

## Internet Addiction and its Relation to Time Management Skills among Nursing Students

<sup>1</sup>Mohamed Badr El-Din Aboul Fotouh, <sup>2</sup>Mahdia Morsi El-Shahat and <sup>3</sup>Hanaa Samir Abd El-Aziz Elsaïad  
(1) Nursing Teacher at Al-Saheyet Nursing Secondary School, (2) Assistant Professor of Nursing Administration- Faculty of Nursing- Benha University- Egypt and (3) Lecturer of Nursing Administration- Faculty of Nursing- Benha University- Egypt.

### Abstract

**Background:** The academic life of nursing students has become closely related to the different uses of the internet, which created a challenge that made them required to strike a balance between using time management skills and using of the internet. **Aim of the study:** The study aimed to assess internet addiction and its relation to time management skills among nursing students. **Study design:** A descriptive correlational design was utilized. **Setting:** The study was conducted at Faculty of Nursing- Benha University. **Study subjects:** A stratified random sample consisted of (1084) of nursing students from the four-academic years (2022-2023). **Tools of data collection:** Two tools were used to collect the data: **Tool (I)** Internet Addiction Questionnaire, **Tool (II)** Time Management Skills Questionnaire. **Results:** Nearly to half (48.5%) of nursing students had moderate risk internet use, and more than half (50.9%) of nursing students had high level of time management skills. **Conclusion:** The overall internet addiction and time management skills showed a highly statistically significant negative correlation. **Recommendations:** Designing a training program and workshop for nursing students about healthy dealing with the internet by defining the advantages, disadvantages of using the internet and its application. Nursing students need to use daily timelines, keep a notebook to prioritize what is urgent and important.

---

**Keywords:** Internet Addiction, Nursing Students, Time Management Skills

### Introduction

Since the outbreak of the pandemic and the widespread introduction of the internet into students' educational lives, students have had a lot of time to be online, which has made it easier for them to be glued to the screen all the time. Healthy use of the internet achieves goals and helps to facilitate the educational process for students. Despite the great vital role that internet services provide for students, lack of attention in how to use the internet causes internet addiction, which leads to many problems related to the general health of students and also affects the educational level of students (Bayir & Topbas, 2023).

Spending too much time online in chat rooms, dating sites, browsing through social media, playing online games and watching

YouTube videos can lead to internet addiction. Internet addiction is defined as using the internet for a long period without a functional or academic reason for doing so. Internet addiction is described as a loss of control over internet use until the behavior becomes uncontrollable, resulting in difficulties in daily life (Ariningpraja & Wisnasari, 2023).

Anxiety, despair, pain, discomfort, and trouble in completing daily tasks and self-care are all positively correlated with internet addiction, which is linked to worse levels of physical, mental, and social functioning. University students are using internet frequently, consuming a long time of the waking hours on the internet as a result of ease of connecting to the internet for educational purposes, that increases the consequences of internet addiction (Özer et al., 2023).

## **Internet Addiction and its Relation to Time Management Skills among Nursing Students**

Internet addiction is characterized by four domains: Firstly, is salience, noticed when one activity becomes more important than others. Secondly, is excessive use, increasing periods of time while using activities due to engaging for enjoyment or euphoria. Thirdly, is conflict, described as a discrepancy in the inner feeling of the student and the actions that reflect what the student is doing. Fourthly, is relapse, leaving the addiction recovery plan by a conscious and intentional act (Albikawi, 2023).

Time is one of the most precious possessions of students, so it must be used correctly and carefully. Time management is the process of influencing the behavioral axes of students to accomplish many duties in the time allowed. These behavioral axes involve the organization and continuous utilization time management skills. Time management improves professional performance by analyzing and planning everything that surrounds the student. Therefore, knowing how to use time is not sufficient to understand and apply time management principles. To use time wisely, it is essential to know what kind of problems that will encounter as well as the related causes (Filomeno et al., 2023).

Good time management means doing high quality work, not just in large quantities. Time management requires some personal skills as: firstly, staying aware of the importance of time that can help to maintain a distinct picture of what needs to be accomplished and when. Secondly, good planning through setting goals that allows the ultimate goal to be clearly understood and what needs to be prioritized to be achieved. As well as understanding and applying priorities arrange and implement assigned responsibilities according to importance by making a daily to-do list and implementing it, and taking into account any emergency matters (Khat, 2022).

Thirdly, dealing well with the time wasters, whether internal (such as procrastination and the inability to say no to useless work) or external (such as; long interviews or internet notifications). These skills can increase efficiency and achievement, contribute to academic effectiveness, and maintain balance and contentment. In contrast, poor managing time has been linked with poor quality, lower achievement, adverse impact on academic achievement, and higher stress levels (Zyoud, 2023).

For nursing students, it is critical to learn effective time management skills so that they can apply the same competence to their professional role after graduation. In healthcare, effective time management is a mandatory skill, transitioning from the safe confines of being a student nurse to a freelance nurse role. This can be very overwhelming for the new graduate nurse. To manage the various inevitable and stressful factors that come with working in a health care environment, the students must understand how to manage time in a way that is appropriate to the nature of present study and future work (Çingöl & Karakaş, 2023).

