

DOI: 10.5455/msm.2023.35.334-338

Received: Nov 20 2023; Accepted: Dec 15, 2023

© 2023 Enkelejda Shkurti, Diamant Shtiza

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ORIGINAL PAPER

Mater Sociomed. 2023; 35(4): 334-338

Internet Addiction in Undergraduate Students of the University of Medicine in Tirana, Albania

Enkelejda Shkurti, Diamant Shtiza

¹University of Medicine,
Tirana, Albania

Corresponding author:
Enkelejda Shkurti,
Ass.Prof, Faculty of
Technical Medical
Sciences, University
of Medicine, Address:
Rr; Dibres nr 371,
Phone:+355692800086.
E-mail: enkeleda.
shkurti@umed.edu.al.
ORCID ID :0000-0002-
3338-8393.

ABSTRACT

Background : The usage of the internet amid university students and has increased significantly. Internet dependence between university students rises the hazard of adverse mental, somatic, economic concerns. **Objective:** The objective of our study is to determine the prevalence and aspects related to internet dependence amid university students in the University of Medicine in Tirana, Albania. **Methods:** This cross-sectional study was held in June-August 2022 at University of Medicine in Tirana, Albania. By using Internet Addiction Test (IAT) we collected data on respondents' social-demographic features, internet use rehearsals, observed mental status and interactive bond of participants. **Results:** From 405 students who delivered their whole reply, we found that the prevalence of Internet Dependence is 109(27.65%). Regarding the gender the majority of the participants were females 275 (67.91%). Prior to the field of study the nursing students involved the larger part of the respondents 177 (43.7%). 234 (57.77%) of the students reported to have a middle economic status. **Conclusion:** Almost twenty eight percent of medical university students in Albania depend on the internet. Internet dependence is correlated with applying the internet at the university, using more time on the internet per day, and spending the internet for social media. More surveys are required to regulate the load of psychological issues related to internet dependence in high-risk populations.

Keywords: Internet addiction, university students, Albania.

1. BACKGROUND

Internet dependence is one of the rising addictive comportment and is a substantial public health issue, upsetting a huge number of individuals globally (1). Recurring usage of the internet leads to extreme use, typically named as internet addiction or challenging internet custom (2-6). Internet addiction is a psychosomatic dependence on the internet related to extreme use, removal, tolerance, negative consequences/struggle, longing, and attitude alteration (1, 7, 8).

The usage of the internet amid university students and has increased significantly (8-10). Internet dependence between university students rises the hazard of adverse mental, somatic, economic concerns (11, 12).

These comprise suicide, psychosomatic distress, nervousness, violence, low academic presentation, absence of sleep, visual and hearing damage, social seclusion, Etc (13.18).

Challenging internet use is described as the "incapacity to end Internet abuse, a trend to recognize offline time with no meaning, unnecessary anger, and violence through withdrawal" and can be also defined as Internet addiction or compulsive Internet use (19, 20).

Regarding of the current literature, it was assumed that challenging Internet use would have a adverse effect on the educational performance of college students (21, 22). It has been observed that the incidence rate of tricky Internet use amid college students varies from 0.8% to 47.7% (23-31).

Medical students may undergo psychological suffering prior to their challenging educational responsibilities (30). Furthermore, students changing the school system from high school to medical university may face

Characteristics	N (%)
Age	
<20 years old	180(44.4%)
≥20 years old	225(55.6%)
Gender	
Male	130(32.09%)
Female	275(67.91%)
Residence	
Urban	168(41.48%)
Rural	237(58.52%)
Field of study	
Nursing	177 (43.7%)
Midwifery	42 (10.4%)
Physiotherapy	23 (5.7%)
Laboratory technician	18 (4.4%)
Speech therapist	18 (4.4%)
Medicine	63 (15.6%)
Dentistry	356 (8.6%)
Pharmacy	29 (7.2%)
Family income status	
Low	156 (38.51%)
Middle	234 (57.77%)
High	15 (3.72%)

Table 1. Socio-demographic profile of the participants (N=405)

a diversity of problems and dangerous comportments, such as, depression, exhaustion or anxiety (31, 32).

Globally, the prevalence of internet dependence has been appraised at 6%, taking into account that nearly 39% of the world population has internet admission. It appears to be a noteworthy difference in rates of internet dependence among countries (33).

The risky use of internet demonstrated the addictive comportment of the internet consumption (34). Physical injuries such as insomnia (26.8%), daytime drowsiness (20%), and eye pressure (19%) were stated amid consumers (35). Today's medical students are prospect doctors who will work for society; if they have a societal media dependence, it will delay both their ability to perform everyday duties, and their education progression.

