

Internet Addiction and Cigarette Smoking Dependence Among Students of Soran University

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Abstract

Background and objective: cigarette smoking is the most basic public health problem worldwide, particularly in developing countries, also Internet addiction is characterized by excessive or poorly controlled preoccupations, and behaviors regarding computer use and internet access that lead to impairment or distress. the objectives of the study were to assess the sociodemographic characteristics of students and assess the level of cigarette dependence and internet addiction among students at Soran university in Soran city. **Methods:** A quantitative design/ a descriptive cross-sectional study was carried out from 10th Jan 2022 to 10th April 2022. A non-probability (purposive) sampling of 350 students at Soran university in Soran city. A questionnaire was composed of three parts, part one included questions related to socio-demographic characteristics, part two included questions related to nicotine addiction, and part three was related to internet addiction. The data was collected by interview technique and (SPSS V 26) program was used for data analysis. Chi square test was used to compare proportions between selected variables of the study and internet addiction levels. **Results:** The study revealed that the mean age and standard deviation of students were 22.05±2.4 years more than half 60.9% were male and 59.1% of participants were in the age group (22-25) years and 31.4% were in the second academic year, 85% passed the first trimester successfully. Also, 6.3% had high cigarette dependence levels, and half 54.57% had moderate internet addiction. There were no significant association between internet addiction levels and age, gender, academic year, GPA and residence **Conclusion:** According to the finding of this study level of internet addiction was higher than cigarette dependence, few students had high cigarette dependence and severe internet addiction, public awareness about negative effects of both internet use and cigarette smoking, limitation of internet access and cigarette in public and using screen time Apps will have a role in decreasing internet addiction.

Keywords: cigarette smoking, health problems, dependence, internet addiction.

1. Introduction

Nowadays, the Internet is an abroad accessible approach for communication, education, and socializing all over the world and it nearly controls people's life. Internet addiction is behavior addiction characterized by unlimited or obsessive internet use or other online tools, that have negative effects including withdrawal from real-life relationships, decreased academic activities, impaired emotional status, and anxious temper. ^{1,2} Also Internet addiction as a health issue has to be taken into consideration and it is asserted as a mental disorder. ³

Video games, cyber sex, and online gambling are subtypes of internet addiction. ⁴ interpersonal sensitivity, depression, anxiety, and sleep and appetite problems have been identified as symptoms of internet addiction. ⁵

Cigarette smoking is the most common form of tobacco use worldwide and scientists have associated smoking with lung cancer. Tobacco causes major health problems and illnesses, killing more than 8 million people a year around the world. ^{6,7} The prevalence of cigarette smoking among university students in Kurdistan is 23.5% and 16.7%. ^{8,9}

More than half of all long-term smokers die from

tobacco-caused disease, with an average loss of at least 10 years of life. Smoking leads to 87% of lung cancer deaths, 61% of pulmonary disease deaths chronic obstructive pulmonary disease. ¹⁰

Studies show that internet addiction influences students physically in addition to psychologically. Also, today internet has turned into a fundamental requirement for the development of science and technology, it has also overtaken daily activity and has a significant negative impact on students' academic performance. ^{11,12} Therefore data on cigarette smoking dependence are crucial to allow experts to plan effective strategies for cigarette dependence. This study aimed to assess the level of Internet addiction and cigarette smoking dependence among students at Soran University, Soran, Erbil.

2. Methods

Study design, setting, and participants

Descriptive A cross-sectional study was conducted among 350 students from Jan 2022 to April 2022 at Soran University. The sample size was estimated by Epi. Info software (Version 7). The expected frequency (40%) is based on the study done in Jordan¹³ and a confidence interval of 95%. The population size is 6591 students at Soran university

accordingly to the estimated sample size by Epi. Info was 349 but the researcher decided to sort out 350 participants as a sample size to be a more accurate representative sample.

