The Prevalence of Problematic Internet Use and the Related Factors in Medical Students, Kerman, Iran

Shahrzad Mazhari MD, PhD[1]

Abstract

Background: Although problematic internet use (PIU) is a growing problem among adolescents, few studies have examined its prevalence among university students in Iran. This study was designed to investigate the prevalence of PIU and its potential risk factors among students at Kerman University of Medical Sciences, Kerman, Iran.

Methods: In a cross-sectional study, data was collected from 976 university students. PIU was assessed by the 18-item Problematic Internet Use Questionnaire. In addition, information on demographics and Internet usage pattern was also collected.

Findings: A total of 920 students completed the survey (response rate = 94.8%). Of them, 98% were Internet users. Overall, 21% of the students were identified as problematic Internet users. Logistic regression analysis showed that spending more time online, having a history of psychiatric disorders, and using the Internet for chatting and playing games were risk factors for PIU.

Conclusion: PIU is a common problem among university students. These results suggest the need for preventive and interventional strategies for this vulnerable group.

1- Assistant Professor, Neuropsychiatrist, Neuroscience Research Center, Kerman University of Medical Sciences, Kerman, Iran
Correspondence to: Shahrzad Mazhari MD, PhD, Email: smazhari@kmu.ac.ir

Introduction

The Internet has become one of the major necessities of life in almost all countries. Being a rich source of information, and containing entertainment facilities for all age groups, as well as its easy access are among major reasons of increasing use of the World Wide Web. In spite of various advantages of this technology, in the case of being misused, it can be dangerous and lead to Internet addiction.[1] This issue is so important that pathological Internet use or Internet addiction has been considered as one of the epidemics of 21st century[2] It seems that by inventing portable mini-computers and cell phones connecting to the Internet, the problem is undergoing rapid spread particularly among the youth.

According to some studies, Internet overuse would bring several negative outcomes in different aspects of life including sleep, nutrition, physical activity, academic and professional progress, and family relationships. Eventually, all these issues can lead to various physical and psychiatric disorders such as low back pain, carpal tunnel syndrome, depression, anxiety, loneliness and low self-esteem.[3,4] Although this phenomenon has been called under different terms including Internet addiction,[4,5] problematic Internet use,[6] or pathologic Internet use,[7] in this paper the issue will be discussed as Internet addiction for convenience.

Internet addiction has been described as intense mental preoccupation with Internet use, compulsive Internet use, spending a lot of time on the Internet, inability in managing time spent on the Internet, considering the world without the Internet as boring, irritability in the case of being disturbed at the time of using the Internet, and decreased social relationships because of Internet use.[3,8]

Since adolescence period is associated with high risk of behavioral addictions, several studies have been performed to determine the prevalence rate of Internet addiction, basically among the youth. According to these studies, the prevalence rate of Internet addiction in western and eastern countries has been estimated as 1.4%-17.9%.[9-11] In recent years, due to the widespread use of Internet in Asian countries, Internet overuse has become a growing psychiatric problem among adolescents. For example, in Taiwan and China, the incidence of this problem has been increased from 6% in 2000 to 11% in 2004.[12,13] In another study, higher prevalence rates in some Asian countries compared to the United States have been reported.[14]

During the recent years, Internet use has become common in Iran as well, particularly among the youth. According to Iranian National Internet Development Management Center, there have been 24550000 Internet users in Iran by March 2010.