### **Significance of the study**

In Egypt, the prevalence of internet use has increased significantly among university students during the past few years, especially after the spread of the (Covid-19) pandemic and more resort to distance learning. It was reported the number of internet users reached 75.6 million of the total population at the end of 2021, which means the internet service has already penetrated to about 75% of the population and the number of daily hours exceeded 7 hours per day, this reflects amount of time wasting (Digital Local Country Headlines Report, 2022).

The university student's category is the most affected group because they have higher access to the internet compared to other age

groups for their academic and scientific needs. Nursing students are one of these groups who use the internet most, so they are exposed to many health risks and more problems if they cannot use time management skills efficiently, which may cause a challenge in using that time in academic life and may cause their academic and educational delays. Therefore, this study was conducted to assess internet addiction and its relation to time management skills among nursing students.

**Aim of the study:**

This study aimed to assess internet addiction and its relation to time management skills among nursing students.

**Research Questions:**

1. What are the levels of internet addiction among nursing students?
2. What are the time management skills levels of nursing students?
3. Is there a relation between internet addiction and time management skills among nursing students?

**Subjects and method:**

**Research design:**

A descriptive correlational design was used to achieve the aim of the present study.

**Study setting:**

The study was conducted at Faculty of Nursing, Benha University.

**Study subjects:**

Consisted of 1084 out of 3543 nursing students from the four academic years (2022/2023) who were selected using stratified random sampling. The sample size was taken from each stratum (an academic year) according to the following sample size formula:

$$n = \frac{N}{1 + N(e)^2}$$

n → The required sample size

N → Total number of nursing students in each academic year

e → Error tolerance (0.5)

1 → A constant value. (Tejada & Punzalan, 2012).

**Table (A): Distribution of nursing students in the study (n=1084).**

Academic year	No. of students	Sample
1 <sup>st</sup>	629	245
2 <sup>nd</sup>	1019	287
3 <sup>rd</sup>	1221	301
4 <sup>th</sup>	674	251
<b>Total</b>	<b>3543</b>	<b>1084</b>

**Tools of data collection:**

Data was collected by using the following two tools:

**Tool (1): Internet Addiction Questionnaire:**

It was developed by (Khalil et al., 2016) and modified by researchers based on reviewing the related literature ((Boyaci, 2019; Ramón et al., 2021; Mohamed et al., 2021) to assess the levels of internet addiction among nursing students. It consisted of three parts:

**First part:** Personal characteristics of nursing students including; age, gender, residence, marital status and academic year.

**Second part:** Internet using of nursing students including; availability of internet at home, mode of using internet, daily hours spent in internet and online activities causing addiction.

## Internet Addiction and its Relation to Time Management Skills among Nursing Students

**Third part:** Internet addiction domains composing of (29) items, distributed as follows:

**Table (B): Distribution of internet addiction domains:**

Internet Addiction Domains	No. of items	Example
Internet salience	6	Use the internet the first thing when wake up
Excessive use	12	Find self-saying "a few more minutes" when online
Conflict	8	Feel remorse after spending a long time online
Relapse	3	Attempt to stop using the internet but fail
<b>Total</b>	<b>29</b>	

### Scoring system:

Responses of nursing students were measured on a three-points Likert scale as follows: (3) always, (2) sometimes and (1) rarely. The scores of domains are summed up and converted into a percent score. The total internet addiction scores ranged from (29-87) and it was considered:

- Average internet use (Controlled user) < 50% (29-43) scores.
- At-risk internet use (Moderately addiction) 50-79% (44-68) scores.
- Addictive internet use (Severe addiction)  $\geq$  80% (69-87) scores. (Eiz – Elregal et al., 2018).

### Tool (2): Time Management Skills Questionnaire:

Self-administered questionnaire was developed by Mohamed et al., (2019) and modified by the researchers after reviewing the related literature (Kulkarni, 2020; Saleh & El

Shazly, 2020; Pertiwi, 2021) to assess the time management skills among nursing students. It consisted of four domains composing of (32) items distributed as follows:

**Table (C): Distribution of time management skills domains**

Time management skills domains	No. of items	Example
Time planning	17	Plan day before it starts
Time attitude	5	Use time constructively
Dealing with internal time wasters	7	Carry on with unhelpful activities
Dealing with external time wasters	3	Can organize room to facilitate study
<b>Total</b>	<b>32</b>	

### Scoring system:

Responses of nursing students were measured on a three-points Likert scale as follows: (3) always, (2) sometimes and (1) rarely. The scores for each domain are summed up and converted into a percent score. The total time management skills scores ranged from (32-96) and it was considered:

- Low time management skills < 60% (32-57) scores.
- Moderate time management skills 60-75% (58-75) scores.
- High time management skills  $\geq$  75% (76-96) scores (Nigussie, 2019).

### Administrative design:

Official permission was obtained from the Dean of the Faculty of Nursing, Benha University. To obtain approval for data collection, the objectives and nature of the study were explained, and that it will be collected both in paper and electronically. After obtaining the approval the Vice Dean for Education and

Students Affairs, the Heads of the Academic Scientific Departments. The researcher interviewed nursing students and discussed the purpose of the study. The time of data collection was determined based on students' views to obtain their consent and cooperation.

