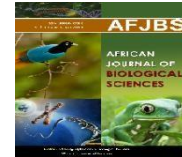


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### Social Media Addiction Among Zagazig University Students

Dalia Fouad Mohamed Omar (1), Amany Sobhy Sorour (2), Gamalat Mustafa Abd El-Ghany (3)

<sup>(1)</sup> B.Sc. Nursing, Faculty of Nursing, Zagazig University. <sup>(2)</sup> Professor of Community Health Nursing, Faculty of Nursing, Zagazig University. <sup>(3)</sup> Assistant. professor of Community Health Nursing, Faculty of Nursing, Zagazig University

[DFOmar@nursing.zu.edu.eg](mailto:DFOmar@nursing.zu.edu.eg), [daliafouad277@gmail.com](mailto:daliafouad277@gmail.com)

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**Abstract:** Background: social media addiction is a rising problem that affects Egyptian university students physically, psychologically, socially, and mentally. It is considered a subtype of Internet addiction, specifically involving checking, and updating behavior. This behavior can become obsessive and affect one's well-being and overall quality of life. Aim of the study: Explore social media addiction among Zagazig university students. Subjects and Methods: Research design: A cross-sectional analytical research design was carried out in this study Setting: The present study was conducted at nursing, pharmacy, education, and commerce colleges at Zagazig University. Subjects: A stratified multi-stage random sample was selected from the four colleges (n= 480). Tool of data collection: two tools were used for collecting data. Tool (I): self-administered questionnaire. Tool (II): Social Media Addiction Scale - Student Form (SMAS-SF). Results: More than two fifths of the study sample (44.2%) was characterized by high total social media addiction. The descending order of high social media addiction among students was virtual tolerance (67.1%), then information (64.6%). The highest negative effects mentioned were headache (68.3%), then visual problems (60.8%). Social media addiction had statistically significant negative correlation with students age ( $r=-.134$ ), school year ( $r=-.150$ ), and GPA ( $r=-.185$ ). Conclusion: More than two fifths of the study sample was characterized by high total social media addiction. Recommendation: conducting Preventive programs to help students raise social awareness in relation to social media use and addiction among university students, Future research to study factors affecting social media addiction, and replicate the study on a large scale and in other settings to permit for generalization of results.

**Keywords:** social media use, social media addiction, university students

**Introduction:** Everyday life now revolves around social media, we use it to communicate with friends and family and join online communities to meet people who have similar interests. With the advent of social media in the early 2000s, social media has opened a new avenue for social experiences and extending the possibilities for communication (Zsila & Reyes, 2023).

The argument over social media effects is challenging to understand because different people have different opinions on the matter. While some think it's an amazing tool, others are concerned about how it will affect people's lives (**Tripathi & Ahad, 2019**).

Therefore, it is crucial to understand that social media is neither good nor bad, helpful, or harmful, nor is it either black or white or brilliant or dark. It's common for the unintended and purposeful effects of many technical breakthroughs to have both positive and negative aspects. The level of brightness or darkness on social media is frequently an issue of judgement (**Baccarella et al., 2018**).

Moreover, social media can have positive effects as it offers a platform for the development and promotion of translational health communication strategies and efficient data dissemination. Moreover, there are exciting new opportunities for increased reach, improved effectiveness, and reduced costs of advocacy and communication efforts when social media is used for advocacy and communications in health promotion. Like previous technological advancements in healthcare, funders may see these efficiencies as a chance to reduce spending and expand the range of health promotion initiatives carried out by health education specialists and their organizations (**Stellefson et al., 2020**).

additionally, a study conducted by **Sharma (2023)** reported that respondents used social media for health communication, and for watching health -related videos, texts and images. Similarly, most of the respondents pointed out that knowledge and skills as one of the motivating influencing factors of social media use.

On the other hand, social media can have detrimental effects on students' lives, students frequently struggle to distinguish between the amount of time they spend online for educational and non-educational purposes. Recent research has shown that adolescents are the most vulnerable to the harmful effects of Internet addiction on lifestyle, nutrition, and physical behavior, all of which increase the risk of physical harm. Internet addiction can cause serious, long-lasting harm to one's body, mind, and spirit over time. It can also negatively impact one's psychological, spiritual, and social well-being, which can result in a variety of issues, including depression (**Eiz-Elregal, Shaker, & El Sayed, 2018**).

