

## Relationship Between Internet Addiction with Educational Failure and Demographic Characteristics in Students

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**Abstract:** The majority of internet users are university students and educated people. Excessive use of the internet led to an addiction to it is that it can also undermine the students' academic status and due to of academic failure and the reduction of the grade point average. This study aimed to investigate the relationship between internet addiction with educational failure and demographic characteristics was conducted. The study is descriptive and analytical. The sample consisted of 600 students of Urmia University of Medical Sciences who were selected quota randomly. The data collection tool was a two-part questionnaire. The first section includes demographic information such as age, sex, occupation, education level as well as questions about hours of internet use during the week, time of use and the use of the internet and the second part was young "internet addiction test". Data analysis Software SPSS/19 was conducted. Based on the findings, Average use of the internet based on "Yang internet addiction test" was 20.1267. In all subjects which is usual and acceptable. Average internet addiction in male students and female students respectively was 25.3382 and 18.2668 that among these scores of internet addiction in male students more than female students. average use of the internet based on "Yang internet addiction test" in Nursing students 18.5946 (typical), Midwifery students 29.5833 (mild), Medical students 17.2906 (typical), Dentistry students 14.8056 (typical), Health 20.2246 (mild), Paramedical students 42.1818 (mild) and Medical Emergencies students 28.2174 (mild) was obtained. Results showed that the average scores of internet addiction in students with educational failure is significantly more than other groups ( $p < 0.05$ ). Based on ANOVA test between the internet addiction, educational level and smoking statistically significant difference were observed. Since the dependence on the internet can undermine students' academic status. Therefore, university should be created appropriate background to meet the needs of cultural and free-time students so that, students refer to internet only in issues such as study of study and news sites and cultural.

**Key words:** Internet, internet addiction, addiction, educational failure, cultural

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### INTRODUCTION

Most of the internet users are students and educated people in Iran and these people have a great impact on their family and groups. Therefore, it could have said that the internet penetration coefficient in Iran is very high and increased rapidly (Karamshaie *et al.*, 2011). The internet itself is a neutral tool but excessive use of it caused addiction. Internet addiction is a new and interesting topic which in recent years considered as a behavior-based addiction (Rezaei and Moradi, 2015). The improper use of internet and curious and non-targeted searches of students not only take them away from the main mission of internet but also by wasting time could have adverse

effect on their academic status (Kamran *et al.*, 2013). Which not only it caused the waste of time and cost in these contents but also caused some psychological, family and social problem for the students (Karami 2000; Abedi *et al.*, 2014). Based on the studies this problem have increased every year in a way that most of the students could not afford the educational content of academic courses or finished them at the right time. Therefore, they faced with educational failure. Educational failure includes different aspects such as lack of presence and repeated absenteeism in the class; prematurely drop out lessons, repeated one grade, or low quality of education (Najimi *et al.*, 2013). Anderson in 1997 studied the internet addiction effect on the students. He found

that one-third of the students, due to the excessive use of the internet experiencing educational failure problem (Anderson, 2001). Orzack in his study showed that the people who are susceptible for internet addiction would be tired simply and this fact has an adverse effect on their academic performance (Hassanzadeh *et al.*, 2010; Abedi *et al.*, 2012). Young (1996) in his research revealed that 58% of the students after excessive use of internet faced with severe failure in their studying habit and their score declined significantly and their absenteeism increased. However due to the high functionality of the internet considered as an ideal educational tool but unfortunately the students often spend their time in irrelevant sites, chat rooms, friendships services and playing with game software instead of doing creative activity. Also 43% of the students because of the late sleeping which is due to the excessive use of internet would be faced with unsuccessfulness in the university (Young, 1996). Navabakhsh and Rahmani (2014) in a study (2007) which was about the evaluation of internet use level and its psychological and social outcomes among the students of Mashhad Islamic Azad University found that 77% of the students are exposed to the internet addiction risk and 14% of students' performance greatly affected by the internet (Abedi *et al.*, 2011). Ghamari *et al.* (2011) study result showed that there was a significant relation between internet addiction and the number of failed courses, passed courses, the work time with computer and internet, average, probation semester and the age of using internet.

Based on the results of the studies when the students used internet more, they have less time for studying and doing their courses during days and this fact caused the educational and academic failure (Young, 1996). Due to the fact that the internet addiction could undermine the students' educational status and caused the educational failure and declined the averages, therefore, the present study has done with the aim of determining the relation between internet addiction and educational failure and demographic characteristics of Oroomieh Medical Science University students.

