

## RESEARCH / ARAŞTIRMA

## Investigating the Relationship Between Social Media Addiction, Body Image, and Physical Activity among University Students

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### ABSTRACT

**Objective:** This study aims to examine the relationship between social media addiction, body image, and physical activity in university students.**Material and Methods:** A total of 301 undergraduate students (210 females and 91 males) participated in the study. The Social Media Addiction Scale-Student Form (SMAS-SF), Social Media Intensity Scale (SMIS), Body Appreciation Scale (BAS), and Physical Activity Scale-2 (PAS-2) were used as outcome measures.**Results:** In the comparison of the results by gender, the physical activity level of male students was found to be higher than that of female students ( $p<0.05$ ). A moderate negative correlation was found between SMAS-SF and BAS ( $r=-0.401$ ,  $p<0.001$ ). Additionally, a weak negative correlations were observed between SMAS-SF and PAS-2 ( $r=-0.357$ ,  $p<0.001$ ), SMIS and BAS ( $r=-0.273$ ,  $p<0.01$ ), as well as SMIS and PAS-2 ( $r=-0.170$ ,  $p=0.003$ ). SMAS-SF explained 13.8% of the variance in BAS, and 9.3% of the variance in PAS-2 ( $p<0.001$ ). SMIS explained 4.9% of the variance in BAS and 1.2% of the variance in PAS-2 ( $p<0.001$ ).**Conclusion:** Excessive use of social media and social media addiction in young adults can adversely affect body image and physical activity.**Keywords:** Body image, physical activity, social media, technology addiction

## Üniversite Öğrencilerinde Sosyal Medya Bağımlılığının Beden İmajı ve Fiziksel Aktivite ile İlişkisinin İncelenmesi

### ÖZET

**Amaç:** Bu çalışmanın amacı, üniversite öğrencilerinde sosyal medya bağımlılığının, beden imajı ve fiziksel aktivite ile ilişkisini belirlemektir.**Gereç ve Yöntem:** Toplam 301 (210 kadın ve 91) lisans öğrencisi katıldı. Sonuç ölçümleri için Sosyal Medya Bağımlılığı Anketi-Öğrenci Formu (SMAS-SF), Sosyal Medya Yoğunluk Ölçeği (SMIS), Beden İmajı Ölçeği (BAS) ve Fiziksel Aktivite Ölçeği-2 (PAS-2) kullanıldı.**Bulgular:** Cinsiyete göre sonuçların karşılaştırılmasında erkek öğrencilerin fiziksel aktivite düzeyi kız öğrencilerden daha yüksek saptandı ( $p<0.05$ ). SMAS-SF ile BAS arasında orta düzeyde korelasyon vardı ( $r=-0.401$ ,  $p<0.001$ ). Ek olarak, SMAS-SF ile PAS-2 ( $r=-0.357$ ,  $p<0.001$ ), SMIS ile BAS ( $r=-0.273$ ,  $p<0.01$ ) ve PAS-2 ( $r=-0.170$ ,  $p=0.003$ ) arasında zayıf bir korelasyon gözlemlendi. SMAS-SF, BAS'daki varyansın %13,8'ini ve PAS-2'deki varyansın %9,3'ünü açıkladı ( $p<0.001$ ). SMIS, BAS'daki varyansın %4,9'unu ve PAS-2'deki varyansın %1,2'sini açıkladı ( $p<0.001$ ).**Sonuç:** Genç yetişkinlerde sosyal medyanın aşırı kullanımı ve sosyal medya bağımlılığı beden imajını ve fiziksel aktiviteyi olumsuz etkileyebilir.**Anahtar Kelimeler:** Beden imajı, fiziksel aktivite, sosyal medya, teknoloji bağımlılığı

### 1. Introduction

Technological innovations and the widespread use of the internet have revolutionized numerous fields. The internet offers opportunities for social interaction, entertainment, business, shopping, education, finance, and communication in the modern world (1). Although the internet has made life easier by making communication and information more accessible to everyone through its endless possibilities, excessive screen time has led to the emergence of the term of "digital addiction" in our lives (2). The World Health Organization reports that addiction to excessive internet, computer, and smartphone use is a significant public health issue affecting numerous individuals worldwide (3).

