

Prevalence of Internet Addiction and Its Associated Factors in Hamadan University of Medical College Students

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Abstract: In the last few years, the use of the Internet has increased dramatically among youth people. The aim of this study was to determine the factors related to Internet addiction among Iranian college students. In this cross-sectional study, conducted among college students in Hamadan University of medical sciences the west of Iran, during 2011, a total of 300 college students, were randomly selected to participate voluntarily in the study. Participants filled out a standard self-administered questionnaire. The data analyzed were by using SPSS-21 at 95% significant level. 39.6 percent of the students were shown varying degrees of Internet addiction. There was a significant correlation ($P < 0.05$) between sex (boy), marital status (single), live in dormitory and Internet addiction. Based on our findings, Internet addiction is high among Iranian college students.

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1. Introduction

Technology can influence psychological and social processes (1). Technical advances might be related to developing, maintaining or limiting addiction. The continuing rise in popularity of the Internet for communication, education, and entertainment provides an opportunity to explore the relationship between addiction and technology. Ever since the idea emerged that objects have the capacity to influence psychological states, the idea that almost any subjectively rewarding activity (e.g., drug use, shopping, working, running, gambling) can become the object of addiction has become increasingly popular (2). Research done by Walker would label Internet addiction an obsessive and compulsive behavior, based on its similarities to gambling addiction and compulsive shopping, since these disorders lack a chemical dependence (3). Young provided research that shows certain users become addicted to specific applications used on the Internet (4). It is this anonymity that gives those with low self-confidence and lacking social skills the desire to create a virtual life for themselves on the Internet. In

these cases, the Internet becomes a substitute for real-life social interaction, giving the user an escape from reality in the early 1990s; the Internet addict was stereotyped as a male computer hobbyist, but recent research proves that anyone can become addicted, as it is a combination of personality type and Internet application that causes overuse leading into addiction (5). As in many other countries, the prevalence of the Internet addiction is increasing in Iran, especially among the youth. Internet addiction was reported in Dargahi studies of Iranian youth in the west of Tehran, 30 percent among of Internet user (6).

The objective of this study was to determine prevalence of Internet addiction and its associated factors in Hamadan University of medical college students.

2. Methods

This cross-sectional study was conducted on 300 students in Hamadan University of Medical Sciences, the west of Iran, during 2011. The sample size was calculated at 95% significant level according to the results of a pilot study, and a sample of 300 was

estimated. Data were analyzed by SPSS version 21. Response rate in this study was 90%. Background data collected were: age (years), field of education (Health, Para medical, Nurse, Rehabilitation, Medical Doctor, Dentist, Pharmacology), marital status (single or married), Job (college Student or employee), Live in Dormitory (yes or no), Native of Hamadan (yes or no), have a personal laptop(yes or no), cigarette smokers(yes or no), social drinkers(yes or no), and drug abuse (yes or no).

The Internet addiction test is the first validated and reliable measure of addictive use of the Internet. Developed by Dr. Kimberly Young (4), the IAT is a 20-item questionnaire that measures mild (20-49 points), moderate (50-79 points), and severe (80-100 points) levels of Internet Addiction. Example of items included:

1. How often do you find that you stay on-line longer than you intended?
2. How often do you neglect household chores to spend more time on-line?

In order to facilitate respondents' responses to the items, all items were standardized to a 5-point Likert scale, ranging from 1 (rarely) to 5 (always).

3. Result

The mean age of respondents was 21.24 years (SD: 2.18), ranged from 18 to 30 years. More details of demographic characteristics of the participants are shown in Table 1.

Nearly 7.4%, 4.4%, and 1.5% of the participants were cigarette smokers, social drinkers, and drug abuse. 80 people (29.6%) reported they have personal laptop.

We found There was a significant correlation ($P < 0.05$) between sex (boy, marital status (single), live in dormitory and internet addiction (table 3). However, there was no significant difference between internet addiction and age group, field of education, native of Hamadan, and job.

Table 3 shows the most important demographic factors that persuaded the participants to internet addiction.

Table 1: Distribution of the demographic characteristics among the participants

Variables	Number	Percent
Age Group		
18-21	171	63.3
22-25	85	31.5
26-30	14	5.2
Sex		
Boy	68	25.2
Girl	202	74.8
Field of Education		
Health	57	21.1
Para medical	54	20
Nurse	49	18.1
Rehabilitation	37	13.7
Medical	35	13
Dentist	24	8.9
Pharmacology	14	5.2
Job		
Only student	257	95.2
Employ	13	4.8
Live in Dormitory		
Yes	209	77.4
No	61	22.6
Marital status		
Single	247	91.5
Married	23	8.5
Native of Hamadan		
Yes	121	44.8
No	149	55.2

Of the 270 respondents, 107 (39.6%) of participants were show varying degrees of internet addiction (Table 2).

