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The Relationship Between Social Media Addiction and Mental Fatigue Levels in Faculty of Health Sciences Students: A Descriptive and Relational Study

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Abstract

Background: Excessive and problematic use of social media can lead to addiction. Social media addiction results in mental fatigue as well as physical and psychosocial problems.

Aim: This study aimed to evaluate the level of social media addiction among university students studying health sciences, identify the factors affecting it, and examine its predictive effect on mental fatigue.

Methods: This study employed a descriptive qualitative and relational research design. Students from the Nursing and Midwifery Departments of the Faculty of Health Sciences who volunteered to participate and were present at the faculty during the study were included. Data were collected using the Individual Introduction Form, Social Media Addiction Scale, and Chalder Fatigue Scale. One-way Analysis of Variance (ANOVA), Independent Sample T-Test, Pearson Correlation, and Multiple Regression Analysis were used for data analysis.

Results: The mean age of the students was 20.53 ± 1.94 years; 84.4% were female, and 66.5% were nursing students. On average, nursing and midwifery students used social media for 4.76 ± 2.50 hours per day. The mean Social Media Addiction Scale score was 93.69 ± 26.36, and the mean Chalder Fatigue Scale score was 13.89 ± 5.78. Among the subdimensions of social media addiction, an increase of 0.063 units in the mood score average and an increase of 0.044 units in the conflict subdimension raised the mental fatigue score by one unit.

Conclusion: Students' social media addiction was mild. It was determined that they experienced moderate physical fatigue and low mental fatigue. Additionally, as social media addiction increased, mental fatigue also increased.

Keywords: Mental fatigue, social media addiction, university student

Introduction

Social media is a driving force in the media sector, bringing together interacting individuals who aim to achieve common outcomes through diverse ideas. With the rise of Web 2.0 platforms in the early 2000s, dialogues and exchanges between individuals through social networking sites have become accessible to a vast audience from a single point. This evolution has transformed social media from merely being a platform for entertainment and socializing into a vast industry utilized in fields such as human resources, commerce, politics, education, and healthcare. Today, numerous social networking platforms, including Facebook, YouTube, WhatsApp, Facebook Messenger, WeChat, Instagram, TikTok, X, QQ, QZone, and Pinterest, continue to grow in number and user base.[1]

Social networking sites are especially popular among young people, who use them to access information, gain and maintain social status, and communicate.[2] These platforms, which are among the most common digital channels for connecting with friends, are often described by users as spaces where life feels real and where meeting online friends can be emotionally enriching.[3] The free availability of social networking site applications developed for mobile phones, which facilitate Internet access, combined with the ease of accessing social networking sites through these apps, increases individuals' use of social media throughout the day and contributes to problematic usage patterns.[4] The problematic use of social networking sites has led to numerous negative psychosocial outcomes, including reduced engagement in real-life activities, the

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formation of negative relationships, poor academic performance, depression, loneliness, and addiction.[3] One study found that students in the Faculty of Education exhibited procrastination behavior due to social media addiction,[5] while other studies of university students highlighted psychological problems caused by social media addiction.[6,7]

Individuals addicted to social media—a form of behavioral addiction—tend to use social media as their first solution when bored, prioritizing it over real-life activities. The daily lives and responsibilities of social media-addicted individuals become disrupted, as the posts of those they follow take precedence over their own real lives. Virtual friends and followers often replace real-life friendships, and when access to social media is unavailable, feelings of restlessness and an overwhelming need to share content are commonly experienced.[8] Additionally, social media fatigue has been reported as a result of anxiety and the fear of missing posts from people or groups they follow. Social media addiction can lead to numerous physical and psychosocial problems, particularly in individuals who struggle with impulsivity, lack self-control, experience poor emotional states, or derive little enjoyment from life. A study conducted with 903 university students found a positive correlation between daily Facebook usage time, loneliness levels, and the degree of Facebook addiction.[9] Among these issues, various health problems have been identified, including the fear of missing out on situations shared by family members and friends due to disconnection, anxiety, social media fatigue, insomnia, eating disorders, burnout, depression, and mental fatigue resulting from prolonged use of cognitive functions,[10,11] particularly on social networking sites. However, no evidence of a relationship between mental fatigue and social media addiction has been documented in the literature.

