



**International Journal of Biology, Pharmacy
and Allied Sciences (IJBPAS)**

'A Bridge Between Laboratory and Reader'

www.ijbpas.com

EXPLORING THE IMPACT OF INTERNET ADDICTION ON ACADEMIC ACHIEVEMENT

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Received 15th Nov. 2023; Revised 19th Dec. 2023; Accepted 16th June 2024; Available online 1st April 2025

<https://doi.org/10.31032/IJBPAS/2025/14.4.8915>

ABSTRACT

Background: Academic performance occupies an important role in adolescent development. It reflects adolescents' cognitive ability and also shapes their academic and career paths. Internet addiction is a common problem in students and negatively affects cognitive functioning, leads to poor academic performance and engagement in hazardous activities, and may lead to anxiety and stress. So, the present study aimed to assess the prevalence of internet addiction and associated factors among Pharmacy students.

Objectives: The main objective of this study was to assess the prevalence and associated factors of internet addiction among Pharmacy students.

Methodology: A total of 200 pharmacy students were selected from different colleges of Moinabad through random sampling. After selection of the sample, Young's Internet Addiction Scale, Symptom Checklist-90-Revised, and Rosenberg Self-Esteem Scale were used to assess the Internet usage, psychopathology, and self-esteem of the college students.

Conclusion: This study and many other previous studies have revealed that internet addiction affects academic performance. The number of internet users is ever increasing therefore, the number of internet misusers will also increase. If no step is taken to control internet addiction, it may cause a serious impact in the future.

Keywords: Academic performance, Internet addiction, Pharmacy students

INTRODUCTION:

The Internet has significantly changed people's lives nowadays. Despite the profound benefits of the Internet, the public is aware of the negative influence of its overuse and misuse on health and well-being. One common problem is Internet addiction (IA), which refers to one's inability to control Internet use that consequently causes social, psychological, academic, and work difficulties in life.

The term Internet Addiction Disorder was first proposed by Ivan Goldberg for pathological, compulsive Internet usage. It can be defined as, "an individual's inability to control his or her use of the internet, which eventually causes psychological, social, school, and/or work difficulties in a person's life" [1].

Among different age groups, adolescents are considered more vulnerable to IA as their cognitive ability, self-control, and coping strategies are not fully developed. The high potential of the internet for rapid search for accommodating social and mental needs, its limitlessness in terms of time, and its engagement with engaging content are all factors contributing to internet overuse by students, which could lead to internet addiction [2, 3].

The internet has become a vital tool for knowledge acquisition and communication. The abundance of electronic books, encyclopaedias, and dictionaries has made

research more accessible and faster. Simulations, online slides, and presentations provide a more precise and elaborate view of topics. However, studies have shown that excessive use of social media can negatively impact academic performance. Most scholars use social media for interaction, entertainment, and fun, which distracts them from academic work. Excessive social media use has been linked to poor academic performance, with scholars spending more time drooling and making musketeers than reading books. Social media addiction can lead to poor academic performance and set back personal and professional responsibilities. Social media platforms are more of a distraction than a tool for academic growth, with scholars spending more time on socializing conditioning than academic purposes. However, excessive internet use has been associated with academic problems and failure to complete assignments. One study found a negative correlation between regular internet use and student results, while another identified several negative impacts on academic performance.

However, over half of students surveyed reported improved academic performance due to internet use. Another study found a positive correlation between study hours and internet use for academic purposes, while a negative correlation was found for non-

study purposes. Given the complexity and stress of academic course curricula, undergraduate students may be particularly susceptible to internet addiction, which could have negative consequences for their future career, lifestyle, and personality. Internet addiction has emerged as a major public health issue globally, and more and more students are becoming addicted to it, leading to detrimental effects on their health, studies, sleep, and family relationships.

