Examining the Relationship between Addiction to Social Networks and Social Maturity of University Students

Ali Hatami[1], Mohammad Rasouli Badrani[1], Hakimeh Mohammadzadeh[2*], Mehdi Kargar[3]

[1]Student Research Committee, Shoushtar Faculty of Medical Science, Shoushtar, Iran

[2]Department of Nursing, Shoushtar Faculty of Medical Sciences, Shoushtar, Iran

[3]Health Education and Health Promotion Department, Health School, Shiraz University of Medical Sciences, Shiraz, Iran

ABSTRACT

Introduction: Social networks influence the personal and social life of individuals by preparing the ground in order to exchange a large amount of information. Social maturity would lead to the development of age-appropriate behaviors in line with society's standards and expectations. The purpose of this study is to determining the relationship between the addiction to social networks and social maturity of students.

Materials and Methods: This is a descriptive, analytical study using random sampling on 181 students of Shoushtar Faculty of Medical Sciences in 2016. A researcher-designed questionnaire of addiction to social networks and Rao's Social Maturity Scale (RSMS) were employed to collect the data. The data was analysed by SPSS-16.

Results: According to the findings, highly addicted students to social networks had lower overall social maturity (p=0.028) and interpersonal adequacy (p=0.023), however no significant relationship was found between the personal adequacy and social adequacy (p>0.05). Males had higher overall social maturity, personal adequacy, interpersonal adequacy, and social adequacy (p=0.000) than females. No significant difference was found between males and females in terms of the social network addiction scores (p=0.707).

Conclusion: High addiction to social networks is related to individual's social maturity. This relationship can be used in preventing and treating the addiction to social networks.

Key words: Addiction to social networks, Social maturity, Students

INTRODUCTION

Internet is a growing phenomenon. More people become the internet users' everyday [1] so that the proportion of the users has increased by 1000% in the last 15 years [2]. Previous studies have shown that Internet users in the past year amounted to 2.5 billion people, and this figure is on the rise. Al-Gamal et al. study shows that 40% of the samples studied in the study were addicted to the Internet [3]. However, greater internet use would lead to an increase in social support and, consequently, reduced loneliness, greater life satisfaction, and mental health boost [4]. Yet, excessive use and dependence on Internet-if individual's relationships are ignored with the real life, friends, and family-would lead to poor occupational, social, academic, family, economic, and psychological performance, known as internet addiction [5]. The results

of the studies indicate that internet addiction is effective in mental health so that internet addiction at adolescence can bring about certain problems such as depression, stress, tendency to suicide, hyperactivity, fear, social fear, irritation, violence, and anti-social behaviors [6]. In the past, social networks were considered as a tool for senior executives, businesses and technology for the upper classes. But today social networks penetrate social groups and become a part of everyday life with its high growth rate [7]. Addiction to social networks is a growing concern. Some researchers believe in six criteria for social networking disorder namely neglect of personal life, mental conflicts, escaping from realities and life problems, experiencing mood change, tolerating and concealing addictive behavior [8]. Others believe that at least three criteria out of excessive use, lack of control, tolerance for recovery, disruptions in individual and social functioning, confinement and escape from reality over a 12-month period are required to detect addiction to social networks [9]. Various studies have shown that addiction to social networks would lead to certain problems such as