Mental fatigue is defined objectively as a reduced ability to complete cognitive tasks and subjectively as a lack of energy and lateralgia (loss of interest and lethargy). In healthy individuals, it can occur due to overuse of the brain's resources, but it can also arise[12,13] in situations involving excessive stress, cognitively demanding tasks, attention-requiring activities, insomnia, and certain diseases of the nervous system.[14,15] Although mental fatigue is reported to be more prevalent in younger populations, this is thought to be associated with the nature of the work performed at younger ages rather than age itself.[16] An analysis of research on mental fatigue revealed that the samples typically focused on professions requiring significant use of mental resources, such as athletes,[17-19] teachers,[20] and nurses.[21] The nursing and midwifery professions, which demand high levels of attention, do not tolerate mistakes due to the nature of long working hours. These professions form a crucial link in health service delivery, requiring candidates to utilize their cognitive functions at a high level. Nursing and midwifery students are also recognized as a high-risk group for addiction.[22] Furthermore, it is thought that these students may be especially susceptible to experiencing mental fatigue due to the rapid advancement of technology and the increasing prevalence of social media addiction. However, no studies in the literature have examined the relationship between social media addiction and mental fatigue among nursing and midwifery students. Therefore, this study was conducted to assess the levels of social media addiction and mental fatigue among students in the Faculty of Health Sciences, identify the factors influencing social media addiction, and evaluate the predictive effect of social media addiction on mental fatigue.

Research Questions

1. What is the level of social media addiction among university students studying in the Faculty of Health Sciences?
2. What are the factors influencing social media addiction among university students studying in the Faculty of Health Sciences?
3. What is the level of mental fatigue among university students studying in the Faculty of Health Sciences?
4. Does social media addiction have a predictive effect on mental fatigue among university students studying in the Faculty of Health Sciences?

Materials and Methods

Study Design

This study employed a descriptive qualitative and relational research design.

Sample of the Study

The research data were collected from 562 students studying at the Faculty of Health Sciences at a university in Eskişehir during the autumn semester from October 2, 2022 to October 31, 2023, according to the 2023-2024 academic calendar. The timing of data collection was planned to avoid interference from preparations for exams, projects, and homework, which were anticipated to influence students' levels of mental fatigue.[12] Therefore, data collection was conducted shortly after the start of the academic year. All students enrolled in the programs were included in the study using the complete count method. The inclusion criteria were as follows: students who were present at the faculty on the days of the research, who were social media users, and who agreed to participate in the study. It is unknown how many potential participants were excluded based on the inclusion criteria. The exclusion criteria included incomplete completion of the questionnaire forms and being a student in the Health Management Department of the faculty. Mental fatigue can occur in healthy individuals as a result of overuse of brain resources and cognitive functions.[13] Therefore, it was planned to include students from Nursing and Midwifery Departments, as they are admitted based on the same numeric score type, have similar base scores, and follow comparable course programs and content in university entrance preferences. Students from the Health Management Department, admitted based on the equal weight score type, and students from other faculties of the university were excluded from the research.

Data Collection Tools

The data for this study were collected using the Individual Introduction Form, the Social Media Addiction Scale, and the Chalder Fatigue Scale.

Individual Introduction Form

This form, developed based on the literature,[4,14] includes questions regarding the type of department, grade level, age, gender, employment status, the number of social networking sites used, time spent on social networking sites, and the reasons for their use.

Social Media Addiction Scale

The Social Media Addiction Scale (SMAS) was developed in Turkish by Tutgun Unal in 2015 to measure the level of social media addiction among university students. The scale consists of 41 items and follows a 5-point Likert format. The internal consistency coefficient of the scale is 0.967. The scale includes four sub-dimensions: *Occupation*,

Mood Regulation, *Relapse*, and *Conflict*. The level of addiction is determined based on the following score ranges:

- 41-73: No addiction;
- 74-106: Low addiction;
- 107-139: Moderate addiction;
- 140-172: High addiction;
- 173-205: Very high addiction.[23]

In this study, the internal consistency coefficient of the SMAS was found to be 0.959.