2. OBJECTIVE

The objective of our study is to determine the prevalence and aspects related to internet dependence amid university students in the Faculty of Technical Medical Sciences in Tirana, Albania.

3. MATERIAL AND METHODS

This cross-sectional study was held in June-August 2022 at the University of Medicine in Tirana, Albania.

We used a self-administered questionnaire to collect the data. The questionnaire gathered evidence on respondents' social-demographic features, internet use rehearsals, observed mental Status and interactive bond of participants. The survey was in English, to reply in about 15–20 min about problematic Internet use, which was collected by using Internet Addiction Test (IAT) The questionnaire consisted of sections where socio-demographic information, second of behavioral factors

Internet use practices	Frequency/Percentage
Technique of internet access	
Wi-Fi at university	7 (0.74 %)
Mobile data	124 (30.61 %)
Both	274 (68.65%)
Time spent in internet per day	
≤ thirty min	63(15.6 %)
30-60 min	89(22.0 %)
One-two hours	106(28.2 %)
Two-three hours	69(17.0 %)
≥ Three hours	78(19.3 %)
Use of internet for education	
Yes	248(61.23%)
No	157(38.77 %)
Use of internet for social media	
Yes	270 (66.67%)
No	135(33.33%)
Time of visiting social media	
In leisure time	290 (71.6 %)
Between school-work	7(1.8 %)
During lunchtime	2(7.3%)
Every moment	78(19.3%)

Table 2. Internet use practices (N=405)

related to the internet use, and perceived psychological status and interpersonal relationship, and Internet Addiction Test (IAT).

Descriptive statistics (mean, median, frequency, and percentage) were used to summarize data and the results were reported using frequencies, percentages, charts, and tables. Bivariate and multivariate logistic regression analysis was conducted to identify factors associated with problematic Internet use and statistical significance was considered at P value <0.05 .

Inclusion and Exclusion Criteria. Registered undergraduate medical university students of 18 years currently enrolled at any course of Faculty of Technical Medical Sciences University, Tirana, Albania were qualified to be involved in this study and delivered their informed approval.

This study was approved by the Ethical committee of the University of Medicine Tirana, Albania.

4. RESULTS

A total of 400 undergraduate students of the Faculty of technical Sciences of Tirana, Albania participated in our study. From 405 students who delivered their whole reply, we found that the prevalence of Internet Dependence is 109 (27.65%).

Socio-demographic profile of respondents

The mean age of the undergraduate students who took part in the study was 19.62 ± 1.8 years. Regarding the gender the majority of the participants were females 275 (67.91%). Prior to the field of study the nursing students involved the larger part of the respondents 177 (43.7%). 234 (57.77%) of the students reported to have a middle economic status (Table 1).

Internet Use-Linked features of participants

Referring to the method of internet access 274 (68.65

Characteristics	N (%)
Observed stress	
Presence	101 (24.9 %)
Absence	304 (75.1%)
Observed self-esteem	
Presence	94 (23.2%)
Absence	311 (76.8)
Connectionwith parents	
Wonderful	226 (65.7%)
Good	82 (20.24%)
Satisfactory	97 (14.06%)
Parental control over internet use	
Not at all	93 (22.97%)
Sometimes	220 (54.32%)
Often	92 (22.71%)

Table 3. Psychosocial and behavioral related characteristics of students

%) of the students stated to use both Wi-Fi at university and mobile data. In relation with time spent in internet per day almost a quarter of the respondents 106 (28.2 %) observed that they spent more than one-two hours. About consuming internet for education 248 (61.23%) reported to use it for this objective. Concerning the use of internet for social media 270 (66.67%) confirmed to use it for this reason. Regarding the time of visiting social media 290 (71.6 %) mentioned to use it during leisure time while 78(19.3%) every moment (Table 2).

5. DISCUSSION

It is observed that the prevalence of internet dependence in this study group was 27.65 % which was sustained by a met-analysis related to prevalence of Internet addiction in undergraduate medical university students in dissimilar states, which was 30.1% [36]. Additionally, a study performed between university students in Ethiopia was found to be 29.4% moderate to severe Internet Addiction (37). A different study held amid youngsters in Bangladesh showed that the prevalence of Internet dependence was 27.1%, [38] and virtual study of challenging Internet consumption (PIU) between medical students of Nepal discovered the prevalence of PIU to be 31.9% (39).

