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## Social Media Addiction Among Nursing Students and Its Related Factors

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# Social Media Addiction Among Nursing Students and Its Related Factors

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## Abstract

**Background:** Social media use has become an indispensable part of our lives as a result of technology advancement and is quite high among students.

**Methods:** This study employed a cross-sectional design. Participants were 289 students from the Faculty of Health Sciences at Artvin Coruh University, Turkey. The Social Media Addiction Scale (SMAS) was used to obtain data. T-test, one-way ANOVA, Pearson's correlation, and Bonferroni analysis were used to analyze the data.

**Results:** The participants' mean SMAS score was  $81.03 \pm 34.79$ , which was moderate. A weak and positive correlation was found between social media addiction and daily social media use. Statistical differences were found between social media addiction and social class, maternal education level, place of residence, income level, and general health status. Further, statistically significant differences were found between access to social media such as Facebook, Twitter, and Skype, and SMAS and subscales ( $p < 0.05$ ).

**Conclusions:** The nursing students in this study showed moderate levels of social media addiction. Factors such as daily social media use, year of study, maternal education level, place of residence, income level, and general health status are associated with the degree of social media addiction.

**Keywords:** addiction, internet, nursing, social media

## INTRODUCTION

Given the rapid development of Web 2.0 information and communication technologies in recent decades, such internet-based tools have become an indispensable part of our lives. The gradual increase in internet access has likewise expanded its use, especially among young people in their professional and social environments.<sup>1</sup> Internet use primarily takes place through social media.<sup>2</sup> Spending too much time on social media platforms such as Facebook, Twitter, and Instagram is considered social media addiction. Though it is not considered an addiction by the World Health Organization, excessive use of social media has attracted attention and led to further research in this field.<sup>3</sup> Social media involves a variety of internet applications that allow over three billion people to connect by sharing texts, messages, photos, and videos in real time. The popularity of social media networks is widespread in developing countries, especially among the young population.<sup>4</sup> The number of monthly active social media users worldwide is expected to reach 3.43 billion by 2023, which is approximately one third of the world's population.<sup>3</sup>

According to the January 2021 digital report by the We Are Social platform, which provides up-to-date internet statistics for Turkey and includes mobile and social media statistics, the number of social media users increased by more than 11 percent, with an increase of 6 percent compared to 2020. million. Based on this estimate, the number of social media users in Turkey constitutes 70.8% of its total population.<sup>5</sup> The primary purposes for social media use are keeping up with global events, following the news, watching entertaining videos and content, spending free time, interacting with friends and family, and sharing photos and videos. Most users spend their time on social networks, online news sites, and film and music portals. In addition, with the recent effects of the COVID-19 pandemic, the number of social media users has increased by 13% since 2020.<sup>5</sup> As such, social network usage patterns are a clear indicator of the transition to mobile platforms.

Through smartphones and tablets, mobile web access facilitates the continuous use of mobile-first or mobile-only platforms such as Twitter, Instagram, and Snapchat.<sup>6</sup> With the increase in social media use, technology-related addictions have also increased. Studies have shown that the addictive use of social media reduces productivity, healthy social relationships, and life satisfaction, while excessive use causes anxiety, depression, social envy, weak social relationships, poor job performance, and

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decreased quality of life.<sup>7</sup> Additionally, social media reduces social interaction and communication among individuals. These findings have important implications in professions where communication is a key skill, such as nursing.<sup>8</sup> Excessive phone use in nursing students was found to be associated with lower sleep quality, self-esteem, perceived social support, and communication skills, and higher social distress.<sup>9</sup> When technology is not used appropriately, it impacts the daily routines of individuals and reduces their sleep quality, which negatively affects the mental and physical health of students and their academic success.<sup>10</sup> Academic achievement decreased in students from health-related departments (medicine, nursing, etc.) as social media addiction increased.<sup>11</sup> Studies have shown that long-term social media use is positively associated with poor mental health, such as anxiety, depression, and stress, and negatively associated with well-being over time.<sup>12</sup> Social media has also been associated with decreased face-to-face communication. Current nursing students born in this age of technology and spending significant time on social media may be affected by these problems, which may negatively impact their communication skills in their professional lives.<sup>13</sup> It is important to develop nurses' communication skills during their student years. Nurses, who comprise the majority of healthcare professionals, most actively promote and safeguard the health of patients, as they spend the most time with patients. To ensure success in their careers, greater awareness of their social media use and better management of the time spent on such platforms is important. Therefore, this study investigated social media addiction and its influencing factors in students in a nursing program.