Chalder Fatigue Scale

The Chalder Fatigue (CFS) Scale was developed by Chalder et al.[24] in 1993 to assess fatigue levels in individuals. The Turkish validity and reliability study of the scale was conducted by Adın et al.[25] The scale includes 7 items addressing physical fatigue and 4 items addressing mental fatigue. In this study, a 4-point Likert scoring method was used, where the response options for the 11 items were scored as 0, 1, 2, or 3. The scoring ranges are as follows:

- Physical Fatigue Subsection: 0-21,
- Mental Fatigue Subsection: 0-12, and
- Total Fatigue Score: 0-33.

Higher scores indicate greater severity of fatigue. In the validity and reliability study, the physical fatigue dimension demonstrated good test-retest reliability, the mental fatigue dimension showed moderate reliability, and the overall scale exhibited good test-retest reliability. The Intraclass Correlation Coefficient values for these dimensions were 0.793, 0.739, and 0.817, respectively. The internal consistency of the Chalder Fatigue Scale was found to be good for the physical fatigue dimension, acceptable for the mental fatigue dimension, and good overall, with Cronbach's alpha values of 0.893, 0.764, and 0.897, respectively.[25] In this study, the internal consistency coefficient of the scale was determined to be 0.849.

Data Collection

The research data were collected using the face-to-face interview technique, taking approximately 20 minutes per participant. The interviews were conducted in a quiet undergraduate classroom within the Faculty of Health Sciences.

Data Analysis

The data obtained from the study were analyzed using the SPSS 25.0 software package (IBM, Chicago, USA). The conformity of the data to a normal distribution was assessed using the Shapiro-Wilk test. Continuous data were expressed as mean and standard deviation, while categorical data were expressed as numbers and percentages (%). For normally distributed variables, results were reported as mean and standard error. The data were analyzed using One-Way Analysis of Variance (ANOVA) and an Independent Sample T-Test. Pearson Correlation Analysis was conducted to examine the relationships between numerical variables, and multiple regression analysis was performed to assess the effect of the independent variable on the dependent variable. Statistical significance was set at $P < 0.05$.

Ethical Considerations

Written permissions were obtained from Eskişehir Osmangazi University Non-Interventional Clinical Research Ethics Committee (Approval Number: 10, Date: 04.10.2022), and the Dean's Office of the Faculty of Health Sciences. Permission to use the scales employed in the study was obtained from the respective authors, and informed voluntary consent signatures were collected from the students who participated in the study. The study was conducted in full accordance with the principles outlined in the Declaration of Helsinki. Participants were informed that they could withdraw from the study at any time without providing a reason.

Results

The mean age of the students was 20.53 ± 1.94 years. Among the participants, 84.5% were female, 66.5% were nursing students, and 29% were in their fourth year. Additionally, 56.9% reported having income equal to their expenses, 88.8% were not working, and 92.9% reported having no chronic diseases. Of the students, 22.1% smoked cigarettes, and 17.6% consumed alcohol in social settings.

The average time spent by students on social media was 4.76 ± 2.50 hours per day. The most frequently used social media platform was Instagram (691.38 ± 509 min/day). The majority of students (61.8%) used social media for purposes such as entertainment, accessing information, communication, passing time, and following others. Mobile phones were the most commonly used device for accessing social media, reported by 55.7% of students (Table 1).

The minimum score obtainable from the Social Media Addiction Scale is 41, and the maximum score is 205.[24] Within the scope of this research, the students' average total score on the Social Media Addiction Scale was 93.69 ± 26.36, ranging between 74 and 106, indicating a low level of addiction. Based on this result, it was determined that the students exhibited a low level of social media addiction. When the sub-dimensions of the scale were analyzed, the findings indicated that the students were moderately dependent in the *preoccupation* sub-dimension (34.14 ± 9.14) and exhibited low dependency in the *mood regulation* (13.48 ± 4.77), *relapse* (10.73 ± 4.29), and *conflict* (35.33 ± 13.04) sub-dimensions (Table 2).

For the Chalder Fatigue Scale, the total mean score was 13.89 ± 5.78, indicating that the students experienced moderate fatigue overall. Analysis of the scale's sub-dimensions revealed that students experienced moderate physical fatigue (9.25 ± 4.36) and low mental fatigue (4.64 ± 2.17) (Table 2).