There have been several studies about the prevalence rate of Internet addiction in Iran. Kheirkhah et al. investigated the prevalence of Internet addiction in Mazandaran province. The study sample was recruited from individuals attending in Internet centers including Internet cafés and subscribers of Internet services. According to the results, 22.8% of Internet users in Mazandaran province were Internet addicts and Internet addiction was significantly higher in males and younger age groups. In whole, 54.7% of Internet addicts were university students.[15] In another study by Ghassemzadeh et al., the prevalence rate of Internet addiction among high school students in Tehran was reported as 3.8%.[16]

As it was mentioned, Internet addiction is more prevalent among adolescents and youths. Moreover, university students are among high risk groups for Internet addiction because they use the Internet for both educational purposes, such as doing assignments and searching information sources, and non-educational purposes like communication with friends and entertainment. Easy access to the Internet in the universities and absence of parental control are factors resulting in Internet overuse by university students. The prevalence rate of Internet addiction in university students has been reported to be 4% in the United States, 10.6% in China, 5.9% and 17.9% in Taiwan, and 34.7% in Greece.[12,13,17,18]

Mohammadbeygi et al. found a significant relationship between Internet addiction and academic failure (the number of failed courses, conditional status, and low grade point average) among students of Arak University of Medical Sciences (Arak, Iran).[19] In fact, Internet services have been provided by all Iranian universities to improve students' knowledge. Universities of medical sciences also spend great amounts of money annually for purchasing full text articles and other medical educational packages. Although high percent of medical students have access to the Internet for increasing their knowledge, doing research and information

exchange, according to Ershad Sarabi and Mirzazadeh using full text sources among students of Kerman University of Medical Sciences (Kerman, Iran) is low.[20] Therefore, it seems that Internet misuse and aimless searches by students are against the main goal of providing Internet services in universities. Due to this assumption, the present study was designed to find the prevalence rate of Internet addiction and its relationship with demographic features among students of Kerman University of Medical Sciences. Since Internet addiction can cause academic failure and has serious risks for mental, physical, and social health of students, the results of this study could be beneficial for those concerned with the prevention and management of this problem in universities.

Methods

This cross-sectional study was performed on all the students of Kerman University of Medical Sciences who were studying in the spring semester of the academic year 2011. Students were only included if they provided consent for participation in the study. In order to include all students from any academic field in the sample population, multi-stage sampling based on proportional classification was performed.

By using the formula for calculating sample size in prevalence studies and considering the prevalence rates reported in other studies on university students, the sample size was calculated as 578 students. However, it was expanded to 976 to increase accuracy. Finally, 920 students filled out and returned the questionnaires.

Data collection was performed through a 2-part questionnaire. The first part included demographic variables such as age, sex, academic field and year, last term grade point average, place of using the Internet, mean hours spent on the Internet per week, and student's aim of searching the Internet. The second part was the Persian version of the Problematic Internet Use Questionnaire (PIUQ). This questionnaire has 18 questions scored on a 5-point Likert scale through which participants choose one of the scores from 1-5 for each item according to their condition (1 = never, 2 = seldom, 3 = sometimes, 4 = often, and 5 = always). Total scores range from 18 to 90. This questionnaire includes 3 subscales of obsession, neglect, and control disorder.[21] Since

the questionnaire had not previously been used in Iran, it was translated into Persian by two English language experts and translations were discussed in a meeting. There was only disagreement about items 8 and 11 that led to contacting Demetrovics, one of the developers of the questionnaire. He agreed with replacing "being with your parents" with "spending time with your close friends" for item 8 and replacing "impair your work" with "disturb academic performance" for item 11. Then, for determining content validity, the original questionnaire and the translated version were given to 10 experts to give their suggestions about the accuracy of translation and items clarity. All experts believed that the translated version was accurate and the instrument had no inconsistency with Iranian culture or ambiguous questions.

The collected data was coded and analyzed through $SPSS_{17}$ (version 17, SPSS Inc., Chicago, IL, USA). According to the suggestion of the questionnaire's developers, the score of 41 was considered as the cut-off point.[22] Therefore, those with scores ≤ 41 were considered as "average Internet users" and those with scores > 41 were considered as "problematic Internet users". Multivariate logistic regression was used for determining the predictive factors of Internet addiction and the results showed adequate goodness of fit for the applied model.

