






Article

Internet Addiction and Depression among Syrian College Students: A Cross-Sectional Study

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Citation: Swed, S.; Bohsas, H.; Alibrahim, H.; Rais, M.A.; Elsayed, M.; Nashwan, A.J.; Hasan, M.M.; Nour Nasif, M.; Sawaf, B.; Albuni, M.K.; et al. Internet Addiction and Depression among Syrian College Students: A Cross-Sectional Study. *Psychiatry Int.* **2023**, *4*, 275–285. <https://doi.org/10.3390/psychiatryint4030027>

Academic Editor: Paolo Girardi

Received: 15 June 2023

Revised: 25 August 2023

Accepted: 30 August 2023

Published: 1 September 2023



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Abstract: Background: Problematic internet use (PIU) or internet addiction has become increasingly prevalent, and concerns about its impact on mental health and social functioning have grown. This study aimed to investigate the prevalence of PIU among Syrian university students and its relationship with their demographics, internet user behavior, and mental health. Methods: A cross-sectional study was conducted among undergraduate medical students in Syrian government universities between 12 April and 29 May 2022. The survey included the Beck Depression Inventory and the Internet Addiction Scale. Results: Out of 2891 participants, 75.2% were female, with an average age of 21.87. The average Internet Addiction Test (IAT) score was 49.4, and the overall prevalence of PIU was 89%. Furthermore, 93.0% of participants displayed possible signs and symptoms of depression. PIU was significantly linked with physical abuse ($p = 0.001$) and mental stress ($p = 0.0001$). Internet addiction is (AOR:1.723, COR:2.289) fold more likely to occur in those with more than 8 h of sleep per night than in those who sleep for less than 6 h (p -value < 0.05). Unadjusted regression analysis showed that 13 predictors of the independent variables were statistically significant in predicting the presence of internet addiction, such as participants who suffered from a breakup (COR:2.039), domestic violence (COR:2.136), physical abuse (COR:2.190), or mental stress (COR:2.621) were more likely to be affected by internet addiction than those who did not (p -value < 0.05). Conclusions: The study found a high rate of internet addiction among Syrian medical students, with those experiencing mental health problems and depression symptoms more likely to be internet addicts. To prevent PIU, students should be encouraged to participate in extracurricular activities, such as sports, and awareness programs should be enhanced to highlight the negative effects of internet addiction.

Keywords: addiction disorder; internet; internet addiction; social media addiction; problematic internet use; medical students; Syria

1. Introduction

Internet addiction (IA) or problematic internet use (PIU) is defined as uncontrollable use of the Internet or significantly using the Internet as one of the necessities of life, causing stress and impairment when not using it [1]. However, as problematic internet use increased in prevalence, there were more worries about its effect on people's mental health and social function [2]. A European cross-sectional study showed that 14% to 55% of European internet users have PIU [3]. Another cross-sectional study revealed that IA among university students in Jordan was 40% [4]. Previous studies revealed a correlation between PIU and mental health illnesses such as insomnia, headache, and problems with sleep quality leading to learning, concentration, and memory problems, as well among students with internet addiction (17.2%); 51.7% were also identified as insomniacs [5,6]. Many observational studies have documented the relationship between PIU and depression among adults, especially students, which revealed a higher rate of inadequate sleep, irregular dietary habits, less physical activity, and suicidal thoughts. In addition, the overall prevalence of PIU was 17.6% and nearly 44% (95% CI: 39.9–48.8) of the participants exhibited PIU [7–9]. Although Facebook is one of the most popular social media applications, created in 2004, it allows people to connect more easily and upload their features, pictures, videos, and feelings and provides easier ways to get to know others. The most interactive category with the application is university students. According to statistics, there were 2.45 billion monthly active users worldwide by the end of 2019. Around 68% of American adults used Facebook in 2018, compared to 56% in Germany, 75% in Italy and Spain, 76% in France, 89% in Belgium, 79% in the Netherlands, and 85% in the United Kingdom [10–12]. A Pew Research Center survey of US adults mentions that some 88% of 18- to 29-year-olds indicate that they use any form of social media [11]. High rates of emotional discomfort have been reported among Damascus University medical students. Depression was ranked as the most frequent distress, with a frequency of 60.6%, while almost one in two medical students felt stressed (52.6%), and one in three medical students experienced anxiety symptoms (35.1%) [13]. Significant numbers of Syrian students have stigmatizing views toward depressed individuals. However, vast numbers of Syrian students are eager to interact with these individuals [14]. Previous research has indicated that the proportion of people with PIU is greater in low-income countries, and PIU has shown more prevalence among university students. However, the number of these studies is still small [15–17]. Even though recent studies have discussed this phenomenon, the number of these studies is still small, especially for the categories of university students, where we can see a significant rise in depression rates every year; therefore, this topic must be studied more with a concentration on university students to minimize the occurrence of this issue. This study aims to measure the correlation between depression and internet addiction, especially among Syrian college students on social media platforms like Facebook.

