

Research Article

Considering the Relationship between Internet Addiction, Happiness, and General Self-Efficacy in the Students of Hamadan University of Medical Sciences

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Abstract

Introduction: The purpose of this study was to determine the relationship between Internet addiction and happiness and general self-efficacy among students of Hamadan University of Medical Sciences.

Methods: This study was a cross-sectional descriptive-analytical study. The statistical population consisted of all students of Hamadan University of Medical Sciences and the sample consisted of 315 students. Data were collected using the Yang Internet Addiction, Scherer General Self-efficacy, and Oxford Happiness Questionnaire.

Results: The results of this study showed that the mean age of students were 22.31 years and the sex ratio was almost equal (43.9% male and 56.1% female). 12.2% of students had severe Internet addiction behavior. The most frequent use of the Internet during the day was 2-4 hours (35.4%), which was the most time consumed during the night (63.2%). The results also showed that the mean score of self-efficacy was 59.88 ± 8.72 , the mean score of Internet addiction was 53.59 ± 16.43 , and the mean score of happiness was 41.09 ± 12.99 .

Conclusion: Daily use of the Internet on various websites by students with Internet addiction reduces their sense of happiness; this finding could be an alarm about the increase of this disorder among students. So appropriate planning in this field should be done with the cooperation of university officials.

Keywords: Internet addiction; Self-efficacy; Happiness; Student

Introduction

The use of new technologies is one of the obvious manifestations of today's world. Information technology has provided many possibilities in the scientific, social and economic fields. Internet access is one of its important indicators. The Internet is also one of the emerging dimensions of these new technologies in the contemporary world which is consisted of human beings, information and computers. It has an important role to play in changing the lives of individuals in society and it has quickly become one of the essential tools of life. So it is inevitable to eliminate it from the mundane [1]. The internet is everywhere, including home, school, university and the workplace. The number of Internet users is increasing [2].

Due to the young population and the large number of educated youth who are familiar with the Internet, it seems that the Internet can be considered as a media of influence in society. Since internet users in Iran are mainly educated people, and these people have a great influence on families and groups, therefore, it can be said that the Internet penetration rate in Iran is high and it is also rapidly increasing [3].

The number of Iranian Internet users in 2006 was 11 million that reached 33 million and 200,000 in 2010 and it has now grown to 45 million and 500,000. According to these statistics Iran has been

ranked first in the Middle East [4]. There is a new type of addiction as people increasingly access the Internet, the Internet addiction that is the growing dilemma of the information age. Like other types of addiction, Internet addiction is associated with symptoms such as depression, restlessness, tiredness, disruption of social relationships, and academic failure [5].

Excessive use of the Internet creates mental happiness in the individual so that people cannot distinguish between happiness in the real space and happiness in the virtual space and this immature state leads to a decrease in self-esteem; so he or she becomes dependent on the individual rather than trying to solve their problems.

Happiness is the most fundamental human debate of all generations and it is the most central driver of human goals. It is also considered a positive emotion in the field of psychology [6]. Happiness and joy have benefits for all sections of society. The majority of students have received much attention from researchers and psychologists because they are young and promising forces of the society [7].

Studies on Internet addiction show that the overuse of the Internet leads to social isolation and reduced communication and interaction, addicted users have lower self-esteem and depression is more common about them [8]. Various studies on students show

that the rate of Internet use is also increasing and the incidence and prevalence of Internet addiction are increasing. School and university students face problems such as decreased interpersonal communication, anger, aggression, and excitement [9].

A growing number of studies on Internet addiction show that Internet addiction disorder is a type of psychosocial disorder. Its Characteristics include tolerance, withdrawal symptoms, emotional disorders and disruption of social relationships [10]. Therefore, it is essential to find factors that reduce internet dependency and decrease Internet dependency problems. Studies show that increasing self-efficacy can reduce internet dependency. Iskander and Akin's study (2010) showed a negative relationship between social self-efficacy and Internet addiction [11]. Recent studies in Iran show that the majority of Internet users are young people and most of the Internet users use it for downloading files, forums, internet games, checking emails and searching the web, etc. respectively [12]. The aim of this study was to determine the relationship between Internet addiction and happiness and general self-efficacy among students of Hamadan University of Medical Sciences, considering the importance of mental and physical health of students as a young and future stratum of society and measuring the influential variables in Internet addiction disorder.

Methods

This study was a cross-sectional descriptive-analytical study. Faculties covered by Hamadan University of Medical Sciences were the study sites for this study. The study was done on students studying in 2018. Quota sampling method was used and the number of samples was calculated using formula 304. In the present study, to enhance the external validity and eliminate the effect of sampling loss, 365 students were selected. At first, the total number of students in each college was obtained through correspondence and referral to each college education. Based on the calculated sample size (365 students) and proportional to each faculty, they were selected as a quota. Therefore, 66 students from the Faculty of Health, 83 from the Faculty of Medicine, 60 from the Faculty of Nursing, 70 from the Paramedical Faculty, 25 from the Faculty of Rehabilitation, 28 from the Faculty of Pharmacy, and 33 from the Faculty of Dentistry, participated in this study. After calculating the sample size for each faculty, referring to the classroom of each faculty, the calculated samples were randomly selected from the students. The tools used in this study were:

Questionnaire of demographic information including characteristics such as age, sex, educational level, marital status, major, educational semester, literacy level and parental employment status, family economic status, internet usage hours, and reasons for using different sites and channels per day was asked.