## METHODS

This study employed a cross-sectional design. Data were collected from first-, second-, third-, and fourth-year students from Department of Nursing, Faculty of Health Sciences, Artvin Coruh University, Turkey between December 1, 2021 and February 1, 2022. A total of 289 nursing students participated in the study. Students who did not volunteer to participate in the study were excluded from the sample. The study sample size was calculated based on the universal formula on OpenEpi. As the population was 419 individuals, the minimum sample size needed was 201 individuals, with a confidence interval of 95% and error margin of 5%. In addition, considering a 50% observation rate, 1% standard deviation, and 99% confidence interval using OpenEpi, a sample calculation program, 258 students were deemed to be an appropriate sample size. Students older than 18 years of age were included. Participants' sociodemographic characteristics were considered the independent variables, while their Social Media Addiction Scale (SMAS) scores formed the dependent variables. Students who provided consent were included in the study. Data were

collected by the researchers through in-person surveys. When taking a sampling method, 62% of the samples were reached. The inclusion criteria were age being  $\geq 18$  years and being a nursing student. The exclusion criteria were refusal to be involved in the study and incomplete questionnaires. A descriptive information form and the social media addiction scale were used to collect data.

The descriptive information form was developed by the researchers after a literature review. It includes 20 questions regarding the participants' characteristics such as age, education level, monthly income, social media usage time, sleep time, internet usage time, and place of residence.

Social Media Addiction Scale (SMAS) was developed by Şahin (2017) to determine social media addiction levels in secondary education, high school, and university students. Within the framework of validity studies, exploratory and confirmatory analyses were conducted and the SMAS-AF (Social Media Addiction Scale-Adult Form) was found to use a 5-point Likert-type scale. The scale consists of 29 items across four subscales: virtual tolerance, virtual communication, virtual problem, and virtual information. Items 1-5 covered virtual tolerance, 6-14 covered virtual communication, 15-23 covered virtual problem, and 24-29 covered virtual information. The internal consistency coefficient (Cronbach's alpha) was 0.93 for the whole scale, while internal consistency coefficients were between 0.81 and 0.86 for the subscales. The maximum possible score on the scale is 145 and the minimum possible score is 29. Responses ranged from not at all appropriate to very appropriate, with 1 point for not suitable at all and 5 points for very suitable. High scores indicate that individuals perceive themselves as addicted to social media.<sup>14</sup>

The data were analyzed using IBM's SPSS program, version 25 to obtain descriptive statistical methods (number, percentage, min-max values, mean and standard deviation), and normal distribution was tested with skewness and kurtosis. As the data were normally distributed, we performed a parametric t-test and one-way ANOVA. Pearson's correlation coefficient was calculated to understand the relationships between the scales, and a Bonferroni analysis was used to find the difference in multiple comparisons. A 95% confidence interval and  $p < 0.05$  error level were considered in evaluating the results.

The study was carried out in accordance with the principles of the Declaration of Helsinki. Students were informed about the study and their consent was obtained. The ethics committee approval for this study was received from the Artvin Coruh University Ethics Committee (No. E-43747944-044-26873, October 21, 2021).

## RESULTS

### SMAS and subscale scores

The mean score for the SMAS was  $81.03 \pm 34.79$ , which was found to be moderate. The mean subscale scores were  $14.96 \pm 6.48$  for virtual tolerance,  $24.84 \pm 11.22$  for virtual communication,  $23.14 \pm 11.89$  for virtual problem, and  $18.08 \pm 71.16$  for virtual information. Cronbach's alpha reliability coefficient for the SMAS was 0.98, with virtual tolerance = 0.94; virtual communication = 0.92; virtual problem = 0.96; and virtual information = 0.92. (Table 1).

### Correlation results for social media addiction and daily internet use, daily social media use, and the number of social media applications used

Pearson's correlation analysis showed a weak positive correlation between social media addiction and daily social media use ( $r = 0.200, p = 0.001$ ), a moderate positive correlation between daily internet use and daily social media use ( $r = 0.416, p = 0.000$ ), a weak positive correlation between daily internet use and the number of social media applications used ( $r = 0.175, p = 0.003$ ), and a weak positive correlation between daily social media use and the number of social media applications used (Table 2).