depression, social isolation, identity disorder, decreased emotion and lack of confidence [10]. Some researchers believe that those who suffer from stress, loneliness, and depression or are incapable of communicating with their true lives use internet as a mechanism to overcome these shortcomings [11]. Maturity is the sign of individual's end of growth [12]. Social maturity is considered the last maturity step. Social maturity is the accurate understanding of social environment, which directs individual's social emotions, thoughts, and behaviors towards others' respect and attention. It enables individuals to have acceptable age-appropriate performance and balanced social behaviors [13-16]. Social maturity consists of various dimensions, such as active collaboration, social responsibility, capability to create a friendly environment, better selection choice, promoted quality of peer relationships, self-regulation, goal setting, social commitment, social tolerance, flexibility to change, familiarity with work, ability to withstand stress, effective communication, interpersonal trust, problem-solving styles, self-awareness, empathy, decision making, adherence to social laws, accommodation of role expectations, creation of a better balance in life, and wise judgment in important life affairs [17-19]. Psychologists believe that age-appropriate behavior is a sign of individual's social maturity [12]. Failure to social maturity would cause trouble for the individuals and friends, leading to incapability to overcome depression signs [18]. Various factors are effective in social maturity formation. For example, the study by Anand et al. showed that peer group, health and physical physiology, school and neighbours, family, character, mass media and entertainment are effective in teenager's social growth and maturity [20]. Various studies have focused on the relationship of internet and social networks with social performance. The results of some of these studies showed that the extent of using internet has a direct, significant relationship with social isolation so that increasing internet use leads to an increase in social isolation and loneliness [21,22]. The study by Onsrodi et al. showed that lower family's perceived social support leads to an increase in increased tendency to internet addiction among adolescents [23]. The study by Mirzayian et al. showed that mental health and its components (physical, anxiety, depression, and social function symptoms) vary depending on the students' level of internet addiction [24]. Therefore, due to the growing internet addiction among the young, the role of social maturity in promoting the mental health and improved quality of life, and few studies in this regard, the purpose of this study is to examine the relationship between the social network addiction and social maturity of university students.

MATERIALS AND METHODS

This is a descriptive, analytical study conducted in Shoushtar Faculty of Medical Sciences in 2016. The statistical population consisted of all students in this faculty. The inclusion criteria were being Persian speaker in order to better understand the questions, age of 17-25, willingness to participate in the study, and no physical impairment in terms of physical fitness. The exclusion criterion was no response to all questions. The sample size was estimated 147 using similar studies [25,26] (Equation 1),

$$n = \left[\frac{z_{1-\frac{\alpha}{2}} + z_{1-\beta}}{0.5 \times \ln\left[\frac{1+r}{1-r}\right]} \right]^2 + 3, \text{ (where r=0.27, } z_{1-\frac{\alpha}{2}}=1.96,$$

$z_{1-\beta}=1.28)$ (1)

A sample was 184 was finally selected due to 20% drop. The data were collected using three questionnaires: Students' Demographic Questionnaire (age and sex), RSMS, and researcher-designed questionnaire of Addiction to Social Networks. RSMS was developed by Naline Rao in 1986 with 90 items. The scale consists of three dimensions (Interpersonal Adequacy, Personal Adequacy, and Social Adequacy). It also measures 10 factors (lack of control, domination, trust in others, negligence, shyness, diversity, selfishness and self-interest, benevolence, carefree, and megalomania). The participants rate their feelings on these items on a four-rating scales (from Strongly Agree to Strongly Disagree). In this scale, 23 items are stated positively and 67 negatively so that weights are directly calculated in boxes with + [1-4] and inversely in boxes without symbol [1-4]. The allocation of scores is as follows: 90-134, low social maturity; -135-224, relatively low social maturity; 225-314 relatively high social maturity; and 135-224 high social maturity. Hooman et al. analysed the psychometric properties of RSMS through two studies and approved its standard. In these studies, Cronbach's alphas were reported 0.889 and 0.883. In order to examine the convergent validity, the California social adjustment test was used and the total correlation coefficient was 0.411 between two questionnaires. Structure Validity Test also showed that the extracted factors determine 38.388% of variance of the variables. The study by Kashi showed that the internal reliability was 0.859 using Cronbach's alpha [27-29]. The researcher-designed questionnaire of "Addiction to Social Networks" was in fact inspired by the one by Youngh. After studying new books and articles, descriptions were provided in terms of the extent of separating the extent of using internet and social networks. Few modifications were made in Youngh's scale. The questionnaire has 20 items. The participants rate their feelings on each items on a five-rating scale (1=Rarely, 2=Sometimes, 3=Often, 4=Almost always, and 5=Always). The minimum and maximum scores are 20 and 100, respectively. When the totals core is 20-39, addiction is medium. 40-69 and 70-100 are considered high and severe addictions, respectively. In our study, content and face validities were used. The two questionnaires were forwarded to 10 faculty members of Shoushtar Faculty of Medical Sciences in order to judge and examine the content, clarity, and simplicity. After modifications, the questionnaires were forwarded. Internal consistency (Cronbach's alpha) was used to determine the reliability. To this end, the questionnaires were forwarded to 20 participants. Cronbach's alphas were reported 0.92 and

