Relationship between Internet Addiction and Identity Styles in Bushehr University of Medical Sciences Students

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ABSTRACT

Aims Internet addiction is excessive use of the Internet (daily more than three hours). This is social and psychological damage with severe consequences for young people, especially college students. This study aimed to investigate the relationship between Internet addiction and identity styles in Bushehr University of Medical Sciences students.

Instrument & Methods The present research is a descriptive correlational study. The statistical population was all students of Bushehr University of Medical Sciences. The sample included 277 students studying at Bushehr University of Medical Sciences who were selected using simple random sampling. The data were collected using demographic characteristics, the Berzonsky Identity Style Inventory, and Yang's Internet addiction questionnaire. For analyzing data, statistical Pearson correlation, ANOVA, t-test were used by SPSS 23 statistical software.

Findings The result showed that 90.2 percent of students were non-addicted, and 9.8 percent are addicted to the Internet. The average information identity is 40.29±6.65, and the avoidance identity is 27.89±6.21. The correlation between normative identity style (-0.30) and information (-.0.26) with Internet addiction in a negative direction is statistically significant (p<0.001).

Conclusion The present study's findings confirm the relationship between informational and normative identity styles and Internet addiction. According to the results of this study, it is necessary to develop programs such as training the Internet's correct use at universities and filling students' leisure time.

Keywords Internet Addiction; Identity Styles; Students

CITATION LINKS

[1] Prediction of internet addiction and social anxiety based on parenting ... [2] Relationship between internet use and academic achievement ... [3] The relationship between internet and cell-phone addictions ... [4] Assessment of internet addiction among college students ... [5] Ego identity status and identity processing orientation ... [6] Modeling structural relations of social support ... [7] Identity styles and academic status of Gilan university ... [8] Relationship between internet addiction and depression ... [9] The relationship between internet addiction and personality ... [10] Evaluation of the relationship between identity styles ... [11] Mediating role of gender-related personality traits ... [12] The relationship between the identity process styles ... [13] Psychometric properties of Young internet ... [14] Internet addiction and its effects on the academic ... [15] Prevalence and associated factors of internet addiction ... [16] Study of the relationship between identity styles and ... [17] Exploring individual differences in online addictions ... [18] Relationship between parenting styles, identity styles ... [19] The relationship between the internet addiction ... [20] The how and what of identity formation: Associations ... [21] Online activities, prevalence of internet addiction ... [22] Lower psychological well-being and excessive sexual ... [23] Investigate internet addiction and effective factors ... [24] Forecast of social intimacy based on identity style ...

Introduction

With the popularization of the Internet, the overuse and harmfulness of this technology have attracted the attention of psychologists, and its relationship with various variables has been studied. Among the raised issues is excessive use or some kind of Internet addiction [1].

Columbia University psychiatrist Goldberg first raised the issue of Internet addiction. According to him, Internet addiction is an inconsistent pattern of Internet use that leads to significant harm and confusion [2]. The American Psychiatric Association also describes Internet addiction as a pattern in Internet use that causes dysfunction and is associated with unpleasant internal states over two months [3].

Vahidifar et al., in a study in 2013, showed that 20.7% of nursing, medical and dental students of the North Khorasan University of Medical Sciences (12.1% boys and 8.6% girls) have Internet addiction behavior [4].

Identity style is one of the critical topics in psychology that has attracted the attention of researchers in recent years. By presenting a new model, Brzezinski's studies emphasize those socio-cognitive processes in which individuals are placed in different situations based on their preferred way of processing information about themselves and discussing issues related to identity and individual decisions and adopts "information", "normative" or "confusing-avoidance" from three orientations or processing styles[5]. Information identity style requires a desire to explore multiple solutions to an existing problem and explore several options before selecting them. Normative identity style considers growth by meeting social and family expectations and a high degree of commitment to autonomy and the practice of judging. Confused-avoidant identity style is characterized by a tendency to spend time aimlessly and make decisions based on momentary situations [6].