### Comparison of mean SMAS scores by sociodemographic characteristics

The distribution of the sociodemographic characteristics showed that mean age was  $21.25 \pm 2.04$ , with most students aged between 20 and 22 years (69.6%). About 72.7% were female students, a majority were Anatolian high school graduates (42.6%), and 26.3% were in their fourth year. In terms of maternal education level, 38.1% had primary education; for paternal education level, 27.3% were high school graduates and 27.3% had primary education. Nearly 46.7% of the students lived with family, 56.4% had income that was lower than their expenses, and 57.8% had good general health. Daily internet use was  $4.45 \pm 3.05$  hours, while daily social media use was  $3.12 \pm 1.71$  hours. While no differences were found between social media addiction and age, gender, type of high school, or paternal education level ( $p > 0.05$ ), differences were found for year of study, maternal education level, place of residence, income level, and general health status ( $p < 0.05$ ). A Bonferroni analysis showed the difference resulted from third-year students, whose mean SMAS scores were higher than all other students. In terms of maternal education level, students whose mothers had secondary education showed higher mean SMAS scores than students whose mothers had primary education. Differences in terms of place of residence was observed in students living alone and whose mean SMAS scores were higher than those of

students living with family and other people (with friends, etc.). Students with income lower than their expenses had higher SMAS scores than those with higher incomes. In terms of general health, differences were found in the group with moderate general health, suggesting that students with good and poor health levels had higher SMAS scores than those with moderate health (Table 3).

### Comparison of SMAS and subscale mean scores in terms of internet/smartphone use

When the mean SMAS and subscale scores of the students who participated in the study were compared in terms of internet/smartphone use, no statistically significant difference was found between checking the phone during sleep hours or phone use delaying sleep latency and scores on the SMAS and its subscales ( $p > 0.05$ ). A statistically significant difference was found between checking the phone at night and checking the phone on waking up and the virtual tolerance and virtual communication subscales, as well as between losing sleep due to internet use and SMAS and all subscale scores ( $p > 0.05$ ). An independent t-test showed that the mean virtual tolerance and virtual communication subscale scores were higher in students who checked their phone at night compared to those who did not. Mean SMAS and all subscale scores for students who lost sleep owing to internet use were higher than those of students who did not lose sleep. In addition, mean virtual tolerance subscale and virtual communication subscale scores for students who checked their phones on waking up were higher compared to those who did not (Table 4).

### Comparison of mean SMAS and subscale scores in terms of social media characteristics

When mean SMAS and all subscale scores of the students who participated in the study were compared in terms of social media characteristics, no statistically significant difference was found between social media use, believing that social media is harmful, Instagram, WhatsApp, and other social media applications and SMAS score ( $p > 0.05$ ). However, a statistically significant difference was found between access to social media such as Facebook, Twitter, and Skype, and SMAS and subscales ( $p < 0.05$ ). A Bonferroni analysis showed that social media addiction levels of students who used desktop and mobile devices to access social media were higher than those of the students who used only mobile devices.

In terms of social media applications, students who used Facebook often or excessively had higher SMAS scores than students who never or seldom used it, while students who used Twitter and Skype often or exclusively had higher SMAS scores than students who never, seldom, or moderately used them (Table 5).

**TABLE 1.** Means scores of the Social Media Addiction Scale (SMAS) and subscales used in the study and descriptive statistics

Scale	Number of Items	Items	Min-Max	Mean ± SD	Cronbach's Alpha
SMAS	25	1-29	29-145	81.03 ± 34.79	0.98
Virtual tolerance	5	1-5	5-25	14.96 ± 6.48	0.94
Virtual communication	9	6-14	9-45	24.84 ± 11.22	0.92
Virtual problem	9	15-23	9-45	23.14 ± 11.89	0.96
Virtual information	6	24-29	6-30	18.08 ± 7.16	0.92

**TABLE 2.** Correlation between social media addiction and daily internet use, daily social media use, and the number of social media applications used

Correlation results of social media addiction	1	2	3	4
Social media addiction	1.000	0.023	0.200*	0.090
Daily internet use		1.000	0.416*	0.175*
Daily social media use			1.000	0.306*
Number of social media applications used				1.000

