A Survey of the prevalence of self-disclosure behavior in virtual social networks and related factors among the students of Kurdistan University of Medical Sciences, Iran

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Abstract

Original Article

BACKGROUND: The growing popularity of social networking sites (SNS) raises concerns about privacy and security, especially among teenagers and young people, as they experience different types of unsafe behaviors on SNS. In this regard, the problem of the consequences of using this communication tool has attracted the attention of psychology and sociology researchers. The aim of this study was to evaluate self-disclosure behavior in virtual social networks and its related factors.

METHODS: This descriptive-analytical study was conducted among 601 students of Kurdistan University of Medical Sciences, Sanandaj, Iran. Data were collected by standard questionnaire and analyzed by SPSS software.

RESULTS: Effective factors such as presence in the virtual network, obscurity, and access to the Internet and virtual networks were among the factors behind the self-disclosure behavior among students. The goal of attending virtual networks was communicating and sharing personal information, getting rid of loneliness, using in free time, accessing various information and updating information, getting to know friends and colleagues, feeling anonymity, feeling united, and lacking confidence. The findings main reason for self-disclosure behavior was presence in virtual social networks. There was a significant relationship between gender and the desire to obscurity.

CONCLUSION: The results of this study indicate that the tendency to self-disclosure behavior in virtual social networks among young people, especially students, is increasing. It is essential for the cultural and social authorities to pay attention and create effective grounds for raising awareness among the youth.

KEYWORDS: Internet, Self-Disclosure, Behavior, Social Networks

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Introduction

The current era is the era of the press, media, and communications. The current world is the field of competing mass media such as radio, television, satellite, cellular networks, and Internet.[1,2] The Internet in the simplest definition is a set of interconnected computers that are connected throughout the world.[3] One of the attractions of the Internet is the social networking sites (SNS) that have made most young people replace them with the interaction with peers and parents. The term social networks were first introduced by Barter in 1954.[4]

SNS are online services with a specific policy, which firstly provides participants with an identification profile including individual features and personal information. In the second step, users introduce themselves and openly open their relationships and share their personal information that is visible to others.

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In the third step, they provide the ability to connect with others by connecting to the site.[4,5] The social networking features include interactivity, simultaneous communication, accessibility across the board, lack of monitoring, lack of ownership of the network, multimedia, and high capacity for information and individualization.[6]

Among the topics to consider in the structure of social networks is the relationship between privacy and the online disclosure of information, which has turned it into an important discussion of the day in the psychological and social fields.[7] Factors such as the lack of visual symptoms and anonymity provide a completely different way of face-to-face interaction; thus, it is likely that identities that are created successfully during social interactions are affected by online and virtual interaction. Some of these changes will be positive and some will be negative.[4,5,8]

Based on world-wide statistics, the number of Facebook users has risen to more than 1 billion in 2016, which is in the first position compared to the Google+ social network with 300 million users, LinkedIn with 347 million users, Instagram with 300 million users, and Twitter with 288 million users.[9,10] According to the statistics published in 2016, about 30 million of Iranians are members of the social networks. Moreover, based on the latest statistics released by the cyberspace authorities, more than 40 million smartphone devices are available for Iranian users, which about 30 million of them use social networks.[11]

In recent studies, it was reported that 9% of European young people's information has been abused in the past year.[9] Therefore, one of the negative consequences of Internet communications and social networks is creating conditions for self-disclosure, intimacy, privacy violation, and self-supply. Self-disclosure in the broadest sense of the process is to disclose and provide personal information for others.

On the other hand, the people share their own discovery, emotions, thoughts, experiences, and personal information with others. SNS, as a direct intermediary, persuade people to disclose themselves.[12-14] Most vulnerable users are young people who suffer irreparable harm due to inappropriate use of cyberspace.[15,16] User access to SNS, especially the youth and teenagers, is inevitable. Several factors such as trust, anonymity, social anxiety, internet access, and peers' presence in virtual networks are effective in self-disclosure behavior.[6,17,18]

As a result, the youth and teenagers should be guided in using these new tools and technologies as much as possible. The aim of this study was to determine the prevalence of self-disclosure behavior in virtual social networks and its related factors among the students of Kurdistan University of Medical Sciences, Sanandaj, Iran.