Internet addiction can also cause loneliness, shyness, depression and various other psychological conditions. All these factors may make the development and maintenance of the social relationship with the academic supervisors and peers difficult. Moreover, overuse of the internet may expose the students to its dark side like spam, malware, hacking, phishing, invasion of privacy, pornography etc. Addiction in these dark sides may be career ending.

Scientific studies have been conducted to unravel the mechanisms of the negative impacts of IA on academic performance among adolescents. Earlier research has focused on the distraction and divergence behaviours in learning among students with IA, which often directly lead to a decline in academic performance. Besides, anxiety and depression have been found to mediate the adverse effect of IA on academic performance. Recent evidence suggests that IA may also interrupt students'

psychological learning process and create problems in academic values and motivation. For example, problematic Internet use was found to exert a negative effect on academic motivation, learning productivity, and psychosocial status, which have negative impact on students' performance.

Although a few studies have been conducted on internet addiction among Pharmacy students, results have varied widely due to differences in study design, assessment methods, and sampling from different sub-populations across the world. The rising prevalence of internet addiction up to 14% among college-based populations, has become a matter of concern [4]. To date, no concrete internet addiction results have been registered. According to the surveys done in India, 1.3% of Indian population has an internet addiction [5]. Hence, this study was undertaken to assess the prevalence of internet addiction among Pharmacy undergraduate students and to determine if there is any association between excessive internet use and academic performance among students. The findings of this study could help raise awareness about internet addiction prevention and encourage students to take precautionary measures, as well as inform specific interventions by concerned authorities.

2. METHODOLOGY:

2.1. Study Design, Sampling and Sampling Methods:

This cross-sectional study included all pharmacy students at different pharmacy colleges located at Moinabad. Initially, 200 students completed the questionnaires, 40 of whom were excluded due to incomplete answers to the questions and 10 were excluded because of biased and random answers to the questionnaires. Finally, data on 150 students were analysed. The inclusion criteria were being a pharmacy student during the investigation, access to the internet and devices for getting connected, and informed consent for participating in the study. The exclusion criteria included incomplete answers to the questionnaires and unwillingness to participate.

2.2. Procedure of the Study:

Self-administered, well-structured, and organized English version questionnaire was disseminated to students, and data were collected from the individual student. The questionnaires comprised four parts. The first part consisted of socio-demographic details; a structured questionnaire was used to assess sociodemographic characteristics. The second part consists of Young's Internet Addiction Test (YIAT); a structured, self-administered questionnaire was used to assess Internet Addiction. The YIAT 6 is the most commonly used measure of Internet Addiction among adults. It includes 20

questions with a scoring of 1–5 for each question and a total maximum score of 100. Based on scoring subjects would be classified into normal users (0–30), mild (31–49), moderate (50–79), and severe (80–100) Internet Addiction groups. Mild Internet addiction, moderate Internet addiction, and severe Internet Addiction were considered as having an Internet Addiction. The third part time-associated factors; a self-report structured questionnaire was prepared from different kinds of literature to assess time-associated factors (such as Internet use experience in months and Internet use per day in hours). The fourth part reasons for internet use; a structured questionnaire was used to assess the reasons for internet use.

Statistical analysis:

Statistical techniques used for the present study are mean, SD, correlation, percentage and t-test for analysis the collected data.

3. RESULTS:

3.1. Sociodemographic characteristics:

Out of the total of 200 students, 150 returned the properly filled questionnaires, with a response rate of 96.5%. Out of the total respondent's majority of the respondents were male students (56%). The mean age of the study participants was 23.01, with a range of 18–29 years. Regarding the residence the area, majority of the study participants (62%) were from urban areas

and students residing outside the campus showed a major usage (70%) (Table 1).

3.2. Prevalence based on Internet addiction Test:

Based on the total score, the respondents were categorized into 3 categories: mild, moderate and severe. The severe level of addiction indicated that the respondents' internet usage is causing significant problems in their life. Moderate level of addiction depicted that person is experiencing occasional problems due to internet use and they should have considered the internet's full impact on their life. Mild level of addiction indicated that the person is an average online user who might surf the web a bit long, but still s/he can control over the usage. The level of internet addiction was more in male when compared to female (Table 2, 3).