Yang internet addiction diagnosis questionnaire

The Internet Addiction Questionnaire was developed by Kimberly Young in 1998. The test consists of 20 questions, based on the revised criteria of the Fourth Diagnostic and Statistical Manual of Mental Disorders for the diagnosis of gambling. Likert scoring ranges from zero to five. Every individual's score were grouped into three groups: Normal user (score 20 to 39), mild addiction user (score 40 to 69) and a user with severe addiction (score 70 to 100) who is dependent because of their overuse and their treatment needs. Yang reported

internal validity of the test higher than 0.92 and has emphasized that it is capable of clinically detecting Internet addicts [13].

Oxford happiness questionnaire

The Oxford Happiness Test has 29 questions and measures one's happiness. The theoretical basis of this questionnaire is the Argyle and Crasland definition of happiness (they consider it to have an operational definition of happiness as a construct with three important parts: frequency and degree of positive effect, average level of satisfaction over a period, and lack of negative feelings. This test was developed in 1989 by Michael Argyle based on the Beck Depression Inventory (BDI, 1976). The 21 terms of the questionnaire were taken and revised from the BDI and eleven questions were added to cover other aspects of mental health. Like the Beck Depression Inventory, each Happiness Questionnaire has four options that the subject must choose according to their current situation. This test is widely used in happiness research today [14].

Scherer's general self-efficacy questionnaire

To measure students' self-efficacy beliefs, the self-efficacy beliefs questionnaire of Scherer et al. (1982) was used [15]. This scale, designed for general self-efficacy, has 17 questions. There are 5 answers to each question on this scale that gives you 1 to 5 points per question. These 5 answers are: Completely disagree, disagree, no comments, agree and totally agree. Higher scores indicate stronger self-efficacy and lower scores indicate weaker self-efficacy. In a global study (2009) using Cronbach's alpha the reliability coefficient was 0.74. Validity and Reliability: Scherrer (1982) cited Cronbach's alpha for the general self-efficacy of 0.76. The validity of this scale was obtained through construct validity. In a study conducted by Barati to investigate the validity of this scale, this scale was administered to 100 students who were third grade high school students; The correlation (0.61) obtained from the two self-esteem and self-efficacy scales confirmed the construct validity of this scale.

After expressing the purpose of the study and obtaining informed consent from the participants, for students who would like to participate in the study, the questioner completed the questionnaire through self-reporting. The code of ethics for Hamadan University of Medical Sciences was IR.UMSHA.REC.1397.213.

Research data were analyzed using statistical software spss23 was analyzed. Descriptive statistics and appropriate graphs were used for descriptive information and inferential statistics including ANOVA, Pearson correlation coefficient, t-test and multiple linear regressions were used for data analysis. The significance level was considered 0.05.

Findings: A total of 353 students participated in the study. The response rate was 98.7%. There were 12 confused questionnaires due to lack of satisfaction with the responding to the questionnaire questions. Table results showed that the highest percentage is in the age group of 20-25. The sex ratio is almost equal (43.8% are male and 43.9% are female), and only 11% of them were married. In terms of educational level the highest percentage was related to bachelor's level (47.3%) and in the field of study, the highest percentage of respondents was studying medicine.

The results showed that 29.9% of the students had a bachelor's degree, 31.4% of them had freelance jobs, 70.5% of mothers were

housewives and 28.3% had a high school diploma. 36.3% of students stated that they are in a good economical condition.

Results

Results showed that the mean age of students was 22.31 years. The most hours of Internet use during the day are 2-4 hours (35.4%). The most frequent time was during the night (63.2%). Also, the average student usage time per day was 4 hours 34 minutes. They used the Internet every day.

The most use of the internet during the usage time was a telegram (79%), Instagram (60.9%), film and music (49.3%), respectively. The least use of the internet was recorded for Soroush channel (9.3%). The results of the study showed that 75.9% of students use the Internet continuously during the week.

The results of the study showed that the mean self-efficacy of the students was 59.88, the mean score of Internet addiction was 53.59, and the mean score of happiness was 41.09.

The results of the study show that Internet addiction and self-efficacy had a significant and inverse correlation, and happiness was positively associated with self-efficacy.

The results of the study showed that with one unit score increase in self-efficacy, the mean score for Internet addiction decreased by 510%.

The results of the study showed that with one unit score increase in self-efficacy, the mean score for Internet addiction decreased by 480%, and with the increase of one hour of Internet use, the average Internet addiction score has increased by 4.1%.

There was a significant relationship between the mean of Internet addiction one hour per day with 2, 3 and 4 hours per day. There was also a significant relationship between mean Internet addiction in environmental health and nursing majors.

There was a significant relationship between Internet addiction and students' major ($p=0.007$). There was no significant relationship with other demographic variables. The mean score of internet addiction was higher in nursing, dentistry, pharmacy students than other majors.