#### **Preparatory phase:**

This phase started from June/ 2022 to end of September/ 2022 covering four months. It included reviewing the national and international related literature using journals, periodicals, textbooks, internet and theoretical knowledge of the various aspects concerning the topic of the study for developing the tools and translating the tools into Arabic language and back translation to check its accuracy.

#### **Validity of the tools:**

The tools were tested (face, content) through distribution of the tools to jury of seven experts on field were recruited to establish the content validity of the instrument (consisting of two Professors of Nursing Administration, Faculty of Nursing Tanta University, four Assistant Professors of Nursing Administration, Faculty of Nursing Benha University, and one Assistant Professor of Community Health Nursing, Faculty of Nursing Benha University). The modifications were made according to comments of experts and modifying a few phrases to clarify a point that wasn't understood clearly.

#### **Reliability of the tools:**

**Table (D): Statistical reliability of tools.**

No.	Tools	No. of items	Alpha coefficient
1	Internet addiction questionnaire	29	0.898
2	Time management skills questionnaire	32	0.942

#### **Ethical considerations:**

Ethical approval from the scientific research ethics committee Faculty of Nursing-Benha University was obtained. At interview with nursing students to collect data, they were informed about the goals and benefits of the study and that participation is voluntary and they have the right to refuse to participate in the study without reason. Nursing students were announced that the content of the tools will only be utilized for research purposes. Additionally, by coding all data, confidentiality and anatomy were guaranteed.

#### **Pilot study:**

A pilot study was performed from beginning to end of October 2022. It was conducted on 10% from four academic years of nursing students (108) students from study subjects (1084) at Faculty of Nursing Benha University, to evaluate the effectiveness of the proposed data, collection tools and to assess the feasibility of the study. In addition to estimate the time needed to fill the form that approximately ranged from 15-25 minutes for two tools. Subjects of pilot study were involved in the study because there were no modifications required.

#### **Field work:**

Data collection took about three months from November 2022 to end of January 2023. The time required to fill out each questionnaire was 15-25 minutes based on the understanding and response of the nursing students. The average numbers were 10-15 of the students of the faculty of nursing per day over a period of three months, and the researcher collected the data by distributing the questionnaire link to nursing students and requiring them to enter the internet and fill it out through the following link: ([https://docs.google.com/forms/d/e/1FAIpQLS-clfcTe8z9pr-Iu9ZdHpDQBjtxMK\\_Xfo0Hz-84YqADjhYFaJA/viewform](https://docs.google.com/forms/d/e/1FAIpQLS-clfcTe8z9pr-Iu9ZdHpDQBjtxMK_Xfo0Hz-84YqADjhYFaJA/viewform))

## **Internet Addiction and its Relation to Time Management Skills among Nursing Students**

### **Statistical analysis:**

Statistical Package for Social Science (SPSS version 24) was used for automated data input and statistical analysis following the completion of collection of data. Descriptive statistics were used to analyze the data; for continuous variables, mean and standard deviation (SD) were used, and for categorical variables, frequency analysis was done. The mean score between two or more groups and the chi square test ( $\chi^2$ ) were used to compare qualitative variables. Correlation coefficient (r) was used to evaluate relation between internet addiction level and time management skills of nursing students. A significant value is considered when  $p\text{-value} \leq 0.05$  and a highly significant level was considered when  $p\text{-value} \leq 0.001$ , while  $p\text{-value} > 0.05$  indicates non-significant results.

### **Results:**

**Table (1)** shows that, nearly two thirds (64%) of nursing students were aged equal and less than 20 years, with mean and standard deviation ( $19.78 \pm 1.25$ ). Regarding gender, nearly three-quarters (73.2%) of the students were females. Concerning the residence, more than three quarters (77.3%) of them were from rural areas. In terms of marital status, the most (99.3%) of them were unmarried. In terms of academic year, the highest percent (27.8%) of them were in third academic year.

**Table (2)** shows that, the majority of nursing students 98.2% and 94.4% had access to the internet at home and on their mobile devices respectively. Slightly less than two fifths (39.5%) of the nursing students reported using the internet for three to five hours a day, and over one-third (37.1%) reported viewing videos as their primary online activity.

**Figure (1)** clarifies that, nearly to half (48.5%) of nursing students were at risk of

internet use with moderately addiction, while lowest percent (12.3%) of them were addictive internet use with severe addiction.

**Table (3)** shows that, total mean and standard deviation scores of nursing students' regarding internet addiction domains were ( $53.18 \pm 10.26$ ) that represents 61.1% of total score. The highest mean score ( $12.26 \pm 2.46$ ) that represents (68.1%) of internet addiction domain was related to internet salience domain. While the lowest mean score ( $13.33 \pm 3.92$ ) that represents (55.5 %) was related to conflict domain.

**Figure (2)** clarifies that, more than half (50.9%) of nursing students had high level of time management skills. While less than one fifth (18.5%) of them had low level of time management skills.