Maghsoudi et al.'s research on 371 students of Guilan University of Medical Sciences showed a statistically significant relationship between normative identity style and the total average of students [7]. Also, Salehi et al., in a study aimed at the relationship between Internet addiction and depression among high school students in Kordkoy City, Iran, with emphasis on the type of virtual networks, showed that there is a positive and significant relationship between Internet addiction and student depression [8]. Researchers in Internet psychology such as Talbot, Jung, Kendall, Davis, Smith, Rodrigo and Pallors, Knox, Stardion, Zosmann, Anderson, Lanha, Lee Ping, and Zalan have all emphasized the addictive nature of the Internet, especially among students [9].

Considering that students are one of the groups at risk of Internet addiction and have different interests according to their identity styles, the present study determined the relationship between Internet addiction and identity styles in medical students.

Instrument & Methods

The present study is a descriptive-correlational study conducted in 2015 in Bushehr University of Medical Sciences students. Based on the correlation coefficient (r) of 0.02 between internet addiction and avoidant identity style in the study of Unesi et al. [10] considering the probability of the first and second type of error, 0.05 and 0.1, the minimum required sample estimated 277 people selected by simple random sampling.

Questionnaires of personal information, Brzonsky identity styles, and Yung Internet addiction were used to collect data. The personal information questionnaire included gender, marital status, place of residence, means of using the Internet, the reason for using the Internet, and location of Internet access. The Identity Styles Questionnaire was developed by Brzonsky to assess individuals' orientation and was revised in 1992. This questionnaire is a 40-item self-report tool consisting of four subscales, three of which include identity styles, and the fourth is a commitment subscale. Eleven items are designed to measure information identity style, nine items to measure normative style, ten items to measure confuse-avoidance style, and ten items to measure commitment. Based on a 5-point Likert scale, the subject determines the degree of agreement or disagreement with each item; number one indicates complete disagreement, number 5 indicates complete agreement, and number 3 indicates that the person is indifferent. Brzonsky confirmed the validity of the questionnaire and the reliability of Cronbach's alpha method for information, normative and confused-avoidance identity styles were reported as 0.62, 0.66, and 0.73, respectively [11]. In Iran, Ranjdoost & Ghahramani have reported the reliability coefficient of the questionnaire through Cronbach's alpha technique for three identity styles of information, normative and confusing-avoidance, as 0.75, 0.6, and 0.7, respectively. The validity of the questionnaire was also confirmed by experts [12].

The Internet Addiction Questionnaire was developed by Yung. This tool has 20 five-point Likert items; rarely (1 point), sometimes (2 points), often (3 points), most of the time (4 points), and always (5 points). Therefore, to obtain the overall score of the questionnaire, the respondents' scores for each question are added together. The score obtained is the overall score of the questionnaire and will range from 20 to 100. Obviously, the higher the score, the higher the Internet addiction. The scores between 20-49 show the average Internet users who sometimes spend much time searching the Internet but have control over the use of the Internet (ordinary user). Scores of 79-50 indicate people who sometimes have problems due to Internet use (mild addiction), and scores between 100-80 indicate people who have severe problems in life with excessive use of the Internet. They have found and need to realize the

impact of the Internet in their lives and seek treatment (severe addiction). Overall, a score above 53 indicates Internet addiction. The validity of the tools used in this study using Cronbach's alpha was equal to 0.73 [13].

The present study was approved by the ethics committee of Bushehr University of Medical Sciences. After explaining the research objectives, obtaining satisfaction, and stating the confidentiality of the recorded information, the students answered the questionnaires individually without writing their names.

The obtained data were entered in SPSS 23 statistical software. Data were analyzed using descriptive and analytical statistics, including independent t-test, one-way analysis of variance, and Pearson correlation. The normality of the data distribution was assessed using the Kolmogorov-Smirnov test. The significance level in statistical tests was

considered less than 0.05.

Findings

Most of the participating students (79.3%) were female. 91.6% of the participating students lived in dormitories, and more than half of the people had laptops, and almost half of the participants used the Internet to search for scientific resources. 87.2% of the participants were single.

