

Social Network Sites' Effects on Nursing Students' Physical and Psychological Health Behaviors

Ammar A. Okab*

Technical Nursing Department, Technical Institute-Suwaira, Middle Technical University, Wasit, Iraq.

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ABSTRACT

Background: Social media are online communities where people can share ideas and interests and make new friends. It is a technology used to show off personal creativity or to share information, ideas, business interests, or knowledge between different groups through different forms of communication, and everyone knows that this information is important, even decision-makers.

Objectives: To assess the influence of social media sites on physical and psychological health behaviors among college students.

Materials and methods: A cross-sectional study was conducted at the Department of the Technical Nursing/Technical Institute-Suwaira in Middle Technical University, Wasit, Iraq. The sampling technique to select students was non-probability (convenience sample). The data collection was through the direct interview technique by the researcher with each participant for a period from 28th March 2022 to 15th October 2022. The data analysis approaches were used in order to analyze and assess the results of the study under the application of the statistical package for social sciences (SPSS) version 25.

Results: Three-quarters of the 300 participants were between the ages of 18 and 22, with 68.3% being female. Facebook was the most popular social media site used by the participants. The answer No was the most Student's response about physical and psychological health and for the most of the items related to physical health, and less than half of their assessment were affected. There was a highly statistically significant association between the items related to physical and psychological health and gender, marital status, and economic status.

Conclusion: This study showed that although social media is essential for students in their studies, at the same time it might have some physical and psychological effects on the health of students.

Keywords: Social network; Nursing students; Physical effects; Psychological effects; Health behaviors.

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INTRODUCTION

Social media allow users to express themselves and meet others with similar interests. Social media are virtual communities where people can meet new people and share ideas and interests. It is a technology used to show off personal creativity or share knowledge, ideas, business interests, or knowledge between different groups through different ways of communication, and every-

one knows that this information is important, even decision-makers [1]. McGowan and his colleagues defined social media as websites and apps that use the internet as a platform to create environments where people can share, find, and look at content mostly made by other people [2]. Numerous opportunities exist every day to interact with friends, classmates, and those who share interests, thanks to social networking sites like Facebook, Twitter, Instagram, and others [3]. Social media has recently spread widely. 84% of American teenagers only use Facebook, according to a survey that was conducted there [4], and 60% of 13–17 years old use social media for at least 2 hours a day, according to another study. Some even called it an addiction [5].

* Corresponding author: E-mail: amarabas4@gmail.com
Phone number: +9647703917948

Social media is used for hiring and skill development [6]. Social media differs from traditional channels for disseminating reliable information [7]. Due to their inadequate self-regulation and susceptibility to peer pressure, students are in danger when using social media [8].

Behavior is a person's behaviors to meet his daily wants and desires, whether internal or external. It can either be done consciously or unconsciously [9]. Actions should be watched in order to gauge a person's traits and abilities [6].

The many types of conduct change over time and are influenced by a variety of variables, including genetic, cultural, and religious variables that are being researched in numerous experimental investigations [10, 11]. Social media has taken over the role of time spent on social interactions and health-related habits [12]. This has an impact on its users' offline behavioral issues related to identity, peer connections, and self-expression [13]. Social media increases sensitivity to dangerous behaviors including drug use and risky sexual activity [4].

There are no studies in Iraq that investigated the effect of the various types of social media on student's health. Hence, we conducted this study to measure the influence of social media sites on physical and psychological health behaviors among students, and to find out association between some of the socio-demographic characteristics with physical and psychological health behaviors.

MATERIALS AND METHODS

Study Design and sample

A cross-sectional study was carried out at the Department of Technical Nursing, Technical Institute-Suwayra in the Middle Technical University, Wasit, Iraq. The students in the nursing department who wished to enroll in the study were selected to measure the influence of social media sites on physical and psychological health behaviors among the students. The selection staff used a non-probability (convenience sample) sampling technique.

Data Collection

The data were collected by a researcher using a direct interview sheet with each student participant from March 28th to October 15th, 2022.

Research Tools

The questionnaire: (1) socio-demographic characteristics (age, gender, marital status, economic status, educational stage, etc.) (2) items related to the physical health domain, talk about the problem that can effect on the physical health of students, and (3) items related to the psychological health domain, talk about the problem can effect on the psychological health of students.

Ethical Considerations

Ethical approval was obtained from the Technical Institute Al-Suwayra/Middle Technical University. Students in the study have completed consent forms, acknowledging their understanding that their participation is voluntary and that the information would be treated in confidence and used exclusively for research purposes. Students who didnt wish to participate in the present study were excluded.