\* $p < 0.01$

**TABLE 3.** Comparison of mean SMAS scores by sociodemographic characteristics (N = 289)

Characteristics	N (%)	Mean ± SD	$p$	Bonferroni
<b>Age***</b> (21.25 ± 2.04)				
17-19	39 (13.5)	87.00 ± 3.06	0.341	
20-22	201 (69.6)	79.29 ± 34.16		-
≥23	49 (17.0)	83.44 ± 33.82		
<b>Gender**</b>				
Female	210 (72.7)	82.87 ± 35.00	0.143	-
Male	79 (27.3)	76.15 ± 33.94		
<b>Type of high school attended***</b>				
Anatolian	123 (42.6)	73.36 ± 35.04	0.118	
Regular	30 (10.4)	76.93 ± 31.96		-
Health	71 (24.6)	87.66 ± 34.28		
Vocational	65 (22.5)	84.53 ± 35.29		
<b>Year of study***</b>				
First	69 (23.9)	80.43 ± 35.95	0.000*	Third > Second
Second	72 (24.9)	71.51 ± 26.57		Third > Fourth
Third	72 (24.9)	99.26 ± 38.72		Third > First
Fourth	76 (26.3)	73.34 ± 30.37		
<b>Maternal education level***</b>				
Illiterate	57 (19.7)	76.94 ± 33.55	0.009*	
Primary education	110 (38.1)	73.61 ± 33.59		
Secondary education	77 (26.6)	88.92 ± 33.50		Primary < Secondary
High school	32 (11.1)	92.03 ± 38.40		
University	13 (4.5)	88.00 ± 35.52		
<b>Paternal education level***</b>				
Illiterate	21 (7.3)	84.09 ± 33.62	0.537	
Primary education	79 (27.3)	76.70 ± 34.67		
Secondary education	73 (25.3)	79.20 ± 35.48		-
High school	79 (27.3)	85.88 ± 35.06		
University	37 (12.8)	81.81 ± 34.09		
<b>Place of residence***</b>				
With family	135 (46.7)	71.86 ± 31.77	0.000*	Other < Alone
Alone	63 (21.8)	103.33 ± 29.97		
Other	91 (31.5)	81.65 ± 36.48		Other < Alone
<b>Income level***</b>				
Income = expense	89 (30.8)	77.77 ± 33.44	0.007*	Income < Expense
Income > expense	37 (12.8)	67.32 ± 30.50		>
Income < expense	163 (56.4)	85.93 ± 35.55		Income > Expense
<b>General health status***</b>				
Good	167 (57.8)	82.80 ± 36.28	0.000*	Good > Moderate
Moderate	75 (26.0)	68.94 ± 31.58		Poor > Moderate
Poor	47 (16.3)	94.06 ± 28.24		

\* $p < 0.05$ ; \*\* t-test; \*\*\*F=one-way ANOVA

**TABLE 4.** Comparison of mean SMAS and subscale mean scores in terms of internet/smartphone use (N = 289)

Variables	Subscale/Scale	p
Checking the phone during sleep hours	Virtual tolerance	0.109
	Virtual communication	0.273
	Virtual problem	0.267
	Virtual information	0.443
	SMAS total	0.234
Checking the Phone at night	Virtual tolerance	0.027*
	Virtual communication	0.029*
	Virtual problem	0.124
	Virtual information	0.323
	SMAS total	0.065
Losing sleep due to internet use	Virtual tolerance	0.012*
	Virtual communication	0.006*
	Virtual problem	0.003*
	Virtual information	0.045*
	SMAS total	0.005*
Checking the phone on waking up	Virtual tolerance	0.027*
	Virtual communication	0.029*
	Virtual problem	0.124
	Virtual information	0.323
	SMAS total	0.065
Phone use delaying sleep latency	Virtual tolerance	0.821
	Virtual communication	0.980
	Virtual problem	0.929
	Virtual information	0.610
	SMAS total	0.919

