



Social Media Addiction and Related Factors among Turkish Nursing Students Türk Hemşirelik Öğrencilerinde Sosyal Medya Bağımlılığı ve İlişkili Faktörler

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ABSTRACT

Objective: Nursing is a profession which is in direct contact with people and requires face-to-face communication. However, in recent years, social media addiction (SMA) has become widespread among nurses and nursing students. It is obvious that the inactive time spent on social media will negatively affect the quality of the nursing service provided. For that reason, nursing students should be taught to use social media effectively in the context of information technology during their education. To do this, first of all, it is necessary to determine whether there is an addiction problem in the use of social media in nursing students. Therefore, this study aims to investigate SMA and the affecting factors among Turkish nursing students.

Method: In this descriptive study, 197 nursing students were completed the Social Media Addiction Scale. Independent unpaired t-tests, one-way ANOVA test, chi-square test, and Pearson's correlation coefficient were used as statistical tests.

Results: In this descriptive study, 197 nursing students were completed the Social Media Addiction Scale. Independent unpaired t-tests, one-way ANOVA test, chi-square test, and Pearson's correlation coefficient were used as statistical tests.

Conclusion: Social media addiction was common among nursing students. The limitation of the use of mobile telephones in theoretical, laboratory and clinical practice in nursing education may be a useful to prevent or minimize SMA.

Keywords: academic success, nursing students, social media, social media addiction, social networking sites

ÖZ

Giriş: Hemşirelik bireylerle doğrudan teması ve yüz yüze iletişimi gerektiren bir meslektir. Bununla birlikte, son yıllarda hemşireler ve hemşirelik öğrencileri arasında sosyal medya bağımlılığı giderek yaygınlaşmaya başlamıştır. Sosyal medyada geçirilen etkin olmayan zamanın verilen hemşirelik hizmetlerinin kalitesini negatif yönde etkileyeceği aşikardır. Bu nedenle hemşirelik öğrencilerine eğitimleri sırasında, bilgi teknolojileri bağlamında, sosyal medyayı etkin kullanmaları konusunda dersler verilmesi önerilmektedir. Bunun için öncelikle hemşirelik öğrencilerinde sosyal medya kullanımında bağımlılık sorununun olup olmadığının ortaya konması gerekir. Bu eksiklikten yola çıkarak planlanan mevcut çalışmada hemşirelik öğrencilerinde sosyal medya bağımlılığı ve etkileyen faktörlerin incelenmesi amaçlanmıştır.

Yöntem: Bu tanımlayıcı araştırmanın örneklemini 197 hemşirelik öğrencisi oluşturmuş; veriler Sosyal Medya Bağımlılık Ölçeği ile toplanmıştır. İstatistiksel test olarak bağımsız eşleştirilmemiş t testi, one way ANOVA, ki-kare testi ve Pearson korelasyon katsayısı kullanılmıştır.

Bulgular: Öğrencilerin büyük çoğunluğu (%74.6) sosyal medya bağımlısı olup, sosyal medyaya çoğunlukla akıllı telefonlar yoluyla bağlanmaktadır. Sosyal medyada harcanan zaman arttıkça bağımlılık artmakta (P=0.000); sosyal medya bağımlılığı akademik başarıyı (P=0.000); olumsuz yönde etkilemektedir.

Sonuç: Hemşirelik öğrencilerinde sosyal medya bağımlılığı yaygındır. Teorik, laboratuvar ve klinik hemşirelik eğitiminde mobil telefonların kullanımının sınırlandırılması sosyal medya bağımlılığını önleme ve en aza indirmede yararlı olabilir.

Anahtar Kelimeler: akademik başarı, hemşirelik öğrencileri, sosyal medya, sosyal medya bağımlılığı, sosyal ağ

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INTRODUCTION

Information technology has entered every area of individual and working life. Internet-connected applications have become applicable in different mobile devices and computer operating systems. This has led to the transformation of people from passive users into active content-producing individuals, causing people to remain constantly connected to the internet environment (1).