An indistinctly greater prevalence (37%) was described in Malaysia and Iraq (40, 41). In addition to 40.7 % in Iran (42). Disparities in prevalence could be prior to alterations in the instruments used. For example, a survey in Iraq applied an 8-item scale as faced to the 20-item scale applied in this study. Greater prevalence may similarly be endorsed to internet admittance by means of individual devices, taking into account that over 70% of all participants in this study used the internet through mobile devices.

This study showed that the prevalence of challenging Internet use was 1.58 times upper in males compared to females .This outcome is sustained by studies performed in Egypt (43) and Iran (44). The probable explanation for this solid correlation could be clarified by the detail that males are more expected than females to have a great level of network awareness and likewise the point that

men obtain less parental management and they apply the Internet for amusement compared to women (45, 46).

University students who stated using the internet for social media were more probably to be keen on the internet compared to those who used it for educational objectives. This conclusion coincides with further studies (47, 48). The students could, consequently, be devoting less time virtually in educational activities, that may influence their educational efficiency, that rises the hazard of psychological and somatic results.

Although the present study has delivered a summary of the recent status of the internet dependence amid medical university students in Albania, it has numerous limitations. Initially, our study applied a cross-sectional design that does not permit presenting an implication on the cause-effect association of internet dependence and related features.

Furthermore, the study might have neglected students who were harshly dependent on the internet as they are more expected to fail lessons. The instrument used for data gathering is a self-reported degree to evaluate internet dependence and subject to a possible data bias. Finally, these outcomes may not be generalized to students in additional universities or the overall population through the country.

6. CONCLUSION

Almost twenty eight percent of medical university students in Albania depend on the internet. Internet dependence is correlated with applying the internet at the university, using more time on the internet per day, and spending the internet for social media. The university management should put energy into cultivating the availability, consistency, and guidelines of university internet facilities that may stimulate learning, and educational output. We also endorse awareness on generating interference about the dangerous concerns of unnecessary internet use in this category of population. More surveys are required to regulate the load of psychological issues related to internet dependence in high-risk populations. Additionally, to apprise policy resolutions and involvements, there is a requisite to strengthen research studies on mental health problems in Albania.

- **Patient Consent Form:** All participants were informed about subject of the study.
- **Author's Contribution:** E.Sh and D.Sh. gave substantial contributions to the conception or design of the work in acquisition, analysis, or interpretation of data for the work. E.Sh and D.Sh had a part in article preparing for drafting or revising it critically for important intellectual content. E.Sh and D.Sh gave final approval of the version to be published and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.
- **Conflicts of interest:** There are no conflicts of interest.
- **Financial support and sponsorship:** None.

