

## Original Research Article

# Internet usage and associated factors among college students in Saudi Arabia

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### ABSTRACT

**Background:** Internet usage has heightened exponentially globally. The Internet is a system of connected computer networks globally and millions of users are connected globally. Internet usage has increased.

**Methods:** A cross-sectional study was done to know the prevalence of internet usage.

**Results:** The general prevalence of internet addiction (expressive as heavy users and very heavy users/addicts) was 42.5%.

**Conclusions:** A high proportion of students in the college suffer from the adverse effects of Internet addiction. It is essential for psychoanalysts and psychologists to be mindful of the mental problems induced by Internet addiction.

**Keywords:** Internet, Addiction

### INTRODUCTION

Internet usage has increased exponentially among the general population. The Internet is a worldwide system of connected computer networks used by millions of users globally.<sup>1</sup> Internet usage has increased due to availability of ready Information, ease of Communication, ready entertainment etc. This study aimed to determine the prevalence of addiction of internet including social networking sites and its comorbidity with other behavioral addiction and affective disorder among college students. Communication is inherent to human nature. It is an all-important human motivation and a key social requirement.<sup>2</sup> Social networking sites (SNSs) are online stages that allow for people with an chance to deal with their relationships and stay on informed with the happenings in the world.<sup>3</sup> Social network sites such as Facebook, Twitter, and WhatsApp grant people to showcase themselves, give voice to their opinions and views, and lay down or preserve associations with others.<sup>4</sup> The frequency with which adolescents use the

internet has an effect on their social self-pride and comfort.<sup>5</sup> Over the last few decades, there has been heightened concern in the habit-forming possibility of the Internet.<sup>6</sup> Students are a group believed to be particularly susceptible. depression has been found to coexist with pathological Internet use.<sup>7</sup> In some studies Internet usage was found to be associated with reduction of desolation and depression significantly, while perceived social backing and self-pride enhanced significantly.<sup>8</sup> The idea of "internet addiction" has been offered as an account for uncontainable, detrimental use of this technology. Indications of undue internet usage are likened to the standards used to identify other addictions.<sup>9</sup> The speedy evolution of the Internet has been complemented by demands concerning its affect, both progressive and regressive, on humanity and users.<sup>10</sup> Internet addiction, which has become a cosmopolitan social problem, can be widely hypothesized as a disappointment to curb one's usage of the Internet which instigates adverse consequences in everyday life.<sup>11</sup> Internet addiction turns up as a potential matter in youths. From the already

published data, it gives the notion that Internet captivity can have an classification of disconfirming consequences for minors that may call for expert intervention. Psychoanalysts have now discerned various drills and character traits linked with Internet dependence.<sup>12</sup> Notwithstanding the gains of Internet use, unrestrained Internet use adversely disturbs adolescent growth. Internet addiction is defined as “use of the Internet that produces mental, social, school, and work difficulties in an individual's life”.<sup>13</sup> Exuberant social networking and game playing are related with less time spent on prosocial actions and educational tasks, such that increased Internet usage is linked with inferior school performance, a smaller amount of physical activity and greater levels of detachment from society.<sup>14</sup> Studies have hinted that internet addiction leads to disregard of study, work, family and other social obligations.<sup>15</sup> Because the majority of college students live away from home with negligible parental watch and easy access to the Internet, they are more susceptible to internet addiction than adults.<sup>16</sup> Although the Internet frequently has been branded as male-dominated, recent indication shows that the gender gap in Internet use is briskly shrinking.<sup>17</sup>

## METHODS

This research aims to recognize the prevalence of internet addiction, which social networking website is used by students and discover the perceptions of students who use social networking websites in accordance to their learning process. A questionnaire of two parts was developed,

- the first part included demographic data,
- the second part included the usage of internet including social networking website for different purposes by students.

The questionnaire was developed by the researcher and validated by three public health experts. Students of college of Public Health and Health informatics were surveyed. The collected data was analyzed.

### *Study design, study population and sampling*

This cross sectional study was carried out on the Students of college of Public Health and Health informatics between 18 to 25 years age group during the period of August– October 2016. A total of 200 students using internet for at least one semester (last 6 months) were selected by convenience sampling. Necessary approval from the research ethics committee was obtained from the college ethics committee. The data was collected by self-administering the questionnaire to the students which consisted of three parts. The first part elicited the demographic information including age, gender, type of phone used and time spent on internet per day. The second part was the Young's scale of internet addiction which was developed by Dr. Kimberly Young, 1998 which is one of the most reliable scales for evaluating

internet addiction. It covered the degree to which internet use affected daily routine, social life and sleeping pattern. Total internet addiction scores were calculated, with possible scores for the sum of 20 items ranging from 0 to 100. According to the criteria used in this study, total Internet Addiction Test scores 1-19 represented as lower users, 20-39 as normal users 40-59 as moderate users 60-79 as heavy users and scores above 80 as very heavy users/addicts.