## MATERIALS AND METHODS

This is a cross-sectional study. In the present study the statistical population is all the students of Oroomieh Medical Science University. Based on the latest statistics of the education office in the university, the total number of the students who were studying were 1468 persons which 600 persons of them have selected through stratified random sampling for observing moral items during the study. The questionnaire has filled out anonymously by coding. Also the required licenses have been taken from research council and the confidentiality of evaluated

respondents has been observed. The collected data tools were a questionnaire which regulated in two parts. The first part includes demographic characteristics such as age, gender, job, educational level (Poursadeghiyan *et al.*, 2016) and the second part was the internet addiction test which was designed and developed by Dr. Kimberly Young. This scale was a 20-item self-assessment based on the Likert scale for measuring the internet addiction. Its rate was: always (5 Score), often (4 Score), usually (3 Score), sometimes (2 Score), rarely (1 Score) and never (zero Score).

The score range of this test was 0-100 which the highest the score of a person, his/her internet addiction was evaluated more. The internet addiction rate based on the score classified in four levels: 0-19 normal, 20-49 mild, 50-79 average, 80-100 extreme.

Alavi in their research found a Persian version of this questionnaire. Two types of content validity and discriminant and three-reliability types: re-test ( $r = 0.79$ ), internal consistency ( $r = 0.88$ ), split half reliability ( $r = 0.82$ ), respectively. For determining the validity of the questionnaire, the Cronbach's alpha calculated 92% in this study. For analyzing the data the descriptive statistics (calculation of percent, average, table editing) and correlation coefficient and inferential statistics such as t-test and ANOVA have been used.

## RESULTS AND DISCUSSION

Based on the results in this research 207 persons (43.3%) of the students were men and 393 persons (65.5%) were women. Also 565 persons (94.2%) of them were single and the rest of them were married. In addition, 23.5% of the students were native and the others were non-native. And 22 persons (3.5%) were in associate level, 498 (78.3%) in bachelor, 116 persons (18.2%) were studied in PhD which 186 persons of them (92.2%) were the first year students, 449 persons (70%) were between second and fourth year and the rest of them spend their last year. From this number 211 persons (35%) have the experience of educational failure and four (7%) have the average of <12, 104 persons (17.3%) have the average of 12-14, 285 (47.5%) 14-16, 168 (28%) 16-18 and 10 persons (1.7%) 18-20. From the entire studied students 29 persons were smokers and the rest of them not. The average of the internet use in all the studied students of Oroomieh Medical Science University were 20.12 which was acceptable and based on Table 1, 57.7% of the individuals were in the range of 0-19 were normal and only 5% of all the individuals were in 80-100 range: extreme internet addiction.

In the variance analysis of the internet addiction among the studied students in different majors with  $p$  value of <0.05, it could have concluded that the use of

Table 1: Frequency of Internet use among students based on test Yang

User levels	Frequency	Percent	Accumulative frequency
0-19	346	57.7	57.7
20-49	216	36	93.7
50-79	35	5.8	99.5
80-100	3	5	100
Total	600	100	-

Table 2: Analysis of variance (ANOVA) Internet addiction among students with different fields

Sources of change	Sum of squares	df	Mean of squares	F	$\alpha$
Between groups	6839.58	6	1139.93	4.23	p<5%
Within the group	169380.62	629	269.28		
Total	176220.20	635			

Table 3: Frequency of Internet user levels based on student gender

Variables	User levels of internet addiction					$\chi^2$
	0-19	20-49	50-79	80-100	Total	
<b>Sex</b>						
Male	94	89	21	2	206	p<0.001
Female	251	127	14	1	393	
Total	345	216	35	3	599	

Table 4: Frequency of Internet user levels based on average of academic curriculum

User levels	Average of academic curriculum					Total
	<12	12-14	14-16	16-18	18-20	
0-19	0	11	171	0	0	182
20-49	2	49	92	100	6	249
50-79	0	32	20	62	4	118
80-100	2	12	2	6	0	22
Total	4	104	285	168	10	571

internet among the students with various major was different (Table 2). The average score of the internet addiction in boy students was 25.3 and in girls were 18.26. In addition, the results showed a statistically significant difference in applying internet level for both gender (Table 3).

The results showed that the most frequency of normal user was in the range of 14-16. Most frequency of individuals with mild addiction was in 16-18, most frequency with average addiction was in 16-18 and the most frequency of individuals with extreme addiction was in the range of 12-14. In the average group of 18-20, no internet addiction has observed (Table 4).