2. Methods

2.1. Study Strategy and Questionnaire Design

An online cross-sectional survey was carried out between 12 April and 29 May 2022 to evaluate people's knowledge of the connection between internet addiction and depression among students in Syrian universities. Students from government universities in Syria who were enrolled in undergraduate and graduate programs conducted this research (Damascus University, Tishreen University, Al-Baath University, Aleppo University, and Tartus University). The data was gathered using an online questionnaire distributed on social media platforms such as Facebook, WhatsApp, Twitter, and Telegram. The survey was developed using data from another study [8] and then translated and modified for Syrian locals. We employed convenience and snowball sampling methods to get the required data from the respondents. On the Google Forms website, a sample of 2904 Syrian students was asked to take the survey; however, 13 declined, bringing the total down to 2891.

2.2. Measures

The questionnaire is composed of 56 questions, divided into four sections, and on the first page, there was a question asking about agreeing to participate in this study.

2.2.1. Sociodemographic Variables

Age, gender, present address (city, rural region, or village), relationship status (single or in a relationship), experiences of breakup (yes, no, or not applicable), experiences of domestic abuse (binary variable), college (medical or non-medical) and separated parents are among the eight questions included in this assessment (binary variable).

2.2.2. Health, Behavioral, and Internet Activity Variables

This survey included seven questions that probed respondents' behaviors and lifestyles, collecting data on their average daily physical activity (defined as any activity that raised their heart rate for at least 30 min), average sleep duration (normally six to eight hours), and average weight [18]. Depressive symptoms, past drug use history, and smoking history (binary variables) [19]. Questions on educational internet use, online gaming, YouTube, chat rooms, online shopping, social media like Facebook, Twitter, and Instagram, and how often people use Facebook daily were among the internet-use variables.

2.2.3. Depression Prediction Scale

This survey has 21 questions to measure depressed symptoms, all confirmed in Bangladesh [20]. The depression prediction scale is based on the Beck Depression Inventory (BDI) scale [19]. The overall score, which ranged from 0 to 63, was calculated by adding the individual answer scores, which were categorized as normal from 0 to 4; borderline for depression from 5 to 13; moderate, representing likely moderate depression from 14 to 20; and probable severe depression from 21 to 63. The rating was comparable to that of research in Chinese [21] and Bangladesh [20]. The depression prediction scale based on the (BDI scale) has a Cronbach's alpha of 0.83 and a score of 14 [21] for the depression criterion. The BDI was created to predict the likelihood of depression based on reported symptoms rather than to provide an official diagnosis of a depressive illness since it is not a clinical diagnostic tool.

2.2.4. Internet Addiction Assessment Tool

The internet addiction assessment tool is based on the Internet Addiction Test (IAT), a self-reported tool designed to assess problematic internet use [22]. There are 20 Likert-type questions on the scale, ranging from 0 (never) to 5 (always). Individual answer scores were added to create total scores ranging from 0 to 100. Participants were divided into two "internet-usage" groups based on their IAT scores, classifying them as (PIU), with those scoring more than 50 and "non-PIU" for less than 50. This limit was established using the approach described in prior studies [7,23,24]. Previous research shows this scale has high reliability and validity [7,23,25,26].