Results

In order to determine the reliability of the questionnaire, Cronbach's alpha coefficient (as an index of internal consistency) was calculated for the whole questionnaire and each of its subscales separately. The results showed alpha as 0.94 for the whole questionnaire, 0.86 for the obsession, 0.85 for the neglect, and 0.84 for the control disorder subscales.

The questionnaire was filled out by 920 students (response rate = 98.4%). In the studied group, 303 students (32.9%) were male and 617 (67.1%) were female. The mean age of participants was 21.5 years (range: 19-38 years). In total, 822 (89.9%) were single and 93 (10.2%) were married. Grade point average was less than 16 in 370 (43.3%) and more than 16 in 485 (56.7%) students. In addition, 53 subjects (5.7%) were cigarette smokers and 55 (6.0%) had history of psychiatric disorders. In total, 98.0% were Internet users of whom 81.4% had access to the Internet through computers and 18.6% through

both computers and cell phones. The mean hours spent on the Internet per week was less than 15 hours in 815 students (90%) and more than 15 hours in 91 (10%). The mean total score of PIU was 31 ± 12.4. Table 1 shows the mean total score based on the studied variables.

Table 2 represents the distribution of average Internet users and problematic Internet users based on the studied variables. The results revealed a significant relationship between sex and Internet use, i.e. problematic Internet use was significantly higher among male students. There was no significant difference between average Internet users and problematic Internet users in age and marital status. The frequency of grade point average < 16 was significantly higher among problematic Internet users. Similarly, cigarette smoking and having a history of psychiatric disorders were significantly higher in problematic Internet users. Internet access through both computers and cell phones was significantly higher among Internet addicts. As it was expected, Internet addicts spent longer hours on the Internet compared to the average Internet users. Among reasons of using the Internet, chatting, shopping, playing games, and downloading were significantly different between the two groups. However, the groups were not significantly

different in using the Internet for checking emails, academic purposes, and reading the news. Average Internet users and problematic Internet users showed significant differences in the mean number of friends found through online chat (0.6 ± 3.3 vs. 1.8 ± 4.6; P < 0.001). There was a significant positive correlation between the participants' number of online friends and their total score on the questionnaire (r = 0.25; P < 0.001).

Generally, the mentioned findings showed that sex, last term grade point average, cigarette smoking, history of psychiatric disorders, mean hours spent on the Internet per week, type of Internet access, Internet use for chatting, shopping, playing games, and downloading, and number of online friends were high risk factors for Internet addiction.

In the next part of the study, multivariate logistic regression was used to find the predictive factor for Internet addiction. The results indicated adequate goodness of fit for the applied model (χ^2 = 6.1; P = 0.010). Among the mentioned factors, using the Internet for more than 15 hours per week, using the Internet for online chat and games, and history of psychiatric disorders were predictive factors for Internet addiction. Table 3 shows the risk factors of Internet addiction.

Table 1. Scores of participants on Problematic Internet Use Questionnaire (PIUQ) based on the studied variables

Variables		Mean PIUQ score	P
Gender	Male	34.6 ± 12.5	< 0.001
	Female	30.5 ± 11.8	
Marital status	Single	32.2 ± 12.1	0.500
	Married	31.3 ± 14.4	
Grade point average	12-15.99	33.8 ± 13.3	0.003
	16-20	31.2 ± 11.6	
Smoking	Yes	41.2 ± 16.1	< 0.001
	No	31.6 ± 11.9	
Psychiatric disorder history	Yes	39.8 ± 16.5	< 0.001
	No	31.6 ± 11.9	
Internet access	Computer	31.4 ± 12.1	< 0.001
	Computer and cell phone	35.9 ± 13.2	
Average hours of Internet use in week	< 15 hours	31.7 ± 11.5	< 0.001
	≥ 15 hours	43.2 ± 14.4	

Values are expressed as mean ± SD; PIUQ: Problematic internet use questionnaire

Table 2. The frequency distribution of average Internet users and problematic Internet users based on the studied variables