### *Sampling*

Convenience sampling was used.

### *Statistical analysis*

Data were analyzed using the statistical package for social science (SPSS) software (version 16.0). Frequencies and percentages were calculated for all the variables. Mean and Standard deviation were calculated for age and duration of internet usage. Chi-square test was used for analyzing categorical variables. P value of <0.05 was considered as significant.

## RESULTS

In the present study, out of 200 male students, the mean age of the students was 20.16 (standard deviation, 1.95). The subjects belonged to different streams: 36% to public health, 32% to health administration and 32% to health informatics.

**Table 1: Internet usage.**

		Frequency	Percentage (%)
<b>Valid</b>	Low	35	17.5
	Normal	38	19
	Moderate	42	21
	Heavy	45	22.5
	Very Heavy	40	20
	Total	200	100

The SPSS version 16.0 was used for statistical analysis of the data collected. Using Young's original internet scale criteria, the users were divided into 5 groups: 17.5% as lower users, 19% as normal users 21% as moderate users 22.5% as heavy users 20% as very heavy users. Non-significant usage differences were evident based on the stream of user. Public health students in comparison to other streams were more likely to be heavy users ( $\chi^2=3.92$ ,  $p>0.05$ ). Users used the internet mostly for communicating on social networks, study purposes, entertainment, communication, and downloading media files. The purpose of using the internet was significantly different for heavy users. They indulged more in use of social networks and downloading media files.

Most of the addicts used the internet in the nights as compared to other users who used it in the mornings

( $\chi^2=1.35$ ,  $p=0.50$ ). 61% accessed the internet in the night compared to 39% in the mornings. In this study, no significant relationship was found between users and the preoccupation with internet when offline ( $\chi^2=1.39$ ,

$p=0.49$ ). Furthermore, users have their own set of reasons for getting involved in the usage of internet. Majority of users do not track time when they connected till disconnection.

**Table 2: Frequency of diurnal usage.**

Users	Public health	Health administration	Health informatics	Total
<b>Night</b>	24	20	17	61
<b>Morning</b>	12	12	15	39
<b>Total</b>	36	32	32	100

**Table 3: Relationship between users and the preoccupation with internet when offline.**

Characteristic	Streams			
	Public health	Health administration	Health informatics	Total
<b>Preoccupied with internet when offline</b>				
<b>Yes</b>	23.5	17	17	57.5
<b>No</b>	12.5	15	15	42.5
<b>Total</b>	36	32	32	100

## DISCUSSION

The general prevalence of internet addiction (expressive as heavy users and very heavy users/addicts) was 42.5%, which is more than most studies that have estimated internet addiction. This is similar to the study done in Egypt where the investigators found the prevalence of 47.7%.<sup>18</sup> Also another study reported prevalence in as high as 74% in India.<sup>19</sup> A systematic analysis on internet addiction prevalence reported a high prevalence of 10.9% in the middle east.<sup>20</sup> Internet addiction is more common in public health students than in health administration and health informatics students, which corroborates with the finding of previous studies. 36% of public health students were addicts. This is lesser than that found in medical students in a study in India.<sup>21</sup> 42% of the subjects neglected their daily chores because of internet and 39% lost some amount of sleep because of their behavior of internet usage. This is similar to the one reported by Do who reported sleep loss in 43% of study subjects.<sup>22</sup> These findings can be attributed to the interesting and variety of entertainment the internet offers which makes the youngsters glued to the internet, and leading to loss of sleep. Our study also reported that internet addiction was associated with habits like feeling bored without the internet and have psychiatric abnormality like disturbing thoughts, becoming defensive if somebody asks about the internet and also the productivity decreased. Lots of studies have suggested that internet addiction is related with depression and anxiety.<sup>23,24</sup>

## CONCLUSION

High internet usage has been found in the college students. It needs to be controlled at the initial stages before the problem becomes magnified and adverse outcomes on mental health happen.