The Tukey test showed that the mean self-efficacy at undergraduate level was significantly different from that of Ph.D. Professional and Ph.D. ($P < 0.05$). There was a statistically significant difference between the mean self-efficacy in the first and second years. There was a statistically significant difference in the mean self-efficacy of students whose mothers were employed or retired.

Follow-up tests showed that self-efficacy was different among BS and Ph.D. Students.

Discussion

The main purpose of the present study was to investigate the relationship between Internet addiction, happiness, and self-efficacy, and also the predictability of internet dependency through students' happiness and self-efficacy. Understanding how Internet use behaves in this cortex is essential for investigating internet addiction disorder and its related factors. Based on the findings of this recognition, appropriate interventions can be designed and planned to prevent

this disorder. In this study, 12.2% of students had severe Internet addiction behavior. This finding could be an alarm signal about the increase in this disorder among students. Appropriate planning in this field should be done with the cooperation of university officials.

The results totally showed that there was a significant positive relationship between happiness and self-efficacy, and there is a meaningful relationship between Internet addiction and happiness, as well as the Internet and self-efficacy. On the other hand, the results showed that there is a positive relationship between the variables of happiness and self-efficacy. That is, as the subjects' scores on self-efficacy increase, their happiness increases. This finding is consistent with Bandura's (1977) social cognitive model and is consistent with the results of the Safari, et al study [16].

Also, there was no significant relationship between happiness and demographic variables (age, major, educational level) in this study. But there was a significant relationship with economic status.

For a sense of self-efficacy can lead to more positive experiences and satisfaction with successful performance, it will naturally enhance a sense of happiness, and as Pandora points out, self-affected people will be more satisfied with their lives [17].

The results of the present study showed that users with Internet addiction had lower self-efficacy compared to normal users. These differences were significant. This finding is consistent with the findings of KO et al. A study based on that people with low self-efficacy are more likely to be addicted to the Internet (Ko et al., 2008). And also is correlated with the results of Alexander and Aquin's research that Internet addiction has a negative relationship with social self-efficacy [18]. According to what has been said, it can be expected that by improving and increasing the level of self-efficacy, the severity of Internet dependency of students will decrease. Therefore, empowering students to increase their self-efficacy should be considered by the students' cultural affairs authorities. On the other hand, the findings of the present study were able to predict Internet addiction through self-efficacy and happiness variables.

This study showed that 22.1% of the subjects had a normal Internet addiction status and 65.7% have a low Internet addiction. The rate of 12.2% of the subjects had severe Internet addiction. It was also found that there was a positive correlation between hours of Internet use and Internet addiction. That is, the higher the hours of Internet use, the higher the risk of Internet addiction. Among people with mild or severe Internet addiction, much use the Internet from midnight to morning and most of the usage is related to the use of telegram and Instagram and downloading files in the internet. According to the results it appears that the hours of Internet use (high hours), gender (being male), usage time (midnight to morning) and types of usage (download and work with Telegram and Instagram social networks) are the most important features of internet addicts. This is of course consistent with other studies in this area.

Kamkar and Bayani study showed no significant positive relationship between mean internet addictions in boys compared to girls. This was in agreement with the results of the present study that there was no significant relationship between the mean scores of Internet addiction in girls and boys. This may be due to the widespread use of the Internet and the rise of social networks and

the virtual world of girls and boys which needs further investigation [19,20]. The results of Lin et al.'s research showed that the lack of self-efficacy of Internet use was directly and negatively predictive.

No significant differences were found between self-efficacy scores between boys and girls. In Safa Manesh et al. Studious, self-efficacy scores were higher in boys than in girls. In the study of Khaksar Balducci, men's self-efficacy was greater than that of women. There have also been studies in the field of student happiness in Iran, including the study of Barati et al. In 2014 and Bandani et al., Published in 2016 [21].

For a sense of self-efficacy can lead to more positive experiences and satisfaction with successful performance; it will naturally enhance a sense of happiness. And as Pandora points out, self-affected people will be more satisfied with their lives [17]. Therefore, as is clear from the results of this study, the strong relationship between self-efficacy and happiness do not seem out of the question.

We also had some limitations in this study. A self-report questionnaire was completed. Other limitations of the present study can be pointed to the research community. This was done solely for Hamadan medical students. Generalization of the findings to other communities should be treated with caution. Also, it is better to consider the scope of wider studies of individuals and the study of other colleges and universities in the country to verify the results of the research in further studies in this field.

Conclusion

The results of the study showed that daily use of internet on various websites by Internet addicted students reduced their happiness. Therefore, it is recommended that educational programs be designed to guide students to the proper use of the Internet and scientific sites.

Suggestions

Since the Internet is becoming more and more accessible in developing societies day by day, it is recognized as one of the most important means of accessing information and students are inevitably spending hours of their lives online. Therefore, this emerging phenomenon as a health problem is being taken seriously, and university officials who are responsible for the health of the students, plan appropriate culture training and proper use of the Internet for students. In future studies, it is suggested to focus on the encouraging and inhibiting factors of Internet addiction and its other social and psychological consequences.

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