Since social networks run their applications over the internet, they can not be considered independent of its usage. Although there are different opinions about the lack of privacy, hacking, “fake” news and all other negative aspects of online life, internet and social media usage in the world is becoming more widespread. The global digital growth shows that there is no pause in internet and social media usage, and that one million new people join the online world every day; this growth clearly encourages the use of social media (2).

Carr and Hayes (3) have defined social media as “internet-based channels that allow users to opportunistically interact and selectively self-present, either in real-time or asynchronously, with both broad and narrow audiences who derive value from user-generated content and the perception of interaction with others” (p.50). Kuss and Griffiths (4) have identified social media as virtual communities where users can create individual profiles, interact with real-life friends, and meet other people based on shared interests. According to the Global Digital Report 2019, published annually by We Are Social and Hootsuite, 3.5 billion people in the world, in other words, 45% of the world’s population use social media (2). It is reported that 79% of the population in Turkey have a mobile phone; 72% of the population (59.39 million people) use internet; 63% (52 million people) actively use social media; and 53% of the total population (44 million people) prefer to use social media via mobile phone (5).

Individuals access the internet for many different kinds of entertainment and social activities, such as playing games, spending leisure time, sending photos, and communicating (6, 7). Although this

situation is perceived as an inevitable consequence of the modern informatics era, it is stated that long-term and compulsive internet use should be addressed in the context of addiction in terms of causing negative results (8, 9).

Being too involved with social networks such as Facebook, Twitter, Instagram, etc., being constantly online in social media, being directed by uncontrollable motivation, and the presence of negative impacts of social media on daily life are considered to be social media addiction (SMA) (10). Some users may develop an addiction to specific activities, such as gambling, gaming, shopping, web surfing, cybersexing, and cyber-relationships. SMA is a cyber-relationship addiction, because the main aim and motivation to use social media is to establish and maintain both online and offline relationships (4).

It has been observed that SMA addiction continues to increase, and vulnerable young people with narcissistic tendencies are more prone to social media addiction (11-14). Those who are addicted to social media, similarly to other substance addicts, exhibit negative symptoms and behaviors (12,15) and especially in the young group, SMA adversely affects academic performance (12,16-23).

In Turkey, the most comprehensive study on SMA is “Turkey’s Addiction and Mental Health Risk Profile Map” (24). According to these study results, which were conducted on a sample of 24,494 residents in 81 Turkish provinces, the SMA rate is quite high, especially in the Eastern Anatolia region where one of every two people is addicted to social media.

Today, the internet and social media are indispensable and necessary elements of the business and entertainment world. Therefore, the information obtained from the above-mentioned studies have significant implications for clinical practice. Unlike the treatment of substance-related addictions, the aim of SMA treatment is to control the use of social media rather than total abstinence (4). SMA has become a threat to the youth of the world. Some countries have starting to establish

internet addiction treatment centers to combat the addiction problem. The first examples of internet addiction centers connected with the National Health Services were launched in the UK (25).

Nursing is a profession which is in direct contact with people and requires face-to-face communication. The effective communication skills of a nurse depend on interpersonal communication, and it is necessary to patiently listen, understand, and interpret the verbal and non-verbal messages from clients to plan, implement and evaluate the necessary nursing interventions. Therefore, regardless how high-tech the robotic care tools, patient transfer systems, etc. are, none of these can replace the nurse. However, in recent years, SMA has become widespread among nurses and nursing students. In some hospitals in Canada, nurses are prohibited from using mobile phones during working hours (26).

It is obvious that the inactive time spent on social media will negatively affect the quality of the service provided. For that reason, nursing students should be taught to use social media effectively in the context of information technology during their education. To do this, first of all, it is necessary to determine whether there is an addiction problem in the use of social media in nursing students. To date, the scientific literature addressing SMA among nursing students is scarce. Therefore, this study aims to investigate SMA and the affecting factors among Turkish nursing students.