The results showed that the average score of internet addiction in the individuals with educational failure was significantly higher than other groups. Based on the ANOVA test, there was a significant difference between internet addiction score, educational level and smoking Table 5. Based on the Eta test the correlation coefficient of educational failure was equal with internet addiction 0.353 and the correlation coefficient of smoking was equal with internet addiction 0.438 which showed a direct relation.

The results showed that the most frequency of internet using in three usual mild and average level were related to behavior, grade and the least frequency was related to associate grade (Table 5).

Table 5: Mean and standard deviation of students internet addiction based on academic failure, smoking and education level

Variables	Mean	SD	p values
<b>Academic failure</b>			
Yes	24.37	18.37	<0.001
No	17.85	14.98	
<b>Smoking</b>			
Yes	27	18.85	0.03
No	19.86	16.22	
<b>Education level</b>			
Associate degree	30.23	24.55	0.01
Undergraduate (BS)	20.09	16.43	
Phd	20.12	16.54	

Table 6: Frequency distribution of internet user levels based on education level

Internet user levels	Education level			Total
	Associate degree	Undergraduate (BS)	Phd	
0-19	10	266	70	346
20-49	6	170	40	216
50-79	5	24	6	35
80-100	0	3	0	3
Total	21	463	116	600

p = 0.03

The extreme addiction was observed only in bachelor grade. Also the results showed that there was a significant relation between users level and students educational grade (Table 6).

The results of the present study showed that the using level of internet among the Oroomieh Medical science university's students is normal and there was no internet addicted user among the students which is consistent with Gotabi study about the internet addicting use among teenagers and youth of Tehran city. Their results showed that the use of internet level among most of the studied teenagers and youth was normal and not in addicted level (Asghari and Mirashian, 2009). The results of this study is consistent with Estephanesco, Lanhart, Li and Shang, Mesch, Yang and Yellowless and Marks (2007) studies (Treuer *et al.*, 2001; Mesch, 2001).

In addition, the results of the present study showed that internet addiction among girls and boys students was different. In this field Treuer *et al.* (2001) and Mesch (2001) pointed the gender differences (Treuer *et al.*, 2001; Fitzpatrick, 2008). Other researchers in their studies showed that the internet addiction level among girl students is less than boys (Mesch, 2001; Brenner, 1997). It seems that the boy students in comparison with girls were more addicted to the internet. The present study showed a significant relation between using internet and the educational major in a way that the use of internet rate is different in various majors. Baradaran *et al.* (2004) in their study represent that there was a significant correlation between educational major and grade and the use of internet. It means that the use of internet rate among the students of various major and grade was different.

In the present study the average score of internet addiction in individuals with educational failure is significantly higher than the other groups. These results is consistent with the results of Rouhani and Tari (2013). In Ghaem Panah study the students who have high score for internet addiction in comparison with other students faced with educational failure and Impaired cognitive skills (Ghadimi *et al.*, 2015). In study also there was a statistically significant relation between internet addiction and educational failure. Also in Young study the individuals who have excessive use of internet, their educational scores have declined and their absenteeism in class have increased. When the students use the internet a lot they have less time for studying and doing their courses during the days. Therefore, this fact caused the educational and academic failure (Young, 1996). In this study there was a significant relation between score average of internet addiction and smoking. In this regard it could be concluded that those who have excessive use of internet, feeling more alone and simply be tired and they are susceptible for depression and other addiction risks. A study showed that the internet addiction have related with serious damage in personal and social performance field (Kamran *et al.*, 2013). Chiao *et al.* (2014) study showed that there was statistically significant relation between excessive use of internet and alcohol and cigarette addiction. these relation and represent that the individuals who spend most of their time in coffee-net and public center of using internet, because of the problems which may be exist in these places, are more susceptible for Alcohol and cigarette addiction than the other people (Chiao *et al.*, 2014). kim and chan in their research represent that the individuals who are internet addicted get low scores in life styles. Therefore, high-risk behavior such as smoking in internet-addicted individuals is not far-fetched (Kamran *et al.*, 2013).

### CONCLUSION

Due to the fact that internet addiction could unstable the students educational status, Therefore, the university should provide proper fields for supplying the students cultural requirement and free time in order to, the students use the internet only for evaluating and searching scientific articles and news and culture and prevent the waste of useful opportunities with pointless searching for entertainment.

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