

Correlation Between Fitspiration Content, Physical Activity and Body Image Among Adolescents at SMPN 2 Cimalaka

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Abstract: This study examined the association between exposure to fitspiration content and physical activity and body image among adolescents at SMPN 2 Cimalaka. Using a quantitative correlational design with a cross-sectional approach, data were collected from 195 students aged 11–14 years through a validated questionnaire assessing fitspiration exposure, activity levels, and body image. The results indicated that exposure to fitspiration content was prevalent (86.7%); however, a substantial proportion of adolescents still reported low physical activity (59.5%) and low body image satisfaction (76.4%). Statistical analysis using Chi-Square found a significant positive association between fitspiration content exposure and physical activity ($p = 0.001$), suggesting a potential association with increased physical activity. However, fitspiration content exposure was not significantly associated with body image ($p = 0.120$), suggesting that factors beyond social media content play a more substantial role in shaping self-perception. This study highlights the need for comprehensive health interventions that integrate media literacy and support psychosocial well-being to further promote positive active lifestyles and body image among Indonesian adolescents.

1. Introduction

Physical activity plays a crucial role in maintaining adolescent health. However, approximately 50% of adolescents experienced a decline in physical activity during social restrictions due to the COVID-19 pandemic (Salmi & Markuri, 2022). Data from the Indonesian Health Survey (Kemenkes, 2023) indicate a decline in adolescent physical activity patterns, mainly due to increased sedentary time from online learning, gadget use, and reduced outdoor activities. According to the 2023 Indonesian Health Survey, adolescents aged 11–14 years demonstrate low levels of physical activity. Only one in three adolescents meet recommended activity levels (Kemenkes, 2023). (Rahmawati et al., 2023) stated that data from the Health Office and research in Sumedang Regency in 2024 noted that adolescents with obesity tend to have lower levels of physical activity than those who are not obese. A study by

(Sember et al., 2020) indicated a significant reduction in moderate to vigorous intensity physical activity from ages 11 to 14, with an average decrease of more than a quarter (about 34.96 minutes per day), environmental factors have a greater influence than biological maturation.

This trend is concerning because low physical activity increases the risk of obesity and other health problems (Rochmah & Nadhiroh, 2024) Surveys indicate that many adolescents do not meet the recommended minimum of 60 minutes of physical activity per day, citing a lack of facilities and motivation as primary reasons (Schmidhauser Valentine et al., 2024)). The latest data from the 2023 Indonesian Health Survey (Riskesdas, 2018) indicate that the prevalence of overweight among adolescents aged 13–19 in Indonesia is 23.5% (Kemenkes, 2023). The Indonesian Health Survey (SKI) 2023 also reported an increased prevalence of obesity reaching 23.4% (Kemenkes, 2023). Lack of physical activity among adolescents contributes to an increased risk of mortality by 20–30% (Mulyaningsih et al., 2023)

High social media use has become one of the contributing factors to low physical activity among adolescents (Pertiwi & Niwiadhiroh, 2023) In 2024, internet penetration in Indonesia reached 79.5%, with Generation Z as the majority of users (Indonesian Internet Service Providers Association, 2024). Nearly half of adolescents are exposed to fitspiration content, which aims to motivate a healthy lifestyle by presenting ideal body images and fitness tips (Choukas-Bradley et al., 2022) Exposure to this content can trigger social comparison processes related to physical appearance, leading to body dissatisfaction and mood disturbances (Bowles et al., 2021) Adolescents are vulnerable to appearance-based comparisons, which may increase body image dissatisfaction (Shabrina Marizka et al., 2019).

Nurses play a strategic role as health promoters in assisting adolescents to cope with the influence of social media on lifestyle and body image (Arief Rifki et al., 2024) Suggested solutions include limiting social media use to a maximum of 1–2 hours per day, establishing clear usage rules, and enhancing parental education and supervision to help adolescents manage exposure to fitspiration content in a healthy manner (Bowles et al., 2021).