Materials and Methods

This descriptive-analytical study was conducted on the prevalence and related factors of self-disclosure behavior in social networks among male and female students in dental, medical, health, paramedical, nursing and midwifery faculties of Kurdistan University of Medical Sciences in 2017-2018. In addition, information of students was separated by faculty and gender (Table 1).

The participants were selected using clustered sampling method. First, according to the calculating formula for the sample size, a sample of 601 students from Kurdistan University of Medical Sciences (2392 people) was selected by cluster sampling. Then, this number was divided into five faculties in proportion to their number of students (dentistry: 33 girls and 29 boys, paramedical: 54 girls and 47 boys, medicine: 103 girls and 105 boys, nursing and midwifery: 92 girls and 48 boys, health: 64 girls and 26 boys) which were selected randomly.

Table 1. Information of students separated by faculty and gender, Kurdistan University of Medical Sciences, Iran

Faculty	Total number of students	Number of participant students	Male		Female	
			Total number of students	Number of participant students	Total number of students	Number of participant students
Dental	243	62	113	29	130	33
Paramedical	403	101	189	47	214	54
Medicine	828	208	420	105	408	103
Nursing and midwifery	560	140	193	48	367	92
Health	358	90	101	26	257	64
Total	2392	601				

A study is required to design a new questionnaire proportionate to the behavior and population. In this research, designing and constructing a questionnaire was done after studying and collecting similar questionnaires. The validity of the researcher-made questionnaire was discussed by the panel of experts, and after collecting their point of view in terms of clarity (using plain and simple words) and using common language (avoiding scientific and specialized words), designing a questionnaire based on a 5-point Likert scale was taken. The reliability points to the coherence, accuracy, reliability, and repeatability of the results of the measurement tool, and indicates how successful the test has been in achieving the specified goal. In this research, the Cronbach's alpha method was used to determine the reliability of the questionnaire with an emphasis on internal consistency. The closer the reliability of the questionnaire to 1, the better it is. For this purpose, in the first stage, 30 questionnaires were provided for the students. After collecting data, the Cronbach's alpha was calculated. The data were then described using SPSS software (version 16, SPSS Inc., Chicago, IL, USA).

Results

Demographic data of studied students is shown in table 2.

According to the descriptive results of the Internet usage and social networking questions, approximately, 96% of respondents use the Internet on a daily basis, and the maximum use of the Internet was 90-180 minutes per day with an abundance of 34.3%, and the lowest frequency was 12% in the time period of 0-30 minutes. Regarding the question of how to access the Internet, the mobile phone with the highest frequency of 88% was the highest percentage of access to the Internet and the computer of the university was the lowest rate with 1% abundance. All 601 people surveyed in this study were members of the social networking community, and most respondents with 66% of the frequency were found to be commenting on their social networks. In the question of accepting and inviting unidentified persons, most respondents refused to do so with a high frequency of 54.2%. For the question of accepting and believing information provided by others, only 19% agreed, and 81% were opposed to this belief and acceptance. The majority of respondents with a frequency of 46.9% provided the Internet through purchasing charge packs. Most of them were in the two social networks of Telegram and Instagram with a frequency of 60%. Most information shared on social networks was public information with a frequency of 67.2%; and after that, the sensitive information and the most sensitive information, respectively, were the most frequent. For the group of people who were allowed access to personal information, friends with 92% abundance were the most frequent and the unknowns had the lowest frequency of 2.8%. Finally, about the question of the range of communication in social networks, the wide range of communication with the frequency of 76% was the highest rate, and after that the average

range (friends and work relationship) with the frequency of 45.8%, and the limited range (family and friends) with the frequency of 41.6% had the most frequency, respectively.