**Table (4)** shows that, the overall mean score and standard deviation of nursing students was ( $69.60 \pm 13.50$ ) for the time management skills categories, which account for 72.5% of the total score. Among the time management skill categories, the time attitude domain had the highest mean score ( $11.60 \pm 2.01$ ), accounting for 77.3 %. While, the time planning domain had the lowest mean score ( $35.31 \pm 8.14$ ), accounting for 69.2% of the total.

**Table (5)** indicates that, the overall internet addiction and time management skills showed a highly statistically significant negative correlation between total internet addiction and total time management skills. This indicates that, as internet addiction grew, time management skills declined. And when internet addiction declined, time management skills improved.

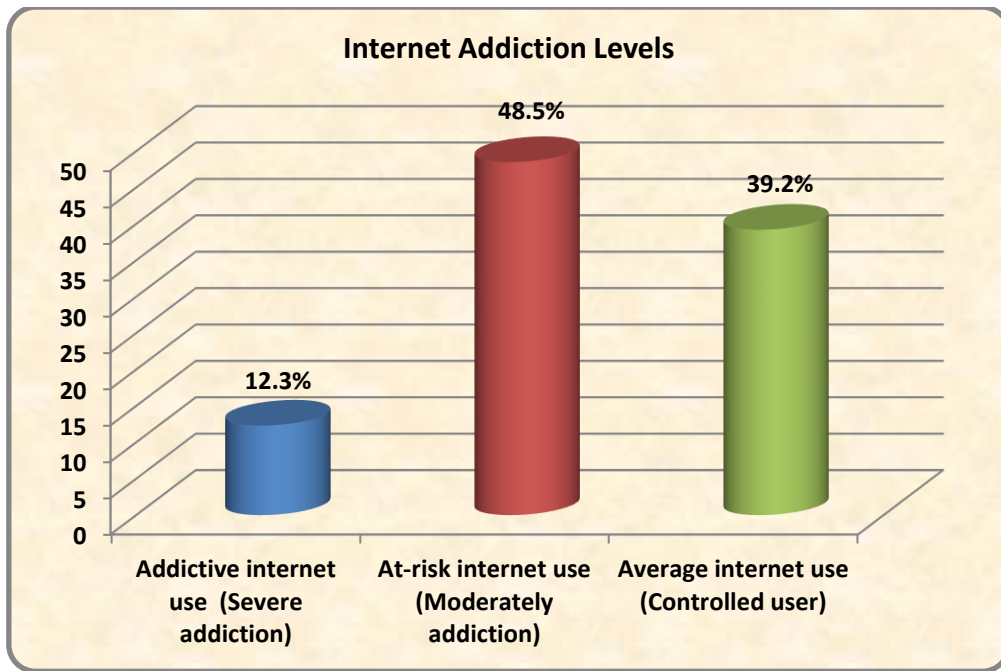
**Table (1): Frequency distribution of nursing students regarding personal characteristics (n=1084)**

Personal characteristics	No.	%
<b>Age</b>		
≤ 20 years	694	<b>64.0</b>
> 20 years	390	36.0
<b>Mean ±SD</b>	<b>19.87±1.25</b>	
<b>Gender</b>		
Male	290	26.8
Female	794	<b>73.2</b>
<b>Residence</b>		
Rural	838	<b>77.3</b>
Urban	246	22.7
<b>Marital status</b>		
Married	8	0.7
Unmarried	1076	<b>99.3</b>
<b>Academic year</b>		
1st	245	22.5
2nd	287	26.5
3rd	301	<b>27.8</b>
4th	251	23.2

**Table (2) Frequency distribution of nursing students regarding internet using (n=1084)**

Internet using data	No.	%
<b>Availability of internet at home</b>		
Yes	1064	<b>98.2</b>
No	20	1.8
<b>Mode of using internet</b>		
Mobile	1023	<b>94.4</b>
Laptop	7	0.6
Computer	12	1.1
Tablet	42	3.9
<b>Daily hours spent in internet</b>		
< 1 hr.	12	1.1
1 < 3 hrs	60	5.5
3 < 5 hrs	428	<b>39.5</b>
5 < 7 hrs	406	37.5
≥ 7 hrs.	178	16.4
<b>Online activities causing addiction</b>		
Studying	322	29.7
Chatting	144	13.3
Gaming	216	19.9
Watching videos	402	<b>37.1</b>