2.3. Pilot Study

This questionnaire was conducted on 30 randomly selected members of the public to establish its applicability and comprehension. Then, improvements were made in response to participant comments. Furthermore, using 30 participants, we ran a pilot test to evaluate the reliability of the inquired scales in this study (internet addiction assessment scale and depression prediction scale). For both scales, Cronbach's alpha ranged from 0.712 to 0.861, indicating that the involved scales maintained a high internal consistency; the questionnaire was distributed once the pilot research was completed.

2.4. Sample Size

The minimum sample size was calculated using a single percentage of the population formula [$n = [(Z/2)^2 \cdot p(1 - p)/d^2]$]. A 50% population percentage (P), 5% error margin,

95% confidence interval ($Z/2 = 1.96$), and an extra 5% non-response rate were employed. The minimum sample size was found to be 385.

2.5. Statistical Analysis

The individuals' demographic characteristics were determined using descriptive statistics. The associations between PIU and other participant characteristics were investigated using chi-square analysis, Fisher's Exact Test, and a binary logistic regression model. The variance inflation factor was used to test for multicollinearity (VIF). The Hosmer–Lemeshow test was used to make the final model selection, and the Wald test was used to determine the significance of the variables. The odds ratios (OR) and associated 95% confidence intervals were calculated. Statistical significance was determined at the 0.05 level or below (2-tailed). Utilizing SPSS Windows version 28.0, results were examined.

3. Results

A total of 2904 individuals were invited to answer the survey, 13 of whom were refused participation, so the final number was 2891. The overall average score of the IAT scale was 49.40, with a standard deviation of 15.79 (Min = 0–Max = 100). The percentage of females was 75.2%, and the mean age of participants was 21.87 (SD = 3.211) years (Table 1). A total of 60.5% of participants were medical college students, and 39.5% were not. After omitting missing data regarding internet addiction (338), the sample size was set to 2553. The prevalence of PIU was 2281(89%) among all participants, and the cutoff score on the IAT was ≥ 50 . Only 8.9% were suffering from domestic violence. Approximately one-third (33.3%) of the participants have experienced a breakup. Also, 13.0% suffered from physical abuse. More than half of individuals (58.7%) reported sleeping 6 to 8 h each night. Most individuals (93.0%) showed signs and symptoms of possible depression; 21.3% of respondents said they did not use the Internet for education. There is a significant correlation between suffering from domestic violence and the existence of PIU ($p = 0.008$). Experiencing a breakup was also related to greater rates of PIU ($p = 0.0001$). PIU was strongly associated with physical abuse ($p = 0.001$) and feelings of mental stress ($p = 0.0001$). Those who used the Internet for non-educational purposes were substantially related to PIU ($p = 0.002$). Participation in online chat rooms was also significantly associated with the existence of PIU ($p = 0.0001$). The following behaviors were also shown to be substantially linked with the existence of PIU: online gaming ($p = 0.005$), watching YouTube videos ($p = 0.0001$), accessing social media ($p = 0.0001$), and downloading movie TV series ($p = 0.0001$) (Table 1).

Table 1. Distribution of sociodemographic, health, and behavioral characteristics and internet use behaviors of respondents.

				Internet Addiction Score				p-Value
				Non-PIU		PIU		
				Frequency 272	Percentage % 11%	Frequency 2281	Percentage % 89%	
Gender	Female	2173	75.2%	201	8.1%	1641	65.9%	0.975
	Male	718	24.8%	71	2.9%	577	23.2%	
Place of residence	City area	1845	63.8%	174	7.0%	1414	56.8%	0.943
	Village area	1046	36.2%	98	3.9%	804	32.3%	
Relationship status	Single	2428	84.2%	220	8.8%	1871	75.2%	0.127
	In a relationship	457	15.8%	52	2.1%	344	13.8%	
Age	Mean + SD	21.87 ± 3.211		22.58 ± 4.117		21.81 ± 3.004		0.258
	≤20 years	1033	35.7%	86	3.5%	778	31.2%	
	>20 years	1858	64.3%	186	7.5%	1440	57.8%	

Table 1. Cont.

