete. Your participation is completely voluntary, and you may withdraw at any time. Please read each question carefully and answer to the best of your ability. Your honest and thoughtful responses are greatly appreciated!

Thank you for taking the time to participate in this survey! Your feedback is valuable and will contribute to a better understanding of the impact of social media usage on consumer well-being.

Sincerely, Aïsha

Introduction Questions

		Yes	No				
SQ	"Do you use TikTok?"	1	2				

		None	<1 hour a day	1-2 hours a day	3-4 hours a day	5-6 hours day	>6 hours a day
SMTS	"How much time do you spend on TikTok on a typical day?"	1	2	3	4	5	6

		<1.60m	1.60m - 1.69m	1.70m - 1.79m	1.80m - 1.89m	1.90m - 2m	> 2m
Height	"What is your height-range?"	1	2	3	4	5	6

Exposure to Fitspiration

The following section focuses on exposure to Fitspiration. In this study, "Fitspiration" (the fusion of the words "fitness" and "inspiration") is defined as sharing or consuming images, quotes, and tips related to fitness and nutrition. It is aimed to motivate individuals to adopt healthy and active lifestyles. Please read each question carefully and choose an option that best describes your experience.

		< 1 day per week	1-2 day per week	3-4 days per week	5-6 days per week	Once a day	More than once a day
ETF1	"How many times a week do you intentionally view Fitspiration TikToks?"	1	2	3	4	5	6
ETF2	"How many times a week do you unintentionally view Fitspiration TikToks?"	1	2	3	4	5	6

Exercise Attitudes

The following section focuses on attitudes toward exercising. Please read each statement carefully and choose an option that best describes your opinion.

		Very unenjoyable	Somewhat unenjoyable	Neither unenjoyable nor enjoyable	Somewhat enjoyable	Very enjoyable
EA1	"Exercising in my leisure time over the next 6 months would be . . "	1	2	3	4	5

		Very boring	Somewhat boring	Neither boring nor interesting	Somewhat interesting	Very interesting
EA2	"Exercising in my leisure time over the next 6 months would be . . "	1	2	3	4	5

		Very harmful	Somewhat harmful	Neither harmful nor beneficial	Somewhat beneficial	Very beneficial
EA3	"Exercising in my leisure time over the next 6 months would be . . "	1	2	3	4	5

Subjective Norms Toward Exercising

The following section focuses on subjective norms toward exercising. In this study "regular exercise" is defined as engaging in physical activities for at least 20 minutes, at least once a week. Physical activities include, but are not limited to, walking, cycling, and sports. Please read each statement carefully and choose an option that best describes your opinion.

		Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat Agree	Agree
SN1	"Most people in my social network want me to exercise regularly in the next 2 weeks"	1	2	3	4	5	6
SN2	"Most people in my social network would approve if I exercised regularly in the next 2 weeks"	1	2	3	4	5	6
SN3	"Most of my friends exercise regularly"	1	2	3	4	5	6
SN4	"Most of my family members exercise regularly"	1	2	3	4	5	6
SN5	"Most of my co-workers exercise regularly"	1	2	3	4	5	6

Perceived Behavioural Control

The following section focuses on perceived behavioural control toward exercising. Please read each item carefully and choose an option that best describes your opinion or situation.

		Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat Agree	Agree
PBC1	''Whether or not I exercise regularly in the next 2 weeks is entirely up to me''	1	2	3	4	5	6
PBC2	''How much personal control do you feel you have over exercising in the next 2 weeks"	1	2	3	4	5	6

		Strongly Agree	Agree	Somewhat Agree	Neither agree or disagree	Somewhat disagree	Disagree
PBC3	''Exercising in the next 2 weeks feels beyond my control"	1	2	3	4	5	6

Exercise Intentions

The following section focuses on the intention to exercise. Please read each statement carefully and choose an option that best describes your opinion.

		Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat Agree	Agree
EI1	"I am highly motivated to exercise regularly within the next month,"	1	2	3	4	5	6
EI2	"I have a strong intention to exercise regularly within the next month"	1	2	3	4	5	6
EI3	"I am fully dedicated to exercising regularly within the next month."	1	2	3	4	5	6

Exercise Frequency

The following section focuses on exercise frequency. Please read each question carefully and choose an option that best describes your situation.

		Never	1-2 day per week	3 days per week	4-5 days per week	Every day of the week
EF1	"How often do you exercise for at least 30 minutes in your free time?"	1	2	3	4	5

		<30 mintues	30-60 minutes	60-90 minutes	90-120 minutes	>120 minutes
EF2	"What is the average duration of a workout in your free time?"	1	2	3	4	5

		<1 month	1-2 months	3-4 months	5-6 months	>6 months
EF3	"How long have you already participated in exercising?"	1	2	3	4	5

Demographics

The following section is the last section of this questionnaire. Please provide some information about yourself. All your information will be stored anonymously and kept securely.

		<16 years old	16-18 years old	19-22 years old	23-26 years old	27-30 years old	>30 years old
Age	"What is your age?"	1	2	3	4	5	6

		Male	Female	Non-binary / Third gender	Prefer not to say
Gender	"What is your gender?"	1	2	3	4

Ethnicity "What is your ethnicity?"

White	Black or African American	American Indian or Alaska Native	Asian	Native Hawaiian or Pacific Islander	Other
1	2	3	4	5	6

Education "What is your highest level of education completed?"

Primary school	Secondary school	College	University	PHD	Other
1	2	3	4	5	6

Weight "What is you current weight-range?"

<50kg	50-59kg	60-69kg	70-79kg	80-89g	90-100kg
1	2	3	4	5	6

Closing Note "If you have any questions, feedback, etc. feel free to note them down below."

_____

We thank you for your time spent taking this survey.

Your response has been recorded.

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