



## Original Research Article

# TO STUDY ON INTERNET ADDICTION AMONG UNIVERSITY STUDENTS: A CROSS-SECTIONAL ANALYSIS OF THE FREQUENCY AND CAUSES

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**ABSTRACT**

**Background:** A growing number of people, particularly those in higher education, are developing unhealthy habits related to excessive use of the internet for purposes such as learning, socialising, and pleasure. Finding out how common internet addiction is among college students and what causes it was the primary goals of this research.

**Materials and Methods:** This cross-sectional survey, which was conducted over a three-month period among students at Department of Psychiatry, Andhra Medical College, Visakhapatnam, India was carried out with the necessary approval from the institutional ethics committee. This study was conducted between October 2023 to September 2024. Participants were selected using stratified random sampling.

**Results:** The study included 500 participants in total. Among them, 160 showed no signs of being addicted to the internet at all, 230 were slightly addicted, 100 were moderately addicted, and 10 were severely addicted. Higher rates of IA were shown to be connected with factors such as being male, living in an urban area, having access to personal electronic devices, and having a heavier academic workload. There was a statistically significant correlation between IA and students who reported experiencing symptoms of anxiety, despair, or poor sleep quality. The two most prevalent activities linked to heavy internet use are social media and online gaming.

**Conclusion:** Findings from the study stress the necessity for focused treatments to combat the alarmingly high rate of internet addiction among university students. Academic pressure, socio-demographic issues, and psychological considerations all have a substantial impact on IA.

**Keywords:** Prevalence, factors, internet addiction, college students.

## INTRODUCTION

The internet has transformed people's communication, information access, and day-to-day lives in the digital era, making it an integral component of daily life. Despite its indisputable advantages, internet addiction (IA) has emerged as a major public health concern due to the exponential growth of internet usage.<sup>[1-3]</sup> When one's social, intellectual, or occupational functioning is negatively impacted due to an excessive or poorly regulated fixation on using the internet, it is considered an internet addiction. College students are at a higher risk of developing an addiction to the internet than the general population because of their immaturity,

academic dependence on online resources, and ease of access to technology.<sup>[2-4]</sup> On top of that, many can't imagine their lives without the internet because of how it facilitates communication, entertainment, and education. However, negative outcomes, including as declines in academic performance, interpersonal difficulties, and mental health, may result from excessive use.<sup>[3-5]</sup>

Reports of internet addiction among college students range from 2% to 50% across different populations, regions, methodologies, and diagnostic criteria. This variation underlines the importance of conducting contextualised studies to have a better grasp of the problem's scope. Peer pressure, academic strain, socioeconomic level, and psychological variables

including stress, anxiety, and depression are among the environmental and social factors that have been linked to internet addiction.<sup>[4-6]</sup>

India is one of the world's most populous and rapidly developing internet markets, and its youth in particular are experiencing a golden era of internet use. There is an immediate need to determine how common internet addiction is among Indian college students and what variables contribute to it in light of this trend. If we want to create interventions that will lessen the impact of internet addiction, we must first understand these processes.<sup>[5-7]</sup> This study intends to fill that void by using a cross-sectional analysis to learn how common internet addiction is among university students and what causes it. This research aims to help educators, politicians, and healthcare professionals design focused preventative and intervention methods by revealing the interplay between behavioural patterns, psychological characteristics, and socio-environmental effects.<sup>[6-8]</sup> The purpose of this research is to find out how common internet addiction is among university students. Examine the correlation between internet addiction and variables including socio-demographics, mental health, and academic achievement. The goal is to find out what makes some pupils more likely to become addicted to the internet. Insights from this study will add to the existing literature on internet addiction and guide efforts to combat this new public health crisis among young adults.<sup>[7-9]</sup>