Variables	Average internet users	Problematic internet users	P
Age	21.4	21.7	0.150
Gender (Male)	221 (30.5%)	80 (41.2%)	0.005
Marital status (Single)	643 (89.3%)	178 (91.8%)	0.300
Grade point average (< 16)	267 (39.8%)	102 (55.7%)	< 0.001
Smoking (Yes)	24 (12.2%)	29 (4.0%)	< 0.001
Psychiatric disorder history (Yes)	24 (12.4%)	31 (4.3%)	< 0.001
Internet access (computer and cell phone)	115 (16.0%)	55 (28.4%)	< 0.001
Average hours of internet use in week (> 15 hrs)	48 (6.7%)	43 (22.2%)	< 0.001
Using the Internet for email (Yes)	544 (82.5%)	161 (81.5%)	0.060
Using the Internet for scientific search (Yes)	665 (95.8%)	182 (95.8%)	0.900
Using the Internet for chatting (Yes)	153 (25.3%)	91 (52.6%)	< 0.001
Using the Internet for reading news (Yes)	441 (71.7%)	123 (73.2%)	0.700
Using the Internet for downloading (Yes)	472 (75.6%)	139 (83.2%)	0.020
Using the Internet for playing games (Yes)	192 (32.1%)	74 (45.1%)	0.020
Using the Internet for shopping (Yes)	157 (26.6%)	66 (40.0%)	0.001

Values are expressed as number (%)

Table 3. Risk factors of Internet addiction based on logistic regression analysis

Predictive variables	Degree of freedom	β	P	OR	95% CI
Average hours of Internet use in week (< 15 vs. > 15 hrs)	1	1.36	< 0.001	3.9	2.2-6.7
Psychiatric disorder history (yes vs. no)	1	1.10	0.005	2.8	1.4-6.0
Using the Internet for chatting (often vs. seldom)	1	0.96	< 0.001	2.6	1.7-3.9
Using the Internet for playing games (often vs. seldom)	1	0.51	0.020	1.7	1.1-2.5

OR: Odds ratio; CI: Confidence interval

Discussion

The aim of this study was to determine the prevalence rate of Internet addiction and its relationship with demographic features among students of Kerman University of Medical Sciences. According to the obtained results, 21.0% of the students showed Internet overuse which classified them as Internet addicts. The results were similar to the results of previous studies performed on university students. Even though, due to applying different instruments in the studies, comparison of their results is not wise. According to previous research, the prevalence rate of Internet addiction among university students has been 26.1% in the United States, 10.6% in China, 5.9% and 17.9% in Taiwan, and 34.7% in Greece.[12,13,17,18]

Kheirkhah et al. reported Internet addiction in 22.8% of Internet services users of Mazandaran (Iran) among whom 54.7% were university students. Since their sample population was limited to individuals who referred to the Internet cafés, it can be said that the mentioned study had sampling bias.[15] In a study by Mohammadbeygi et al. on students of Arak University of Medical Sciences, although Internet addiction was been prevalent, it had relationships with the number of failed courses, grade point average reduction in the last terms, and conditional status during educational program.[20] The results of the present study also showed higher proportion of grade point average < 16 in the Internet addict group which reflected reduced academic achievement in this group.

Similar to other studies, our results revealed higher rate of problematic Internet use among

males compared to females. According to some researches, this is due to the difference in the availability of favorite activities, such as online games, for the two sexes. These researchers believe that by modifying the nature of providing Internet services, this sex-related difference in regard to Internet addiction will be disappeared. Since sex was not a risk factor according to the applied logistic regression model, it can be proposed that in planning for information exchange and preventing this issue, female sex should not be disregarded.[23-25]

Although cigarette smoking was more common in the Internet addict group, the final regression did not suggest it as a risk factor. This finding is similar to what have been reported in previous studies.[23,26,27]

In the present study, positive history of psychiatric disorders was found as a risk factor for Internet addiction [odds ratio (OR) = 2.8; 95% confidence interval (CI) = 1.4-6]. Different studies have indicated the relationship between psychiatric disorders, including mood disorders,[28] and Internet addiction. A study applied clinical interviews and found 100% of the addicts to have one of the impulse control disorders and 70% to have a history of bipolar disorders. In all subjects, depression was in its last phase.[5] According to another study, depression and suicidal ideation were significantly higher in Internet addicts.[24] Therefore, psychiatrists and mental health care providers should always think about other accompanying psychiatric disorders in Internet addicts.