Consequently, the ubiquitous social media platforms and the easy access to the Internet bring about the potential for social media addiction, namely, the illogical and excessive use of social media to the extent that it interferes with other aspects of daily life. Social media addiction has been found to be associated with emotional, relational, health, and working problems. Understanding the causes, consequences, and solutions of social media addiction is thus of dominant importance (**Hou et al., 2019**).

Social media addiction is considered a subtype of Internet addiction, specifically involving checking, and updating behavior. This behavior can become obsessive and affect one's well-being and overall quality of life. Addiction is characterized by excessive preoccupation with social media platforms resulting in negative impacts for young users. These impacts include constant checking for updates, likes, comments, and friend requests (**Al-Samarraie et al., 2021**).

According to research on social media addiction, 210 million individuals worldwide are affected by internet and social media addiction. Studies also indicate that things will only grow worse. While adolescents everywhere have a tendency to use digital devices excessively (**Truelist, 2023**). Furthermore, a study conducted in Egypt on 912 university students revealed that the prevalence of internet addiction among students at Zagazig University was 41.5%, encompassing both at-risk internet use (37.4%) and internet addiction (4.1%). Consequently, the addiction to social media platforms has physical, psychological, social, and mental effects on Egyptian students (**Eiz-Elregal, Shaker, El Sayed, et al., 2018**). Moreover, engaging in activities such as sexting, gaming, gambling, oversharing, and excessive use of mobile devices may worsen the addiction to social media. Teenagers can readily access social media sites without limitations due to their accessibility, affordability, and the widespread availability of Internet connections. (**Al-Samarraie et al., 2021**).

Furthermore, social media use might trigger symptoms like those of addiction. For some people, utilizing social media sites may become their one and only important activity, which could result in an obsession with the platform known as (saliency). These websites offer activities that induce happy feelings or change their mood (mood modification). It takes more time and effort to participate in social networking activities to feel and think the same way as when you first started using them (tolerance) (**Griffiths & Kuss, 2017**).

Additionally, addicts also experience painful psychological and even physical symptoms when SMU is stopped (withdrawal). when personal and intrapsychic crises progress because of SMU (conflict), Addicts frequently relapse into excessive social media use after a period of abstinence (relapse) (relapse) (**Kuss & Griffiths, 2011**).

Nowadays self-help apps for smartphone devices help people who want to reduce their usage of social media. With the help of these apps, users can impose time limits on their usage or block specific social media websites. This can be helpful for individuals who struggle with keeping internal control over their usage of social media, this option acts as an external control mechanism (**Panova & Carbonell, 2022**).

On the other hand, for those who do not want to use an external control means but prefer to develop internal control, mindfulness has been suggested as a worthy skill for healthier social media use (**Charoensukmongkol, 2016**). Practicing mindfulness is sitting with one's thoughts and perceptions in the present moment as opposed to using social networking sites or other forms of cognitive diversion. Moreover, mindfulness is helpful in managing emotional distress to prevent social media from being used as an avoidance coping mechanism (**Shonin et al., 2014**).

### **Significance of the study:**

Social media sites and applications are widely used by students. They spend a lot of their time on these sites as a part of their daily lives. Studies revealed that among the various age

groups of students, university students are among the most using social networking (**Manjur Kolhar et al., 2021**).

**Aim of the study:** Explore social media addiction among Zagazig university students.

**Research Questions:**

- What is the prevalence of social media addiction among Zagazig university students?

**Subjects and methods:**

**Research design:**

A descriptive design was used.

**Study setting:**

The present study was conducted at Zagazig University, Al-sharqia Governorate, Egypt.

**Study subjects:** A stratified multi-stage random sample was selected from the four colleges (n= 480), 120 students from each college. from the academic year 2022\2023.

**Tools of data collection:**

two tools were used to collect necessary data.

**Tool I: self-administered questionnaire** It consists of two parts as follows:

**Part I:** Personal characteristics of the student such as age, gender, marital status, etc., and relevant family characteristics, in addition to certain academic characteristics as college, year, academic achievement and GPA, etc.

