

EFFECT OF PERSONALITY TYPE ON INTERNET ANXIETY IN KERMAN DENTAL SCHOOL STUDENTS (2015-2016)

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ABSTRACT

Introduction and objective: in recent years internet has turned to be one of the most popular global medias due to its unique qualities such as easy accessibility, utilization convenience, users' obscurity and low cost. This study targets at examining the personality types' effects on internet anxiety in students of dental faculty in Medical University of Kerman.

Methodology: This cross-sectional study was conducted on 235 dental students who were selected through census sampling method. Data collecting tools consisted of standard internet anxiety questionnaire (including 20 items), personality type's questionnaire (including 25 items), demographic characteristics (age, sex, entrance year) and also eight related questions via internet. The collected data were entered the computer and analyzed via SPSS statistics software version 18 and linear regression statistics test and t at the significance level of 5%.

Findings: From 235 participant students in this study 141 (66.0 %) were females and the rest were males and the average of their age was 23.85+₋ 5.36. the mean score of internet anxiety was 54.01+₋ 8.39. According to anxiety intensity, 57 (24.3%) persons were in normal range, 176 persons (74.9%) were in mild anxiety range and 2 persons (0.8%) had sever anxiety levels.

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There were a significant correlation between the mean score of internet anxiety and year of education and hours spent using internet ($p=0.028$, $p=0.017$). There was significant correlation between personality type and internet anxiety as well ($p= 0.016$).

Conclusion: Based on this study internet anxiety was lower than moderate in dental school students and type A students who have characteristics like fast and quick, nervous and hot-tempered, biased life style, anxious, impatient and being competitive had more anxiety.

Keywords: internet, dental student, Kerman, Personality type, anxiety

1. INTRODUCTION

Internet is a fast and cheap mass communication media and the required data can be gained from it without any time limitation and only through an internet connection. The data available on internet is usually updated and therefore it has become an appropriate tool to access to recent scientific information and development (1). It has been shown that internet users as compared to those who do not use it have more creativity and self-competence (2). Yang et al believe that extra using of internet can damage mental and physical health of the user (3). Bessiere et al (2010) demonstrated that depression is higher in the users who use internet for hygienic targets as compared to who use internet for finding friends (4). Studies have proved that excessive use of internet has a harmful effect on mental health of students and the students who used internet excessively as compared to those who did not have such an experience were lower at their mental health and pathological problems (5). Nowadays due to extensive role of internet especially in research aspect, internet anxiety is of great importance. Internet anxiety is a type of fear or anxiousness that people experience when they use internet. Internet anxiety is the stress and tension because of using technology and websites. Internet anxiety reflects the recent confrontations with information technology (including internet) (6).

It has been proven that personality type of individuals are one of the anticipating factors of excessive use of internet (7). It has also proven that shy persons with low self-esteem would claim their social advantages through internet (8). In type A personalities the following qualities are being observed: quick and fast, peevish and nervous, extremist in life style, normally anxious, impatient and competitive. These characteristics make them distinctive from type B personalities (7). Mihmanchi et al (2013) showed that neurosis have relationship with internet anxiety (8). Lashkarara et al (2012) expounded that internet addicted students as compared to the others had

higher levels of exposure to anxiety and depression (9). Nowadays students are one of the major categories in each country and the reason behind this is the role that they will play in the future of the country. The available varieties of facilities and alternatives in internet, students acquaint with varied kinds of behaviors and stimuli. This virtual space creates an unknown and mercurial identity especially for a generation that is exposed to much more stimuli as compared to the previous generations. Internet creates a free greenhouse space that teachers and authorities can not affect it and have no way to penetrate it. Thus this research was conducted on dental school students due to extensive utilization of internet, vital role of it in research activities of students and the importance of mental health of students and the role that they play in the future of the country and also the lack of information about this issue.