The present study showed that Internet addicts spend more hours on the Internet. Moreover, the regression model revealed the higher chance of Internet addiction in subjects who spent more than 15 hours a week on the Internet (OR = 3.9; 95% CI = 2.2-6.7). The relationship between mean hours of Internet use and addiction has been reported in several studies.[12,23,28] Researchers have suggested that Internet addicts have to gradually increase the hours of Internet use in order to achieve the desired effect.[12] According to these results, putting limitations for the amount of time spent on the Internet can be a strategy for preventing Internet addiction.

Since our study population consisted of university students, the participants were asked about the reason of using the Internet in order to become ensured that academic and research

activities have not been the main reasons of Internet overuse. The results showed no significant difference between Internet addicts and non-addicts in regard to using the Internet for checking emails and scientific search. However, using the Internet for online chatting, shopping, games, and downloading was more frequent among the Internet addicts. The number of friends found through the Internet was also significantly higher in Internet addicts. According to logistic regression, chat (OR = 2.6; 95% CI = 1.7-3.9) and online games (OR = 1.7; 95% CI = 1.1-2.5) were known as risk factors of Internet addiction. These results show that Internet, itself, does not cause addiction, but its special applications such as playing games and chatting with real and virtual friends cause overuse and addiction. Several studies have similarly reported the relationship between Internet addiction and its use for playing games.[23,29] In regard to chat, it seems that the Internet provides an environment for developing virtual interpersonal communications which do not exist in real life. Timid and lonely individuals may use these types of communications for compensating their shortcomings. Based on previous studies, there is a significant positive relationship between Internet addiction and loneliness. Ghassemzadeh et al. found Internet addicts to be lonely individuals with low self-esteem and poor social skills.[16]

The present study had the following limitations:

1. Since the study was cross-sectional, it was not possible to conclude a cause-effect relationship between the probable factors and Internet addiction.

2. Subjects were not asked about their family features, while family has been an important variable in previous studies.

3. While considering the amount of time spent on the Internet, the mean hours spent during a day would be more appropriate than the mean hours spent in a week.

Since the results of the present study suggested high prevalence of Internet addiction among students of Kerman University of Medical Sciences, it is essential for authorities in charge of students' mental health to apply strategies to exchange information and prevent the problem.

Conflict of Interest: The Authors have no conflict of interest.

References

1. Brenner V. Psychology of computer use: XLVII. Parameters of Internet use, abuse and addiction: the first 90 days of the Internet Usage Survey. Psychol Rep 1997; 80(3 Pt 1): 879-82.

2. Christakis DA, Moreno MA. Trapped in the net: will internet addiction become a 21st-century epidemic? Arch Pediatr Adolesc Med 2009; 163(10): 959-60.

3. Nalwa K, Anand AP. Internet addiction in students: a cause of concern. Cyberpsychol Behav 2003; 6(6): 653-6.

4. Young KS. Internet addiction: the emergence of a new clinical disorder. CyberPsychology & Behavior 1998; 1(3): 237-44.

5. Shapira NA, Goldsmith TD, Keck PE, Jr., Khosla UM, McElroy SL. Psychiatric features of individuals with problematic internet use. J Affect Disord 2000; 57(1-3): 267-72.

6. Davis RA, Flett GL, Besser A. Validation of a new scale for measuring problematic internet use: implications for pre-employment screening. Cyberpsychol Behav 2002; 5(4): 331-45.