A preliminary study involving 22 students at SMPN 2 Cimalaka found that most spent 6–7 hours per day on social media, primarily using TikTok, Instagram, and WhatsApp. Most students reported that their physical activity time decreased due to social media use, and the majority felt dissatisfied with their body shape and had compared themselves to others on social media (Jerónimo & Carraça, 2022).

This study aims to determine the correlation between fitspiration content exposure on social media and physical activity as well as body image among adolescents at SMPN 2 Cimalaka, and to describe the patterns of fitspiration exposure, physical activity, and body image among these students.

2. Materials and Methods

This study employed a quantitative correlational design using a cross-sectional approach at SMP Negeri 2 Cimalaka (accredited "A" school) over two days (October 8–9, 2025). The population

comprised 390 active social media users in grades 7 and 8. Sample size was calculated using the Isaac table (186 + 10% for missing data = 204), yielding 195 students after processing, selected using systematic random sampling. Inclusion criteria: ages 11–14 years, active social media use, willingness to participate, physical activity involvement. Exclusion criteria: age outside range, non-social media users, refusal, significant health issues.

Fitspiration exposure refers to adolescent exposure to social media content featuring healthy lifestyles, exercise, and ideal body standards, either actively (following accounts) or passively (viewing without engagement). Physical activity includes any movement performed in the past 7 days at school, home, or elsewhere requiring energy expenditure. Body image is how students perceive, evaluate, and feel about their body shape and size.

Data were collected using Google Forms with validated and reliable instruments: (1) for physical activity, the Physical Activity Questionnaire for Children (PAQ-C) was used; 9 items were scored on a 5-point Likert scale, with scores interpreted as follows: 1.0–1.99 = very low; 2.0–2.99 = low; 3.0–3.99 = moderate; 4.0–4.99 = high; 5.0 = very high; the instrument has demonstrated good internal consistency in child populations worldwide, including in Indonesia (Cronbach's $\alpha = 0.74$ – 0.77) (Tri et al., 2024) (2) for body image, the Physical Appearance Comparison Scale (PACS-R) was used; 11 items were scored on a 5-point Likert scale, with total scores interpreted as: 11–25 = low dissatisfaction; 26–40 = moderate; 41–55 = high; the scale has undergone rigorous psychometric validation and shows good internal reliability (Cronbach's $\alpha = 0.88$ – 0.91) (Adelheid Tasya & Arjadi Retha, 2022). (3) For fitspiration exposure, a questionnaire consisting of 5 items was developed, adapted from (Goodyear et al., 2019). The indicators of fitspiration content exposure included: (1) viewing fitspiration content on social media; (2) following or unfollowing related accounts on social media; (3) following or practicing advice from those accounts, such as diet or exercise tips; (4) frequency of viewing fitspiration content per day; and (5) the platform used to view such content. Responses were then categorized as exposed or not exposed; based on questions one and two, a respondent was classified as exposed if the answer to the first question was "yes," while a respondent was classified as not exposed if the answers to both the first and second questions were "no." This instrument was tested on 30 students and yielded Cronbach's $\alpha = 0.705$ and correlation coefficients (r) of 0.622–0.783.

In this study, the researcher did not conduct a normality test because data analysis used the chi-square (χ^2) test, a non-parametric statistical test that does not require normally distributed data. The chi-square test analyzed relationships between categorical variables in frequency form, meeting requirements: (1) nominal/categorical data, (2) large sample ($n=195>30$), (3) expected count >5 or max 20% cells <5 , (4) no zero-frequency cells, (5) p -value ≤ 0.05 to reject H_0 ((Sudarma Adiputra Made et al., 2021)). Descriptive statistics summarized patterns. The study was limited by sample size and short collection period. Ethical approval was obtained from Binawan University Health Research Ethics Committee (No. 576/KEPK-UBN/IX/2025), with parental/student informed consent and confidentiality maintained.