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## REFERENCES

1. Simsim MT. Internet usage and user preferences in Saudi Arabia. *J King Saud Univ Engineering Sci*. 2011;23(2):101-7.
2. Raj M, Bhattacharjee S, Mukherjee A. Usage of Online Social Networking Sites among School Students of Siliguri, West Bengal, India. *Indian J Psychol Med*. 2018;40(5):452-7.
3. Barman L, Mukhopadhyay DK, Bandyopadhyay GK. Use of Social Networking Site and Mental Disorders among Medical Students in Kolkata, West Bengal. *Indian J Psychiatry*. 2018;60(3):340-5.
4. Ellison NB, Steinfield C, Lampe C. The Benefits of Facebook "Friends:" Social Capital and College Students' Use of Online Social Network Sites. *J Computer Mediated Communication*. 2007;12(4):1143-68.
5. Valkenburg DPM, Peter J, Schouten AP. Friend Networking Sites and Their Relationship to Adolescents' Well-Being and Social Self-Esteem. *Cyber Psychol Behavior*. 2006;9(5):584-90.
6. Bonetti L, Campbell MA, Gilmore L. The relationship of loneliness and social anxiety with children's and adolescents' online communication. *Cyberpsychology, Behavior Soc Networking*. 2010;13(3):279-85.
7. Niemi K, Griffiths DM, Banyard P. Prevalence of Pathological Internet Use among University Students and Correlations with Self-Esteem, the General Health Questionnaire (GHQ), and Disinhibition. *Cyber Psychol Behav*. 2005;8(6):562-70.

8. Young KS, Rogers RC. The Relationship Between Depression and Internet Addiction. *Cyber Psychol Behav*. 1998;1(1):25-8.
9. Beard KW, Wolf EM. Modification in the Proposed Diagnostic Criteria for Internet Addiction. *Cyber Psychol Behav*. 2001;4(3):377-83.
10. Morahan-Martin J, Schumacher P. Incidence and correlates of pathological Internet use among college students Portions of this paper were presented at the 105th Convention of the American Psychological Association, August 1997, Chicago, IL. *Computers Human Behavior*. 2000;16(1):13-29.
11. Spada MM. An overview of problematic Internet use. *Addictive Behaviors*. 2014;39(1):3-6.
12. Kuss DJ, van Rooij AJ, Shorter GW, Griffiths MD, van de Mheen D. Internet addiction in adolescents: Prevalence and risk factors. *Computers in Human Behavior*. 2013;29(5):1987-96.
13. Aydm B, San SV. Internet addiction among adolescents: The role of self-esteem. *Procedia Soc Behav Sci*. 2011;15:3500-5.
14. Prabhakaran MCA, Patel VR, Ganjiwale DJ, Nimbalkar MS. Factors associated with internet addiction among school-going adolescents in Vadodara. *J Family Med Primary Care*. 2016;5(4):765-9.
15. Lin IH, Ko CH, Chang YP, Liu TL, Wang PW, Lin HC, et al. The association between suicidality and Internet addiction and activities in Taiwanese adolescents. *Comprehensive Psychiatry*. 2014;55(3):504-10.
16. Liu HC, Liu SI, Tjung JJ, Sun FJ, Huang HC, Fang CK. Self-harm and its association with internet addiction and internet exposure to suicidal thought in adolescents. *J Formosan Med Assoc*. 2017;116(3):153-60.
17. Yang LS, Zhang ZH, Hao JH, Sun YH. Association between adolescent internet addiction and suicidal behaviors. *Zhonghua Liu Xing Bing Xue Za Zhi*. 2010;31(10):1115-9.
18. Ali R, Mohammed N, Aly H. Internet addiction among medical students of Sohag University, Egypt. *J the Egyptian Pub Health Assoc*. 2017;92(2):86-95.
19. Cash H, Rae CD, Steel AH, Winkler A. Internet Addiction: A Brief Summary of Research and Practice. *Curr psychiatry Rev*. 2012;8(4):292-8.
20. Cheng C, Li AY. Internet addiction prevalence and quality of (real) life: a meta-analysis of 31 nations across seven world regions. *Cyberpsychol behav Social Networking*. 2014;17(12):755-60.
21. Chaudhari B, Menon P, Saldanha D, Tewari A, Bhattacharya L. Internet addiction and its determinants among medical students. *Industrial Psychiatry J*. 2015;24(2):158-62.
22. Do YK, Shin E, Bautista MA, Foo K. The associations between self-reported sleep duration and adolescent health outcomes: What is the role of time spent on Internet use? *Sleep Med*. 2013;14(2):195-200.
23. Bahrainian SA, Alizadeh KH, Raeisoon MR, Gorji OH, Khazaei A. Relationship of Internet addiction with self-esteem and depression in university students. *J Prev Med Hygiene*. 2014;55(3):86-9.
24. Alavi SS, Maracy MR, Jannatifard F, Eslami M. The effect of psychiatric symptoms on the internet addiction disorder in Isfahan's University students. *J Res Med Sci*. 2011;16(6):793-800.

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