7. Davis RA. Acognitive-behavioralmodel of pathological Internetuse. Computers in Human Behavior 2001; 17(2): 187-95.

8. Yellowlees PM, Marks S. Problematic Internet use or Internet addiction? Computers in Human Behavior 2007; 23: 1447-53.

9. Mythily S, Qiu S, Winslow M. Prevalence and correlates of excessive Internet use among youth in Singapore. Ann Acad Med Singapore 2008; 37(1): 9-14.

10. Cao F, Su L. Internet addiction among Chinese adolescents: prevalence and psychological features. Child Care Health Dev 2007; 33(3): 275-81.

11. Yen JY, Ko CH, Yen CF, Wu HY, Yang MJ. The comorbid psychiatric symptoms of Internet addiction: attention deficit and hyperactivity disorder (ADHD), depression, social phobia, and hostility. J Adolesc Health 2007; 41(1): 93-8.

12. Chou C, Hsiao MC. Internet addiction, usage, gratification, and pleasure experience: the Taiwan college students' case. Computers and Education 2000; 35(1): 65-80.

13. Wu HR, Zhu KJ. Path analysis on related factors causing. Internet addiction disorder in college students. Chinese Journal of Public Health 2004; 20(1363): 1364.

14. Zhang L, Amos C, McDowell WC. A comparative study of Internet addiction between the United States and China. Cyberpsychol Behav 2008; 11(6): 727-9.

15. Kheirkhah F, Ghabeli Juibary A, Gouran A. Internet Addiction, Prevalence and Epidemiological Features in Mazandaran Province, Northern Iran. The Iranian Red Crescent Medical Journal 2010; 12(2): 133-7.

16. Ghassemzadeh L, Shahraray M, Moradi A. Prevalence of internet addiction and comparison of internet addicts and non-addicts in Iranian high schools. Cyberpsychol Behav 2008; 11(6): 731-3.

17. Christakis DA, Moreno MM, Jelenchick L, Myaing MT, Zhou C. Problematic internet usage in US college students: a pilot study. BMC Med 2011; 9: 77.

18. Frangos CC, Frangos CC, Sotiropoulos I. Problematic Internet Use among Greek university students: an ordinal logistic regression with risk factors of negative psychological beliefs, pornographic sites, and online games. Cyberpsychol Behav Soc Netw 2011; 14(1-2): 51-8.

19. Mohammadbeygi A, Ghazavi A, Mohammad Salehi N, Ghamari F, Saeidi A. Effect of internet addiction on educational status of Arak University of medical sciences students. Arak Med Univ J 2009; 12(4): 95-102. [In Persian].

20. Ershad Sarabi R, Mirzazadeh A. The rate of using internet and full-text databases by academic members referring to the IT centre of Kerman University of Medical Sciences in 2005. Strides in Development of Medical Education 2007; 4(1): 57-63. [In Persian].

21. Demetrovics Z, Szeredi B, Rozsa S. The three-factor model of Internet addiction: the development of the Problematic Internet Use Questionnaire. Behav Res Methods 2008; 40(2): 563-74.

22. Koronczai B, Urban R, Kokonyei G, Paksi B, Papp K, Kun B, et al. Confirmation of the three factor model of problematic internet use on off line adolescent and adult samples. Cyberpsychol Behav Soc Netw 2011; 14(11): 657-64.

23. Wang H, Zhou X, Lu C, Wu J, Deng X, Hong L. Problematic Internet Use in high school students in Guangdong Province, China. PLoS One 2011; 6(5): e19660.

24. Kim K, Ryu E, Chon MY, Yeun EJ, Choi SY, Seo JS, et al. Internet addiction in Korean adolescents and its relation to depression and suicidal ideation: a questionnaire survey. Int J Nurs Stud 2006; 43(2): 185-92.