Social media can be defined as internet-based applications that facilitate the exchange of messages or user-generated content for purposes such as social connection, entertainment, or education (4). Individuals use social media to create personal or

public profiles, connect and communicate with others, and share photos, videos, and stories (5). As of 2022, 58.4% (4.62 billion) of the 7.91 billion people in the world are social media users, and on average, individuals spend 6 hours 58 minutes online daily, of which 2 hours 27 minutes are dedicated to social media platforms (6). In Turkey, individuals aged 16 to 74 most frequently use social media platforms such as WhatsApp, YouTube, and Instagram (7). A lack of awareness regarding the time spent on social media applications, combined with increasing usage, is leading young people toward addiction. Social media applications can also be considered as forms of psychological addiction because they may disrupt an individual's daily responsibilities and result in negative consequences (8). In particular, the accessibility and constant availability of social media platforms encourage individuals to constantly browse, share and monitor positive or negative feedback on their posts (e.g., likes, comments). In particular, users' desires to receive likes and comments on personal photos, to project idealized self-

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representations on social media, and the fear of missing out on content shared by others can contribute to the escalation of social media addiction (9-11).

Social media has become an integral part of university students' daily lives and individuals use them to meet their daily needs (10). Despite the benefits it offers, excessive, unaware, improper, and purposeless use of social media can lead to behavioral addiction and cause serious damage to both physical and mental health (12). Considering that platforms such as Facebook, Instagram, Twitter, and YouTube were used regularly by 90% of young adults in 2021 (13), it should not be overlooked that social media significantly impacts various aspects of their lives, including body image and physical activity (14, 15). Posts featuring unrealistic and idealized body images— appealing, toned, and muscular physiques—that promote physical exercise as a way to achieve "appearance-related" goals rather than "health-related goals" can play a particularly negative influence on young adults (14).

As social media networks develop to include more visual content sharing, such as photos and videos, comparisons based on physical appearance comparisons have become easier and more common (16). Also, internet addiction and increased social media usage may correlate with decreased participation in physical or sporting activities (15, 17). Inadequate physical activity can lead to various physiological and psychological problems such as obesity, metabolic syndrome, cardiovascular disease, low self-esteem, and decreased academic performance (18). In addition, social media use has been linked to lower levels of physical activity, while heavy social media investment may increase exposure to physical activity recommendations, potentially serving as motivation (19). However, these studies were mostly conducted in adolescents (20-22) and are less relevant to young adults. Developing a healthier and more positive social media environment for young adults necessitates a deeper examination of the interaction between appearance-focused social media platforms, body image and physical activity. Among university students who use social media freely, have unrestricted internet access, and a large social circle, the factors affecting body image perception and participation in physical activity play an important role in increasing social interaction. (23, 24). Therefore, the purpose of this study was to investigate the potential association between addictive social media use, body image, and physical activity among university students. Specifically, we aimed to assess the strength and direction of this relationship, if it exists.

## 2. Material and Method

### 2.1. Research Type and Sample of the Research

This study was conducted with students enrolled in the Faculty of Physiotherapy and Rehabilitation during the Fall semester of the 2022-2023 academic year. Participants were required to be over 18 years of age, to have no difficulties in reading and comprehending Turkish, to consent to participate in the study, and to use a smartphone and social media. Individuals who did not meet these inclusion criteria were excluded from the study. Since our study was a cross-sectional study, all students enrolled in the Fall semester of the 2022-2023 academic year were invited to participate. Students who agreed to participate were included in the study. Study information and online survey links were distributed to all 631 undergraduate students, and only those who provided informed consent by approving the form in the online questionnaire were included as volunteers.

### 2.2. Data Collection

The demographic data of the students including age and gender, academic grade, most frequently used social media platform, and the duration of daily social media usage, were recorded.

### 2.2.1. Social Media Addiction Scale-Student Form (SMAS-SF)

Social Media Addiction Scale-Student Form (SMAS-SF) was developed by Şahin (2018) to assess students' social media addiction (ICC=0.93). This 29-item scale utilizes a 5-point Likert-type response format, ranging from "strongly disagree" to "strongly agree". It consists of four dimensions: virtual tolerance (5 items, score range 5-25), virtual communication (9 items, score range 9-45), virtual problem (9 items, score range 9-45), and virtual information (6 items, score range 6-30). Total scores on the scale range from 29 to 145 points, with higher scores indicating a greater self-perception of being a "social media addict." (17).