Statistical Analysis

The data analysis approaches were used in order to analyze and assess the results of the study under the application of the statistical package for social science (SPSS) version 25. Frequencies and percentages for categorical variables were presented as tables or figures. While, continuous variables were presented as means \pm SD. A Chi-square test was used for comparison between categorical variables. A P-value of less than 0.05 was considered a statistically significant difference, and a P-value of less than or equal to 0.01 was considered a highly statistically significant difference. The mean of the score varied from (1 to 3), with the not affected (1-1.66), moderately affected (1.67-2.33), and affected (2.34-3).

RESULTS

Out of 300 students; there were 75% from the age group 18-22 years old, 68.3% were female, 83% single, 58.3% moderate level of economic status, 57% in the second stage, 58.7% of afternoon study, 97% using mobile for social media, 60% didn't use social media to play some games, 57.3% had an urgent desire to use social media, 63% spent 1-5 hours in social media, and 46.3% used social media at every time (Table 1).

As shown in Figure 1, the most popular type of social media used by students was Facebook (27%), while other programs such as SnapChat (7%) were the least popular.

Most of the items related to students responses about physical health were with the answer No, and most of items related to physical health, less than half of their assessment were affected (Table 2).

Most of the items related to the student's responses about psychological health were answered No, and for the most of the items related to physical health, less than half of their assessments were moderate affected (Table 3).

Table 4 shows that there were highly statistically significant associations between the items related to physical health and gender, marital status, and economic status (P-value < 0.05). Table 5 shows that there were highly statistically significant associations between the items related to psychological health and age, gender, marital status and economic status (P-value < 0.05).

DISCUSSION

During the past 25 years of using social media networks, there has been an increment in the types, an improvement in the quality, and an increase in the number of users. There are different types of social media, such as Facebook. These tools

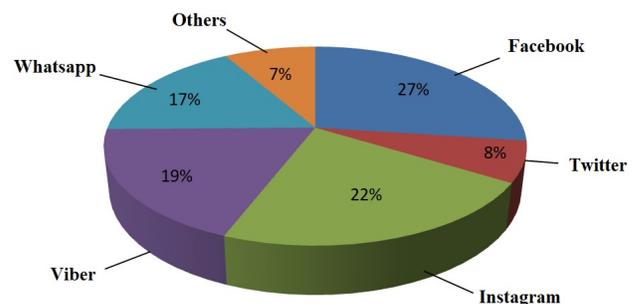


Figure 1. Distribution of the programs that the 300 participants used in social media.

Table 1. Distribution of the 300 students according to the socio-demographic characteristics.

Age	Frequency	Percentage(%)	Gender	Frequency	Percentage(%)
18-22	225	75%	Male	95	31.7%
23-27	58	19.3%	Female	205	68.3%
28-32	13	4.7%	Total	300	100%
33 and more	3	1%			
Total	300	100%			
Marital status			Economic status		
Single	249	83%	High	118	39.4%
Married	49	16.3%	Moderate	175	58.3%
Divorce	2	0.7%	Low	7	2.3%
Total	300	100%	Total	300	100%
Educational stage			Type of study		
First stage	129	43%	Morning study	124	41.3%
Second stage	171	57%	Afternoon study	176	58.7%
Total	300	100%	Total	300	100%
Devices used social media			Hours use social media		
Mobile	291	97%	1-5	189	63%
Laptop	6	2%	6-10	67	22.3%
Others	3	1%	11 and more	44	14.7%
Total	300	100%	Total	300	100%
Urgent desire to use social media			Use social media to play some games		
Yes	172	57.3%	Yes	120	40%
No	128	42.7%	No	180	60%
Total	300	100%	Total	300	100%
Time that use social media					
Night	123	41%			
Morning	38	12.7%			
Every time	139	46.3%			
Total	300	100%			

are widely used by various individuals including university students. Despite the usefulness of social media regarding social and learning issues, it may have a negative impact on the health of users (physical and psychological aspects) [14, 15]. The current study reported that university students used different types of social media and that there was an adverse effect of these tools on their health.

Three-quarters of the participants was from the age group 18-22 years old; this is consistent with another study from Egypt. The study was performed on the medical students and it was observed that the mean age of the students 22.2 ± 0.6 , 76.8% lived in urban areas, about 60% were of intermediate socioeconomic level, and 40% were of high level [12]. There was a similarity between the current study and the previous study from Bangladesh (carried out among teenagers) regarding other socio-demographic characteristics such as gender. Besides, the study reported that most of the respondents (88.6%) use Android phones to visit their favorite social networking sites, not laptops [16].