When the Social Media Addiction Scale scores were evaluated based on the gender variable, it was found that female students exhibited higher social media addiction than male students ($P < 0.001$). Analysis of the scale's sub-dimensions showed that the preoccupation, mood regulation, and relapse dependency scores were significantly higher among female students compared to male students ($P < 0.001$), with the sub-dimension scores being consistently greater for females ($P < 0.001$) (Table 3).

It was found that there was no significant difference between the sociodemographic variables (department, class, income status, and employment status) and the Social Media Addiction Scale scores of the students ($P > 0.05$). Students most frequently reported using social media for entertainment and passing time (n = 105), and social

Table 1. Characteristics of Students' Social Media Use

Feature	n	Mean ± SD
Time spent on social media (hours/day)	562	4.76 ± 2.50
Time spent on specific social media platforms*	n	Mean ± SD
Instagram (minutes/week)	532	691.38 ± 509
WhatsApp (minutes/week)	547	549.33 ± 507.16
YouTube (minutes/week)	481	503.54 ± 474.95
TikTok (minutes/week)	130	426.88 ± 421.29
Other** (minutes/week)	38	412.02 ± 631.49
X (minutes/week)	214	300.74 ± 302.62
Facebook (minutes/week)	33	197.24 ± 372.39
Purpose of Using Social Media	n	%
Enjoyment	105	18.7
Accessing knowledge	54	9.6
Communication	41	7.3
Spending time	6	1.1
Earning income, doing their job	7	1.2
Following people	2	0.4
Other[X]	347	61.8
Means of Connecting to Social Media*	n	%
Mobile phone	313	55.7
Mobile phone and tablet	37	6.6
Mobile phone and computer	191	34.0
Mobile phone, tablet, and computer	21	3.7

*More than one item could be selected.
**Includes WeChat, QQ, QZone, Pinterest, Facebook Messenger.
[X]Includes purposes such as entertainment, accessing information, communication, spending time,and following people. SD: Standard Deviation.

media addiction scores did not vary based on the reasons for social media use (Table 3).

Table 4 presents the relationship between time spent on social media, SMAS sub-dimension and total mean scores, and Chalder Fatigue Scale total and sub-dimension mean scores. According to the findings, as the duration of daily social media use increased, the levels of mental fatigue and total fatigue also increased, although the strength of this correlation was weak. Furthermore, as the total and sub-dimension scores of the Social Media Addiction Scale increased, physical, mental, and total fatigue scores also increased ($P < 0.01$) (Table 4).

Table 2. Distribution of students' Social media addiction scale and Chalder fatigue scale scores

Scale		n	Mean ± SD
Social Media Addiction Scale	Occupation	562	34.14 ± 9.14
	Mood Regulation	562	13.48 ± 4.77
	Relapse	562	10.73 ± 4.29
	Conflict	562	35.33 ± 13.04
	Total	562	93.69 ± 26.36
Chalder Fatigue Scale	Physical Fatigue	562	9.25 ± 4.36
	Mental Fatigue	562	4.64 ± 2.17
	Total	562	13.89 ± 5.78

Hierarchical regression analysis was conducted to test the effect of social media addiction on mental fatigue. The dependent variable was defined as the mental fatigue score, while the independent variables were the sub-dimensions scores of the Social Media Addiction Scale: *busyness*, *mood regulation*, *repetition*, and *conflict* scores, analyzed in stages. With the inclusion of each SMAS sub-dimension into the models, an increase in the R^2 value was observed, with Model 4 explaining 13% of the variance. In Model 4, it was found that a 0.063-unit increase in the mood regulation sub-dimension mean score and a 0.044-unit increase in the conflict sub-dimension mean score resulted in a one-unit increase in the mental fatigue score ($P = 0.011$, $P < 0.001$, respectively) (Table 5).

Discussion

With the advancement of technology, the increasing number of social media channels[4] and content creators,[2] the growing appeal of social media content, the income generated through social media, and changes in individuals' tendencies to seek information, entertainment, socialization, and communication have made social media use prevalent among young people. However, excessive use of social media has given rise to a significant issue: social media addiction.[23] This study aimed to investigate the level of social media addiction among students in the Faculty of Health Sciences, the factors influencing social media addiction levels, and the predictive effect of social media addiction on mental fatigue.