### 2.2.2. The Social Media Intensity Scale (SMIS)

The Social Media Intensity Scale (SMIS) is an adapted version of Ellison, Steinfield, and Lampe's Facebook Intensity Scale designed to measure social media usage (25). A Turkish reliability study was conducted by Traş and Öztemel in 2019 (ICC=0.85). This 5-point Likert-type scale includes six items, with response options ranging from "strongly disagree" to "strongly agree." Total scores on the scale vary from 6 to 30 points, with higher scores indicating a more intense relationship with social media.

### 2.2.3. The Body Appreciation Scale (BAS)

The Body Appreciation Scale (BAS) was developed by Tylka and Wood-Barcalow (2015) to assess individuals' positive body image, acceptance of, favorable opinions toward, and respect for their bodies. A Turkish reliability study was conducted by Anlı, Akin, Eker, and Özçelik in 2015 (ICC=0.88). The scale comprises 10 items rated on a 5-point Likert scale, ranging from 1 (Never) to 5 (Always). Total scores on the scale range from 10 to 50 points, with higher scores indicating greater body appreciation (26).

### 2.2.4. Physical Activity Scale-2 (PAS-2)

Physical Activity Scale-2 (PAS-2) was developed to estimate individuals' time spent in different types of physical activity and at different activity levels. The scale consists of nine items that measure sedentary behavior at work or school, during transportation, and leisure time, as well as physical activity levels of different intensities (light, moderate and vigorous). Each item in PAS-2 corresponds to a different Metabolic Equivalent of Task (MET) intensity: item 1 = 0.9 MET, item 2a = 1.5 METs, item 2b = 2.0 METs, item 2c = 5.0 METs, item 3 = 4.0 METs, item 4 = 1.0 MET, item 5 = 3.0 METs, item 6 = 5.0 METs, and item 7 = 6.0 METs. Items 1 (sleep), 4 (TV time), and 2a (sitting at work) are classified as sedentary behavior. Items 2b (standing/walking at work) and 5 (light leisure-time physical activity) are classified as light activity. Items 2c (heavy work), 3 (active transportation), and 6 (moderate leisure time physical activity) are classified as moderate activity, while item 7 (vigorous leisure time physical activity) is classified as vigorous activity (27). A Turkish reliability study was conducted by Gür (ICC=0.92) (28).

## 2.3. Implementation of the Research

### 2.3.1. Analysis of Research Data

The data were analyzed using the Statistical Package for the Social Sciences software, version 21 (SPSS Inc., Chicago, IL, USA). Descriptive characteristics of the students were presented as follows: continuous variables (e.g., age) were expressed as mean  $\pm$  standard deviation, while categorical variables (e.g., gender) were presented as absolute numbers (n) and percentages (%). The Kolmogorov-Smirnov test was employed to assess the distribution of the sample. As the dataset did not follow a normal distribution, non-parametric statistical methods

were applied. Gender-based comparisons of SMAS-SF, SMIS, BAS, and PAS-2 scores were performed using the Mann-Whitney U test. Spearman's correlation coefficient was calculated to evaluate the relationships between variables. Correlation coefficients were interpreted as follows: negligible (0.00–0.10), weak (0.10–0.39), moderate (0.40–0.69), strong (0.7–0.89), and very strong (0.9–1.0) (29). Furthermore, simple linear regression analyses were conducted to identify factors influencing SMAS-SF and SMIS scores. Statistical significance was set at  $p<0.05$ .

#### 2.4. Ethical Aspects of the Research

This research was conducted in accordance with the principles of the Declaration of Helsinki. The study received approval from the Non-Invasive Clinical Research and Ethics Committee of Pamukkale University, the authors' affiliated institution (date: 29.11.2022, number: 17). Study information and online survey links were distributed to all undergraduate students, and only those who provided informed consent by approving the form in the online questionnaire were included as volunteers. Informed consent was obtained from the participants.

### 3. Results

A total of 210 female (69.8%) and 91 male (30.2%) undergraduate students, with a mean age of  $21.20\pm3.54$ , participated in the study. Instagram was the most frequently used social media platform (78.7%), and 52.2% of the participants spent two or more hours per day on social media. Descriptive statistics and social media usage data for the participants are presented in Table 1.