		Frequency	Percentage %	Internet Addiction Score				p-Value
				Non-PIU		PIU		
				Frequency 272	Percentage % 11%	Frequency 2281	Percentage % 89%	
Domestic violence	No	2625	91.1%	259	10.4%	1996	80.4%	0.008
	Yes	256	8.9%	13	0.5%	214	8.6%	
Breakup (experienced a breakup)	No	613	21.3%	78	3.1%	448	18.0%	0.0001
	Yes	959	33.3%	66	2.7%	773	31.1%	
	Not applicable	1309	45.4%	128	5.2%	992	39.9%	
Separated parents	No	2658	93.0%	247	10.0%	2047	83.0%	0.412
	Yes	200	7.0%	22	0.9%	150	6.1%	
Smoking history	No	1979	68.6%	187	7.5%	1506	60.6%	0.680
	Yes	905	31.4%	83	3.3%	708	28.5%	
Physical abuse	No	2505	87.0%	252	10.2%	1896	76.5%	0.001
	Yes	373	13.0%	19	0.8%	313	12.6%	
Sexual abuse	No	2706	94.0%	260	10.5%	2065	83.3%	0.114
	Yes	173	6.0%	11	0.4%	144	5.8%	
Drug use	No	2867	99.4%	270	10.9%	2199	88.6%	0.609
	Yes	16	0.6%	2	0.1%	11	0.4%	
Feeling mental stress	No	798	27.7%	127	5.1%	558	22.4%	0.0001
	Yes	2087	72.3%	144	5.8%	1658	66.7%	
Suicidal attempt	No	2710	93.9%	261	10.5%	2065	83.1%	0.088
	Yes	175	6.1%	11	0.4%	149	6.0%	
Internet use for educational purposes	No	613	21.3%	38	1.5%	491	19.8%	0.002
	Yes	2263	78.7%	232	9.4%	1717	69.3%	
Using chat rooms	No	174	6.0%	31	1.2%	119	4.8%	0.0001
	Yes	2707	94.0%	241	9.7%	2091	84.2%	
Online gaming	No	2149	74.6%	222	8.9%	1630	65.6%	0.005
	Yes	733	25.4%	50	2.0%	581	23.4%	
Watching YouTube videos	No	308	10.7%	50	2.0%	216	8.7%	0.0001
	Yes	2572	89.3%	222	8.9%	1996	80.4%	
Online shopping	No	2044	70.8%	193	7.8%	1569	63.1%	0.976
	Yes	843	29.2%	79	3.2%	645	25.9%	
Using social media like Facebook, Twitter, and Instagram	No	192	6.7%	32	1.3%	136	5.5%	0.0001
	Yes	2687	93.3%	238	9.6%	2077	83.6%	
Movie and TV series downloading	No	849	29.5%	110	4.4%	609	24.5%	0.0001
	Yes	2031	70.5%	161	6.5%	1602	64.5%	
Are you a student in medical college?	No	1134	39.5%	112	4.5%	847	34.1%	0.335
	Yes	1740	60.5%	159	6.4%	1364	55.0%	
Average sleep	<6 h	357	12.4%	34	1.4%	280	11.2%	0.0001
	6–8 h	1696	58.7%	194	7.8%	1275	51.2%	
	>8 h	837	29.0%	44	1.8%	662	26.6%	
Depressive symptoms	No probable depression	174	7.0%	49	2.2%	106	4.7%	0.0001
	Probable depression	2328	93.0%	185	8.3%	1894	84.8%	

Adjusted and not adjusted binary logistic regression were performed to investigate the prediction association between the existence of PIU among the participants and other demographic variables (Table 2). In the regression-adjusted model for all covariates, out of twenty-four predictive factors of internet addiction, just seven variables (feeling mental stress, average sleep, depressive symptoms, internet use for educational purposes, using chat rooms, watching YouTube videos and movie and TV series downloading) were significant predictors of PIU in participants. Individuals who have mental stress are 1.952 times more likely to experience internet addiction than those who do not have mental stress (95%CI:1.404–2.715) ($p = 0.0001$). The probability of having an internet addiction is 2.721 times higher in individuals with depressive symptoms than in those without depressive symptoms (95%CI: 1.758–4.214) ($p = 0.0001$). People who use the Internet for educational purposes have a 0.544-fold increased risk of developing an internet addiction compared to those who do not (95%CI: 0.350–0.846) ($p = 0.007$). Internet addiction is 1.723 fold more

likely to occur in those with more than 8 h of sleep per night than in those who sleep for fewer than 6 h (95% CI:1.179–2.519, p -value: 0.005) (Table 2).