**Part II:** Characteristics and details of social media usage, such as name of social media sites, aim, daily usage time, perception of the drawbacks related to the use of social media.

- **Tool II:** Social Media Addiction Scale - Student Form (SMAS-SF). This tool was developed by **Sahin (2018)**, to determine the social media addiction levels of high school and university students. It consists of 29 items categorized into four subscales. These are virtual tolerance (item 1-5), virtual communication (item 6-14), virtual problem (item 15-23) and virtual information (item 24-29).

**Scoring system:**

The responses are on a five-point Likert type scale from “strongly disagree” to “strongly agree,” scored from one to five, respectively. The scores of the items of each subscale and of the total scale are summed-up for a total ranging from 29 to 145, so that a higher score indicates more addiction. For categorical presentation, the addiction status is classified as no addiction (29-51 points), little dependent (52-74 points), moderately dependent (75-97 points), highly dependent (98-120 points), and very highly dependent (121-145 points). For dichotomous analysis, a score less than 75 is considered “not social media addict” and 75 or higher as “social media addict.” The scale has documented validity and reliability (**Sahin, 2018**).

**Content validity& Reliability:**

The questionnaire was translated into Arabic; and then content and face validity were established by a panel of five experts at the Faculty of Nursing, Zagazig University. Experts

were requested to express their opinions and comments on the tool and provide any suggestions for any additions or omissions of items. According to their opinions, all recommended modifications were performed by the researcher. Reliability was measured by using the Cronbach's Alpha Coefficient factor test to determine the internal consistency of the scale and it was satisfactory, for social media addiction scale (0.863).

### **Fieldwork**

After securing the official approvals for conducting the study, the researcher met with the deans of the selected colleges to explain the aim of the study and the data collection procedure, and to determine the suitable time to collect data. The researcher obtained the distribution of sections and its places in each academic year from student affairs, followed by meeting with instructors of the randomly chosen sections. The researcher explained to them the aim of the study, the researcher asked them to choose randomly 30 students from the attendance list. The chosen students were asked to remain in their places after the section ended, the researcher spoke to the students and introduce them to the aim of the study and the criteria for inclusion and exclusion. Those willing to participate were asked to provide informed consent verbally. The data collection form was handed to recruited students to fill them in. The needed time required to fill out questionnaires for each section ranged from 30 to 45 minutes. The researcher stayed with the students to answer any specific questions that arose during completing the data. The researcher checked it for their completeness. The researcher went to the selected colleges 3 days per week from 11 AM to 2 PM. The field work was carried out within approximately a month and a half, starting from the mid of April 2023 to the end of May 2023.

### **Pilot study:**

A pilot study was carried out on a sample of 48 adolescents, approximately 10% of the calculated total sample size (12 student from each college of the four colleges, 3 students from each year of the four years). The aim was to test the clarity and applicability of the data collection forms and to estimate the time needed for filling them in (The time needed to fill out the tools was about 15-20 min). The pilot sample was excluded from the main study sample.

### **Administrative and ethical considerations:**

The study was approved by the ethics committee and dean of the Faculty of Nursing, Zagazig University. Then, a letter containing the aim of the study was directed from the Faculty of Nursing to the selected four colleges deans requesting their approval and cooperation for data collection. Consent was established with the completion of the questionnaires. Also, verbal explanation of the nature and aim of the study had been explained to students included in the study sample. Likewise, oral consent was received from each participant in the study after explaining the purpose of the study. Students were given

an opportunity to refuse or to participate, and they were assured that the information would be used confidentially for research purposes only.

### **Statistical analysis:**

All data were collected, tabulated, and statistically analyzed using SPSS 20.0 statistical software package. Quantitative continuous data was compared using Student t-test in case of comparisons between two groups. For multiple group comparisons of quantitative data, one-way analysis of variance test (ANOVA) was used. Categorical variables were compared using chi-square or Fisher exact tests as suitable. Statistical significance was considered at p-value <0.05.

### **Results:**

**Table 1** shows that 50.2% of the students were aged 21+ years old, with Mean±SD equal 20.5±1.4. As for gender, 72.3% were females, and 66.2% were from rural areas. Additionally, 96.9% of students were currently single, and 87.1% had sufficient family income.