**Table 1.** Descriptive characteristics of participants

Age (years) (X $\pm$ SD)	
Female	21.20 $\pm$ 3.54
Gender [n, (%)]	
Female	210 (69.8)
Male	91 (30.2)
Grade [n, (%)]	
1 <sup>st</sup>	70 (23.2)
2 <sup>nd</sup>	93 (30.9)
3 <sup>rd</sup>	55 (18.3)
4 <sup>th</sup>	83 (27.6)
Most frequently used social media [n, (%)]	
Instagram	237 (78.7)
Twitter	46 (15.2)
Snapchat	4 (1.3)
Youtube	2 (0.7)
Pinterest	3 (1.0)
Tiktok	2 (0.7)
Facebook	2 (0.7)
Whatsapp	4 (1.3)
Reddit	1 (0.3)
Time spent on social media [n, (%)]	
Less than 1 hour	67 (22.3)
About 1 hour	75 (24.8)
2 hours	82 (27.2)
3-4 hours	48 (15.9)
5-6 hours	20 (6.6)
7 hours and more	9 (3)

X=mean, SD=standard deviation

Table 2 presents the comparison of measurement scores by gender. The SMAS-SF scores were found to be  $73.77\pm20.60$  for female students and  $78.80\pm24.66$  for male students, with no significant difference between the groups ( $p>0.05$ ). SMIS scores were  $19.51\pm5.21$  for females and  $19.61\pm5.56$  for males, also showing no significant difference ( $p>0.05$ ). BAS scores were  $37.07\pm11.03$  for females and  $38.43\pm7.99$  for males with no significant difference observed ( $p>0.05$ ). PAS-2 scores were  $48.96\pm20.62$  for males and  $42.52\pm20.63$  for females, with males exhibiting a higher physical activity level ( $p<0.05$ ). A moderate, negative correlation was found between SMAS-SF and BAS ( $r=-0.401$ ,  $p<0.001$ ).

**Table 2.** Comparison of social media addiction, body image and physical activity between genders

	Female (n=210)		Male (n=91)		p
	X $\pm$ SD	Med (IQR)	X $\pm$ SD	Med (IQR)	
<b>SMAS-SF</b>	$73.77\pm20.60$	77.00 (27.00)	$78.80\pm24.66$	81.00 (32.00)	0.144
<b>SMIS</b>	$19.51\pm5.21$	20.00 (7.00)	$19.61\pm5.56$	20.00 (8.00)	0.708
<b>BAS</b>	$37.07\pm11.03$	39.00 (13.00)	$38.43\pm7.99$	39.00 (12.00)	0.806
<b>PAS-2</b>	$42.52\pm20.63$	38.95 (21.70)	$48.96\pm20.62$	44.40 (24.65)	<b>0.004</b>

Mann Whitney-U test, X=Mean, SD=Standard deviation, Med=Median, IQR=Interquartile range, SMAS-SF: Social Media Addiction Scale-Student Form, BAS: Body Appreciation Scale, PAS-2: Physical Activity Scale-2, SMIS: Social Media Intensity Scale.

Furthermore, a weak, negative correlation was identified between SMAS-SF and PAS-2 ( $r=-0.357$ ,  $p<0.001$ ). A weak, negative correlation was also found between SMIS and body image ( $r=-0.273$ ,  $p<0.01$ ), as well as between SMIS and physical activity level ( $r=-0.170$ ,  $p=0.003$ ). Lastly, a weak positive correlation was observed between body image and physical activity level ( $r=0.229$ ,  $p<0.001$ ) (Table 3).

Simple linear regression analysis was conducted to assess the predictive ability of gender on SMAS-SF, SMIS, BAS, and PAS-2 as well as the effects of social media addiction and social media use intensity on body image and physical activity levels. Gender explained only 2% of the variance in PAS-2, with a significant

**Table 3.** Correlations, means, standard deviations, and ranges among variables

X	SD	Range	SMAS-SF	SMIS	BAS	PAS-2
SMAS-SF	75.29	21.99	119.00	I		
SMIS	19.54	5.31	24.00		I	
BAS	37.48	10.21	40.00	-0.401*	-0.273*	I
PAS-2	44.46	20.80	144.00	-0.357*	-0.170**	0.229*

Spearman correlation analyses, X=Mean, SD=Standard deviation, SMAS-SF: Social Media Addiction Scale-Student Form, BAS: Body Appreciation Scale, PAS-2: Physical Activity Scale-2, SMIS: Social Media Intensity Scale.