In this study, conducted with nursing and midwifery students, the average time spent on social media was 4.76 ± 2.50 hours, and the students' social media addiction levels were categorized as low. Similar findings have been reported in other studies conducted with university students in Türkiye. For example, a study on nursing students found that they spent 3-4 hours daily on social media,[26] and their social media addiction levels were low.[27] In our country, it was found that university students spent an average of over 2 hours and 51 minutes on social media.[28] The social media addiction levels of students in social sciences,[29] as well as those in economics and administrative sciences,[30] are at a moderate level. A study conducted in Lebanon found that 49% of students used social media for at least 5 hours.[31] In another study with pharmacy students, it was shown that higher social media addiction correlated with an increased susceptibility to depression.[32] Similarly, a study conducted with undergraduate students in Nigeria revealed that 26.8% of participants spent more than 4 hours on social media.[33] Additionally, studies in universities outside of Türkiye also indicate that the majority of students use social media for an average of more than 3 hours.[34] The results of the study indicate that while university students use social media daily, they do not perceive themselves as social media addicts. However, it is important to recognize that the increasing use of social media, particularly among young people, could evolve into compulsive use that may lead to addiction in the future.

Female students in our study scored higher on the Social Media Addiction Scale than male students. A study conducted at the University of Bonn suggested that women are genetically more prone to addiction.[35] Additionally, women nursing students were found to exhibit greater smartphone usage habits and a higher prevalence

Table 3. Social Media Addiction Scale Scores by Variables

Variable			Total and Subdimension Scores of Social Media Addiction				
			Occupation	Mood Regulation	Relapse	Conflict	Total
Sex	**n**	**%**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**	**Mean ± SD**
Female	474	84.5	34.83 ± 0.40	13.85 ± 0.21	10.99 ± 0.19	35.70 ± 0.58	95.39 ± 1.18
Male	87	15.5	30.45 ± 1.06	11.48 ± 0.54	9.27 ± 0.44	33.08 ± 1.5	84.29 ± 2.99
t			4.158	4.327	3.461	1.731	3.645
p			**<0.001**	**<0.001**	**0.001**	0.084	**<0.001**
95% Confidence Interval (Lower-Upper)			2.30-6.43	1.29-3.45	0.74-2.69	-0.35-5.61	5.11-17.07
Department							
Midwifery	188	33.5	34.53 ± 0.65	13.62 ± 0.33	10.74 ± 0.30	34.73 ± 0.92	93.63 ± 1.86
Nursing	374	66.5	33.94 ± 9.20	13.41 ± 0.25	10.72 ± 0.22	35.63 ± 0.68	93.72 ± 1.38
t			0.713	0.487	0.052	-0.769	-0.037
p			0.476	0.627	0.958	0.442	0.971
Class							
First Grade	138	24.6	33.80 ± 0.72	13.36 ± 0.38	10.12 ± 0.31	33.72 ± 0.94	91.01 ± 1.95
Second Grade	132	23.5	34.57 ± 0.84	13.94 ± 0.44	10.88 ± 0.40	35.10 ± 1.14	94.51 ± 2.40
Third Grade	129	22.9	33.84 ± 0.77	13.40 ± 0.41	10.70 ± 0.37	36.04 ± 1.26	94 ± 2.41
Fourth Grade	163	29.0	34.31 ± 0.73	13.29 ± 0.36	11.14 ± 0.34	36.30 ± 1.05	95.06 ± 2.12
t			0.227	0.540	1.480	1.144	0.669
p			0.87	0.65	0.219	0.331	0.571
Income							
More Than Expenditure	38	6.7	31.55 ± 1.33	13.05 ± 0.73	10.94 ± 0.73	33.15 ± 2.52	88.71 ± 4.70
Equals Expenditure	320	56.9	34.13 ± 0.50	13.31 ± 0.25	10.59 ± 0.22	34.87 ± 0.67	92.91 ± 1.39
Less Than Expenditure	204	36.4	34.63 ± 0.65	13.84 ± 0.36	10.90 ± 0.32	36.45 ± 0.98	95.84 ± 1.95
F			1.829	0.931	0.382	1.485	1.498
p			0.162	0.395	0.683	0.227	0.224
Working Status							
Working	63	11.2	32.28 ± 1.21	12.96 ± 0.64	11.06 ± 0.57	36.01 ± 1.94	92.33 ± 3.86
Not Working	499	88.8	34.37 ± 0.40	13.55 ± 0.21	10.68 ± 0.19	35.24 ± 0.57	93.86 ± 1.15
t			-1.715	-0.920	0.651	0.442	-0.435
p			0.087	0.358	0.515	0.659	0.664
Reason for Using Social Media							
Entertainment/Passing Time	105	18.68	34.15 ± 0.95	14 ± 0.52	11.46 ± 0.42	39.16 ± 1.42	98.78 ± 2.81
Accessing Information	54	9.6	34.70 ± 1.22	12.87 ± 0.59	11.46 ± 0.57	36.01 ± 1.96	95.05 ± 3.75
Communication/Socialization	41	7.29	30.46 ± 1.29	12.75 ± 0.64	10.51 ± 0.66	33.58 ± 2.26	87.31 ± 4.15
Passing Time/Nothing To Do	6	1.06	38 ± 3.45	16.5 ± 1.64	13.83 ± 2.74	34.5 ± 3.12	102.83 ± 8.88
Generating Income/Getting Things Done	7	1.24	35.14 ± 3.46	14.57 ± 2.01	13.71 ± 1.99	43 ± 5.38	106.42 ± 11.56
Addiction	2	0.35	32.5 ± 2.50	10 ± 4	7 ± 1	46.5 ± 3.5	96 ± 3
Following People	2	0.35	37 ± 6	16.5 ± 3.5	12 ± 6	42.5 ± 18.5	108 ± 34
All of the Above	345	61.43	34.39 ± 0.48	13.44 ± 0.25	10.31 ± 0.22	34.01 ± 0.64	92.17 ± 9.73
F			1.221	1.104	2.343	2.614	1.517
p			0.289	0.359	0.023	0.012	0.159