REFERENCES

1. WHO. Public health implications of excessive use of the internet, computers, smartphones and similar electronic devices: meeting report, Main Meeting Hall, Foundation for Promotion of Cancer Research, National Cancer Research Centre, Tokyo, Japan, 27-29 August 2014. Geneva: World Health Organization; 2015.
2. Islam S, Malik MI, Hussain S, Thursamy R, Shujahat M, Sajjad M. Motives of excessive internet use and its impact on the academic performance of business students in Pakistan. *J Subst Abus.* 2018; 23(1): 103–111.
3. Kuss JD, Griffiths MD, Karila L, Billieux J. Internet addiction: a systematic review of epidemiological research for the last decade. *Curr Pharm Des.* 2014; 20(25): 4026–4052.
4. Derbyshire KL, Lust KA, Schreiber LRN, Odlaug BL, Christenson GA, Golden DJ, Grant JE. Problematic internet use and associated risks in a college sample. *Compr Psychiatry.* 2013; 54(5): 415–422.
5. Salehi M, Khalili MN, Hojjat SK, Salehi M, Danesh A. Prevalence of internet addiction Mashhad, Iran in 2013. *Iran Red Crescent Med J.* 2014; 16(5): e17256.
6. Thatcher A, Goolam S. Defining the south African internet 'addict': prevalence and biographical profiling of problematic internet users in South Africa. *S Afr J Psychol.* 2005; 35(4): 766–792.
7. Mercy ON, Oluwatosin BO. Internet addiction among undergraduates in University of Ibadan: imperative for counselling intervention. *Afr J Psychol Stud Soc Issues.* 2015; 18(3): 1–14.
8. Kandell JJ. Internet addiction on campus: the vulnerability of college students. *Cyberpsychol Behav.* 1998; 1(1): 11–17.
9. Ching SM, Hamidin A, Vasudevan R, Sazlyna M, Wan Aliaa W, Foo YL, Yee A, Hoo F. Prevalence and factors associated with internet addiction among medical students—a cross-sectional study in Malaysia. *Med J Malaysia.* 2017; 72(1): 7.
10. Babakr ZH, Majeed K, Mohamedamin P, Kakamad K. Internet addiction in Kurdistan university students: prevalence and association with self-control. *Eur J Educ Res.* 2019; 8(3): 867–873.
11. Lee S-Y, Kim MS, Lee HK. Prevention strategies and interventions for internet use disorders due to addictive behaviors based on an integrative conceptual model. *Curr Addict Rep.* 2019; 6(3): 303–312.
12. Cash H, Rae CD, Steel AH, Winkler A. Internet addiction: a brief summary of research and practice. *Curr Psychiatr Rev.* 2012; 8(4): 292–298.
13. Mei S, Gao T, Li J, Zhang Y, Chai J, Wang L, Zhang Z, Zhang H. Internet addiction in college students and its relationship with cigarette smoking and alcohol use in North-east China. *Asia Pac Psychiatry.* 2017; 9(4). [https:// doi. org/10.1111/appy.12281](https://doi.org/10.1111/appy.12281).
14. Anand N, Jain PA, Prabhu S, Thomas C, Bhat A, Prathyusha P, Bhat SU, Young K, Cherian AV. Internet use patterns, internet addiction, and psychological distress among engineering university students: a study from India. *Indian J Psychol Med.* 2018; 40(5): 458.
15. Missaoui SG, Brahim T, Bouriga W, Abdelaziz AB. Prevalence and consequences of internet addiction in a cohort of Tunisian adolescents: a pilot study. *J Child Adolesc Behav.* 2015; 3: 2375–4494.
16. Salubi OG, Nekhwevha F, Oyediran-Tidings S, Ondari-Okemwa E. Digital media usage and prevalence of internet addiction among undergraduate students in South Africa. *Int J Web Appl.* 2019; 10(4): 127–136.
17. Upadhayay N, Guragain S. Internet use and its addiction level in medical students. *Adv Med Educ Pract.* 2017; 8: 641–647.
18. Tran BX, Hinh ND, Nguyen LH, Le BN, Nong VM, Thuc VTM, Tho TD, Latkin C, Zhang MW, Ho RC. A study on the influence of internet addiction and online interpersonal influences on health-related quality of life in young Vietnamese. *BMC Public Health.* 2017; 17(1): 138.
19. Greydanus DE, Greydanus MM. Internet use, misuse, and addiction in adolescents: current issues and challenges, *International Journal of Adolescent Medicine and Health,* 2012; 24(4): 283–289.
20. Widyanto L, Griffiths M. Internet addiction: a critical review, *International Journal of Mental Health and Addiction.* 2006; 4(1). 31–51.
21. Ahangarzadeh Rezaei S, Moradi Y. Internet addiction study at Urmia university students medical sciences, *Nursing And Midwifery Journal.* 2015; 13(5): 434–439.
22. Hazrul SS, Nik Hashim NM, Ahmad M, Che Wel A, Nor SM, Omar NA. Negative and positive impact of internet addiction on young adults: emperical study in Malaysia, *Intangible Capital.* 2014; 10(3): 619–638.
23. Lin MP, Ko HC, Wu JYW. Prevalence and psychosocial risk factors associated with Internet addiction in a nationally representative sample of college students in Taiwan, *Cyberpsychology, Behavior, and Social Networking,* 2011; 14(12); 741–746,
24. Fernandez-Villa T, Ojeda JA, Gomez AA, Carral J, Cancela M, Delgado-Rodriguez M. Problematic internet use in university students: associated factors and differences of gender, *Adicciones,* 2015; 27(4).
25. Kim YJ, Kim DJ, Choi JS. The cognitive dysregulation of Internet addiction and its neurobiological correlates, *Frontiers in Bioscience,* 2017; 9; 307–320,
26. Niemz K, Griffiths M, Banyard P. Prevalence of pathological Internet use among university students and correlations with self-esteem, the General Health Questionnaire (GHQ), and disinhibition, *CyberPsychology and Behavior,* 2005; 8(6); 562–570,
27. Morahan Martin J, Schumacher P. Incidence and correlates of pathological Internet use among college students, *Computers in Human Behavior,* 2000 ; 16(1); 13–29.
28. Yu L, Shek DTL. Internet addiction in Hong Kong adolescents: a three-year longitudinal study, *Journal of Pediatric and Adolescent Gynecology,* 2013; 26(3); S10–S17.
29. Tateno M, Teo AR, Shiraishi M, Tayama M, Kawanishi C, Kato TA. Prevalence rate of Internet addiction among Japanese college students: two crosssectional studies and reconsideration of cut-off points of Young's Internet Addiction Test in Japan, *Psychiatry and Clinical Neurosciences,* 2018; 72(9); 723–730.
30. Masters K, Loda T, Tervooren F, Herrmann Werner A. How have researchers acknowledged and controlled for academic work activity when measuring medical students' internet addiction? A systematic literature review, *International Journal of Environmental Research and Public*