MATERIAL and METHODS

Study Design

This study was designed as quantitative, descriptive and correlational study.

Participants

This descriptive study was carried out in March 2019 among undergraduate nursing students at a foundation university in Istanbul. There were 218 nursing students. The sample consisted of 197 nursing students who agreed to participate in the study. Thus 90.4 percent of all nursing students were included in the study.

The mean age of the students was 21.7 years (range: 18-42 years); 157 (79.7%) of the students were female and 40 (20.3%) were male. This gender distribution reflects the enrollment profile of the nursing student body in Turkey, which is 80% female.

Instruments

We collected data by using Social Media Addiction Scale (SMAS). The Social Media Addiction Scale (SMAS), a 5 point Likert scale (1=never to 5=always), was developed by Tutgun Unal and Deniz (27) to measure social dependence among university students. The SMAS consists of 41 items, and four sub-dimensions, including occupation (items 1-12), mood modification (items 13-17), relapse (items 18-22), and conflict (items 23-41).

The occupation dimension includes statements that indicate that a person intensely thinks about social media activities and is engaged in these activities. Mood modification dimension refers to the change in the emotions of the individual during the use of social media. The relapse dimension includes statements about the unsuccessful attempts of avoiding social media, limiting its use, and controlling it rather than repeating the same behavior patterns. The conflict dimension is related to the use of social media negatively affecting the life of the individual by creating a conflict in their relationships.

The SMAS score can be calculated for both the total of the scale and sub-dimensions; as the score increases, the level of SMA increases. Depending on the scores obtained from the total of the scale, the addiction classification is distributed as follows: 41-73 (not addicted), 73-106 (slightly addicted), 107-139 (moderately addicted), 140-172 (highly addicted), and 173-205 (extremely addicted). In the current study, Cronbach's alpha values were found to be 0.92, 0.90, 0.85, 0.93 and 0.96 for the occupancy, mood modification, relapse, conflict dimensions, and for the total scale, respectively.

Research Hypotheses

In this study, we attempted to answer questions regarding SMA and related factors in nursing students based on the following hypotheses.

H1: Among nursing students, the SMA level will be high.

H2: SMA levels will increase as students' daily social media usage increases.

H3: There will be a positive and significant relationship between SMAS sub-dimensions.

H4: Social media addicted students will have lower self-reported academic performance.

Data Collection

The SMAS was completed in 6-9 minutes by each student during regularly scheduled class sessions.

Statistical Analyses

Data analyses were run on SPSS, version 25.0 (IBM SPSS Corp.; Armonk, NY, USA). We used Cronbach's alpha analyses for internal consistency of the SMAS. Pearson's correlation coefficients were calculated to examine associations between two continuous variables. Independent unpaired t-tests were used for two-group comparisons of continuous variables. One-way ANOVA was conducted to compare scores for three-group comparisons of continuous variables. Data were presented as numbers and mean \pm standard deviation (SD), where appropriate. In all statistical analyses, significance was determined at $p < 0.05$.

RESULTS

All participating students used social media. The most widely used social media platforms were Whatsapp (100%), Instagram (98.5%), Facebook (52.3%), and Twitter (40.6%), respectively. Almost all students (94.4%) accessed social media via smartphones; however, a small percent of students

(5.6%) used desktop, laptop, and tablet computers to access social media. Daily internet access time was 3.8 hours (SD=2.1, min-max=1-5); the average duration of daily using social media was 3.0 hours (SD=2.0, min-max=0-12). The nursing students had been using social media for an average of 6.5 years (SD=2.5, min-max=0-15).

Using the SMAS, we identified that 25.4% of the students were not social media addicted and 74.6% were addicted (66.5% slightly/moderately addicted; 8.1% highly/extremely addicted). SMA levels significantly increased as the students' daily duration of social media usage increased (Table 1). According to these findings, hypotheses H1, nursing students have a high SMA level, and H2, SMA levels will increase as students' daily social media usage increases, have both been accepted.