\*p &lt; 0.05

**TABLE 5.** Comparison of Mean SMAS and Subscale Scores in Terms of Social Media Characteristics (N = 289)

Variables	Subscale/Scale	p	Bonferroni
<b>Social media use**</b>	Virtual tolerance	0.661	
Yes	Virtual communication	0.403	
No	Virtual problem	0.426	
	Virtual information	0.420	
	SMAS total	0.430	
<b>Believe social media is harmful**</b>	Virtual tolerance	0.352	
Yes	Virtual communication	0.133	
No	Virtual problem	0.362	
	Virtual information	0.528	
	SMAS total	0.272	
<b>Social media access***</b>	Virtual tolerance	0.000*	
Desktop	Virtual communication	0.000*	Desktop and mobile
Desktop and mobile	Virtual problem	0.000*	>
Only mobile	Virtual information	0.000*	Only mobile
	SMAS total	0.000*	
<b>Facebook***</b>	Virtual tolerance	0.000*	
Never or seldom	Virtual communication	0.000*	Often or excessively
Moderate	Virtual problem	0.000*	>
Often or excessively	Virtual information	0.000*	Never or seldom
	SMAS total	0.000*	
<b>Instagram***</b>	Virtual tolerance	0.165	
Never or seldom	Virtual communication	0.067	-
Moderate	Virtual problem	0.059	
Often or excessively	Virtual information	0.327	
	SMAS total	0.088	

TABLE 5. Continued

Variables	Subscale/Scale	<i>p</i>	Bonferroni
<b>Twitter***</b>	Virtual tolerance	0.000*	Often or excessively
Never or seldom	Virtual communication	0.000*	>
Moderate	Virtual problem	0.000*	Never or seldom;
Often or excessively	Virtual information	0.000*	Often or excessively
	SMAS total	0.000*	>
			Moderate
<b>WhatsApp***</b>	Virtual tolerance	0.599	
Never or seldom	Virtual communication	0.374	
Moderate	Virtual problem	0.815	-
Often or excessively	Virtual information	0.629	
	SMAS total	0.606	
<b>Skype***</b>	Virtual tolerance	0.000*	Often or excessively
Never or seldom	Virtual communication	0.000*	>
Moderate	Virtual problem	0.000*	Never or seldom;
Often or excessively	Virtual information	0.000*	Often or excessively >
	SMAS total	0.000*	Moderate
<b>Other (TikTok, blogs, forums)***</b>	Virtual tolerance	0.166	
Never or seldom	Virtual communication	0.163	
Moderate	Virtual problem	0.305	-
Often or excessively	Virtual information	0.106	
	SMAS total	0.159	

\**p* < 0.05

## DISCUSSION

It is important for nurses to develop their communication skills during their student years. Because nurses spend a lot of time with patients, they actively promote and maintain patient health. They are more likely to succeed professionally if they are more skilled in using social media wisely and managing their time. Internet access and use are increasing worldwide, and social media use is also increasing with this ease of access.<sup>6</sup> Studies have found that social media addiction levels increase as time spent on social media increases.<sup>15-17</sup> The mean scores for the SMAS was  $81.03 \pm 34.79$ , which was moderate. In a study conducted on university students, social media addiction levels increased with increased internet addiction.<sup>16</sup> Nursing students in particular are at risk of social media addiction since they spend excessive time on the internet and social media.<sup>18</sup>

A moderate and positive correlation was found between daily internet use and daily social media use. Similar to this result, a study conducted with university students showed that social media addiction increased as daily internet use increased.<sup>19</sup> Students who spent five hours or more daily on social media had higher social media addiction levels, and addiction increased as time spent on social media increased.<sup>20</sup> Nurses use social media to communicate with patients and their families, for educational purposes, to foster professional connections, and to educate and inform health professionals and society.<sup>21</sup> Social media is believed to be the preferred way to use the internet as it provides a platform for communication, obtaining information, and entertainment.

No correlation was found between students' gender and social media addiction. Similarly, gender was not associated with risk of social media addiction.<sup>16,22</sup> Since both genders had similar purposes (online communication, chat, shopping etc.) for social media use, gender cannot be considered a factor associated with addiction levels. In our study, third-year students had higher social media addiction levels, which was confirmed in another study.<sup>23</sup> In a study conducted with health sciences students, while social media addiction was high in second-year students, it was low in first-year students.<sup>20</sup> Differences in these results suggest that sociodemographic characteristics correlate with students' social media addiction levels.

In terms of education level, significant correlation was found between maternal education level and social media addiction. In a study conducted with high school students in Spain, students from families with higher education levels were found to have higher addiction levels, similar to the results of our study.<sup>24</sup> A study conducted with female university students showed that problematic internet use decreased as parents' education levels increased and, when parents were university graduates, their children used technology less for entertainment.<sup>25</sup> Family awareness increases with higher education levels and children's options for acquiring knowledge likewise increase. With increased education levels, the need for technology increases and this may result in addiction.