**Table 2** shows that an equal percentage (25%) of the study sample were from pharmacy, nursing, education, and commerce colleges. As for the school year, an equal percentage (25%) of students were distributed according to four academic years, about one third of study sample's grade ranged from fair to good (34%).

**Table 3** shows that the descending order of social media used among studied sample was WhatsApp (92.3%), then Facebook (87.9%), then Instagram (66.3%), then Messenger (65.6%). As for duration hours 36.0% were using social media for an average of 4-6 hours daily.

**Table 4** shows that almost all study sample (99.2%) reported positive effects of social media use. The highest positive effect mentioned was public health awareness (73.3%), while the lowest one was general information (14%). It also shows that almost all study sample (99.8%) reported negative effects of social media use. The highest negative effects mentioned were headache (68.3%), then visual problems (60.8%) while the lowest ones were stress and tension (37.7%), then depression (45.8%).

**Table 5** shows that the descending order of high social media addiction among students was virtual tolerance (67.1%), then information (64.6%), then communication (39.0%), and problems (36.9%). More than two fifths of the study sample (44.2%) was characterized by high total social media addiction.

**Table 6** shows that social media addiction had statistically significant negative correlation with students age ( $r=-.134$ ), school year ( $r=-.150$ ), and GPA ( $r=-.185$ ). conversely, social media addiction had statistically significant positive correlation with No. of social media ( $r=.180$ ), hours on social media ( $r=.356$ ), No. of side effects ( $r=.159$ ), and No. of benefits ( $r=.100$ ).

**Table 7** shows that hours on net, No. of side effects were a statistically significant positive predictors of social media addiction score. Conversely, the school year, GPA were a statistically significant independent negative predictors of social media addiction score.

### **Discussion:**

While social media platforms are considered progress as they do improve different aspects of life, the negative effects that can be associated with it must also be detected and confronted. Overall, the evidence suggests that problematical or maladaptive use of social media exists, and it is associated with addiction-like behavior and other negative effects (**Smith, 2023**).

**Concerning answering of the research question regarding determining prevalence of social media addiction among students of the study sample**, the current study results revealed that more than two fifths of the study sample was characterized by high social media addiction. This might be attributed to social media platforms are easily accessible and available on various devices like smartphones. University students often have constant access to the internet, allowing them to engage with social media platforms frequently therefore social media can become a source of addictive behavior.

In the same vein, a study conducted by **Yu and Luo (2021)** among Hong Kong university students indicated that more than two fifths of study sample had social media addiction. Similarly **Malagi et al. (2023)** carried out a study in India and revealed that two fifths of the students exhibited symptoms of social media addiction. Additionally **Obeid et al. (2019)** in Lebanon clarified that nearly two fifths of adolescents had occasional or frequent problems related to Internet use.

Similar results were found in Malaysia by **Jafarkarimi et al. (2016)** reported a prevalence rate of more than two fifths being addicted to Facebook among a sample of college students. Likewise, **Terzioğlu and Ayhan (2023)** in Turkey clarified that nearly two fifths of students scored above the scale average on the social media addiction scale. While **Alfaya et al. (2023)** carried out a study in Saudi Arabia and revealed that more than half of students are social media addicts. As well, **M. Kolhar et al. (2021)** in Saudi Arabia found that more than half of the students reported that they were addicted to social media.

regarding the descending order of high social media addiction among students was virtual tolerance. Virtual tolerance refers to the phenomenon where individuals require more and more time on social media platforms to achieve the same level of satisfaction or gratification. This might be attributed to that many students are introduced to social media at a young age, and they develop habits of frequent usage early on. This prolonged exposure can lead to an increased tolerance over time, as the initial novelty wears off and they seek more engagement to achieve the same level of satisfaction.

**Regarding social media used among studied sample**, the current study results clarified that the descending order of social media use was WhatsApp, then Facebook, then Instagram, then Messenger. This might be attributed to WhatsApp is primarily a messaging app, offering instant messaging, voice calls, and video calls, all within a single platform. Its

ease of use and convenience for communication purposes make it a popular choice for staying in touch with friends, family, and peers.

These results agreed with **Desmal (2017)**

In Bahrain Reported that the most popular social media sites often used by students have been identified include WhatsApp and Facebook. Similarly, **Akalin(2022)** in Turkey showed that the most used social media accounts were WhatsApp. Additionally, **Uma et al. (2021)** in Malaysia and Finland reported that the most frequently used applications was WhatsApp.