0.823 for Addiction to Social Networks and Social Maturity, respectively. After obtaining the official permission from Shoushtar Faculty of Medical Sciences, the researcher explained the goals of the study. After ensuring the confidentiality of information and taking the informed written consent, the questionnaires were forwarded and then collected. In order to examine the statistical indicators and variables, descriptive statistics (mean, standard deviation, etc.) were used. Pearson correlation test was used to examine the relationship among variables and t-test for comparing the means. The data were analyzed in SPSS-16.

RESULTS

In this study, 181 students with the mean age of 20.1 ± 84.66 participated out of which 72.4% were female and 27.6 male. 60.8% of students had moderate addiction to social networks and 39.22% reported high addiction. The mean social maturity was 204.17 ± 61.59. According to the Kolmogorov-Smirnov test, the data had normal distribution (p=0.962, K-S=0.503). Comparing male and female participants in terms of addiction to social networks indicated that no significant difference is found

between them (p-value=0.707, t-test=0.376). T-test was used to compare the social maturity and its subscales between two groups of addiction to social networks (medium and high). According to the results, no significant difference was found in two groups in terms of the mean scores of social maturity and its subscales (personal adequacy, interpersonal adequacy, and social adequacy) (p>0.05). Pearson correlation test was used to examine the relationship between the social maturity and addiction to social networks at medium and high levels. According to the results, no significant relationship was found between the medium addiction to social networks and social maturity and its subscales (p>0.05) (Table 1), however a significant, inverse relationship was found between high addiction to social networks and social maturity so that lower social maturity leads to greater addiction to social networks (p=0.028). According to the results, high addiction to social networks had a significant relationship with interpersonal adequacy (p=0.023), however high addiction to social networks had no significant relationship with personal adequacy and social adequacy (p>0.05) (Table 2).

Table 1: Pearson correlation test between social maturity and addiction to social media networks at medium level

Variable	Pearson Correlation Coefficient (ρ)	Significance Level (P)
Addiction to social networks and social maturity	0.008	0.931
Addiction to social networks and personal adequacy	-0.084	0.382
Addiction to social networks and interpersonal adequacy	0.074	0.444
Addiction to social networks and social adequacy	0.031	0.748

Table 2: Pearson correlation test between social maturity and addiction to social media networks at high level

Variable	Pearson Correlation Coefficient (ρ)	Significance Level (P)
Addiction to social networks and social maturity	-0.261*	0.028
Addiction to social networks and personal adequacy	-0.119	0.322
Addiction to social networks and interpersonal adequacy	-0.269*	0.023
Addiction to social networks and social adequacy	-0.16	0.181
* significance at 0.05 level		

The results of comparing social maturity and its subscales among the males and females show a significant difference in terms of male and female mean scores of social maturity so that male students displayed greater social maturity than female counterparts

(p=0.000). A significant difference was found among the males and females in subscales so that female students had lower personal adequacy (p=0.003), interpersonal adequacy (p=0.008), and social adequacy (p=0.000) (Table 3).

Table 3: Comparing social maturity and its subscales among the male and female participants

Maturity subscales	Sex	Number	Mean	Standard Deviation	t-test	DF	p-value
Social Maturity	Female	131	201.69	16.3	-3.74**	66	0
	Male	50	212.28	18.68			
Personal Adequacy	Female	131	67.73	6.62	-3.028**	179	0.003
	Male	50	71.58	9.84			

	Female	131	67.68	7.82			
Interpersonal Adequacy	Male	50	71.12	7.52	-2.66**	179	0.008
	Female	131	66.51	5.13			
Social Adequacy	Male	50	69.58	5.23	-3.57**	179	0