Social media addiction	n	Mean	SD	F	P
No addiction	50	1.25	0.43		
Slightly/moderately addicted	131	1.77	0.41	64.25	.000
Highly/extremely addicted	16	2.28	0.45		

There was a positive and statistically significant relationship between SMAS dimensions (Table 2).

	Mood modification	Relapse	Conflict	Addiction-Total
Occupation	0.647	0.551	0.585	0.838
Mood modification		0.416	0.506	0.715
Relapse			0.587	0.736
Conflict				0.906

According to the results of the correlation analysis, the strongest relationship was between occupation and mood modification ($r=0.647$). Again, it was observed that there was a positive, moderate and significant relationship between the occupation and relapse dimensions ($r=0.551$) and the occupation and conflict ($r=0.585$) dimensions. At the same time, there was a positive and moderately significant relationship between the mood modification and relapse dimensions ($r=0.416$) and between the mood modification and conflict dimensions ($r=0.506$). Finally, there was a positive, moderate, significant relationship between the relapse and the conflict dimensions ($r=0.587$). Thus H3 has been accepted based on the results obtained from the correlation analysis.

It was reported by 42.6% of the students that the time spent on social media adversely affected their academic success. These students spent longer times on the internet and social media (Table 3). In addition, the mean score of addiction was higher among those students (Table 4). Thus, the H4 hypothesis, which predicted that students with SMA would have lower academic success, was also confirmed.

Self reported Adverse Effect of the Time Spent on Internet and Social Media on Academic Performance				
	Yes		No	
	n	%	n	%
		84	42.6	113
Time spent on internet in a day (mean hour \pmSD)	4.26 \pm 2.32		3.43 \pm 1.94	
	t= 2.71; P<0.01			
Time spent on social media in a day (mean hour \pmSD)	3.70 \pm 2.41		2.59 \pm 1.49	
	t= 3.97; P<.001			

Self Reported Adverse Effect of the Time Spent on Internet and Social Media on Academic Performance					
		Yes		No	
		n	%	n	%
			84	42.6	113
Social media addiction	No addiction	8	21.3	42	28.7
	Slightly/moderately addicted	64	55.9	67	75.19
	Highly/extremely addicted	12	6.8	4	9.2
Chi-square= 23.43; P<.001					

DISCUSSION

In our study, we found that 100% of nursing students were using social media, by comparison to the average usage in Turkey of 63% (2). Similar to our study, Al-Menayes (17) reported that in Kuwait 99.7% of university students use social media. In reviewing social media usage statistics, we determined that social media usage has increased substantially over the last few years, especially among the young population (2). One-third of social media users were in the 25-34 age group in Turkey (5).

Nowadays, it is possible to reach many applications via smartphones, such as voice and video calls, text messages, video recordings, etc. In addition, mobile phones can be used during many activities such as driving, walking, and working. It is also possible to transfer applications made with smartphones to desktop, laptop, and tablet computers. Especially among youth, there is a large growth in the use of mobile phones, which is followed by rapid growth in the use of online social media sites (28,29). In our study, almost all of the nursing students (94.4%) were connected to social media via their smartphones. Similar to our results, in a study conducted in Kuwait, mobile phones were preferred by 97.7% in accessing social media (16).

In Turkey, the most widely used social media platforms are YouTube (97%), Instagram (84%), WhatsApp (83%), and Facebook (82%). TV series and cartoons are thought to have a major impact on YouTube searches. WhatsApp is preferred in messaging applications, while Instagram is preferred in sharing photos (5). In our study, the most commonly used social media platform was WhatsApp (100%) and Instagram (98.5%), respectively. Similar to our study, Otu (30) determined that the most used social media platform was WhatsApp. Al-Menayes (16) reported that the most widely used social media platform was WhatsApp, Instagram, and Twitter.