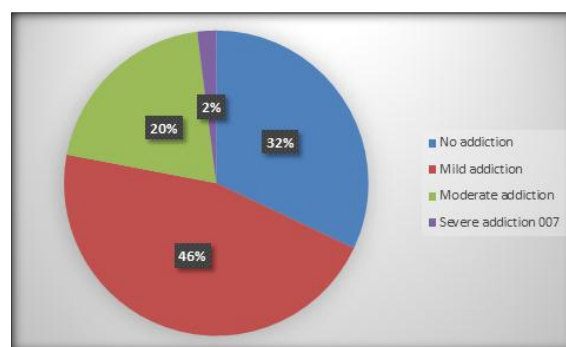
## MATERIALS AND METHODS

This cross-sectional survey, which was conducted over a three-month period among students at Department of Psychiatry, Andhra Medical College, Visakhapatnam, India was carried out with the necessary approval from the institutional ethics committee. This study was conducted between October 2023 to September 2024. Participants having a history of significant disease or psychiatric issues were excluded from the experiment, but those above the age of 18 who provided the required written consent were allowed to participate. Five hundred

children who met the inclusion and exclusion criteria took part in the study.

## RESULTS

In total, there were five hundred students that participated in the study. The prevalence of internet addiction among the individuals who took part in the research is illustrated in Table 1 and Figure 1, respectively. The sample consisted of 500 individuals, 160 of whom did not exhibit any signs of being addicted to the internet, 230 of whom were moderately addicted, 100 of whom were significantly addicted, and ten of whom were terribly addicted. [Table 1]



**Figure 1: Subjects' Internet addiction distribution**

Table 2 presents a comparison of individuals with addiction and those without, focussing on sociodemographic and other characteristics. A statistically significant gender gap was observed regarding internet addiction. [Table 2]

Students hailing from urban environments demonstrated a markedly increased propensity for addiction when contrasted with those from rural settings. Students who were perceived to have undergone an authoritarian parenting style showed a higher likelihood of developing internet addiction in comparison to those raised in a permissive environment, while those with authoritative parenting demonstrated the lowest tendency for this addiction. A notable difference was observed when analyzing the groups in relation to the type of parental involvement with their children.

**Table 1: Subjects' Internet addiction distribution**

Sr. No.	Addiction	Number
1.	No addiction	160
2.	Mild addiction	230
3.	Moderate addiction	100
4.	Severe addiction 007	10
	Total	500

**Table 2: Comparing internet addiction to sociodemographic factors**

	Gender		
	No addiction	Mild	Moderate to severe
Male	45	112	101
Female	120	103	19
Rural	Background		
	65	110	100

Urban	100	105	20
<b>Place of stay</b>			
Hostel	60	115	95
Day scholar	105	100	25
<b>Socio-economic status</b>			
Lower	100	101	80
Middle	45	90	19
Upper	20	24	21

## DISCUSSION

This study sought to explore the prevalence of internet addiction in college students and to pinpoint the factors that contribute to its emergence. The results of this study offer essential understanding of the behavioural patterns, socio-demographic traits, and psychological influences linked to IA, especially within the framework of a developing economy such as India, where digital adoption is expanding rapidly.<sup>[9-11]</sup>

The research has been finalised with the involvement of five hundred students. The prevalence of internet addiction among the participants in the study varied significantly. A total of 500 individuals participated in the study. Among the individuals studied, 160 showed no signs of online addiction, 230 exhibited a mild addiction, 100 demonstrated a moderate addiction, and 10 were classified as having a severe addiction to the internet.<sup>[12-14]</sup>

The findings indicated that 28% of college students displayed symptoms of internet addiction, with 15% categorised as having moderate IA and 3% as experiencing severe IA. This prevalence corresponds with the global variation in IA rates among students, which have been reported to range from 2% to 50%, influenced by cultural, geographical, and methodological differences.<sup>[15-17]</sup> The findings of this study reveal a notable prevalence that underscores the growing reliance on digital technology among Indian youth, influenced by the extensive use of smartphones, accessible internet services, and the incorporation of online platforms into both educational and social contexts.<sup>[16-18]</sup>