Students who lived alone had higher social media addiction levels, presumably because they tend to be more active in online social networks when alone.<sup>26</sup> Studies conducted with students have shown that those with high levels of loneliness and low levels of social

support are more addicted to social media.<sup>27</sup> One study found that being single, being young, and living in a small town was associated with loneliness, and internet use was higher in individuals who lived alone.<sup>28</sup> While individuals use the internet and social media to communicate, obtain information and have fun, it is thought that individuals living alone prefer social media applications to socialize and relieve stress.

Significant correlation was found between income level and social media addiction. A study conducted with female university students showed that low family socioeconomic status is not only a social problem but also causes addiction to other technologies.<sup>25</sup> Individuals with insufficient and unstable financial sources potentially use the internet to cope with stressful life events, which may lead to increased addiction.<sup>29</sup>

Students with a moderate level of general health showed higher social media addiction. Unlike our study, social media addiction in university students has been found to increase as their depression levels increased.<sup>19</sup> Social media addiction is believed to increase because social media applications are used as sources of information today; individuals seek solutions to health problems and want to discuss these problems with others.

Our study showed that students who checked their phones at night had higher virtual tolerance and virtual communication mean scores than students who did not. In a study conducted with medical faculty students, those with poor sleep had a higher probability of reporting excessive social media use. Sleep patterns were found to deteriorate as time on social media increased.<sup>30</sup> Depending on the purpose for social media, spending too much time on the phone to keep up with events may cause various health problems. Individuals who check their phone to keep up with the latest developments on social media or who feel that they will miss something important otherwise tend to be more addicted.

In our study, students who lost sleep owing to internet use had higher SMAS and subscale scores. In a study conducted on medical faculty students, male students with smartphone addictions who used smartphones before bed reported low sleep quality, avoided social interactions, were uncomfortable when smartphone use was restricted, and allocated more time to online and offline games.<sup>31</sup>

In our study, students who checked their phones as soon as they woke up had higher mean virtual tolerance and virtual communication scores than students who did not. In a study with medical faculty students, 83.9% of students checked their phones for notifications as soon as they woke up.<sup>32</sup> Another study showed that individuals experienced negative psychological and sometimes physiological symptoms when they paused social media

use, causing social media addiction and more problematic behaviors in these individuals.<sup>33</sup>

Individuals who used desktop and mobile devices to access social media had higher social media addiction levels than those who used mobile devices exclusively. With the increasing number of touch screen phones, mobile access to social networks has increased. In addition, it has been observed that installing social networking applications on mobile phones increases the time spent on virtual social networks.<sup>34</sup> In a study of individuals with an average age of 14.2, 99.2% used WhatsApp and mobile devices the most to follow social media.<sup>35</sup> Smartphone addiction in nursing/midwifery students has also reportedly increased as the time they spent using social media increased.<sup>36</sup> Social media addiction has become concerning because, in recent decades, users have gained convenient access to such applications from portable devices such as tablets and phones.<sup>25</sup> The portability and ubiquitousness of such devices increases the time spent on social media applications and consequently addiction levels.

In our study, statistically significant differences were found between access to social media such as Facebook, Twitter, and Skype, and SMAS and subscales. A study conducted with university students suggests that with the increasing number of social media accounts, social media addiction will also rise.<sup>3</sup> The greater the number of social media applications individuals use to keep up with events, communicate, or for entertainment and the more time spent using them is believed to increase the level of addiction.

Students who used Facebook have shown higher social media addiction levels. A study of Akdeniz university students showed that social media usage differs across Facebook, Twitter, and Instagram. While students used Twitter to express themselves and socialize, Instagram was used to promote themselves.<sup>37</sup> The purpose for social media use is believed to influence the type of social media used and addiction levels. This study has some limitations. First, participants were limited to nursing students and were approached online and not personally. Second, nursing students from only one university were included. Third, psychological factors associated with social media addiction were not determined. Therefore, future studies should consider different populations and with larger samples.

## CONCLUSIONS

The nursing students in this study showed moderate levels of social media addiction. Factors such as daily social media use, year of study, maternal education level, place of residence, income level, and general health status are associated with their social media addiction levels. Students use social media for their information needs, to



learn about new technological developments, and for entertainment during their free time, which is believed to lead to addiction to social media.