\* $p<0.001$  \*\* $p<0.05$

$F(1,299)=6.190$ ,  $p=0.013$ . The SMAS-SF accounted for 13.8% of the variance in BAS, with a significant  $F(1,299)=49.098$ ,  $p<0.001$ . Additionally, SMAS-SF explained 9.3% of the variance in PAS-2, as indicated by a significant  $F(1,299)=31.591$ ,  $p<0.001$ . Similarly, SMIS explained 4.9% of the variance in BAS, with a significant  $F(1,299)=16.485$ ,  $p<0.001$ . SMIS also accounted for 1.2% of the variance in PAS-2, with a significant  $F(1,299)=4.609$ ,  $p<0.033$ . Furthermore, BAS alone explained 3% of the variance in PAS-2, with a significant  $F(1,299)=10.408$ ,  $p=0.001$  (see Table 4).

According to the ANOVA test, our model significantly explained BAS and PAS-2 ( $p<0.05$ ). Specifically, when perceived SMAS-SF increases by 1 standard deviation SD from its mean, BAS is expected to decrease by 0.17 SDs from its mean ( $p<0.001$ ), and PAS-2 is expected to decrease by 0.29 SDs ( $p<0.001$ ). Similarly, if SMIS increases by 1 SD from its mean, BAS is expected to decrease by 0.44 SDs from its own mean ( $p<0.001$ ), and PAS-2 is expected to decrease by 0.48 SDs ( $p<0.05$ ). Finally, when BAS increases by 1 SD from its mean, PAS-2 is expected to increase by 0.37 SDs ( $p<0.001$ ) (Table 3).

### 4. Discussion

This study aimed to investigate the impact of social media addiction on body image and physical activity by analyzing the direction and strength of this association. The research identified Instagram as the most commonly used social media platform. Social media platforms, especially those with high visual content, such as Instagram, can influence body ideals, particularly among young adults, which may affect body image and physical activity levels (30, 31). The study findings indicate that increased social media addiction and usage intensity negatively impact both physical activity levels and body image.

**Table 4.** Estimated regression equations predicting social media addiction scale, social media intensity scale, body appreciation scale, physical activity scale scores.

Regression model	Unstandardized Coefficients			Standardized Coefficients		R <sup>2</sup>	t	p	[%95 CI]
	F	$\beta$	SE	$\beta$					
<b>Gender</b>									
<b>SMAS-SF</b>	3,341	5.026	2.750	0.105	0.011	1.828	0.069		[0.385,10.437]
<b>SMIS</b>	0,023	0.101	0.668	0.009	0.009	0.151	0.880		[-1.213,1.415]
<b>BAS</b>	1,131	1.363	1.282	0.061	0.004	1.064	0.288		[-1.159,3.886]
<b>PAS2</b>	6,190	6.441	2.589	0.142	0.020	2.488	<b>0.013</b>		[1.346,11.537]
<b>SMAS-SF</b>									
<b>BAS</b>	49,098	-0.174	0.025	-0.376	0.138	-7.007	<b>0.000</b>		[-0.223,-0.125]
<b>PAS2</b>	31,591	-0.292	0.052	-0.309	0.093	-5.621	<b>0.000</b>		[-0.395,-0.190]
<b>SMIS</b>									
<b>BAS</b>	16,485	-0.440	0.108	-0.229	0.049	-4.060	<b>0.000</b>		[-0653, -0.227]
<b>PAS2</b>	4,609	-0.483	0.225	-0.123	0.012	-2.147	<b>0.033</b>		[-0.925, -0.040]
<b>BAS</b>									
<b>PAS2</b>	10,408	0.374	0.116	0.183	0.030	3.226	<b>0.001</b>		[0.146, 0.601]

Simple linear regression analyses, F=ANOVA coefficient, SE=Standard error, t=regression coefficient, CI=Confidence Interval, SMAS-SF: Social Media Addiction Scale-Student Form, BAS: Body Appreciation Scale, PAS-2: Physical Activity Scale-2, SMIS: Social Media Intensity Scale