Significant associations were observed between key socio-demographic factors, including male gender and urban residence, and higher prevalence of IA. It appears that males frequently exhibit a heightened inclination towards online activities, including gaming and social media, which could account for this observed trend. Students in urban areas, benefiting from increased access to personal devices and high-speed internet, tend to exhibit higher tendencies towards problematic usage patterns. Additionally, the findings indicated a positive correlation between increased academic demands and internet addiction, implying that students might seek online activities for relaxation or delay, which could unintentionally promote addictive tendencies.<sup>[19-21]</sup>

Psychological distress, such as anxiety, depression, and inadequate sleep quality, was identified as important predictors of IA. The results align with previous research suggesting a two-way connection

between mental health issues and excessive internet use. Individuals experiencing anxiety or depression might turn to the internet as a means of escape; however, overuse can worsen these conditions by interfering with sleep and diminishing in-person social connections. Furthermore, it was noted that online activities like social media engagement and gaming play significant roles, highlighting the enticing and immersive characteristics of these platforms that frequently encourage compulsive participation.<sup>[22-24]</sup>

The investigation highlights the critical necessity for initiatives aimed at addressing IA within the college student population. Programs aimed at raising awareness must be crafted to inform students about the dangers associated with excessive internet usage and to encourage the development of healthy online practices. Support services in educational settings can significantly impact the psychological dimensions of IA, providing assistance for students facing challenges such as anxiety, depression, or academic stress. Implementing policy measures, like restricting screen time and incorporating digital literacy into educational programs, can assist students in cultivating a well-rounded perspective on internet use. Oversight from parents and institutions regarding screen usage can prove advantageous, especially for younger students making the shift to college life.<sup>[25-27]</sup>

This study presents specific limitations that must be taken into account when analysing the results. The cross-sectional design limits the ability to determine causal relationships between IA and its related factors. Furthermore, self-reported data can be influenced by response biases, which may lead to either underreporting or over-reporting of internet usage.<sup>[26-28]</sup> Future investigations should concentrate on longitudinal studies to examine the temporal dynamics of IA and its predictors. Moreover, qualitative studies can offer more profound understanding of students' perceptions and experiences related to internet usage.<sup>[27-29]</sup>

## CONCLUSION

This study's findings emphasise the complex characteristics of internet addiction in college students, shaped by various socio-demographic, academic, and psychological factors. In light of the expanding digital environment, tackling IA necessitates a cooperative approach that includes educators, mental health experts, policymakers, and families. By promoting a culture of balanced internet

use, we can reduce the negative effects of IA and improve the overall well-being and productivity of young adults.