Data Collection

Data were collected using a self-completed questionnaire composed of three-part, sociodemographic such as age, gender, academic year, GPA, and residency, and the internet addiction scale is a 20-item scale that measures the presence and severity of internet addiction among adults, the scale, a 5-degree Likert self-completed questionnaire, includes of 20 questions, it is categorizing not applicable (score 0), rarely (score 1), occasionally (score 2), frequently (score 3), often (score 4) and always (score 5). The greatest score is 100, the higher the score is, the higher the severity of internet addiction. Overall scores that range from 0 to 30 are counted as a normal level of Internet usage; scores of 31 to 49 demonstrate a mild level of Internet addiction; 50 to 79 consider the existence of a moderate level, and scores of 80 to 100 indicate a severe dependence.¹⁴

Additionally, for assessing cigarette smoking dependence the Fagerstrom Test for Nicotine Dependence was used which consist of 6 questions. Scores of the questions were summed up to provide a total score, 1-2 = low dependence, 3-4 low to moderate dependence, 5-7 moderate dependence, and more than 8 high dependences. ¹⁵SPSS 26 statistical software was used for analysis.

3. Results

Table 1 shows the distribution of the socio-demographic data of the 350 students. the mean age and standard deviation of patients were 22.05±2.4. The highest percentage (59.1%) of students were in the age group of (22-25) years and the lowest percentage (2.3%) were 26 years and above. Concerning gender 60.90% were male and 39.10% were female. Also, (31.4%) of the students were in their second academic year while (20 %) of the students were in their third year. Additionally, 85.1% passed the first trimester, and 13.4% fail. It is evident in the table that 45.4% of the sample were living in the dorm and (54.6%) home was their residency. Figure 1 shows the scores of the level of cigarette smoking dependence among students, more than half of 59.10% of students were non-smokers, 20.85% had moderate dependence and 6.30% had high dependence. Table 2 shows that

54.57% of students had a moderate level of internet addiction, 44.85% had a mild level of internet addiction and only 0.57% had severe internet addiction

Table 1 socio-demographic data:		
	No.	(%)
Age(years) Mean age ± SD 22.05 ± 2.4		
≤ 21	135	38.6%
22-25	207	59.1%
≥ 26	8	2.3%
Gender		
Male	214	60.90%
Female	137	39.10%
Academic year		
1st year	74	21.1%
2nd year	110	31.4%
3rd year	70	20.0%
4th year	96	27.4%
GPA		
Fail	47	13.4%
Pass	298	85.1%
Good	5	1.4%
Residence		
Home	191	54.6%
Dorm	159	45.4%

Figure 1: shows the scores of level of nicotine addiction among students, more than half of 59.10% of students were none-smokers, 20.85% were have moderate addiction and 6.30% were have high addiction to nicotine.

*Low addiction 1-2 score, low to moderate addiction 3-4 score, low to moderate addiction 3-4 score, moderate addiction 5-7 score, and high addiction 8+ score.

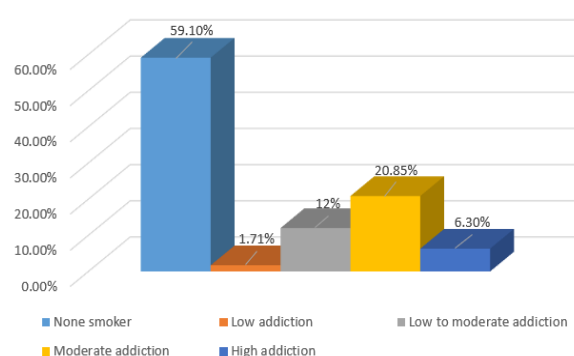


Figure 1: level of cigarette smoking dependence

Table 2 shows that 54.57% of students had moderate level of internet addiction, 44.85% had mild level of internet addiction and only 0.57% had severe internet addiction.

Table 2: Distribution of internet addiction levels		
Internet addiction levels	N	%
Mild level of Internet addiction 31 to 49 score	157	44.85%
Moderate level Internet addiction 50 to 79 score	191	54.57%
Severe Internet addiction 80 to 100 score	2	0.57%
*There is no normal level of internet usage (0 to 30 score) among study participants.		

Table 3 shows the association between age group with internet addiction level of study samples. The highest percentage (62.5%) of mild internet

addiction was within age group ≥ 26 years and lowest percentage 42.0% of samples were within age group 22-25 years. there was no association between

age and internet addiction scores ($P = 0.481$). Regarding the association between gender and internet addiction scores, the highest percentage of mild internet addiction for male samples were 58.7% and the lowest for female samples were 48.2% there

were non significant association between gender and internet addiction ($P = 0.092$). Also the table shows no significant association with the following variables: academic year ($P = 0.702$), GPA ($P = 0.702$) and residence ($P = 0.874$).