2. METHODOLOGY

This study is a descriptive cross-sectional survey that targets at evaluation of internet anxiety in dental school students of Medical University of Kerman and the statistical population was selected via census sampling method and in the beginning of the second semester of 2015-2016 academic year. Initially in the classes the executor of the research explained the survey to students and they were wanted to carefully answer the questionnaire. The students were assured about the confidentiality of their answers. The data collection method was internet anxiety questionnaire, personality type questionnaire, demographic questions such as age, sex, academic year, the amount of internet utilization and its type. Internet anxiety evaluation questionnaire was based on Spilberger's state-trait anxiety inventory and is modified by Reed and Palumbo. They changed the vocabulary in each term to reflect exactly the emotions associated with computer but their inventory retained the form of the previous inventory and its 20 items. Ealy used this scale to evaluate internet anxiety with replacing the word internet instead of computer (10). The reliability of this survey has been reported by Cronbach Alpha during pretest 0.94 and post-test 0.96 (11). The internet anxiety evaluation questionnaire includes 20 items that is scored according to Lykert –degree scale like: 1- completely disagree 2- disagree 3- fair to middling 4- agree 5- completely agree. Thus the domain of changes is 20-100. Altogether in this test low score means low levels of internet anxiety and high score means high levels of internet anxiety and the score 60 is the average score for internet anxiety. The score range 20-55 is low levels of anxiety, 56-65 is average anxiety levels and 66-100 is severe anxiety levels. The personality type

questionnaire includes 25 questions with only two options of yes or no. In this questionnaire the participants select the option that is closer to their personality. The option yes is equal to 1 and the option no is equal to 0. This questionnaire identifies the elements of type A and type B personalities in participants. In this questionnaire the score 13 is the average score. The scores higher than 13 tend to be type A personality and the scores lower than that indicate type B personality. The scores less than 5 indicate an intense tendency towards type B personality and the scores more than 20 show an intense tendency towards type A personality. The validity of this test is reported more than 70 and 80% in the majority of studies. After data collection, the information was entered the computer and was analyzed by statistic software SPSS version 18 and frequency distribution tables, statistic t tests and linear regression, the significance level was 5%.

3. RESULTS

The results of this survey that was conducted on 235 dental students of Medical University are as follows: in this survey 94 persons (40%) were males and 141 persons (60 %) were females with the average age of 23.85 ± 5.36 . The maximum of responsiveness was reported for the students of the second year which was 51 persons. Table number 1 shows the demographic information of the participants. The method of internet introduction in 195 persons (82.97%) was via personal experience, 23 persons (9.78%) in the university and 17 persons (7.23%) was in computer training classes. Table number 2 shows the information about know-how utilization and accessibility of internet and its consumptions. As we can see 67 (28.5%) persons have used internet more than two hours daily. 96 persons (40.9%) have used 15% of their internet utilization for their college activities. the mean of internet anxiety 54.01 ± 8.39 out of 100. According to the intensity of internet anxiety 57 participants (24.3%) were normal, 176 persons (74.9%) were in mild anxiety range and 2 persons (0.8%) were in severe anxiety levels. 9 persons (3.82%) were type A personalities while 7 persons (2.79%) had perfect characteristics of type B personality. Between the average score of internet anxiety and variables of entrance academic year and hours spent using internet was a significant correlation ($p=0.028$ and $p= 0.017$) (table-3), between internet anxiety and personality type was also a significant correlation ($p= 0.016$). With more tendency toward type A personality the anxiety levels would rise.

4. DISCUSSION AND CONCLUSION

In this research the average score of internet anxiety questionnaire was $54.01 + 8.39$. Narmenji et al (2010) in a survey conducted on the students of graduate studies in Birjand and Ferdous to evaluate their internet anxiety reported the average score of internet anxiety $48.15 + 12.29$ (11) and Mihamnchi et al have reported this score in medical students of Mazandaran university as $51.06 + 10.05$ (8) that both of these numbers were lower than this study reports. The difference can be because of the year of the research or the population of it due to the ever-increasing progresses in IT and the more accessibility to internet and the facilities to reach it. Considering the score 60 as the average level of internet anxiety in Narmenji and Mihmanchi researches we can observe that students had lower levels of anxiety, in this research there was no significant correlation between the gender of the participants and their anxiety levels. These results based on no relationship between the gender and anxiety level of participants are in harmony with Narmenji et al surveys (8 and 11) while Rezaei et al conducted a study on agricultural students (13) and also Khoshyian research on graduate studies students and medical students of Shiraz have reported more internet anxiety in females than in males (14). The difference between their results with this study's results may be due to the population they have conducted their research on.