The independent t-test showed that the status of Internet addiction of male students compared to female students (p<0.001), as well as single individuals compared to married individuals (p=0.009) and also in those who use the Internet to search for not scientific content (p<0.001) was significantly higher. Also, informational and normative identity styles (p=0.025 and p<0.001, respectively) had significant differences between male and female students (Table 1).

Table 1) Frequency of demographic variables and its relationship with Internet addiction and identity styles

Demographic variables	N (%)	Internet addiction (Mean±SD)	p-value	Information identity style (Mean±SD)	p-value	Normative identity style (Mean±SD)	p-value	Avoidant identity style (Mean±SD)	p-value
Gender									
Male	57 (20.7)	39.29±15.18	<0.001	38.37±6.33	0.025	30.12±4.78	<0.001	27.96±5.48	0.945
Female	218 (79.3)	30.10±10.23		40.78±6.68		33.31±5.62		27.89±6.42	
Field of Study									
Medical	65 (23.8)	30.05±10.4		40.60±7.23		31.65±5.04		27.21±6.75	
Nursing	69 (25.3)	31.55±10.68		42.00±6.33		32.83±5.48		28.6±08.48	
Surgical technologist	40 (14.7)	32.05±11.95	0.382	40.40±5.72	0.449	32.6±4.04	0.541	26.47±3.77	0.592
Anesthesiology	27 (9.9)	30.68±10.67		40.37±6.07		31.39±5.63		27.77±6.1	
Public Health	27 (9.9)	32.80±9.25		42.07±7.32		32.68±5.08		27.50±4.94	
Library & Information Sciences	47 (16.4)	31.30±13.04		40.24±6.65		32.15±6.87		28.00±7.38	
Accommodations									
Dormitory	252 (91.6)	31.93±11.97	0.913	40.39±6.76	0.547	32.66±5.69	0.924	27.90±6.3	0.686
Non-dormitory	23 (8.4)	32.23±12.41		39.45±5.6		32.78±4.68		27.85±5.05	
Has a laptop									
Yes	141 (51.3)	33.82±12.41	0.056	40.35±6.56	0.946	32.45±6.14	0.581	27.75±6.73	0.746
No	134 (48.7)	30.01±11.25		40.29±6.77		32.85±5.05		28.01±6.69	
Marital status									
Married	35 (12.8)	27.02±8.30	0.009	41.66±6.07	0.244	31.9±4.81	0.415	27.83±7.05	0.992
Single	239 (87.2)	32.67±12.28		40.14±6.74		32.78±5.73		27.82±6.06	
Internet use location									
Library	30 (11.4)	31.86±12.47		40.23±6.55		33.14±5.82		27.65±6.34	
Dormitory	188 (71.2)	31.27±11.7	0.292	40.34±6.67	0.984	32.92±5.54	0.260	27.89±6.14	0.968
Other cases	46 (17.4)	34.2±12.44		40.16±6.78		31.45±5.61		28.04±6.51	
The reason for using the Internet									
Search for scientific content	134 (48.4)	27.67±8.88	<0.001	41.05±6.74	0.081	33.10±6.00	0.222	27.97±6.06	0.838
Other cases	141 (51.6)	36.14±13.07		39.54±6.5		32.22±5.14		27.81±6.38	

Table 2) Pearson correlation dimensions of identity style and internet addiction

Variable	1	2	3	4
1-Information identity style	1			
2-Normative identity style	0.644	1		
3-Avoidance identity style	0.053	0.051	1	
4-Internet addiction	-0.266	-0.300	0.024	1

Table 3) Mean and range of scores of identity style and internet addiction

Variable	Range of scores	Mean±SD
Information identity style	11-55	40.29±6.65
Normative identity style	9-45	32.66±5.59
Avoidance identity style	10-50	27.89±6.21
Internet addiction	28-140	91.23±22.11

According to the scale of Internet addiction, 90.2% of the total participants were normal Internet users, and 9.8% were in the range of mild Internet addiction. None of the students were severely addicted to the Internet. Normative identity style had the most damaging relationship with Internet addiction (p<0.001; Tables 2 and 3). Also, the correlation between information identity style and Internet addiction was negatively significant (p<0.001; Tables 2).