F: One Way Analysis of Variance (ANOVA) Test; t: Independent T-Test.

of nomophobia (fear of being without a phone) compared to men.[36] Another study reported that 16.4% of women were addicted to Facebook.[3] Conversely, some studies have found no significant relationship between social media addiction and gender.[29] Research investigating the reasons behind social media addiction in women has shown that women often seek to maintain communication with friends regardless of distance[37] and struggle to control the time they spend on social media.[38] In this study, the majority of students reported using social media primarily for entertainment and passing time. Similarly, other studies found that nursing and medical faculty students predominantly used social media for browsing purposes,[39] and nursing students, in particular, often used social media for this

Table 4. Correlation Between Students' Time Spent on Social Media, Social Media Addiction, and Fatigue Scores

Variable			Physical Fatigue	Mental Fatigue	Total Fatigue	Time Spent on Social Media
Time Spent on Social Media (hours/day) *		r	0.06	0.126	0.093	1
		p	0.156	0.003	0.028	
Social Media Addiction Scale*	Occupation	r	0.266	0.246	0.293	0.339
		p	<**0.01**	<**0.01**	<**0.01**	<**0.01**
	Mood Regulation	r	0.340	0.283	0.363	0.203
		p	<**0.01**	<**0.01**	<**0.01**	<**0.01**
	Relapse	r	0.213	0.209	0.240	0.274
		p	<**0.01**	<**0.01**	<**0.01**	<**0.01**
	Conflict	r	0.288	0.372	0.333	0.406
		p	<**0.01**	<**0.01**	<**0.01**	<**0.01**
	Total	r	0.342	0.373	0.335	0.407
		p	<**0.01**	<**0.01**	<**0.01**	<**0.01**

*Pearson Correlation Test was used.

reason.[40] Based on the results of this research, it can be concluded that university students primarily use social media for entertainment and to pass their free time.