The present study revealed that Facebook was the most used type of social media used by students which were in agreement with a study carried-out among students at a Pakistan University. The students worry about maintaining their social identities, which pushes them to use Facebook and WhatsApp, according to a study [17].

The current study indicated that the responses to the physical health domain were consistent with an investigation of students from Pakistan. Social media overuse affects pupils emotionally and physically, leading to an unbalanced and dull or irritable appearance. The negative influence of social me-

dia may affect a student's academic performance, thus parents should regulate their children's use [18].

While the responses to the psychological health domain were in agreement with the study that is carried out among students in the US Facebook's launch at a college affected student mental health. It also enhanced the chance of academic performance deficiencies due to mental health. More data reveals that Facebook fosters unfavorable social comparisons [19].

Furthermore, our results showed that there was a significant association between the items related to physical health and gender, marital status, and economic status; which were similar to the study from the US that was carried out among students. The US study reported that age, gender, and influence of social networking sites on users' personal growth were correlated. Class rank and field of study were also related to the social networking site effect. Positive relationships were identified between social network site usage and students' networking with friends, family, and professionals. Negative associations were established between social network site usage and students' searches for volunteer opportunities and their awareness of others' improved date search. Positive relationships were also identified between age and students' networking with friends, family, and professionals and their awareness of cyberbullying. Age negatively correlates with users' awareness of others' improved social network search techniques. Data showed that students' perceptions of social network influence matched the actual effects [20].

Finally, the results of the current study reported statistically significant associations between the items related to

Table 2. Distribution of the 300 subjects according to their responses to the physical health domain *.

Items	Yes		Not sure		No		M.S	S.D	Assess.
	F	%	F	%	F	%			
The social media sites make smoke	15	5%	14	4.7%	271	90.3%	2.85	0.475	Affected
Smoke a lot while using these social media sites	23	7.7%	9	3%	268	89.3%	2.82	0.551	Affected
The social media sites make alcohol abuse	17	5.7%	14	4.7%	269	89.6%	2.84	0.499	Affected
Stay up these social media sites	104	34.7%	49	16.3%	147	49%	2.41	0.905	Affected
Feel insomnia by stay up these social media sites	122	40.7%	44	14.7%	134	44.6%	2.04	0.924	Moderate affected
Feel tired by using these social media sites for long time	166	55.3%	37	12.3%	97	32.4%	1.77	0.909	Moderate affected
Feel headache by using these social media sites for long time	176	58.7%	39	13%	85	28.3%	1.70	0.884	Moderate affected
Feel pain in joints when have used these social media sites for long time	130	43.3%	39	13%	131	43.7%	2.00	0.934	Moderate affected
These social media sites caused problem in vision	126	42%	51	17%	123	41%	1.99	0.913	Moderate affected
Feel pain in eye when have used these social media sites for long time	196	65.3%	26	8.7%	78	26%	1.61	0.872	Not affected
Diet is irregular while use these social media sites	89	29.7%	43	14.3%	168	56%	2.26	0.889	Moderate affected
Eat a lot while using social media sites	52	17.3%	46	15.3%	202	67.4%	2.50	0.774	Affected
Weight increased due to these social media sites	37	12.3%	45	15%	218	72.7%	2.60	0.698	Affected
Neglect your food while using these social media sites	75	25%	50	16.7%	175	58.3%	2.33	0.851	Moderate affected
Weight decreased due to these social media sites	49	16.3%	49	16.3%	202	67.4%	2.51	0.761	Affected

* F = Frequency, % = Percentage, M.S = mean of score, S.D = standard deviation

Table 3. Distribution of the 300 subjects according to their responses to the psychological health domain *.

Items	Yes		Not sure		No		M.S	S.D	Assess.
	F	%	F	%	F	%			
Affected by the topics of these social media sites, which makes more violent	56	18.3%	41	13.3%	203	67.7%	2.49	0.791	Affected
Feel depressed because of these networks	92	30.7%	46	15.3%	162	54%	2.23	0.892	Moderate affected
They are affected by the violent and risky scenes presented by these networks	113	37.7%	30	10%	157	52.3%	2.15	0.939	Moderate affected
Tried to mimic these views	53	17.7%	41	13.6%	206	68.7%	2.51	0.778	Affected
Become violent if these networks prevented	81	27%	47	15.7%	172	57.3%	2.30	0.868	Moderate affected
Feel depressed if don't have these networks available	135	45%	48	16%	117	39%	1.94	0.916	Moderate affected
Use of these networks makes separate it from friends and family	109	36.3%	42	14%	149	49.7%	2.13	0.919	Moderate affected
Feel lonely because of these networks	41	23.7%	71	13.6	188	62.7%	2.39	0.845	Affected
Got emotional disturbances caused by these networks	93	31%	36	12%	171	57%	2.26	0.903	Moderate affected
Use of these networks excludes from your study	121	40.3%	35	11.7%	144	48%	2.08	0.938	Moderate affected
Worried that have not performed your study	188	62.7%	6.7%	30.6%	1.68	0.913	Moderate affected		