Discussion

This study aimed to determine the relationship between Internet addiction and identity styles in Bushehr University of Medical Sciences students. In the present study, 90.2% were regular students, and 9.8% had mild Internet addiction. These results are consistent with the results of previous studies. In the study of Ghahremani et al., 91.6% of students were at the normal level, 6.4% had mild dependence, and 0.3% had severe dependence on the Internet [14]. Also, Hassan et al. show that 27.1% of young people are addicted to the Internet [15]. One of the crucial reasons for the growing trend of internet addiction in Iran is the lack of proper planning of social management system to solve the problems of young people such as unemployment, suitable conditions for continuing education, and livelihood problems. Also, no cultural work has been done on how to use the Internet, and if this trend continues, we will have to witness new complications that threaten society. The young man enters the virtual space and wants to start a conversation and exchange ideas in this space. This person turns away from reality and forgets how different virtual and real communications are, and suffers from dualistic behavior and fantasies [17].

Most participants had an informational identity style. This finding is consistent with the results of other studies. Maghsoudi et al. found that 69.3% of people have an informational identity style, 27.2% have a normative identity style and 3.5% have a confused-avoidant identity style. Explaining this finding, it can be said that the style of identity becomes apparent over time and with changes in mental maturity, but the details of what happens are unknown. Since the samples of the present study were students who have gone through adolescence and are in their youth, it is expected to observe the average score of high information identity style [7].

The present study's findings showed that information and normative identity styles have a significant negative relationship with Internet addiction; This means that students with higher information and normative identity styles are less likely to become addicted to the Internet. This finding is similar to the results of other researches. Monacis et al. showed that identity styles avoid risk factors and normative styles are among the protective factors in Internet addiction [17]. Research evidence also shows that Internet addiction has a negative relationship with students' information and normative identity style and a positive relationship with avoidant identity style [18, 19]. On the other hand, according to Brzonsky, people with a confused-avoidant identity style tend to delay dealing with conflicts and identity issues. They also have weak commitments, arousal, self-disability, and confused identity status. People with such characteristics are expected to spend more time on the Internet and in the virtual world and less time in social situations to avoid conflicts and identity issues [20].

The average Internet use was significantly higher in boys than in girls. This finding was consistent with the results of studies by Xin et al. [21] and Hassan et al. [15], However, it was inconsistent with Vahidifar et al., which did not show a significant relationship between gender and Internet addiction [4]. Men seem to be more interested in knowing the unknown and discovering new things than women. Men are also more likely to be attracted to addictive topics such as virtual space and online games [22]. There was a statistically significant relationship between the cause of Internet use and Internet addiction. As we move from the normal users to the addicted users, the scientific use decrease, and the use of the Internet in discussion and downloading photos and videos increases. This result is consistent with the findings of Qahramani et al., who showed that there is a significant relationship between chatting with Internet addiction, which can be due to the attractiveness of chatting, especially with another person, and the lack of feeling the passage of time while chatting [14]. The present study results showed that Internet addiction is significantly higher in single people than married people. This result was in line with the findings of Dadipoor et al. [23]. In this study, a statistically significant relationship was found between informational and normative identity styles and gender. These results are consistent with the findings of Daneshvarpour et al., which showed a significant relationship between the two sexes in the style of normative identity [24].

The present study sample was students at a certain age; therefore, the findings of the present study can not be generalized to other segments of society and other age groups. Also, this study has not considered the role of cultural factors that affect the identity of individuals. It is suggested that in future research in this field, a total number of people of both genders and the scope of studies be considered to confirm the results of the research. Finally, it is suggested that programs such as teaching the correct use of the Internet in universities, filling students' leisure time and education, considering the increasing use of the Internet by individuals, especially young people and students, and the impact that the use of the Internet has on shaping and changing people's identities. Develop time management programs to prevent the spread of Internet addiction among students.

Conclusion

There is a negative relationship between informational and normative identity styles and Internet addiction. The rate of Internet addiction in Bushehr University of Medical Sciences students is 9.8% and is in the range of mild addiction.

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