Table 2. Regression analysis of factors associated with PIU.

Variables	Categories	p -Value	Adjusted Odds Ratio		
				Lower	Upper
Age	(Ref.: ≤20 years)		1		
	>20 years	0.293	0.836	0.599	1.167
Gender	(Ref.: Female)		1		
	Male	0.658	1.085	0.756	1.558
Residence	(Ref.: City)		1		
	Rural	0.685	1.068	0.778	1.464
Relationship status	(Ref.: Single)		1		
	In a relationship	0.927	0.979	0.617	1.552
Breakup (experienced a breakup)	(Ref.: No)		1		
	Yes	0.124	1.420	0.908	2.221
	Not applicable	0.375	1.206	0.797	1.823
Domestic violence	(Ref.: No)		1		
	Yes	0.326	1.447	0.692	3.025
Separated parents	(Ref.: No)		1		
	Yes	0.354	0.756	0.418	1.367
Smoking history	(Ref.: No)		1		
	Yes	0.263	0.820	0.579	1.161
Physical abuse	(Ref.: No)		1		
	Yes	0.177	1.501	0.833	2.705
Sexual abuse	(Ref.: No)		1		
	Yes	0.571	1.238	0.591	2.594
Suicidal attempt	(Ref.: No)		1		
	Yes	0.887	1.061	0.471	2.389
Feeling mental stress	(Ref.: No)		1		
	Yes	0.0001	1.952	1.404	2.715
Drug addiction	(Ref.: No)		1		
	Yes	0.439	0.402	0.040	4.041
Sleep	<6 h	0.963	0.989	0.616	1.587
	(Ref.: 6–8 h)		1		
	>8 h	0.005	1.723	1.179	2.519
Are you a student in medical college?	(Ref.: No)		1		
	Yes	0.685	1.072	0.765	1.502
Depressive symptoms	(Ref.: No probable depression)		1		
	Probable depression	0.0001	2.721	1.758	4.214
Internet use for educational purposes	(Ref.: No)		1		
	Yes	0.007	0.544	0.350	0.846
Using chat rooms	(Ref.: No)		1		
	Yes	0.004	2.181	1.291	3.685
Online gaming	(Ref.: No)		1		
	Yes	0.085	1.409	0.954	2.083
Watching YouTube videos	(Ref.: No)		1		
	Yes	0.0001	2.077	1.381	3.124
Online shopping	(Ref.: No)		1		
	Yes	0.304	0.831	0.584	1.183
Using social media like Facebook, Twitter, and Instagram	(Ref.: No)		1		
	Yes	0.159	1.451	0.865	2.437
Movie and TV series downloading	(Ref.: No)		1		
	Yes	0.045	1.399	1.007	1.945

However, for the regression curve or unadjusted model, we found that thirteen predictors of the independent variables were statistically significant in the prediction of the presence of internet addiction, such as the participants who suffered from a breakup (COR: 2.039), domestic violence (COR: 2.136), physical abuse (COR: 2.190), or feel mental stress

(COR: 2.621) had a higher probability to be affected of internet addiction conduction rather than those who had none (p -value < 0.05) (Table 3).

Table 3. Unadjusted regression analysis of factors associated with PIU.