3. Results and Discussion

Table 1. Respondent Characteristics

Variables	Frequency	Percentage(%)
Gender		
Males	83	42.6
Females	112	57.4
Age		
12	72	36.9
13	75	38.5
14	48	24.6
Exposure to fitspiration content		
Exposed	169	86.7
Non Exposed	26	13.3
Type of Platform used		
Tiktok	143	73.3
Instagram	23	11.8
YouTube	19	9.7
Facebook	3	1.5
Pinterest	4	2.1
WhatsApp	2	1.0
Animeplay	1	0.5
Frequency of social media use in a day		
<1 hours	34	17.4
1-2 hours	57	29.2
3-4 hours	75	38.5
>5 hours	29	14.9
Distribution of physical activity frequency		
Very low	32	16.4
Low	116	59.5
Medium	47	24.1
Frequency distribution of body image in adolescents		
Low	149	76.4
Medium	46	23.6

Table 2. Chi Square Test Results between Fitspiration content exposure on physical activity in adolescents

Exposure to fitspiration content		Physical Activity			
		Low	Very Low	Medium	Total
Exposed	F	104	21	44	169
	%	61.5%	12.4%	26.0%	100.0%
Non-exposed	F	12	11	3	26
	%	46.1%	42.3%	11.5%	100.0%
Total	F	116	32	47	195
	%	59.4%	16.4%	24.1%	100.0%

$\chi^2 = 15.12, df 2, p < 0.001$

Table 3. Chi Square Test Results between Fitspiration content exposure on body image in adolescents

Exposure to fitspiration content		Body Image		
		Low	Medium	Total
Exposed	F	126	43	169
	%	74.5%	25.4%	100.0%
Non-exposed	F	23	3	26
	%	88.4%	11.5%	100.0%
Total	F	149	46	195
	%	76.4%	23.5%	100.0%

$\chi^2 = 2.417, df 1, p < 0.120$

Discussion

The majority of respondents were female (57.4%), with 13-year-olds comprising the largest age group (38.5%). The majority of respondents were exposed to fitspiration content (86.7% prevalence), primarily via TikTok (73.3%), with 3–4 hours of daily social media use being the most common (38.5%). These patterns align with high social media penetration among Indonesian youth, particularly Generation Z, who rely heavily on short-form video platforms for information, entertainment, and social validation (Indonesian Internet Service Providers Association, 2024; Jerónimo & Carraça, 2022).

High exposure to fitspiration content does not necessarily mean high engagement. Exposure (passive viewing) refers to how often adolescents see fitspiration content, whereas engagement (active use) involves how they interpret, evaluate, and translate that content into behavior (e.g., trying workouts, adopting diet tips, or reflecting on body image standards). Many adolescents in this study reported high exposure but low engagement, meaning they scroll through fitspiration videos without actively adopting the recommended behaviors or internalizing the idealized body standards (Bayudamai & Yuliastrid, 2022; Jerónimo & Carraça, 2022). This distinction explains why fitspiration may motivate physical activity in some adolescents but not significantly affect body image in others.

Despite high fitspiration exposure, 59.5% of adolescents exhibited low physical activity levels. Male adolescents tend to be more physically active outside school hours and weekends than females, who experience motivational fluctuations due to social and psychological factors (Syalфина et al., 2024). This gender difference may reflect traditional gender norms and social expectations, in which boys receive greater encouragement for sport participation, whereas girls often face body image related concerns that discourage physical exertion in public or visible settings (Laksmi.S.P & Jayanti D.A, 2023). Research also shows that boys engage more in light and moderate physical activity and are less affected by body image pressures, while girls are more likely to compare themselves to idealized images on social media, leading to higher body dissatisfaction (Bayudamai & Yuliastrid, 2022). This finding may be explained by research showing boys engage more in light/moderate activity and face fewer body image pressures (Syalфина et al., 2024). The significant association between fitspiration exposure and physical activity ($p < 0.05$) suggests that such content may serve as a motivational cue, particularly for adolescents who actively seek fitness-related information. However, this effect is limited, as many adolescents still report low physical activity despite exposure, indicating that exposure alone does not ensure engagement or translate into sustained behavior change. Structural barriers such as sedentary life style, online learning, limited facilities, and restrictive gender (Laksmi.S.P & Jayanti D.A, 2023) may overpower the motivational potential of fitspiration.