**Internet Addiction and its Relation to Time Management Skills among Nursing Students**

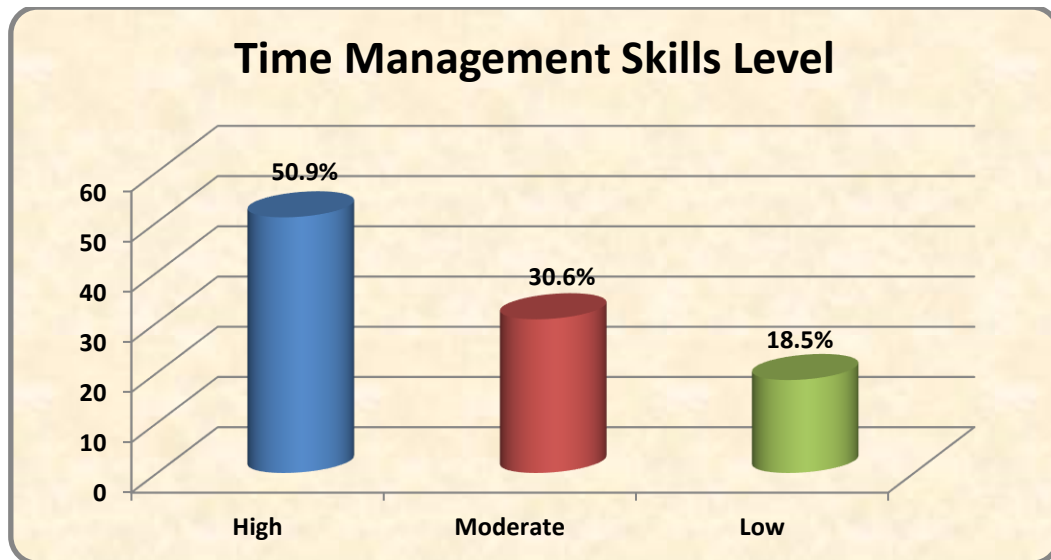


**Figure (1): Total levels of internet addiction among nursing students (n=1084).**

**Table (3): Total mean score and standard deviation regarding internet addiction domains (n=1084)**

Domains of internet addiction	Total score	Minimum	Maximum	Mean $\pm$ SD	Mean %	Ranking
Internet salience	18	6	18	12.26 $\pm$ 2.46	68.1%	1
Excessive use	36	12	36	21.90 $\pm$ 4.44	60.8%	3
Conflict	24	8	24	13.33 $\pm$ 3.92	55.5%	4
Relapse	9	3	9	5.68 $\pm$ 1.53	63.1%	2
<b>Total</b>	<b>87</b>	<b>33</b>	<b>84</b>	<b>53.18<math>\pm</math>10.26</b>	<b>61.1%</b>	





**Figure (2): Total levels of time management skills among nursing students (n=1084).**

**Table (4): Total mean score and standard deviation regarding time management domains (n=1084)**

Domains of time management	Total score	Minimum	Maximum	Mean ±SD	Mean%	Ranking
Time planning	51	17	51	35.31±8.14	69.2%	4
Time attitude	15	5	15	11.60±2.01	77.3%	1
Dealing with internal time wasters	21	7	21	15.84±3.41	75.4%	3
Dealing with external time wasters	9	3	9	6.83±1.63	75.9%	2
<b>Total</b>	96	36	96	69.60±13.50	72.5%	

**Table (5): Correlation between total internet addiction score and total time management skills of nursing students (n=1084).**

Total internet addiction scores	Total time management skills scores	
	R	P value
	-0.525	0.000**

\*\* A highly statistically significant difference  $P \leq 0.001$ )

## Internet Addiction and its Relation to Time Management Skills among Nursing Students

### **Discussion:**

The internet is a great invention that has contributed to facilitating and improving the standard of life by allowing access to all kinds of information to experience new skills and easy communication with everyone, which saves a lot of effort, time and money. Nursing students are at greater risk for excessive internet use and internet addiction than other age groups, using the internet extensively for research, entertainment, social interaction, and to combat loneliness by increasing time spending online. This may result in the potential for problematic internet use among college students (**Özer et al., 2023**).

Time management is an important challenge among university students, it reflects how to perceive and benefit from time in a way that helps to achieve academic duties appropriately. Many students often complain about having academic workloads that require more time than have during the semester. With congested schedules students can feel overwhelmed, increased pressure of academic demands that create a stressful lifestyle. Students waste time searching for and failing to find important knowledge and consume long time repeating tasks (such as checking e-mails and social media) and feeling worried about unfinished tasks also waste time and impede progress (**Gezgin et al., 2021**).

Concerning distribution of nursing students, the finding of present study showed that, nearly two thirds of nursing students were aged equal and less than 20 years. As far as gender, near to three quarters of them were females. **Regarding** the residence, more than three quarters of them were from rural areas. Regarding marital status, most of them were unmarried. Regarding **the academic** year, the highest **percentage** of them were in third academic years.

Regarding internet using data of nursing students, the finding of current study revealed

that, most nursing students had availability internet at home and used mobile as a mode of internet using. As regards the daily hours spent in internet, near two fifth of them used the internet from three to five hours per day, and concerning to online activities more than one third of nursing students used internet to watching videos. From the researcher's point of view, this might be due to the use of mobile phone and the internet applications as an integral part of the student's daily life and linked to all daily activities, whether educational or recreational.

This result matched with **Mohammed et al., (2016)** who conducted a study about "Internet addiction a comparative study between faculty of nursing students at Damanhur and Alexandria University" and reported that, less than half of students used internet from three to five hours per day and about two fifth of them used internet for watched YouTube and social media videos.

This result was similar to **ElRamady et al., (2020)** who conducted study about "Nursing students' perception regarding using of social networking in nursing education and its effect on their engagement, at Benha University, Egypt" and found that the most of the studied nursing students had smart mobile phone. On the same line with **Elghabbour et al., (2022)** who conducted study about "Satisfaction and learning obstacles of online education among maternity nursing students during COVID-19 outbreak" and showed that, most of students had internet at home.