Nowadays, users on social media platforms can freely create accounts, discuss, share, and exchange information through text, images, audio, and video (32). However, because social media places great importance on physical appearance (33), constant exposure to idealized and edited images may cause individuals to internalize these unrealistic standards as personal goals, potentially leading to body image distortions (30). Although a perceived discrepancy between the media-internalized body ideal and one's actual body often leads to body dissatisfaction, various tools such as mobile applications and photo filters provide opportunities to present oneself as closer to the ideal or desired image (20). In our study, we observed that Instagram is the most frequently used social media platform. However, we did not investigate the primary purposes for which participants use social media applications. Although we did not assess this directly, we assume that even if individuals use Instagram primarily for informative content, they are still likely to encounter appearance-related posts and be influenced by them. In line with this assumption, our findings indicate that increased social media addiction is associated with a decrease in body image. A decline in body image may lead to an increased need for approval and acceptance, which can result in a greater tendency to edit photos, potentially reinforcing social media addiction.

Furthermore, our findings indicated that an increase in social media addiction was associated with a decrease in body image satisfaction. This result may be specifically related to posts tagged with "fitspiration". Although these posts primarily showcase images and videos related to exercise, girls typically focus on achieving the ideal of thinness, while boys tend to emphasize a masculine and muscular physique (34). Exposure to such posts on social media, which idealizes extremely thin and muscular bodies, can contribute to negative body image (35). Additionally, addictive social media use can also result in body dissatisfaction (11). In summary, although social media may be used for various purposes, it can have negative effects on body image in young adults. The desire to present a more idealized personal image to a virtual audience may increase social media addiction, particularly among individuals already experiencing body dissatisfaction. Research also shows that, compared to individuals with an independent self-construal, those with an interdependent self-construal tend to be more vulnerable to fear of missing out (FoMO). Particularly in Western countries, which are characterized as more individualistic, social media use is often driven by internal motivations (e.g., mood regulation), whereas in collectivist cultures, individuals may be influenced by both internal and external motivations (e.g., in-group norms), which may increase their susceptibility to social media addiction (36). In collectivist societies, stronger pressure to conform to in-group norms and a greater motivation to maintain in-group relationships may heighten individuals' vulnerability to social media addiction (36). Similarly, the fact that participants in our

study resided in more collectivist societies compared to Western societies may have influenced body image results. High levels of problematic internet use and social media addiction are associated with increased sedentary time (31) and lower levels of physical activity (24). It has been reported that a one-unit increase in motivation to participate in physical activity leads to a 0.567-unit decrease in social network addiction (23), and that physically active adolescents are less interested in sedentary activities such as spending long hours on the internet (24). In addition, heavy social media use may increase the likelihood of encountering physical activity recommendations (19). This study demonstrated that heightened social media addiction and intense engagement with social media platforms result in decreased physical activity levels. This outcome may be due to the fact that dependence leads to reduced physical activity or because individuals can edit and present their photos according to their ideal body image before sharing them. Notably, the World Health Organization recommends that adults engage in 150–300 minutes of moderate-intensity or 75–150 minutes of vigorous-intensity physical activity per week, or a combination of both, to maintain and enhance health. Therefore, it is important to encourage young individuals to engage in physical activity both to reduce social media addiction and to prevent the negative health effects of a sedentary lifestyle. Additionally, this study revealed that higher body appreciation was positively correlated with increased levels of physical activity. Previous studies have demonstrated that physical activity can have a positive impact on individuals' body image (37, 38). This relationship can be interpreted in various ways. Individuals experiencing body dissatisfaction and high levels of self-stigma may adopt a pessimistic outlook on their body image, leading them to decrease their physical activity levels under the belief that improvement is unlikely even with increased activity (39, 40). Conversely, they may engage in excessive physical activity in an attempt to alter their appearance and conform to societal standards (30). In our study, individuals with a negative body image may avoid physical activity or exercise due to the belief that they will not achieve an attractive appearance regardless of their efforts or out of fear of being negatively evaluated by others. Therefore, preventing the dysfunctional use of social media is important to reduce users' exposure to unrealistic body image ideals and to discourage maladaptive behaviors, such as excessive or compulsive exercise, in pursuit of an idealized body.