Table 2. Descriptive results of demographic variables of the participants in the research

Variables		Frequency	Percent
Age (years)	18-28	566	94.2
	28-35	21	3.5
	> 35	14	2.3
Gender	Female	346	57.6
	Male	255	42.4
Education	Associate	15	2.5
	Bachelor	303	50.4
	Master of science	24	4.0
	Doctor of medicine	252	41.9
	PhD	7	1.2
Field of study	Dental	62	10.3
	Paramedical	102	17.0
	Medicine	208	34.6
	Nursing and midwifery	139	23.1
	Health	90	15.0
Income (Iranian Rial)	Below 2000000	327	54.4
	2000000-6000000	123	22.1
	Over 6000000	141	23.5
Address	Dormitory	406	67.6
	Home	195	32.4
Marital status	Single	536	89.2
	Married	63	10.5
	Other	2	0.3

Based on the results of motivational questions in the use of virtual social networks and self-disclosure behavior, the subjects with the highest amount of motivation were getting rid of loneliness with the frequency of 78.4%, and after that, access to various information and update information with a frequency of 50.1% was the next motivation, and the lowest motivation with the prevalence of 2.6% was related to dating and marriage in virtual social networks.

For the reasons for self-disclosure behavior, the respondent's deepest-to-heart relationships with the highest frequency of 55.6% was the most frequent reason and the realization of the virtual social networks was at the lowest frequency of 7%.

The results of table 3 showed that there was a significant statistical difference between the tendency to obscurity and gender (P = 0.003). However, there was no significant difference between the motivation and access to the Internet with the gender of the individuals, but the difference between the access to the Internet and the marital status was significant too (P = 0.003).

Table 3. The relationship of demographic variables with motivation, Internet access, anxiety tendency in social networks

Variables	Internet access			Motivation			Anxiety tendency		
	Yes [n (%)]	No [n (%)]	P	Yes [n (%)]	No [n (%)]	P	Yes [n (%)]	No [n (%)]	P
Gender									
Male	248 (3.97)	7 (2.70)	1.360	197 (77.30)	58 (27.10)	0.569	208 (81.60)	47 (18.40)	0.003
Female	328 (0.94)	18 (5.20)	1.990	274 (79.20)	72 (20.80)		311 (89.90)	35 (10.10)	
Age (years)									
18-28	543 (95.90)	23 (4.10)	0.104	441 (77.90)	125 (22.10)	0.554	490 (94.40)	76 (13.40)	0.226
28-35	21 (100)	0 (0)		18 (85.70)	3 (14.30)		19 (90.50)	2 (9.50)	
> 35	12 (0.85)	2 (14.30)		12 (0.85)	2 (14.30)		10 (71.40)	4 (28.60)	
Education									
Associate	15 (100)	0 (0)	0.641	12 (80.00)	3 (20.00)	0.564	13 (86.00)	2 (13.30)	0.140
Bachelor	287 (94.70)	16 (5.30)		234 (72.20)	69 (22.80)		257 (84.80)	46 (15.20)	
Master of science	23 (95.80)	1 (4.20)		22 (91.70)	3 (8.30)		18 (75.00)	6 (25.00)	
Doctor of medicine	244 (96.80)	8 (3.20)		198 (78.60)	54 (21.40)		226 (89.70)	26 (10.30)	
PhD	7 (100)	0 (0)		5 (71.40)	2 (28.60)		5 (71.40)	2 (28.60)	
Address									
Dormitory	394 (97.00)	12 (3.00)	0.330	315 (77.60)	91 (22.40)	0.501	357 (87.90)	49 (12.10)	0.105
Home	182 (93.30)	13 (6.70)		156 (80.00)	39 (20.00)		162 (83.10)	33 (16.90)	
Marital state									
Single	516 (96.30)	20 (3.70)	0.003	417 (77.80)	119 (22.20)	0.319	460 (85.80)	76 (14.20)	0.508
Married	59 (93.70)	5 (6.30)		53 (84.10)	10 (15.90)		59 (92.50)	6 (7.50)	

There was no significant difference between the motivation and the tendency to obscurity with marital status. There were no significant relationships among other variables.