25. Hall AS, Parsons J. Internet Addiction: College Student Case Study Using Best Practices in Cognitive Behavior Therapy. Journal of Mental Health Counseling 2001; 23(4): 312-27.

26. Yen JY, Yen CF, Chen CC, Chen SH, Ko CH. Family factors of internet addiction and substance use experience in Taiwanese adolescents. Cyberpsychol Behav 2007; 10(3): 323-9.

27. Liberatore KA, Rosario K, Colon-De Marti LN, Martinez KG. Prevalence of Internet addiction in Latino adolescents with psychiatric diagnosis. Cyberpsychol Behav Soc Netw 2011; 14(6): 399-402.

28. Yang SC, Tung CJ. Comparison of Internet addicts and non-addicts in Taiwanese high schools. Computers in Human Behaviors 2007; 23: 79-96.

29. Huang RL, Lu Z, Liu JJ, You YM, Pan ZQ, Wei Z, et al. Features and Predictors of Problematic Internet Use in Chinese College Students. Behaviour & Information Technology 2009; 28(5): 485-90.

شیوع استفاده مشکل‌آفرین از اینترنت و عوامل مرتبط با آن در دانشجویان دانشگاه علوم پزشکی کرمان

دکتر شهرزاد مظهری ۱

چکیده

مقدمه: استفاده مشکل‌ساز از اینترنت یا وابستگی به اینترنت یک مشکل در حال افزایش در میان قشر جوان می‌باشد. با این وجود، مطالعات اندکی به بررسی شیوع وابستگی به اینترنت در میان دانشجویان دانشگاه‌های ایران پرداخته‌اند. مطالعه حاضر با هدف، بررسی شیوع وابستگی به اینترنت و عوامل خطر احتمالی آن در میان دانشجویان دانشگاه علوم پزشکی کرمان در سال تحصیلی ۹۰- ۱۳۸۹ انجام شد.

روش‌ها: پژوهش حاضر یک مطالعه مقطعی (Cross-sectional) بود. در این مطالعه ۹۷۶ دانشجو به روش نمونه‌گیری طبقه‌ای تناسبی و اتفاقی وارد مطالعه شدند. جمع‌آوری داده‌ها با استفاده از پرسش‌نامه ۱۸ سؤالی سنجش استفاده مشکل‌ساز از اینترنت (Problematic internet use questionnaire) انجام شد. همچنین اطلاعات جمعیت‌شناختی و الگوی استفاده از اینترنت جمع‌آوری شد.

یافته‌ها: از میان شرکت‌کنندگان، تعداد ۹۲۰ نفر پرسش‌نامه‌ها را تکمیل نمودند (میزان پاسخ‌دهی برابر با ۹۸/۴ درصد). از این میان، ۹۸ درصد استفاده‌کننده از اینترنت بودند. ۲۱ درصد دانشجویان در گروه وابسته به اینترنت قرار گرفتند. نتایج Logistic regression نشان داد که بالا بودن میانگین ساعات استفاده از اینترنت، داشتن تاریخچه مثبت از ابتلا به اختلالات روان‌پزشکی، استفاده از اینترنت جهت گپ زدن (Chat) و بازی از عوامل خطر وابستگی به اینترنت به حساب می‌آیند.

نتیجه‌گیری: وابستگی به اینترنت یک اختلال شایع در میان دانشجویان می‌باشد. این نتایج، ضرورت برنامه‌ریزی جهت اقدامات پیشگیری و مداخله‌ای را در میان این گروه در معرض خطر نشان می‌دهد.

واژگان کلیدی: استفاده مشکل‌آفرین از اینترنت، دانشجویان دانشگاه، ایران

۱- استادیار، متخصص اعصاب و روان، دکترای تخصصی نوروسایکیاتری، مرکز تحقیقات علوم اعصاب، دانشگاه علوم پزشکی کرمان، کرمان، ایران

نویسنده مسؤول: دکتر شهرزاد مظهری   Email: smazhari@kmu.ac.ir