Table 2: internet addiction status

Internet Addiction	Frequency	Percent
Mild	163	60.4
Moderate	101	37.4
Sever	6	2.2

Table 3: Most important demographic factors that persuaded to internet addiction

Variables	Internet Addiction Status			X ²	P-value
	Mild	Moderate	Sever		
Sex					
Boy	31 (45.6%)	36 (52.9%)	1 (1.5%)	9.384	0.009
Girl	132 (65.3%)	65 (32.2%)	5 (2.5%)		
Live in Dormitory					
Yes	118 (56.5%)	85 (40.7%)	6 (2.9%)	6.727	0.035
No	45 (73.8%)	16 (26.2%)	0 (0%)		
Marital status					
Single	142 (57.5%)	99 (40.1%)	6 (2.4%)	10.084	0.006
Married	21 (91.3%)	2 (8.7%)	0 (0%)		

4. Discussion

This study focused on prevalence of Iranian college students with Internet addiction. Our results indicate that prevalence of Internet addiction among a sample of Iranian college student is relatively high. Result indicated a total of 39.6% student could be described to suffer from Internet addiction. In this regard, several studies indicate the prevalence of 10 to 31 percent, Internet addiction among adolescents and students. For example, Sunwoo Kim (7) Johansson (8), and Konstaiones (9) reported that 20%, 10.6%, and 8.2% of the subjects in their studies have an Internet addiction respectively. These findings are alarming for youth health policy. Internet addiction is currently becoming a serious mental-health problem, which eventually causes psychological, social, school, and/or work difficulties in a person's life (5); Anxiety, aggression, feelings of inferiority complex and lack of close relationships with others, loneliness, lack of self-confidence and academic failure were another side effect of Internet addiction (10-12).

The study findings also indicated the prevalence of Internet addiction among boy, and single was more than of female and married student; this result is consistent with the other studies (13-14). These findings suggest that the training programs should be focused on unmarried students. Other findings of this study was higher prevalence of Internet addiction among college students who living in the dormitory. Lack of appropriate and diversified recreational facilities, away from family and influence peers could be underlined for high-risk behaviors such as Internet addiction. Based on our findings, providing accommodations, and implementing internet addiction negative consequence's educational program for student is essential. Comprehensive preventative health education programs need to emphasize psychological factors that mediate and predict adolescents' and

youths health-related behaviors (15). We suggest the designing theory driven studies or qualitative research for explain or predict factors influencing Internet addiction among Iranian adolescent and youth.

Data collection was based on self-reporting, which is usually prone to recall bias is a limitation of this study. Not consideration of psychological factors influencing Internet addiction was another limitation of this study.

5. Conclusion

Our findings showed, internet addiction is high among Iranian college students. According to a side effect of Internet addiction, is the necessity of paying attention to this issue, among the students.

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Conflict of interest statement

The authors declare that they have no conflict of interest.

References:

1. Kipnis D. The technological perspective. *Psychological Science*, 1991; 2(2): 62-69.
2. Shaffer HJ. The most important unresolved issue in the addictions: conceptual chaos. *Substance Use & Misuse*, 1997; 32(11): 1573-1580.
3. Shaffer HJ. Strange bedfellows: a critical view of pathological gambling and addiction. *Addiction*, 1999; 94(10): 1445-1448.
4. Walker MB. Some problems with the concept of gambling addiction: should theories of addiction be generalized to include excessive gambling? *Journal of Gambling Behavior*, 1989; 5:179-200.

5. Young, K. S. Caught in the net: How to recognize the signs of internet addiction--and a winning strategy for recovery. John Wiley & Sons. (1998).
6. Young KS. Internet addiction: the emergency of a new clinical disorder. Published in *Cyber Psychology and Behavior*, 1996; 3(1): 237-244
7. Dargahi H, Razavi M. Internet addiction and effective factor related. *Payesh* 2006; 6(3): 265-272 (Persian Article).
8. Sunwoo K, Rando K. A Study of Internet Addiction: Status Causes and Remedies. *Journal of Korean Home Economics Association* 2002; 3(1): 1-19.
9. Johansson A, Götestam KG. Internet Addiction: Characteristics of a Questionnaire and Prevalence in Norwegian Youth (12-18 Years). *Scand J Psychol* 2004; 45(3):223-9.
10. Konstantinos E. Siomos, Evaggelia D. Dafouli, Dimitrios A. Braimiotis, Odysseas D. Mouzas, and Nikiforos V. Angelopoulos. *Cyber Psychology & Behavior*, 2008; 11(6): 653-657.
11. Kraut R, Kiesler S, Boneva B. Internet paradox revisited. *J Soc Issues* 2002; 58:49-74
12. Nathan AS, Toby DG, Paul EKJr, Uday M. Khosla SL. McElroy. Psychiatric features of individuals with problematic internet use. *J Affect Disord*, 2000; 57(1-3):267-72.
13. Alavi SS, Maracy MR, Jannatifard F, Eslami M, Haghghi M. A Survey of Relationship between Psychiatric Symptoms and Internet Addiction in Students of Isfahan Universities. *JSH* 2010; 17 (2): 57-65 (Persian Article).
14. Tsai HF, Cheng SH, Yeh TL, Shih CC, Chen KC, Yang YC, Yang YK. The Risk Factors of Internet Addiction--A Survey of University Freshmen Psychiatry Res, 2009; 30; 167(3):294-9.
15. Ceyhan AA. Predictors of Problematic Internet Use on Turkish University Students. *Cyberpsychol Behav*, 2008; 11(3):363-6.
16. Jalilian F, Karami Matin B, Mirzaei Alavijeh M, Ataee M, Mahboubi M, Motlagh F, et al. Prevalence and Factor Related to Ritalin Abuse among Iranian Medical College Student: An Application of Theory of Planned Behavior. *Terapevticheskii Arkhiv*, 2013; 85(4): 22-26.

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