Variables	Categories	p -Value	Curve Odds Ratio	95% C.I. for COR	
				Lower	Upper
Age	(Ref.: ≤20 years)		1		
	>20 years	0.258	0.856	0.653	1.121
Gender	(Ref.: Female)		1		
	Male	0.975	0.995	0.747	1.326
Residence	(Ref.: City)		1		
	Rural	0.943	1.010	0.777	1.312
Relationship status	(Ref.: Single)		1		
	In a relationship	0.128	0.778	0.563	1.075
Breakup (experienced a breakup)	(Ref.: No)		1		
	Yes	0.0001	2.039	1.440	2.887
	Not applicable	0.052	1.349	0.997	1.827
Domestic violence	(Ref.: No)		1		
	Yes	0.010	2.136	1.202	3.795
Separated parents	(Ref.: No)		1		
	Yes	0.412	0.823	0.516	1.312
Smoking history	(Ref.: No)		1		
	Yes	0.680	1.059	0.806	1.392
Physical abuse	(Ref.: No)		1		
	Yes	0.001	2.190	1.353	3.543
Sexual abuse	(Ref.: No)		1		
	Yes	0.118	1.648	0.881	3.084
Suicidal attempt	(Ref.: No)		1		
	Yes	0.092	1.712	0.916	3.201
Feeling mental stress	(Ref.: No)		1		
	Yes	0.0001	2.621	2.026	3.389
Drug addiction	(Ref.: No)		1		
	Yes	0.611	0.675	0.149	3.063
Sleep	<6 h	0.253	1.253	0.851	1.845
	(Ref.: 6–8 h)		1		
	>8 h	0.0001	2.289	1.629	3.218
Are you a student in medical college?	(Ref.: No)		1		
	Yes	0.335	1.134	0.878	1.466
Depressive symptoms	(Ref.: No probable depression)		1		
	Probable depression	0.0001	4.733	3.267	6.856
Internet use for educational purposes	(Ref.: No)		1		
	Yes	0.002	0.573	0.401	0.819
Using chat rooms	(Ref.: No)		1		
	Yes	0.0001	2.260	1.489	3.430
Online gaming	(Ref.: No)		1		
	Yes	0.005	1.583	1.148	2.182
Watching YouTube videos	(Ref.: No)		1		
	Yes	0.0001	2.081	1.485	2.916
Online shopping	(Ref.: No)		1		
	Yes	0.976	1.004	0.761	1.325
Using social media like Facebook, Twitter, and Instagram	(Ref.: No)		1		
	Yes	0.001	2.053	1.366	3.087
Movie and TV series downloading	(Ref.: No)		1		
	Yes	0.0001	1.797	1.386	2.330

4. Discussion

Problematic and obsessive use of the Internet, sometimes known as “cyber addiction”, causes significant damage to a person’s ability to operate in numerous areas of their lives over an extended period; it is a relatively new phenomenon and is a recent field of research in mental health, particularly among the youth population. It seems to interact

with several individual and environmental factors [27]. Study participants' correlation between depression and internet addiction was the focus of this research. Our study had a population of 2891 young Syrian college students. Our findings show that 1414 out of 1845, that would be nearly 76% of city area residents have PIU. Its prevalence among single participants seems to be very high, at 75.2%. Also, findings report that 84.2% of participants with PIU use chat rooms, and 83.6% use social media applications; this could be a clear justification for its abuse and increased use among the young population. Furthermore, 84.8% of participants with PIU present probable depression symptoms. The findings did not report a clear correlation between internet addiction and suicide.

Overall, results show a relatively high prevalence of internet addiction among Syrian college students, with a significant correlation between depression symptoms and cyber addiction. This recognized disorder made psychologists argue that excessive internet use should be treated the same as other types of addiction [28]. Several factors can play a role in the development of PIU; one of the best known is underlying mental health conditions, including anxiety and depression. Environmental factors significantly affect PIU among young people [29]. Internet addiction is severe and can lead to restlessness, irritability, agitation, and anger. Furthermore, it will cause lower productivity, which may negatively affect the addicted person, the surrounding population, and society [30]. In Syria, despite the very high prevalence of internet addiction, there has been no formal government response to this issue. PIU and the inability to control the amount of time spent interfacing with digital technology must be considered an impulse mental illness and, therefore, require efficient management to help restore a balanced use of the Internet and everyday life [31]. Despite the lack of evidence-based therapies for internet addiction, cognitive-behavioral methods may be useful [32]. As suggested recommendations to prevent, detect, and manage internet addiction, targeted actions on modifiable factors, especially those affecting family interactions and environmental activities, would be beneficial. First, using external stoppers such as sports practice and hobby learning can be significantly effective in internet addiction management [33]. Also, marital and family therapy may be useful to reduce internet time as a family support system is critical in maintaining the intervention effect and fostering positive parent-adolescent relationship promotion [34]. In addition, internet addiction treatment dedicated to psychiatric centers seems to be mandatory in a few cases; this can provide complete, efficient management [35]. Depression or anxiety may be the fundamental cause of internet addiction. In this situation, medication to address the underlying disease may considerably enhance the treatment of the condition [36].