Concerning total internet addiction levels, the present study clarified that, nearly to half of nursing students were at risk of internet use with moderately addiction. While, lowest percent of studied students were addictive internet use with severe addiction. From the researcher's point of view, this might be due to nursing students have multiple assignments

related to study that require a daily presence on the internet, such as theoretical lectures, distance learning activities, and the preparation of some research related to academic projects. These tasks required for study only, away from using the internet for social and entertainment matters.

This result was similar to **Khalil et al., (2016)** who conducted study in Saudi about "Internet addiction among nursing students and the association with their academic performance and mental health" and found that, less than half of studied students were at moderate risk of internet use, while the lowest percent of students were addictive internet use. Moreover, **Bagdady et al., (2021)** who conducted study about "Physical and psychological effects of internet addiction among faculty of nursing students at Port Said University" and showed that, near to half of nursing students had moderate risk of the internet use.

In addition, this result is in the same line with **Mahmoud et al., (2022)** who conducted study about "The association between internet addiction and sleep quality among medical students in Sohag University" and reported that, nearly to half of studied students had moderate internet addiction, and lowest percent of student's addictive internet user. And study conducted by **Özer et al., (2023)** about "Investigation of the relationship between internet addiction, communication skills and difficulties in emotion regulation in nursing students" and found that, approximately half of the nursing students had moderate risky internet users.

The current study findings showed that, the highest mean score of internet addiction domain was related to internet salience domain. This result might be due to internet salience pointing to group of signs that occur naturally as a result of the frequent use of the internet and indicating that the internet has become a part of

students' daily lives. This result was similar to a study conducted by **Eiz-Elregal et al., (2018)** about "Internet addiction and its relationship with nursing student's health profile at the technical institute of nursing, Fayoum University" and found that, the highest mean scores related to internet salience domain.

While, the lowest mean score of internet addiction domain was related to conflict domain. From the researcher point of view, this might be due to the students aware by the importance of the internet, as well as the risks that arise from excessive use of the internet, and due to the clarity of the importance and the risks related to it, the conflict among nursing students was decreased. This result was in same line with **Altiner et al., (2022)** who conducted study about "Relationship between level of internet addiction and time management skills among nursing students" and found that, the lowest mean scores related to conflict domain.

Concerning total levels of time management skills, the finding of current study revealed that, more than half of nursing students had high level of time management skills. While less than one fifth of nursing students had low level of time management skills. From the researcher point of view, this result might be due to the students have responsibility for their studies by attending lectures and practical study with fixed dates as well as other study-related activities with deadlines. As well as the personal responsibilities of each student through extra work to improve income or help with household matters.

This study result was supported by **Uysal et al., (2017)** who conducted study about "Assessing time management skills and life satisfaction of the nursing students" and found that, about half of studied students had a high level of time management skills. Moreover, this result agreed with **Gündođdu et al., (2020)** who conducted study about "Determining the level of time management skills of nursing

## **Internet Addiction and its Relation to Time Management Skills among Nursing Students**

students and social media addiction" and found that, more than half of students had high level of time management skills. And **Sekizler et al., (2022)** who conducted a study about "The relationship between time management skills and academic achievements of nursing students during the COVID-19 pandemic" and showed that, about half of nursing students had high level of time management skills.

Regarding time management skills domains, the result of the current study showed that, the highest mean score of time management skills domains related to time attitude domain. This result might be due to the students have knowledge about the importance of time and what is required of them in general during their academic years. This result is in same line with **Nayak, (2019)** who conducted a study about "Impact of procrastination and time-management on academic stress among undergraduate nursing students" and found that, the highest mean score of time management skills domains related to time attitude domain.

Also, the lowest mean score of time management domains related to time planning domain, this result might be due to the planning requires commitment on a daily assignment as well as physical and mental effort that may hinder some non-compliant students and make them deal with routine. This result agreed with **Mohammed et al., (2019)** who conducted study about "The relation between time management skills and stress level among fourth year students at Faculty of Nursing Elminia University" and showed that, the lowest mean scores of time management skills related to time planning domain.

The finding of the current study revealed that, there was highly statistically significant negative correlation between total internet addiction and total time management skills. This means that, when internet addiction increases, time management skills decrease.

And, when internet addiction decreases, time management skills increase. From the researcher point of view, this might be due to belief of the number of hours that staying on the internet and immersion in it will lead to postponing tasks, which will make them accumulate until it is difficult to implement, which will affect the rest of the activities that must be performed after that. On the contrary, using the healthy internet will save wasted time in searching and so on, and will allow more time to perform other tasks and activities.

This result agreed with **Öksüz et al., (2018)** study about "Relationship between problematic internet use and time management among nursing students" and showed a significant negative correlation was found between problematic internet use and time management among nursing students. Also, this result is in same line with **Altiner et al., (2022)** who study about "Relationship between level of internet addiction and time management skills among nursing students" and found a significant negative correlation between nursing students' level of internet addiction and time management skills and concluded that, the nursing students who had fewer academic achievements and spent more than six hours per day on internet that indicate to high level of internet addiction and less time management skills.