3.3. Time spent on internet per day:

Among the study respondents, more than half (50%, n = 75) had used the internet for more than 12 months. The majority (46%,

n = 69) of the study participants had been using the internet for between 30 min and 1 h per day. Approximately (17%, n = 26) of all respondents had used the internet at least once per day. The majority (43.3%, n = 65) of the respondents use Wi-Fi or wireless, while nearly one third (36%, n = 54) use mobile data as a common mode of internet access (Table 4).

3.4. Reasons for internet use among students:

The furthestmost frequent reasons for internet use among undergraduate students were using the internet for courses / assignments (90.6%), for social networks (Facebook, etc.) (89.6%), for reading / posting news (66.6%), for getting into relationships online (76.6%), for playing mobile games (54.5%), for downloading music or videos (75.7%), for watching videos (67.8%), for retrieving sexual information (32.8%), for chat rooms (57.6%) and for e-mail (reading, writing) (39.8%) (Figure 1).

Table 1: Sociodemographic characteristics

Variables	Categories	Frequency	Percent
Gender	Male	84	56.0
	Female	66	44.0
Age	18–20	45	14.0
	21–23	51	36.1
	≥ 24	54	49.9
Childhood residence	Urban	93	62
	Rural	57	38
Current living arrangement	In the campus	45	14.0
	Out of the campus	105	70

Table 2: Respondents' Internet Addiction Level according to the modified criteria of Young's (1998) Internet Addiction Test (IAT)

S. No.	Level	Frequency	Percentage
1	Severe	40	26.6
2	Moderate	60	40.1
3	Mild	50	33.3
Total		150	100

Table 3: Level of internet addiction among males and females

S. No.	Level of Internet Addiction (IAT)	Gender				Total.no of Respondents
		Male	%	Female	%	
1	Severe	5	3.33	3	2	8
2	Moderate	52	34.63	50	33.33	102
3	Mild	21	14	19	38	40
	Total	78	51.96	72	73.3	150

Table 4: Time Spent on internet by undergraduate students

Variables	Categories	Frequency	Percent
Duration since started to use the internet	0-6 months	38	25.3
	6-12 months	37	24.6
	Greater than 12 months	75	50
Total average time spent online use per day	30 min to 1 h	69	46
	1 to 5 h	55	36.6
	Greater than five hours	26	17.3
Frequency of internet use per day	One times per day	27	18
	Two times per day	57	38
	>Two times per day	66	44
Common mode of internet access	Wi-Fi /wireless	65	43.3
	Cable internet	31	20.6
	Mobile data	54	36