**concerning duration hours among students**, 36.0% were using social media for an average of 4-6 hours daily. This might be attributed to social media platforms offering a plethora of engaging content, including videos, memes, games, and user-generated content, which can easily captivate users for extended periods.

On the same vein A study conducted by **Rahman and Mithun(2021)** in Malaysia found that a significant number of university students spent between three to five hours on social media daily. Similarly, a study conducted by **Uddin et al. (2022)** in Bangladesh found that the majority of students spent more than four hours daily on social media.

**Regarding negative effects of social media use as reported by students**, the highest health hazards mentioned by them were headache, then visual problems. This might be attributed to electronic devices emitting blue light, which has been linked to eye strain. Excessive exposure to blue light, particularly in the evening or at night, can contribute to eye discomfort, and headaches.

These results were in agreement with **Saied et al. (2016)** stated that The most commonly reported adverse effects were: eye irritation, followed by headache.

**Regarding positive effects of social media use as reported by students**, The highest positive effect mentioned was public health awareness. This might be attributed to public health organizations and professionals using social media to disseminate information and raise awareness about various health topics, reaching a large audience quickly and efficiently. The widespread availability of health-related content on social media platforms increases the likelihood of users encountering and engaging with public health messages.

On the same vein a study conducted by **Mwaura et al. (2020)** in South Africa shows that social media presents a significant opportunity to enhance health programs and campaigns and, support public health initiatives.

**Concerning predictors affecting social media addiction**, the current study results clarified that hours on net, No. of side effects were a statistically significant positive predictors of social media addiction score. This might be attributed to spending more time online can offer instant gratification through likes, comments, and interactions, creating a cycle of seeking pleasure and avoiding discomfort leading to social media addiction. Moreover, spending excessive amounts of time on social media platforms can lead to an increased number of side effects such as eye strain, headaches, neck and back pain, and depression.



On the same vein a study conducted by **Shanshal et al. (2024)** in Iraq presented that using social media for more than 4 hours was found to be one of predictors for social media addiction. The longer time the students spend on social media, the higher possibility of addiction to social media. Likewise, **Parlak Sert and Başkale (2023)** in Turkey stated that increasing hours spent on social media is significantly related to social media addiction. Also **Afacan and Ozbek (2019)** in Turkey showed that the students' usage of social media addiction increases as the internet usage period of the students increases.

Similar results were found in India by **Sheinov (2021)** shows that social media addiction is associated with a range of negative consequences and increasing number of side effects, including physical health problems, and mental disorders.

The current study also clarified that, the school year, GPA were a statistically significant independent negative predictors of social media addiction score. This might be attributed to students who have higher **GPA** who may have developed better time management skills. They might allocate their time more efficiently, dedicating less time to social media and more time to academic pursuits. Additionally, as students advance through **school years**, they may develop better self-regulation skills and become more aware of the potential negative consequences of excessive social media use, leading to reduced addiction.

These results were in agreement with **Alshanqiti et al. (2023)** in Saudi Arabia showed that students with excellent GPAs are less likely to be addicted to social media networks. This was supported by **Al-Menayes (2014)** in Kuwait and show that heavy social media usage is positively related to lower GPA. Similarly, **Al-Yafi et al. (2018)** conducted a study on Qatari students showed that Grade Point Average (GPA) was lower among students who were addicted to social networking compared to other students.

Similar results were found in Pakistan by **Khan and Ahmed (2018)** revealed that Facebook addiction among undergraduates was quiet high along with disturbing effects on student's academics resulting in lower GPAs.

Similar results were found by **Bagley et al. (2022)** in United States showed that younger people are far more likely to show signs of social media addiction. On the same way, **Abbasi (2019)** conducted a study in United States and finds that age is negatively related with social media addiction.

On the contrary **Afacan and Ozbek (2019)** in Turkey showed that that there was no statistically significant difference in social media addiction status of students according to **school year** variable. This might be attributed to students in different school years who might be at similar developmental stages in terms of their social media habits and behaviors. The attraction of social media tends to be consistent across different academic school years.