In the present study, it was observed that as students' daily social media usage time, as well as their total and sub-dimension scores on the SMAS (indicating increased engagement in long-term, cognitively demanding processes), increased, their physical, mental, and total fatigue levels also increased. Excessive and compulsive use of social media can lead to mental fatigue.[41] While there is evidence in the literature supporting this finding,[42] it has also been reported that internet addiction increases fatigue,[43] and the fear of losing internet access can cause headaches and fatigue in individuals.[44] Studies have further shown that social network addiction leads to excessive procrastination among undergraduate students,[45] anxiety in high school students,[46] and social network fatigue in both groups. A study conducted with pharmacy students found that social media addiction increases susceptibility to depression.[32] Similarly, a study conducted with medical students revealed that excessive use of social media negatively affects sleep quality.[47] These results highlight the negative effects of social media use. To mitigate these consequences, individuals could be encouraged to limit their social media usage and abstain for specific periods. A study conducted in China reported that 95% of participants believed that measures should be taken to prevent the adverse effects of social media, such as restricting its use during certain situations and times.[48,49]

Table 5. Multiple Regression Analysis Findings Showing the Role of Social Media Addiction on Mental Fatigue

	Unstandardized Coefficients		Standardized Coefficients		
Model	ß	Std. Error	ß	t	P
1 Constant	2.644	0.344		7.679	<**0.001**
Occupation	0.058	0.010	0.246	6.001	
2 Constant	7.679	0.343		7.167	<**0.001**
Occupation	6.001	0.013	0.108	2.026	0.043
Mood Regulation	0.097	0.024	0.213	4.003	<**0.001**
3 Constant	2.422	0.343		7.052	<**0.001**
Occupation	0.016	0.014	0.068	1.142	0.254
Mood Regulation	0.093	0.024	0.204	3.826	<**0.001**
Relapse	0.038	0.026	0.076	1.495	0.135
4 Constant	2.235	0.339		6.586	<**0.001**
Occupation	0.005	0.014	0.021	0.354	0.723
Mood Regulation	0.063	0.025	0.139	2.563	0.011
Relapse	-0.017	0.028	-0.033	-0.600	0.549
Conflict	0.044	0.009	0.265	4.754	<**0.001**

Model 1 $R^2 = 0.060$, $F = 36.013$, $P < 0.001$
Model 2 $R^2 = 0.087$, $F = 26.500$, $P < 0.001$
Model 3 $R^2 = 0.090$, $F = 18.450$, $P < 0.001$
Model 4 $R^2 = 0.126$, $F = 20.024$, $P < 0.001$

This study found that an increase in the mean score of mood regulation was associated with higher levels of mental fatigue. Given that the sample predominantly consisted of women, who are known to use social media more frequently, often as a means of escaping life's negativities and alleviating loneliness,[36] this may have contributed to the elevated levels of mental fatigue observed among the students. Additionally, in our study, the *conflict* sub-dimension was also shown to increase the level of mental fatigue. This conflict arises from individuals' inability to communicate effectively[37] and has been linked to heightened mental fatigue in students. There is no research specifically examining the relationship between social media addiction and mental fatigue among university students. However, one study reported that the perceived well-being of high school and university students decreased as problematic internet use increased.[38] Another study conducted with university students found that social media addiction generates negative emotions in individuals.[39] Based on these findings, it can be concluded that social media addiction impacts students' mood, well-being, and levels of physical, mental, and overall fatigue.

Limitations

The limitations of this study include its focus on undergraduate students from the Nursing and Midwifery Departments of a Faculty of

Health Sciences during a specific time period. Consequently, the results reflecting the mild level of social media addiction among these students are generalizable only to this specific population. Furthermore, the data was based on self-reports and was collected at a single point in time.

Conclusion

As the social media addiction of nursing and midwifery students increases, their levels of mental fatigue also rise. In a world where the number of social media platforms is growing daily and their content is becoming increasingly engaging, we believe that encouraging students to shift their focus towards social environments that involve face-to-face interactions, rather than virtual ones, could help reduce mental fatigue. Additionally, efforts should be made to guide students' interests toward sports programs, educational and cultural activities, and engaging entertainment options. We suggest that training programs be developed to teach students who spend excessive time online how to manage their time effectively and use social media tools consciously and efficiently. For future studies, it is recommended to include students with mild, moderate, and severe levels of social media addiction to better evaluate the relationship between social media addiction and mental fatigue levels.

Ethics Committee Approval: Ethics committee approval was obtained from Eskişehir Osmangazi University Non-Interventional Clinical Research Ethics Committee (Approval Number: 10, Date: 04.10.2022).

Informed Consent: Informed voluntary consent signatures were collected from the students who participated in the study.

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