- Health, 2021; 18(14); 7681.
31. Khayat MA, Qari MH, Almutairi BS. Sleep quality and internet addiction level among university students, *The Egyptian Journal of Hospital Medicine*, 2018; 73(7); 7042–7047.
 32. Marahatta S, Adhikari B, Aryal N, Regmi R. Internet addiction and associated factors among health sciences students in Nepal, *Journal of Community Medicine and Health Education*, 2015; 5(4); 6–10.
 33. Hull M, Proulx DA. Internet addiction facts and statistics, *The Recovery Village*, Umatilla, FL, USA, 2022.
 34. Balhara YS, Mahapatra A, Sharma P, Bhargava R. Problematic internet use among students in South-East Asia: current state of evidence, *Indian Journal of Public Health*, 2018; 62(3); 197–210.
 35. Khazaie H, Lebni JY, Abbas J. Internet addiction status and related factors among medical students: a cross-sectional study in western Iran, *International Quarterly of Community Health Education*, 2021; 15.
 36. Zhang MWB, Lim RBC, Lee C, Ho RCM. Prevalence of Internet addiction in medical students: a meta-analysis, *Academic Psychiatry*, 2018; 42(1); 88–93.
 37. Zenebe Y, Kunno K, Mekonnen M. Prevalence and associated factors of internet addiction among undergraduate university students in Ethiopia: a community university study, *BMC Psychol*, 2021; 9(1).
 38. Hassan T, Alam MM, Wahab A, Hawlader MD. Prevalence and associated factors of internet addiction among young adults in Bangladesh, *Journal of the Egyptian Public Health Association*, 2020; 95(3); 8.
 39. Sharma P, Shakya R, Singh S, Balhara YPS. An online survey of problematic internet use and its correlates among undergraduate medical students of Nepal, *Neurology Psychiatry and Brain Research*, 2020; 37; 95–99.
 40. Ching SM, Hamidin A, Vasudevan R, Sazlyna M, Wan Aliaa W, Foo YL, Yee A, Hoo F. Prevalence and factors associated with internet addiction among medical students—a cross-sectional study in Malaysia. *Med J Malaysia*. 2017; 72(1): 7.
 41. Babakr ZH, Majeed K, Mohamedamin P, Kakamad K. Internet addiction in Kurdistan university students: prevalence and association with self-control. *Eur J Educ Res*. 2019 ; 8(3); 867–873.
 42. Bahrainian SA, Alizadeh KH, Raeisoon MR, Gorji OH, Khazaei A. Relationship of internet addiction with self-esteem and depression in university students. *J Prev Med Hyg*. 2014; 55(3); 86–89.
 43. Park SK, Kim JY, Cho CB. Prevalence of Internet addiction and correlations with family factors among South Korean adolescents, *Adolescence*, 2008; 43(172); 895–909.
 44. Yen JY, Yen CF, Chen CC, Chen SH, Ko CH. Family factors of Internet addiction and substance use experience in Taiwanese adolescents, *CyberPsychology and Behavior*, 2007; 10(3); 323–329.
 45. Anand N, Jain PA, Prabhu S, Thomas C, Bhat A, Prathyusha P, Bhat SU, Young K, Cherian AV. Internet use patterns, internet addiction, and psychological distress among engineering university students: a study from India. *Indian J Psychol Med*. 2018; 40(5): 458.
 46. Young K, Cherian AV. Internet use patterns, internet addiction, and psychological distress among engineering university students: a study from India. *Indian J Psychol Med*. 2018; 40(5): 458.
 47. Kumar A, Nawaz AS, Kumar R, Yamuna B. Internet addiction and associated factors: a cross-sectional study among students of a medical college in Davangere, Karnataka. *Int J Community Med Public Health*, 2017; 4(7): 2525.
 48. Bhushan S, Piplani S, Tekkalaki BV. Internet addiction and performance of health science students. *Int J Community Med Public Health*. 2018; 5(9): 3824.