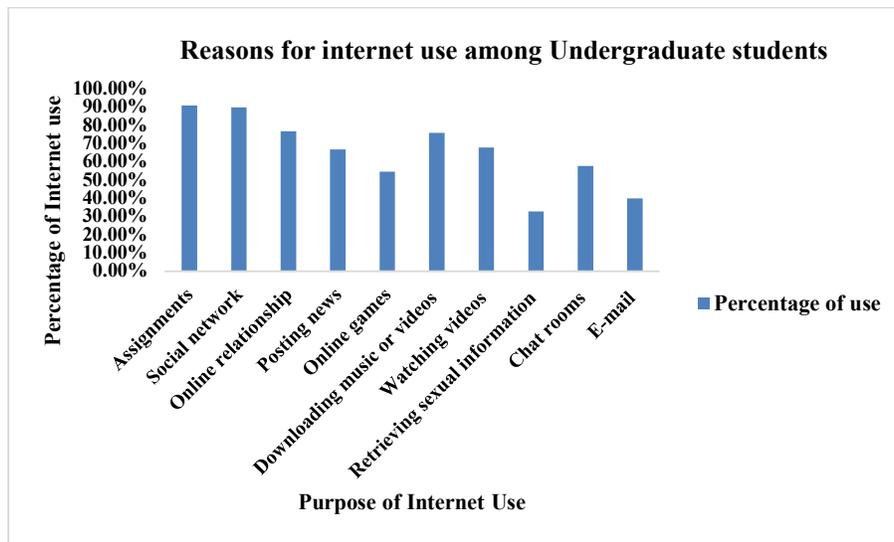


Figure 1: Reasons for internet use among Undergraduate students

DISCUSSION:

In the present study, we have tried to assess the impact of IA on students’ academic performance. The Internet Addiction Test is the only validated instrument that identifies the high, low, and average internet users. It is found from this study that 27.5% of the students were severe users of the internet.

Several other studies have reported a higher percentage of Internet-addicted youths 7. The continuous exposure to the internet and susceptibility to addictive behaviours may represent a possible danger 8. Severe internet users used a maximum of 3 to 4 hours per day. They could not perform their responsibilities adequately, such as

concentrating on academics and developing social isolation owing to excessive internet use. Users spending significant time online experience academic, relational, economic, and occupational problems and physical disorders 9.

The age distribution of our study population was from 18 years to 30 years. The age group 24 to 26 years had more prevalence of internet addiction (49.9%). Internet addiction increased with age, though not statistically significant, consistent with the results of studies conducted on teenagers between 17 and 27 years, who found the prevalence of internet addiction 9. However, most previous researchers have concluded a significant relationship between addiction severity and age, with younger people at higher risk of IA 10. IA has been proven to reduce the young generation's productivity and cause cognitive dysfunction, poor academic performance, and physical, mental, and behavioural disturbances.14

The Internet Addiction Test is the only validated instrument that identifies the high, low, and average internet users. It is found from this study that 26.6% of the students were severe users of the internet. Several other studies have reported a higher percentage of Internet-addicted youths 11. The continuous exposure to the internet and susceptibility to addictive behaviours may represent a possible danger. Severe internet users used a maximum of 3 to 4 hours per

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Students who used the internet by mobile internet were 36% of lower risks of having Internet Addiction as compared to those students who used data cards. This might be due to inadequate finance to use the internet on mobile internet. So, the students may refrain from using the internet through mobile internet. Students who used the internet for more than 12 months were less likely to have Internet Addiction than their counterparts.

On the contrary, it is also reported that internet use is higher among the undergraduate students, which is explained by the amount of work that requires a literature search for projects, seminars, and presentations during the clinical years of study. The vast knowledge served by internet like online libraries, computer-aided educational software, lessons on YouTube, search engines, and online university classes could be the causes of rises in internet addiction scores. Interns and females were found to be more dependent on digital devices. They responded with a higher score for getting anxious over losing the mobile,

possessing the gadget every time they leave their house and keeping them near during sleep. On the other hand, the percentage of time spent for social networks, posting news, for getting into relationships online, for playing mobile games, for downloading and watching videos very significant and less time was spent for e-mail reading, writing.

On the basis of some existing literature, it was hypothesized that internet addiction would have negative impact on academic achievement of the students. The result is in accordance with the stated hypothesis. Students' academic performance greatly depends on the student's health, study habits and time management for every academic works 15. Young (1998) suggested that the internet can distract students from their study. Other several studies also reported that internet has negative impact on students' academic success and their mental health. All these previous studies support the current findings that academic achievement is the most important predictor of internet addiction.

CONCLUSION:

The current study documents a high prevalence of Internet Addiction among Undergraduate students. The factors associated with Internet Addiction were spending more time on the internet, having mental distress, playing online games, downloading, and watching videos. As

internet addiction becomes an evident public health problem, carrying out public awareness campaigns on its severity and negative consequences of excruciating agonies may be a fruitful strategy to decrease its prevalence and effect.

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