* Significance at 0.05 level

** Significance at 0.01 level

DISCUSSION

The purpose of this study is to determine the relationship between the addiction to social networks and social maturity of students of Shoushtar Faculty of Medical Sciences. Examining the correlation between social maturity and addiction to social networks at medium and high levels showed that although no significant relationship is found between the medium addiction and social maturity and its subscales (personal adequacy, interpersonal adequacy, and social adequacy), a significant, inverse relationship is found high addiction to social networks and social maturity so that lower social maturity leads to greater addiction to social networks. According to the findings, high addiction to social networks has a significant relationship with interpersonal adequacy, however no significant relationship is found between high addiction to social networks and personal and social adequacy. Although no study was found in terms of the relationship between the addiction to social networks and social maturity, the results of some studies in terms of the relationship between various social growth aspects and internet addiction are in line with ours. For example, the Study by Musavimoghadam et al. showed a significant, negative relationship between internet addiction and social competence so that adolescents with greater social competence are less likely to be addicted to internet [30]. The study by Whang et al. indicated a strong correlation between internet addiction and inefficient social behaviors [31]. The study by İskender et al. showed a significant, reverse relationship between internet addiction and social self-efficiency [32]. According to the social skills theory by Griffiths et al. in terms of possible reasons of addiction to social networks, lack of social skills including self-reporting leads to virtual relationship rather than face-to-face interaction, ultimately leading to obligatory or addictive use of social networks [11]. The study also showed that males are at higher levels than women in terms of social maturity and its subscales. Although the findings were consistent with certain studies [19,33]. The results of our study are inconsistent with some similar studies. For example, the study by Athanimath et al. showed no specific difference between male and female adolescents in terms of social maturity [18]. The results of the study by Manju showed that female teachers had greater social maturity compared to their male peers [34]. Some researchers believe that the possible reason in different results is associated with sex, influencing individuals' socialization process along with the genetic features [35]. Other researchers believe that

peers, physical physiology and health, family, personality, entertainment, school, and neighbours are effective in adolescents' social maturity formation [20]. Most studies in terms of internet addiction show that boy's internet addiction is greater than that of girls [36-39] so that some researchers believe that it is associated with greater males' tendency to engage in risky internet behaviors and females' tendency to establish close relationships with strangers [6,40]. According to the results of our study, no significantly statistical difference was found between male and female participants in terms of addiction to social networks. This is consistent with the results of other similar studies [41,42]. The different results are believed to be associated with different sample size and cultural differences [43]. Too many questions of social maturity questionnaire might have decreased the accuracy due to fatigue and time-taking process. Therefore, since it is difficult judge whether social maturity or addiction to social networks is the main cause, a longitude study is required to determine the relationship these two factors.

LIMITATIONS OF THE STUDY

Limitations of this study include the lack of cooperation of some students, the incomplete completion of questionnaires by students.

CONCLUSION

Some theorists including the founders of social skills theory believe that lack of social growth is an important reason for the excessive dependency on internet and social networks. The results, showing a significant, inverse relationship between high addiction to social networks and social maturity, to a great extent, approves this theory. Further longitude study is required to determine the cause-effect relationship between the addiction to social networks and social maturity. On the other hand, the results revealed greater social maturity of young males compared to their female counterparts. Since girls play and key and valuable role in the formation of future societies and generation and the effects of social maturity on wise judgement in balanced life affairs, further studies are required to examine the reasons of low social maturity among females and propose practical solutions for promoting the social maturity. Therefore, the findings can prepare the ground for the next studies and designing intervention in order to prevent the addiction to social networks and promote social maturity of the young.

ETHICAL CONSIDERATIONS

This study received approval from the ethics committee of Shoushtar Faculty of Medical Sciences. All participants gave their oral consents for interview. The questionnaires were anonymous and all the information was kept confidential in this study.

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AUTHORS' CONTRIBUTIONS

Study design: Hakimeh Mohammadzadeh, Ali Hatami; Data collection and analysis: Mohammad Rasouli Badrani, Hakimeh Mohammadzadeh, Mehdi Kargar; Manuscript preparation: Ali Hatami, Hakimeh Mohammadzadeh, Mehdi Kargar.

All authors read and approved the final version of the manuscript.

CONFLICT OF INTEREST

All authors declare that there is no conflict of interest.

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