### **Conclusion:**

Based on the results of the present study, it could be concluded that more than two fifths of the study sample was characterized by high total social media addiction.

### **Recommendation:**

In view of the main results of the study the following recommendations were derived and suggested:

- Preventive programs to help university students raise social awareness in relation to social media use and addiction.
- Future research to study factors affecting social media addiction.
- Replicate the study on a large scale and in other settings to permit for generalization of result

### Results:

**Table (1): demographic characteristics of students in the study sample (n=480)**

demographic characteristics	Frequency	Percent
<b>Age:</b>		
<21	239	49.8
21+	241	50.2
<b>Range</b>	18-24	
Mean±SD	20.5±1.4	
Median	21.0	
<b>Gender:</b>		
Male	133	27.7
Female	347	72.3
<b>Residence:</b>		
Rural	318	66.2
Urban	162	33.8
<b>Marital status:</b>		
Single	465	96.9
Married	15	3.1
<b>Family income:</b>		
Insufficient	62	12.9
Sufficient	418	87.1

**Table (2): Academic characteristics of students in the study sample (n=480)**

Academic characteristics	Frequency	Percent
<b>College:</b>		
Pharmacy	120	25.0
Nursing	120	25.0
Education	120	25.0
Commerce	120	25.0
<b>School year:</b>		
1	120	25.0
2	120	25.0
3	120	25.0
4	120	25.0

<b>Grade:</b>		
Fair	22	4.6
Good	141	29.4
Very good	222	46.2
Excellent	95	19.8

**Table(3) Use of social media types and duration among students in the study sample (n=480)**

Use of social media types	Frequency	Percent
Social media used:@		
Facebook	422	87.9
WhatsApp	443	92.3
Messenger	315	65.6
Instagram	318	66.3
Link.Net	53	11.0
Telegram	26	5.4
Duration (hours):		
<2	34	7.1
2-4	109	22.7
4-6	173	36.0
>6	164	34.2

**Table (4): Positive and negative effects of social media use as reported by students in the study sample (n=480)**

Positive effects	Frequency	Percent
<b>Sporting programs</b>	184	38.3
<b>Nutrition programs</b>	145	30.2
<b>Digital clinics</b>	105	21.9
<b>Public health awareness</b>	352	73.3
<b>general information</b>	67	14
Total positive effects:		
<b>None</b>	4	0.8
<b>Yes</b>	476	99.2
Range	0-6	
Mean±SD	2.4±1.4	
Median	2.0	
<b>Negative effects</b>		
<b>Headache</b>	328	68.3
<b>Neck/back pain</b>	247	51.5
<b>Visual problems</b>	292	60.8
<b>Stress and tension</b>	181	37.7
<b>Depression</b>	220	45.8
Total negative effects		
<b>No</b>	1	.2

<b>Yes</b>	479	99.8
Range	0-6	
Mean±SD	2.4±1.4	
Median	2.0	

**Table (5): Social media addiction among students in the study sample (n=480)**

Social media addiction	Frequency	Percent
High addiction (60%+):		
Virtual tolerance	322	67.1
Virtual communication	187	39.0
Virtual problem	177	36.9
Virtual information	310	64.6
Total social media addiction:		
High	212	44.2
Low	268	55.8

**Table (6): Correlation between students' total scores of social media addiction and students' characteristics.**

Student 's characteristics	Spearman's rank correlation coefficient
	Social media addiction
Age	-.134**
Income	-.007
School year	-.150**
GPA	-.185**
No. of social media	.180**
Hours on social media	.356**
No. of side effects	.159**
No. of benefits	.100*

**Table (7): Best fitting multiple linear regression model for the social media addiction score**

	Unstandardized Coefficients		Standardized Coefficients	t-test	p-value	95% Confidence Interval for B	
	B	Std. Error				Lower	Upper
Constant	56.42	3.18		17.731	0.000	50.17	62.67
School year	-1.01	0.44	-0.09	-2.267	0.024	-1.88	-0.13
GPA	-2.55	0.62	-0.17	-4.082	0.000	-3.78	-1.32
Hours on net	4.16	0.56	0.32	7.453	0.000	3.06	5.25
No. of side effects	0.68	0.34	0.09	1.995	0.047	0.01	1.36

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