Finally, to summarize, during the last decade, the wide availability of the Internet and the adoption of new digital technologies such as smartphones have changed people's lifestyles and introduced new social dynamics, which resulted in internet addiction; this condition is considered a disorder and needs to be appropriately managed in order to avoid its consequences. Internet addiction seems to be widely shared among Syrian college students and therefore requires urgent intervention. Syrian authorities must organize prevention and treatment programs for this condition in order to reduce its high prevalence and raise awareness about its dangerousness and adverse outcomes [29–31].

5. Limitations

The cross-sectional study design utilized in this research was valuable and affordable, but it cannot establish causation. Moreover, due to the study's focus on Syrian medical students, it is possible that those students who required extended absences were not included, potentially leading to an underreporting of the prevalence of student internet addiction. However, the anonymous nature of the surveys also introduced the possibility of memory bias, as there was no way to contact participants after completing their questionnaires to verify their responses. Also, there is missing data on some questions as we did not include a choice within our online survey to force participants to answer all questions. Despite these limitations, several measures were taken to strengthen the research's internal validity. This included using validated instruments, accounting for possible confounders in the final

model, sampling from multiple study sites using universal techniques, and calculating the sample size a priori to ensure adequate statistical power. To mitigate potential biases in the online survey, investigators were involved in the data-gathering process, fabricated data were removed, and multi-auto responses were restricted.

6. Conclusions

Our research indicates that internet addiction (IA) or problematic internet use (PIU) is a pressing issue among Syrian medical students. This study also revealed that most participants with IA exhibited signs of depression. In addition, 80.4% with PIU watch YouTube videos, 66.7% with PIU feel mental stress, and 64.5% with PIU download movie TV series. Several variables, such as mental stress, sleep duration, depression, recent breakup, domestic violence, and physical abuse, may contribute to the development of Internet addiction, although no statistically significant association has been established between Internet addiction and suicide attempts. Further research is necessary to identify the underlying factors that cause IA and to develop effective prevention and intervention strategies.

Author Contributions: S.S. (Sarya Swed): Conceptualization, Data Curation, Methodology, Formal Analysis, Writing—Original draft and Writing—Review and Editing. H.B., H.A., M.A.R., M.E., A.J.N., M.M.H., M.N.N., B.S., M.K.A., E.B., R.A.K., S.S. (Shiekh Shoib): Writing—Review and Final Editing. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: This study has been approved by Aleppo and Damascus Universities' institutional review boards and ethical licensing committees (IRB: RK/22-017). Informed consent was obtained from all participants. All methods were performed in accordance with the Declaration of Helsinki.

Informed Consent Statement: Not applicable.

Data Availability Statement: The authors have made accessible and saved all the information needed to draw the conclusions in this research. Any legitimate request will result in access to all data from the corresponding author.

Acknowledgments: Data collection group: Sham Alholiby (Faculty of Medicine, Damascus University, Damascus, Syria); Raghad Daoud (Faculty of Medicine, Tishreen University, Latakia, Syria); Sally Edlby (Faculty of Medicine, Aleppo University, Aleppo, Syria); Salwa Bormo (Faculty of Medicine, Damascus University, Damascus, Syria); Ibrahim Mosab Kerawan Ibrahim Mosab (Faculty of Medicine, Damascus University, Damascus, Syria); Maram Dery (Faculty of Medicine, Aleppo University, Aleppo, Syria); Joudy Karh Damour (Faculty of Medicine, Aleppo University, Aleppo, Syria); and Mouhammed Sleiy (Faculty of Medicine, Hama University, Hama, Syria).

Conflicts of Interest: The authors declare no conflict of interest.

Ethics Approval and Consent to Participate: This study has been approved by Aleppo and Damascus Universities' institutional review boards and ethical licensing committees (IRB: RK/22-017). Informed consent was obtained from all participants. All methods were performed in accordance with the Declaration of Helsinki.

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