### **Conclusion:**

The present study concluded that nearly to half of nursing students had moderate risk internet use, while lowest percent of them had addictive internet use. More than half of nursing students had high level of time management skills, while less than one fifth of them had low level of time management skills. Additionally, there was a highly statistically significant negative correlation between total internet addiction and total time management skills. This means when internet addiction increased

time management skills decreased. And when internet addiction decreased time management skills increased.

**Recommendations:**

Based on the results of the current study, the following recommendations were suggested.

**Recommendations for Faculty administration:**

- Conducting a training program for nursing students about healthy dealing with the internet by defining the advantages and disadvantages of using the internet.
- Conducting training workshops related to developing students' time management skills.

**Recommendations for nursing students:**

- Implementation of plans regarding time management while using internet applications.
- Use daily time charts to make the most of time.

**Opportunities for further research:**

- Studying the relation between internet addiction and academic achievement among nursing students.
- Studying the effect of time management skills on nursing students' academic performance.

**References:**

**Albikawi, Z. (2023).** Anxiety, depression, self-esteem, internet addiction and predictors of cyberbullying and cybervictimization among female nursing university students: A cross sectional study. *International Journal of Environmental Research and Public Health*, 20(5), 4293- 4308.

**Altiner M., Isci, N., Alacam, B., Caliskan, R., & Kulekci, E. (2022).** Relationship between level of internet addiction and time management skills among nursing students. *Perspectives in Psychiatric Care*, 58(2), 758-766.

**Ariningpraja, R. & Wisnasari, S. (2023).** Nursing students' learning support, outcome, and satisfaction towards online learning. *Journal of Nursing Science Update (JNSU)*, 11(1), 18-27.

**Bagdady, E., Shahin, E., Mohamed, A. & Elsaid, S. (2021).** Physical and psychological effects of internet addiction among faculty of nursing students at Port Said University. *Port Said Scientific Journal of Nursing*, 8(1), 275-293.

**Bayir, B., & Topbas, T. (2023).** The effect of technology addiction training given to nursing students on the perspectives and addiction levels of students. *Archives of Psychiatric Nursing*. 45, 152-157.

**Boyacı, M. (2019).** Internet addiction research in Turkey: A content analysis study. *The Turkish Journal on Addictions*, 6(3), 777-795.

**Çingöl, N. & Karakaş, M. (2023).** Effect of the management in nursing course on students' time management and career planning attitudes: A single-group pre-test post-test study. *Nurse Education Today*, 125, <https://doi.org/10.1016/j.nedt.2023.105797>.

**Digital Local Country Headlines Report, (2022).** Data reported offers thousands of free reports that help you make sense of what people are really doing online. Available at: <http://datareportal.com/>.

**Eiz-Elregal, F., Shaker, M., El Sayed, H. & Latif, A. (2018).** Internet addiction and its relationship with nursing students' health profile. *Egyptian Journal of Health Care*, 9(4), 368-381.

**Elghabbour, G., Amr, T., Atia, R. & Elgharib, N. (2022).** Satisfaction and learning obstacles of online education among maternity nursing students during COVID-19 Outbreak. *Egyptian Journal of Health Care*, 13(3).

**El-Ramady, M., El-Sayed, K., & El-Shahat, M. (2020).** Nursing students' perception regarding using of social network in nursing

## Internet Addiction and its Relation to Time Management Skills among Nursing Students

education and its effect on their engagement. Master thesis. Faculty of Nursing- Benha University. 80-89.

**Filomeno, L., Di Muzio, M., Tartaglini, D., Gigliello, M., Di Mario, S., Forte, D., & Ivziku, D. (2023).** A rapid review of time management strategies among nurse managers. *The therapeutic clinic*, 174(1), 75-79, doi: 10.7417/CT.2023.2500.

**Gezgin, D., Mihci, C., & Gedik, S. (2021).** The effect of free time management skills upon smartphone addiction risk in university students. *Journal of Education in Science Environment and Health*, 7(4), 354-366.

**Gündogdu, F., Boztaş, E., Güler, E., Akbaba, A., & Varsoyoğlu, S. (2020).** Determining the level of time management skills of nursing students and social media addiction. *KTO Karatay University, Journal of Health Sciences*, 1(2), 5-16.

<https://doi.org/10.1177/0033294118789034>

**Khalil, A., Alharbi, N., Alhawasawi, H., & Albander, A. (2016).** Prevalence of internet addiction among nursing students and the association with their academic performance and mental health. *Athens Journal of Health*, 3(4), 291-306.

**Khiat, H. (2022).** Using automated time management enablers to improve self-regulated learning. *Active Learning in Higher Education*, 23(1), 3-15.

**Kulkarni, M. (2020).** Time management skills among medical students. *Indian Journal of Public Health Research & Development*, 11(6), 488-493.

**Mahmoud, O., Hadad, S., & Sayed, T. (2022).** The association between internet addiction and sleep quality among Sohag University Medical Students. *Middle East Current Psychiatry*, 3(1), 23-29.