Although all the respondents in our study used social media, 74.6% of students were addicted; 66.5% were mildly / moderately addicted, and 8.1% were severely / very severely addicted. These findings confirm the high prevalence of the SMA among Turkish nursing students, although it is not at an alarming level in terms of severity. In a study conducted in Ghana, (30), while 80% of the students were moderately addicted, 19% were not addicted, and only 1% were severely addicted.

In the current study, the average time spent on the internet was 3.8 hours per day of which 3 hours were spent on social media. There was a statistically significant relationship between the mean duration of time spent on social media and SMA. This was above the 2.46 hours per day average for Turkey (5). As seen in Table 1, students who were addicted spent more time on social media than those who were not addicted. This finding shows that there is a direct relationship between the time spent on social media time and addiction.

A positive and statistically significant relationship was found between dimensions of SMAS (Table 2). Thus, we can conclude that as the occupation behavior in social media increases, there will also be increases in the actions of relapse, conflict and mood modification. Therefore, it can be said that the way to avoid the adverse effects of social media may be to limit the time spent on social media to reasonable periods.

Students who agreed that spending time on social media adversely affected their academic performance (42.6%) also stated that they spent a longer time using social media ($P < 0.001$, Table 3). When evaluated by the SMAS, students who thought that the time spent on social media adversely affect their academic performance were shown to be more addicted to social media (Table 4). These results show that SMA affects academic success negatively; in other words, it is important in terms of showing that students devote time to social media rather than schoolwork. This result also means that students were aware that uncontrolled usage was damaging their academic performance yet they continued to use it heavily (12,16,18,21).

Talaue et al. (21) reported that students continued using their phone even during the class session. Barkley and Lepp (18) found that 87% of the college students use cell phone primarily while sitting, and 70% use was for leisure. Like all addictions, SMA also interferes with normal, everyday functions, such as studying, thus affecting academic performance. In a study by Barkley and Lepp (18), it was found that the use of mobile phones may adversely affect the students' academic performance because many students tend to use the mobile phone during class or while studying. In the study of Al-Menayes (16), it was shown that SMA had a negative impact on the academic achievement as assessed by the student's grade point average. Similar results were also shown in other studies (20,23).

Savci et al. (12) also reported that academic success decreased as mobile social media usage period increased. Finally, a cross-cultural study with a large sample of 10,930 adolescents from Greece, Iceland, the Netherlands, Poland, Romania, and Spain showed that students who used social media for two or more hours daily had decreased academic achievement (22).

The present study has two main limitations to be considered. First, the sample of the study was composed of a limited number of nursing students. Thus, using a convenience sampling method from one university may not represent the nursing student population in Turkey properly. Second,

information on SMA was gathered on self-reported questionnaires. This technique may cause biases including recall biases. Hence, our results should be interpreted cautiously.

In conclusion, SMA was very common among nursing students; students were mostly using smart phones to connect social media; the increased time spent in the social media led to an increase in addiction levels and the SMA had a negative impact on the academic success.

The limitation of the use of mobile telephones in theoretical, laboratory and clinical practice in nursing education may be a useful to prevent or minimize SMA. In addition, qualitative studies are needed to reveal motivational factors in SMA. Thus, the underlying causes of SMA, which adversely affect the academic success of nursing students can be determined and necessary measures can be taken.

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Conflict of Interest

The authors declare that they have no conflict interests regarding content of this article.

Ethics Committee Approval

We obtained ethical approval from the university ethics committee in accordance with the Helsinki Declaration (Documan no: 20292139-050.01.04, Ethics approval decision no:2019/17). We also obtained written informed consent from each participant after we assured students of confidentiality.

Main Points

- Social media addiction among nursing students was common.
- Spending longer time on social media was related to social media addiction.
- Actions of relapse, conflict, and mood modification increased as occupation behavior in social media increased.

- Social media addiction affected academic success negatively.

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