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## CONFLICT OF INTEREST

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## REFERENCES

1. Arabacı IB. Investigation Faculty of Education students' cyberloafing behaviors in terms of various variables. *Turk Online J Educ T*. 2017;16:72-82.
2. Baz FÇ. Sosyal medya bağımlılığı: Üniversite öğrencileri üzerine çalışma [Social media addiction: Study on university students]. *Int J Soc Res*. 2018;9:276-95. Turkish.
3. Doğrusever C. Ergenlerin sosyal medya bağımlılık düzeylerinin bazı sosyo demografik değişkenler açısından incelenmesi [Investigation of adolescents' social media addiction levels in terms of some socio-demographic variables]. *Anadolu Univ J Soc Sci*. 2021;21:23-42. Turkish.
4. da Veiga GF, Sotero L, Pontes HM, Cunha D, Portugal A, Relvas AP. Emerging adults and Facebook use: The validation of the Bergen Facebook Addiction Scale (BFAS). *Int J Ment Health Addict*. 2019;17:279-94.
5. Kemp S. *Digital 2021: The latest insights into the 'state of digital'*. United Kingdom: We Are Social, 2021.
6. Dixon S. *Mobile social media worldwide-Statistics & Facts*. Germany: Statista, 2022.
7. Sun Y, Zhang Y. A review of theories and models applied in studies of social media addiction and implications for future research. *Addict Behav*. 2021;114:106699.
8. Onay M, Süslü ZH, Kılıç S. İletişim tarzının ve sözsüz iletişimin çalışanların iş performansına etkisi: Posta dağıtıcıları ve hemşireler üzerine bir araştırma [The effects of communication style and nonverbal communication level on employees' work performance: A study on the mail distributors and nurses]. *J Organ Manag Sci*. 2011;3:57-66. Turkish.
9. Osorio-Molina C, Martos-Cabrera MB, Membrive-Jiménez MJ, Vargas-Roman K, Suleiman-Martos N, Ortega-Campos E, et al. Smartphone addiction, risk factors and its adverse effects in nursing students: A systematic review and meta-analysis. *Nurse Educ Today*. 2021;98:104741.
10. Hawi NS, Samaha M. The relations among social media addiction, self-esteem, and life satisfaction in university students. *Soc Sci Comput Rev*. 2017;35:576-86.
11. Azizi SM, Soroush A, Khatony A. The relationship between social networking addiction and academic performance in Iranian students of medical sciences: A cross-sectional study. *BMC Psychol*. 2019;7:28.
12. Bányai F, Zsila Á, Király O, Maraz A, Elekes Z, Griffiths MD, et al. Problematic social media use: Results from a large-scale nationally representative adolescent sample. *PLoS One*. 2017;12:e0169839.
13. Açıkgöz A, Ezen M, Emir B, Özkaraman A. Effect of social media dependence of nursing students on communication skills. *Kocaeli Med J*. 2019;8:130-40.
14. Şahin C, Yağcı M. Sosyal medya bağımlılığı ölçeği-eytişkin formu: geçerlilik ve güvenilirlik çalışması [Social media addiction scale - adult form: The reliability and validity study]. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi*. 2017;18:523-38. Turkish.
15. Al-Menayes J. Psychometric properties and validation of the Arabic social media addiction scale. *J Addict*. 2015;2015:291743.
16. Çömlekçi MF, Başol O. Gençlerin sosyal medya kullanım amaçları ile sosyal medya bağımlılığı ilişkisinin incelenmesi [Analysis of relationship between youths' social media usage motives and social media addiction]. *Celal Bayar Univ J Soc Sci*. 2019;17:173-88. Turkish.
17. Gazi MA, Çetin M, Çakı C. The research of the level of social media addiction of university students. *Int J Soc Sci Educ Res*. 2017;3:549-59.
18. Turan GB, Özer Z, Atan G. The relationship between cyberloafing levels and social media addiction among nursing students. *Perspect Psychiatr Care*. 2021;57:836-43.
19. Dikmen M. COVID-19 pandemisinde üniversite öğrencilerinin depresyon düzeylerinin sosyal medya bağımlılığı üzerindeki rolünün incelenmesi: Bir yapısal eşitlik modeli [Relationship between university students' depression levels and social media addiction in the COVID-19 outbreak: A structural equation model]. *J Depend*. 2021;22:20-30. Turkish.
20. Çimke S, Cerit E. Social media addiction, cyberbullying and cyber victimization of university students. *Arch Psychiatr Nurs*. 2021;35:499-503.
21. Lefebvre C, McKinney K, Glass C, Cline D, Franasiak R, Husain I, et al. Social media usage among nurses: Perceptions and practices. *J Nurs Adm*. 2020;50:135-41.
22. Ramesh Masthi NR, Pruthvi S, Phaneendra MS. A comparative study on social media usage and health status among students studying in pre-university colleges of Urban Bengaluru. *Indian J Commun Med*. 2018;43:180-4.
23. Çelik M. Üniversite öğrencilerinin sosyal medya bağımlılık düzeylerinin incelenmesi: Kültür üniversitesi öğrencileri üzerinde bir araştırma [Examination of the level of dependency on social media college students: A study on students of Istanbul Kültür University]. Paper presented at: 1st International conference on new trends in communication; 2017 May 4-5; İstanbul, Turkey.