**Mohammed, E., Mohammed, N., & Ahmed, H. (2016).** Internet addiction: A comparative study between Faculty of Nursing Students at Damanhour and Alexandria

University. *Zagazig Nursing Journal*, 12 (1), 49-67.

**Mohamed, A., Mohamed, A., & Hafez, H. (2021).** Cognitive behavior therapy to control internet addiction among nursing institute students in Beni-Suef University, Egypt. *Egyptian Journal of Health Care*, 12(1), 1400-1409

**Mohammed, S., Aref, S., & Mohammed, E. (2019).** Relation between time management skills and stress level among fourth year students at Faculty of Nursing. *Minia Scientific Nursing Journal*, 6(1), 86-91.

**Nayak, S. (2019).** Impact of procrastination and time-management on academic stress among undergraduate nursing students: A cross sectional study. *International Journal of Caring Sciences*, 12(3), 1480- 1487.

**Nigussie, T. (2019).** The effect of time management practice on the academic achievement A case of Dire Dawa University, Ethiopia. *European Journal of Business and Management*, 11(4), 43-50.

**Öksüz, E., Guvenc, G., & Mumcu, S. (2018).** Relationship between problematic internet use and time management among nursing students. *Computers, Informatics, Nursing*, 36(1), 55-61.

**Ozer, D., Altun, O., & Avşar, G. (2023).** Investigation of the relationship between internet addiction, communication skills and difficulties in emotion regulation in nursing students. *Archives of Psychiatric Nursing*, 42, 18-24.

**Pertiwi, E. (2021).** Investigating the correlation between time management and accomplishing the highest honor of academic achievement in PMPBI UNJ students. *In English Language and Literature International Conference Proceedings* (4), 37-47.

**Ramón, E., Granada, J., Martínez, B., Echániz, E., Antón, I., & Nash, M. (2021).** Prevalence and factors associated with

problematic internet use in a population of Spanish university students. *International Journal of Environmental Research and Public Health*, 18(14), 7620-7629.

**Saleh, N., & El Shazly, E. (2020).** Effect of time management training program on nurses' daily time wasters. *Assiut Scientific Nursing Journal*. 8(23), 1-9.

**Sekizler, E., Yıldız, K., Gök, N., Kahraman, İ., Örskıran, B., & Kaya, U. (2022).** The relationship between time management skills and academic achievements of nursing students during the COVID-19 Pandemic. *Mediterranean Nursing and Midwifery*. 2(3), 94-102.

**Tejada, J., & Punzalan, J. (2012).** On the misuse of Slovin's Formula. *The Philippine Statistician*, 61(1), 129-136.

**Uysal, N., Sözeri, E., Selen, F., & Bostanođlu, H. (2017).** Assessing time management skills and life satisfaction of the nursing students. 3 (1), 30-36 DOI: 10.5222/jaren.030.

**Zyoud, R. (2023).** Psychometric properties of nursing time management scale (NTMS), Arabic version. *BMC Nursing*, 22(1), 153-159.

## إدمان الإنترنت وعلاقته بمهارات إدارة الوقت بين طلاب التمريض

محمد بدر الدين أبو الفتوح - محضية مرسى الشحات - هناء سمير عبد العزيز الصياد

أصبحت الحياة الأكاديمية لطلاب التمريض مرتبطة ارتباطاً وثيقاً بالاستخدامات المختلفة للإنترنت، مما خلق تحدياً جعلهم مطالبين بتحقيق التوازن بين استخدام مهارات إدارة الوقت واستخدام الإنترنت. **الهدف من الدراسة:** هدفت الدراسة إلى تقييم إدمان الإنترنت وعلاقته بمهارات إدارة الوقت بين طلاب التمريض. **تصميم الدراسة:** تم استخدام تصميم وصفي ارتباطي لإجراء هذه الدراسة. **مكان البحث:** أجريت هذه الدراسة بكلية التمريض جامعة بنها. **عينة البحث:** عينة عشوائية طبقية تكونت من (1084) من طلاب التمريض من الفرق الدراسية الأربعة للعام الدراسي (2022-2023م). **أدوات جمع البيانات:** تم استخدام أداتين لجمع البيانات (1) إستييان إدمان الإنترنت (2) إستييان مهارات إدارة الوقت. **النتائج:** أظهرت نتائج هذه الدراسة أن ما يقرب من نصف (48.5%) طلاب التمريض لديهم مخاطر متوسطة في استخدام الإنترنت، وأكثر من نصف (50.9%) طلاب التمريض لديهم مستوى عالٍ من مهارات إدارة الوقت. **الاستنتاج:** كان هناك علاقة ارتباط سلبية ذات دلالة إحصائية عالية بين إدمان الإنترنت ومهارات إدارة الوقت. **التوصيات:** تصميم برنامج تدريبي وورش عمل لطلاب التمريض حول كيفية التعامل الصحي مع الإنترنت من خلال تحديد مزايا وعيوب استخدام الإنترنت وتطبيقاته. يحتاج طلاب التمريض إلى استخدام الجداول الزمنية اليومية وتحديد الأولويات لكل ما هو عاجل ومهم.