Additionally, our study found a relationship between gender and physical activity, with male students exhibiting higher levels of physical activity compared to female students. Consistent with these findings, another study reported that male students participate in physical activity more frequently than female students (23). Moreover, factors such as biological differences in males, cultural and societal norms, social pressures, and the surrounding social environment may have contributed to the increased participation of males in physical activity.

In our study, no significant differences were found in social media addiction, intensity of social media use, or body image based on gender. In line with the findings of our study, another study found no significant gender differences in social media usage scores (41), suggesting that social media is used regardless of gender. The absence of such findings in our study may be due to the unequal distribution of male and female participants. Additionally, it is possible that the female students in our sample were not subjected to societal pressures regarding ideal body standards to the same extent. These mixed findings suggest that the relationship between gender and social media addiction is complex and may be influenced by various factors, including cultural, social, and individual differences.

The increase in social media use underscores the importance of addressing its potentially harmful effects. University students, in particular, extensively use social media in their daily lives and often rely on it as a source of information on health, nutrition, and physical activity. Leveraging these platforms can provide an accessible and cost-effective means to disseminate health-related information, enhance well-being, and promote increased participation in physical activity (24, 42). Encouraging the use of evidence-based, filtered online resources containing reliable and up-to-date health information is essential for this purpose. Research indicates that reducing social media usage may lead to increased frequency of physical activity (43) or regular exercise might decrease internet usage behavior (31). Behavior modification strategies, such as planned exercise prescriptions that increase physical activity, can change individuals' internet usage behaviors. Furthermore, it is vital to advocate for the benefits of using social media platforms to promote health and encourage healthy lifestyle behaviors, including providing guidance on accessing accurate information through these platforms. Furthermore, it is crucial to explore the factors contributing to social media addiction and develop strategies to mitigate and prevent its onset.

#### 4.1. Limitation

Several limitations should be considered when interpreting the findings of this study. The results depend on the accuracy of participant responses, which may affect the reliability of the outcomes. In addition, the weak correlation observed between some variables limits the generalizability of the findings. The reasons for using social media have not been examined in this study. Given that the use of social media for different purposes may lead to different outcomes, future research should consider collecting such data to provide further insight into the relationship between body image and physical activity levels. Moreover, participants' sports habits were not assessed, which may have affected their physical activity levels. The study sample consisted of undergraduate students from the physiotherapy and rehabilitation faculty; thus, the results cannot be generalized to all young adults. On the other hand, given that most similar studies focus primarily on adolescents, our findings have important implications for young adults. These results may also be valuable for future research aimed at examining the factors affecting social media addiction in larger, more representative samples and developing strategies for its prevention.

#### 5. Conclusion and Recommendations

The excessive use of social media and social media addiction among young adults may have detrimental effects on body image and physical activity. It is crucial to develop strategies to mitigate this addiction, and one approach is to promote effective and safe social media usage behaviors. Hashtags such as "fitness", "slimness", and "muscle", which are especially popular among young adults and frequently searched, often contribute to misconceptions about body ideals. These hashtags can,

however, be leveraged to share accurate, safe, and evidence-based information about healthy body ideals. Attention should be drawn to the interaction between body image and physical activity levels among university students on social media platforms. Increasing physical activity may potentially reduce social media addiction. In addition, initiatives aimed at promoting a positive body image are crucial for mitigating the negative effects of social media on students' health. Therefore, hashtags promoting physical activity could be incorporated into information shared on social media platforms. Moreover, it is crucial to prioritize content that emphasizes "real" health ideals rather than solely focusing on achieving a slim or muscular appearance. By doing so, a positive interaction between social media usage and body image perception can be fostered. Furthermore, enhancing students' critical thinking skills on this subject during their university education can help alter their perspectives on the unrealistic beauty standards promoted by social media.

#### 6. Contribution to the Field

As a result, it has been determined that the increasing social media addiction and usage intensity among university students negatively affect both physical activity levels and body image. In line with these findings, it is important to take measures to reduce social media addiction among students and promote regular exercise habits. Assessing individuals' physical activity levels and developing personalized exercise programs may help mitigate a sedentary lifestyle. Additionally, psychological support related to body image should be provided. Moreover, the dissemination of media content that may negatively affect body image should be prevented.

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#### Conflict of Interest

There is no conflict of interest with any person and/or institution.

#### Authorship Contribution

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