* F = Frequency, % = Percentage, M.S = mean of score, S.D = standard deviation

psychological health and age, gender, marital status, and economic status. These results agreed up on with another study that was performed among students in Saudi Arabia, which found that 57% of them were social media addicts. They used such tools more for enjoyment than learning. This affects aca-

ademic performance, learning, and knowledge. Fifty-two percent (n = 157) of the students said social media use harmed their learning (P-value = 0.035), and 66% (n = 198) felt more drawn to social media than to schoolwork [21].

The small sample size as well as the sample of the partic-

Table 4. Distribution of the 300 students according to the socio-demographic characteristics.

Items	Socio-demographic characteristics			
	Age P-value	Gender P-value	Marital status P-value	Economic status P-value
The social media sites make smoke	0.22	0.0001	0.03	0.000
Smoke a lot while using these social media sites	0.69	0.0001	0.05	0.02
The social media sites make alcohol abuse	0.27	0.0001	0.003	0.02
Stay up these social media sites	0.33	0.03	0.56	0.97
Feel insomnia by stay up these social media sites	0.05	0.93	0.41	0.95
Feel tired by using these social media sites for long time	0.48	0.51	0.84	0.59
Feel headache by using these social media sites for long time	0.38	0.49	0.53	0.94
Feel pain in joints when have used these social media sites for long time	0.14	0.42	0.03	0.55
These social media sites caused problem in vision	0.32	0.81	0.28	0.36
Feel pain in eye when have used these social media sites for long time	0.86	0.64	0.94	0.61
Diet is irregular while use these social media sites	0.19	0.007	0.85	0.03
Eat a lot while using social media sites	0.14	0.001	0.52	0.98
Weight increased due to these social media sites	0.14	0.008	0.05	0.81
Neglect your food while using these social media sites	0.75	0.23	0.74	0.66
Weight decreased due to these social media sites	0.36	0.01	0.24	0.05

Table 5. There was an association between socio-demographic characteristics of the 300 participants and the psychological health domain.

Items	Socio-demographic characteristics			
	Age P-value	Gender P-value	Marital status P-value	Economic status P-value
Affected by the topics of these social media sites, which makes more violent	0.002	0.000	0.51	0.008
Feel depressed because of these networks	0.61	0.05	0.71	0.02
They are affected by the violent and risky scenes presented by these networks	0.76	0.94	0.52	0.11
Tried to mimic these views	0.66	0.04	0.01	0.05
Become violent if these networks prevented	0.49	0.001	0.69	0.49
Feel depressed if don't have these networks available	0.54	0.03	0.17	0.12
Use of these networks makes separate it from friends and family	0.05	0.21	0.47	0.91
Feel lonely because of these networks	0.15	0.01	0.63	0.18
Got emotional disturbances caused by these networks	0.21	0.000	0.002	0.04
Use of these networks excludes from your study	0.01	0.03	0.15	0.04
Worried that have not performed your study	0.001	0.39	0.54	0.37

ipants didn't represent all Iraqi college students are considered a shortcoming for the present study. Therefore, further study is recommended to include a large sample size from different Iraqi colleges to achieve reasonable results.

CONCLUSION

The study concluded that the students who participated in the study needed more awareness and information to support their knowledge about the effects of social networks on physical and psychological health behaviors. Age, gender, marital status, and economic status had significant correlations with physical and psychological health issues.

ETHICAL DECLARATIONS

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I would like to thank the students for their cooperation in completing this work.

Ethics Approval and Consent to Participate

The study was approved by the Ethical Approval Committee of the Technical Institute Al-Suwaira /Middle Technical University. Every student gave informed consent.

Consent for Publication

Not applicable (no individual personal data included).

Availability of Data and Material

All data are available on request from the corresponding author for reasonable reasons.

Competing Interests

The author declares that there is no conflict of interest to disclose.

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Authors' Contributions

Okab AA analyzed and interpreted the student's data regarding social network sites' effects on physical and psycho-

logical health behaviors. Okab AA was responsible for writing the whole manuscript. Okab AA read and approved the final manuscript draft.

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