24. Sánchez-Martínez M, Otero A. Factors associated with cell phone use in adolescents in the community of Madrid (Spain). *Cyberpsychol Behav.* 2009;12:131–7.
25. He ZH, Li MD, Ma XY, Liu CJ. Family socioeconomic status and social media addiction in female college students: The mediating role of impulsiveness and inhibitory control. *J Genet Psychol.* 2021;182:60–74.
26. Chegeni M, Shahrababaki PM, Shahrababaki ME, Nakhaee N, Haghdoost A. Why people are becoming addicted to social media: A qualitative study. *J Educ Health Promot.* 2021;10:175.
27. Zhang S, Tian Y, Sui Y, Zhang D, Shi J, Wang P, et al. Relationships between social support, loneliness, and internet addiction in Chinese postsecondary students: A longitudinal cross-lagged analysis. *Front Psychol.* 2018;9:1707.
28. Alheneidi H, AlSumait L, AlSumait D, Smith AP. Loneliness and problematic internet use during COVID-19 lock-down. *Behav Sci (Basel).* 2021;11:5.
29. Sela Y, Bar-Or RL, Kor A, Lev-Ran S. The internet addiction test: Psychometric properties, socio-demographic risk factors and addictive co-morbidities in a large adult sample. *Addict Behav.* 2021;122:107023.
30. Basu S, Sharma R, Sharma P, Sharma N. Addiction-like behavior associated with social media usage in undergraduate students of a government medical college in Delhi, India. *Indian J Psychiat.* 2021;63:35–40.
31. Chatterjee S, Kar SK. Smartphone addiction and quality of sleep among Indian medical students. *Psychiatry.* 2021;84:182–91.
32. Belgin O, Şimşek A, YILDIZ O, et al. Ankara Üniversitesi Tıp Fakültesi Dönem 3 Öğrencilerinde Sosyal Ortamlardaki Gelişmeleri Kaçırma Korkusunun Değerlendirilmesi ve İlişkili Faktörler [Evaluation of fear of missing the developments in social environments and related factors in 3rd grade students of Ankara University Faculty of Medicine]. *Manisa Celal Bayar Univ J Inst Health Sci.* 2021;8:613–20. Turkish.
33. Liu Y. *From social media uses and gratifications to social media addiction: A study of the abuse of social media among college students* [Master's thesis]. Lawrence (KS): University of Kansas; 2016.
34. Billieux J, Philippot P, Schmid C, Maurage P, De Mol J, Van der Linden M. Is dysfunctional use of the mobile phone a behavioural addiction? Confronting symptom-based versus process-based approaches. *Clin Psychol Psychother.* 2015;22:460–8.
35. Marengo D, Angelo Fabris M, Longobardi C, Settanni M. Smartphone and social media use contributed to individual tendencies towards social media addiction in Italian adolescents during the COVID-19 pandemic. *Addict Behav.* 2022;126:107204.
36. Corrêa Rangel T, Falcão Raposo MC, Sampaio Rocha-Filho PA. Internet addiction, headache, and insomnia in university students: A cross-sectional study. *Neurol Sci.* 2022;43:1035–41.
37. Balcı Ş, Elif K. Sosyal medyada algılanan sosyal desteğin, yaşam doyumu üzerindeki etkinliği: üniversite gençliği araştırması [The effectiveness of social support perceived in social media on life satisfaction: University Youth Research]. *Akdeniz Üniversitesi İletişim Fakültesi Dergisi.* 2021;2021:47–71.