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## REFERENCES

1. Kuss DJ, Griffiths MD. Internet addiction: A systematic review of epidemiological research for the last decade. *Curr Pharm Des.* 2015;20(25):4026–52.
2. Balhara YP, Mahapatra A, Sharma P, Bhargava R. Problematic internet use among students in South-East Asia: Current state of evidence. *Indian J Public Health.* 2018;62(3):197–210.
3. Lin MP, Ko HC, Wu JY. Prevalence and psychosocial risk factors associated with internet addiction in a nationally representative sample of college students in Taiwan. *Cyberpsychol Behav Soc Netw.* 2011;14(12):741–6.
4. Montag C, Diefenbach S, Lachmann B. Addictive features of social media/messenger platforms and freemium games against the background of psychological and economic theories. *Int J Environ Res Public Health.* 2021;18(14):7530.
5. Sharma A, Sharma R. Internet addiction and its mental health correlates among undergraduate college students of a university in North India. *J Family Med Prim Care.* 2018;7(4):721–7.
6. Choi J, Park SK, Kim Y, Lee J. Daily media use in children and adolescents: Associations with psychiatric symptoms. *Front Psychiatry.* 2020; 11:352.
7. Alavi SS, Maracy MR, Jannatifard F, Eslami M. The effect of psychiatric symptoms on the internet addiction disorder in Isfahan's university students. *J Res Med Sci.* 2011;16(6):793–800.
8. Weinstein A, Lejoyeux M. Internet addiction or excessive internet use. *Am J Drug Alcohol Abuse.* 2010;36(5):277–83.
9. Cao H, Qian Q, Weng T, Yuan C, Sun Y, Wang H, et al. Screen time, sleep duration, and behavioral health among Chinese adolescents: Cross-sectional analysis of a national sample. *J Adolesc Health.* 2011;48(5):503–9.
10. Kiran ES, Çelik T, Alpsoy Ş. Factors associated with problematic internet use among university students: A cross-sectional study. *J Psychiatr Res.* 2022; 152:96–104.
11. Lee SY, Lee D, Nam CR, Kim DY, Park S, Kwon JG, et al. Distinct patterns of internet and smartphone-related problems among adolescents by gender: Latent class analysis. *J Behav Addict.* 2018;7(2):454–65.
12. Chaudhury S, Dasgupta A, Kaur S. Study on the prevalence of internet addiction and its association with stress among undergraduate medical students. *Int J Community Med Public Health.* 2019;6(3):1032–7.
13. Bhatia G, Singh G, Sharma N. Internet addiction among college students in North India: Prevalence and pattern. *Int J Adolesc Med Health.* 2020;32(4):20180098.
14. Kuss DJ, Griffiths MD, Karila L, Billieux J. Internet addiction: A systematic review of epidemiological research for the last decade. *Curr Pharm Des.* 2014;20(25):4026–52.
15. Ghosh A, Singh S, Kumar A. Internet addiction among university students: A cross-sectional study in West Bengal, India. *Asian J Psychiatr.* 2022; 67:102919.
16. Grant JE, Lust K, Chamberlain SR. Problematic smartphone use associated with greater alcohol consumption, mental health issues, poorer academic performance, and impulsivity. *J Behav Addict.* 2019;8(2):335–42.
17. Younes F, Halawi G, Jabbour H, Osta NE, Karam L, Hajj A, et al. Internet addiction and relationships with insomnia, anxiety, depression, stress, and self-esteem in university students: A cross-sectional designed study. *PLoS One.* 2016;11(9):e0161126.
18. Salehan M, Negahban A. Social networking on smartphones: When mobile phones become addictive. *Comput Human Behav.* 2013;29(6):2632–9.
19. Mehroof M, Griffiths MD. Online gaming addiction: The role of sensation seeking, self-control, neuroticism, aggression, state anxiety, and trait anxiety. *Cyberpsychol Behav Soc Netw.* 2010;13(3):313–6.
20. Kaur P, Singh S, Mathur DM. Internet addiction among college students in India: A review. *Indian J Psychol Med.* 2019;41(6):498–503.
21. Zhou Y, Lin FC, Du YS, Wei Z. The prevalence and risk factors of internet addiction among college students in China. *Addict Behav.* 2020; 102:106142.
22. Nayak HS, Meenakshi T. Prevalence and determinants of internet addiction among university students in South India. *Asian J Psychiatr.* 2021; 65:102867.
23. Elhai JD, Levine JC, Dvorak RD, Hall BJ. Fear of missing out, need for touch, anxiety, and depression are related to problematic smartphone use. *Comput Human Behav.* 2016; 63:509–16.
24. Saha R, Sinha A, Pal R. Internet addiction and its determinants among medical students: A cross-sectional study in a medical college of West Bengal, India. *Asian J Psychiatr.* 2022; 67:102926.
25. King DL, Delfabbro PH, Zwaans T, Kaptis D. Clinical features and psychosocial implications of internet gaming disorder. *Aust N Z J Psychiatry.* 2019;53(9):851–65.
26. Azher M, Khan RB, Salim M, Bilal M, Hussain A. The relationship between internet addiction and academic performance among university students. *J Educ Pract.* 2014;5(19):203–7.
27. Faraci P, Craparo G, Messina R, Severino S. Internet addiction test (IAT): Which is the best factorial solution? *J Med Internet Res.* 2013;15(10):e225.
28. Yam CW, Pakpour AH, Griffiths MD, Yau WY, Lo CM. Prevalence and associated factors of internet addiction among adolescents in Hong Kong. *Asia Pac Psychiatry.* 2020;12(1):e12322.
29. Kandell JJ. Internet addiction on campus: The vulnerability of college students. *Cyberpsychol Behav.* 1998;1(1):11–7.