Table 3: Association between internet addiction levels and biographic characteristics

Internet addiction levels								
	Mild level		Moderate level		Severe level		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	P
Age								
≤ 21	66	48.2%	70	51.1%	1	0.7%	137	
22-25	86	42.0%	118	57.6%	1	0.5%	205	
≥ 26	5	62.5%	3	37.5%	0	0.0%	8	0.481*
Gender								
Male	87	40.8%	125	58.7%	1	0.5%	213	
Female	70	51.1%	66	48.2%	1	0.7%	137	0.092*
Academic year								
1st year	37	50.0%	37	50.0%	0	0.0%	74	
2nd year	51	46.4%	58	52.7%	1	0.9%	110	
3rd year	30	42.9%	39	55.7%	1	1.4%	70	
4th year	39	40.6%	57	59.4%	0	0.0%	96	0.702*
GPA								
Fail	20	42.6%	27	57.4%	0	0.0%	47	
Pass	133	44.6%	163	54.7%	2	0.7%	298	
Good	4	80.0%	1	20.0%	0	0.0%	5	0.495*
Residence								
Home	84	44.0%	106	55.5%	1	0.5%	191	
Dorm	73	45.9%	85	53.5%	1	0.6%	159	0.874*
*By Fisher's exact test								

4. Discussion

Cigarette smoking, one of the leading causes of death in the world, is also one of the most effortlessly preventable of all risk factors for disease. cigarette dependence rises the risk of illnesses such as cancer, respiratory tract diseases, and cardiovascular diseases. Children who are exposed to cigarette smoke, especially those exposed during the prenatal period, are more likely to have respiratory tract diseases, cancers, and other health issues. Also It is mainly admitted that the internet plays a major role in our life, but using it unlimited can affect a student psychologically and mentally.¹⁶

In the present study, the prevalence of internet addiction was 44.85%, 54.57%, and 0.75% as mild, moderate, and severe sequentially, which is in line with other studies among university students that showed a high level of internet usage in form of addiction pattern. A study conducted by Sayyah in Iran revealed a prevalence of 47.4% mild, and 38.1% moderate.¹⁷ Taha et al in Saudi Arabia noted that 57.9 % of students had moderate internet addiction.¹⁸ Sushma J et al in India found a prevalence of 58.2%, 19.5%, and 0.8% as mild, moderate, and severe internet addiction¹⁹ Pramanik et al in Nepal reported that 40%, 41.35%, and 3.07% were sorted as mild, moderate, and severe internet addiction.²⁰ Also, the current study aimed to assess cigarette smoking dependence among university students in Soran city, among students 40.86% were cigarette smoking dependent. This result is similar to studies among university students in Jordan 51.2%,²¹ Saudi

Arabia 47%,²² and the USA 45%.²³

Age concerning of other demographic characteristics in table 3 shows that there was no significant association between age groups and internet addiction levels, this result is similar to a cross-sectional study included 316 medical students done by Javaeed et al., 2020 in Pakistan who concluded that there were no significant association between age groups and internet addiction.²⁴ Results of current study is dissimilar from further studies which indicated that age is conversely related to internet addiction.²⁵

Concerning the relation between gender and internet addiction levels results of current study result was non significant which is similar to study done by Khan et al., 2017.²⁶ Several studies have achieved conflicting results. Shek et al., 2016 revealed that internet addictive behavior was persistently high for male gender.²⁷ Also a study conducted on internet addiction and mobile phones in college students of Taiwan found that female students were more addicted than male students.²⁸ The various results about gender differences and internet addiction can be belonged to numerous factors like cultural norms, wireless networking and individual habits.

Regarding GPA our study revealed that there is no significant association between internet addiction levels and academic performance this result is different from other studies done which showed that internet addiction had a significant impression on academic performance of the students.²⁹ Also results show no significant difference between the

level of Internet addiction and residency which is similar to study done by (Shehata. and Abdeldaim, 2021).³⁰

5. Conclusions

In today's world, internet technology is considered a powerful tool, as long as it is used after appropriate training to its full potential, but not to the extent that damages the physical and mental health of individuals. According to the finding of this study, the level of internet addiction was higher than cigarette dependence, few students had high cigarette dependence and severe internet addiction, recommendations includes public awareness about negative effects of both internet use and cigarette smoking, limitation of internet access and cigarette in public places and using screen time Apps will have a role in decreasing internet addiction.

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