Low body image satisfaction was prevalent (76.4%), particularly among females who frequently compared themselves to social media ideals. This finding can be explained by social comparison theory, which suggests that adolescents tend to compare themselves with idealized standards presented on social media, including fitspiration accounts, leading to lower self-esteem and increased body dissatisfaction (Arigo et al., 2021). Fitspiration content often highlights 'perfect' bodies, fitness routines, and restrictive diets, which may trigger downward comparison and appearance-related shame, especially among (Bayudamai & Yuliastrid, 2022; Choukas-Bradley et al., 2022). However, this study found no significant association between fitspiration exposure and body image ($p > 0.05$), suggesting that high exposure does not necessarily translate into higher engagement or internalization of idealized body standards, and indicating that moderating factors such as critical media attitudes, family support, and the school environment may play a protective role in buffering the negative effects of social media exposure (Arigo et al., 2021; Purwanti & Marlina, 2022).

Social Cognitive Theory (SCT) helps explain these findings. Fitspiration content can be viewed as a source of modeling and environmental reinforcement, where adolescents observe influencers behavior (e.g., exercising, following diet tips) and expect similar outcomes in terms of health or appearance. However, SCT also emphasizes that self efficacy, self regulation, and supportive social networks are essential for turning observation into sustained behavior change. Many adolescents appear to be passive viewers rather than active participants, they scroll and watch fitspiration content but do not routinely adopt the recommended exercises or challenges. This may explain why the association with physical activity, while statistically significant, remains modest in strength.

Several methodological and contextual factors may account for the non-significant association between fitspiration exposure and body image. First, baseline body image was already low (76.4%), so variability between 'exposed' and 'not exposed' groups may have been too small to detect a clear relationship. Second, not all exposure implies meaningful engagement, adolescents who lightly follow or sporadically view fitspiration may not internalize the standards as strongly as those who actively imitate or chase them. Third, protective factors such as critical media attitudes, family support, religious values, and school-based health education may mitigate the impact of fitspiration exposure on body perception (Purwanti & Marlina, 2022).

This study was limited to one school (SMPN 2 Cimalaka) and relied on self reported data, which may be influenced by recall bias, misinterpretation of items, and social desirability. Additional variables, such as family support, religious beliefs, bullying experiences, and actual nutritional status, were not measured but may strongly influence both physical activity and body image. Future research should use longitudinal designs, multi-school sampling, and mixed methods (e.g., interviews and focus groups) to explore how adolescents engagement with fitspiration evolves over time and how school- and family-level factors interact with digital exposure.

These findings have important implications for health promotion and education. Fitspiration content may be utilized as a motivational resource to enhance physical activity, particularly when supported by environments that emphasize participation, enjoyment, and inclusivity rather than appearance. Adolescents especially girls also require critical media literacy, positive body image education, and safe spaces to discuss body-related concerns. Therefore, interventions involving teachers, parents, and peers are essential to maximize the benefits of fitspiration while minimizing potential risks to psychological well-being. However, the finding that fitspiration is associated with

physical activity but not with body image underscores the complex nature of digital content influences, with broader psychosocial factors remaining more dominant. Accordingly, health interventions should integrate digital literacy, body image education, and environmental support, with particular attention to adolescent girls. These findings should be interpreted with caution due to the use of self-reported data and the omission of potentially influential variables such as family support and psychological factors.

4. Conclusions

This study found that 86.7% of respondents were exposed to fitspiration content, while most adolescents reported low physical activity (59.5%) and low body image satisfaction (76.4%). Statistical analysis revealed no significant association between fitspiration exposure and body image ($p > 0.05$). However, a significant association was found between fitspiration exposure and physical activity ($p = 0.001$), suggesting that such content may serve as a motivator for increasing physical activity among adolescents. These findings suggest that while social media exposure may influence physical activity, broader social and psychological factors play a more dominant role in shaping body image. This study is limited by its reliance on self-reported data and the exclusion of additional psychosocial variables. Future research should employ longitudinal designs with more diverse samples to better understand the complex effects of social media on adolescent physical and mental health. Holistic interventions integrating digital literacy and psychosocial support are recommended to promote adolescent well being.

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