In this research there was no significant correlation between age and internet anxiety. Studies have shown that between self-competency and internet anxiety in different age spectrum a significant correlation exists (15), the difference between this research results and the study's results above is due to its particular age spectrum because the majority of students were in the range of 18-25. In this study there was a significant correlation between the hours spent by the student using internet and internet anxiety that was compatible with the studies of Joiner et al (16).

In this study 79 participants (33.6%) used internet for amusement. Studies show that for every hour of spending time in internet by the youngsters at home, half an hour of his direct communication with the family would diminish. And this escape to an open society and network would lead in his isolation from the real society (17). In this study 43.40% of participants use internet for net-surfing only and is in accordance to the study of Ghamari et al on medical students that showed 48.4% of this usage (18). Alavi et al showed that 25% of youngsters' internet utilization was for net-surfing (19). The difference between these numbers with what we have acquired is due to the course that our population studied because some courses demand

more utilization of internet while the others demand less and the more the person uses internet he would be more prone to internet anxiety. Joiner et al showed that women use internet for communication more than men and also internet anxiety was related to the hours of using internet (16). Between the entrance year to the college and internet anxiety was a significant correlation. Senior students had low levels of internet anxiety. It seems that internet knowledge and self-effectiveness have reduced this anxiety in senior students.

197 participants (83.8%) were not satisfied with net speed. There was no significant correlation between their satisfaction of net speed and internet anxiety. In Shamo et al research delay in internet services led in internet anxiety (20). It has proved that the delay in internet access would cause in internet anxiety (21). Perhaps higher net speed would be effective to reduce internet anxiety in students who search for their scientific assignments.

The studies showed that there was a significant correlation between personality type and internet anxiety. Type A personality individuals have more internet anxiety. Mihmanchi et al showed that personality type have a significant correlation with internet anxiety (8) that is compatible with the results of this study. Also in Sepehrian research students with type A personality were significantly more addicted to internet (7). It has proved that people with type A personality qualities have characteristics like quick and fast, peevish and nervous, extremist in life style, anxious, impatient and competitive (7).

5. CONCLUSION

The findings of this study showed that the internet anxiety in dental students of medical university of Kerman was lower than the average score. People with type A personality had more internet anxiety. Due to extensive use of internet, training programs can be effective in efficacy and internet knowledge and can reduce internet anxiety.

6. LIMITATIONS AND SUGGESTIONS

Even though we had restrictions in this study such as the paucity of studies on economic, social and cultural variables we suggest authorities to identify persons who are exposed to internet risks and type A personalities and to control the utilization of internet.

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Table 1. Frequency distribution of demographic traits of dental school students

Demographic traits		Number	percentage
gender	Female	194	66
	male	96	40
Academic year	First	49	20.9
	second	51	21.7
	Third	34	14.5
	fourth	45	19.1
	Fifth	42	17.9
	sixth	14	6
total		235	100

Table 2. Frequency distribution of dental school students according to variables related to internet utilization

variable		numbers	percentage
Internet accessibility location	Home	193	82.12
	University	15	6.38
	dormitory	26	11.06
Internet utilization hours	Daily less than half an hour	66	28.08
	Half an hour to two hours	100	42.55
	More than	69	29.36

	two hours		
Internet utilization for college assignments	Less than 15%	96	40.85
	15-35%	78	33.19
	35-70%	48	20.42
	More than 70%	13	5.53
Internet utilization objective	Amusement	79	33.61
	Internet chat	53	22.55
	Web-surfing	102	43.40
VPN utilization	Yes	145	61.70
	No	90	38.29
Net speed satisfaction	Yes	37	15.74
	no	198	84.25

Table 3. Demographic variables and internet usage timing correlation with internet anxiety in dental students of medical university

variable	beta	Significance level
Gender	-0.121	0.97
Age	-0.116	1.160
Entrance year	2.288	0.028*
Daily usage timing	2.408	0.017*
College assignment internet utilization	0.163	0.871
VPN possession	-1.756	0.081
Net speed satisfaction	0.043	0.965

* there is significance level

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