Discussion

The purpose of this study was to investigate the prevalence of self-disclosure behavior in virtual social networks and its related factors among students of Kurdistan University of Medical Sciences. According to the descriptive results, Internet usage was more frequent at daily intervals with a frequency of 95.7%. Self-expression in virtual networks with a frequency of 1.66%, getting rid of loneliness with a frequency of 78.4%, access to various information and update information with a frequency of 50.1%, and deepest-to-heart relationships with others with a frequency of 55.6% had the highest percentage of factors related to self-disclosure behavior in virtual networks among the respondents. The prevalence of self-disclosure behavior and privacy statements is one of the important issues that can be considered consistent with the growth and spread of global social networks.[19] In recent years, the proliferation of devices such as computers, mobile devices, and other smart devices has been accompanied by an increase in online self-disclosure behavior, especially among young people worldwide.[20] Accessibility, how people are present in different social networks, and their various uses from the global Internet networks are all dimensions that can be discussed in the use of the Internet and its effects, such as self-disclosure. In fact, in self-disclosure, individuals share personal issues with other people who may not necessarily have previous acquaintance, and experience life like this.[19] Youth, especially in the age range of 20 to 29 years, have the most sense of security in using virtual social networks. Social network users aged 20 to 29 are less likely to feel insecure due to their emotional spirit and thoroughness. Therefore, they are more exposed to disclosure of their privacy.[16] It is important to pay more attention to this age ranges. Based on the results obtained in the analytical section, there was a statistically significant difference between the tendency to obscurity and gender, so the gender variable in this study played a significant role in the appearance of self-disclosure behavior in virtual networks. Boyd and Ellison research showed that gender affected the participation of users in virtual social networks; women with higher age were more active on virtual social networks than men in higher age, because of obscurity,[4] and women are more likely interested in using these networks to communicate with their friends than men. Regarding the gender impact, Larsen in his experimental study showed that interaction in virtual networks could help rebuild and maintain friendships,[21] and women paid more attention to the received comments and their senders.[22] Anonymity plays an important role in increasing self-esteem and independence of women. Without worrying about the way people look and feel, they talk about private life and personal aspects of their lives. Women and girls due to social pressures and problems that they experience in the community, use the opportunity that gives them the virtual space to present and produce content to express their feelings and emotions. They engage and discuss with similar people, and provide solutions to their problems. Indeed, the tendency to obscurity in relation to gender has increased with regard to the correlation of two disclosure variables, and the individuals have significantly discouraged disclosure of their private issues. In other words, the tendency to anonymity is the main factor in self-disclosure that is more effective than factors such as Internet access and other impacts mentioned in this article.[19] Online anonymity, the lack of physical presence of others, and the lack of real communications allow users to control their

social interaction. Enhanced Internet connectivity facilitates self-esteem and self-excitement, and provides an opportunity to improve social skills. This online facility, in combination with reducing social anxiety, allows individuals to submit themselves ideally and because of their anonymity, take any action.[23] As a result, people show themselves in an unrealistic way in the cyberspace. Also, when one cannot identify an individual, their unethical behavior increases. Other findings suggested that there was a significant statistical difference between Internet access and marital status. Investigations by Adlipour et al.[24] and Heirman et al.[25] is in line with the results of this research. Considering the role of media influence on the society, especially on the younger generation and single individuals, they tend to be more likely attracted to social networks and the Internet, resulting in self-disclosure behavior. According to the results of these studies, adolescents, teenagers, and single adults have less resistance than married and elderly people in temptation to disclose personal information in a situation where they are motivated. The reason for this is because of the emotional spirit, the courage, and the sense of security that young people have, regardless of the outcome of self-disclosure behavior.

Conclusion

According to the potential harmfulness in inappropriate usage of Internet in teenagers and young people and how it relates to their disclosure behavior, it is necessary to pay close attention to the protection of young people in the regulatory area. The issue of self-disclosure on the Internet and virtual networks is one of the subjects that people talk about with caution and sometimes even reluctantly. The experience of this research suggests that in order to identify more dimensions of this issue, in addition to what used in this research, concepts and variables should be used that,

while not inducing respondent sensitivity, persuade them to make clear and precise views. The presence and use of the Internet and virtual networks today is an integral part of the life of the members of various communities, including our developing community, and the issue of self-disclosure and sharing of personal information is considered as one of the most important dimensions; thus, it is important to pay attention to this issue.

Conflict of Interests

Authors have no conflict of interests.

Acknowledgments

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