

A CROSS-SECTIONAL STUDY TO ASSESS INTERNET USE AMONG ADOLESCENTS ENROLLED AT SCHOOLS OF FIELD PRACTICE AREA UNDER RURAL HEALTH TRAINING CENTRE, NAYLA JAIPUR

Community Medicine

Dr. Hemraj Patel* Senior Resident Dr. S.N. Medical College Jodhpur Rajasthan*Corresponding Author

Dr Diksha Singh Senior Resident Government Medical College Sawai Madhopur, Rajasthan

Dr Suresh Kewalramani Senior Professor, Department of Community Medicine, SMS Medical College, Jaipur, Rajasthan

ABSTRACT

Background: Internet has become an integral part of daily life among adolescents for academic, recreational and social purposes. However, excessive and uncontrolled use has resulted in the emergence of internet addiction, affecting mental, social and academic well-being. **Objectives:** To assess the proportion and pattern of internet use and internet addiction among school-going adolescents in the field practice area of Rural Health Training Centre (RHTC), Nayla Jaipur. **Material and Method:** A school-based cross-sectional observational study was conducted among 110 students studying in classes 9th to 12th in government schools under RHTC Nayla, Jaipur from October 2023 to November 2023. Data were collected using a pre-tested semi-structured questionnaire and Young's Internet Addiction Test (IAT) Scale. Statistical analysis was performed using SPSS version 21.0. **Result:** Among 110 adolescents, 57% were males and mean age was 15.5 ± 1.87 years. Regular internet use was observed among 75% students. Smartphones were the most commonly used devices (76%). Facebook/Instagram were the most commonly used social platforms (42%). Among internet users, 44.58% had mild addiction and 21.68% had moderate addiction, while no severe addiction was observed. **Conclusion:** Internet addiction was highly prevalent among school-going adolescents. Awareness regarding healthy internet practices and parental supervision is essential to prevent adverse effects of excessive internet use.

KEYWORDS

Internet Addiction, Adolescents, School Students, Social Media, Internet Use

INTRODUCTION

Internet is one of the most widely accessible communication media in the world and provides opportunities for communication, information sharing and social interaction. India ranks fourth in the world in terms of internet users after China, the United States and Japan.¹ Internet use among adolescents is rapidly increasing for educational as well as recreational purposes. However, excessive and uncontrolled use of the internet has led to the emergence of a new behavioral problem known as "Internet Addiction".² Internet addiction refers to an individual's inability to control internet use, resulting in distress and impairment in daily functioning. Adolescents are particularly vulnerable because of their developing psychological and social behavior.^{3,4}

Excessive internet use may negatively affect cognitive functioning, academic performance, dietary habits and social relationships.⁵ According to Digital Strategy Consulting, internet use in rural India has increased rapidly over recent years, with mobile phones being the major source of internet access.

Considering the growing use of internet among adolescents, this study was conducted to assess internet use and addiction among school-going adolescents in the rural field practice area of RHTC Nayla, Jaipur.

Objective:

1. To determine the proportion and pattern of internet use and addiction among school-going adolescent students.
2. To determine the association of socio-demographic factors with internet addiction among adolescents.

MATERIALS AND METHODS

Study type & design: Cross-Sectional Descriptive type of Observational Study

Study area: Schools under the field practice area of Rural Health Training Centre (RHTC), SMS Medical College, Jaipur (Rajasthan) India.

Study period: Online survey from October 2023 to November 2023.

Study population: Students studying in classes 9th to 12th in government schools under RHTC Nayla, Jaipur.

Sample Size: A sample size of 108 participants are calculated with 95% confidence level and absolute relative error of 10% assuming a prevalence of 78% Internet addiction among school going adolescents

as per seed article (Sowndarya TA et al)⁴ Further a rounded sample size of 110 participants are adequate to assess Internet use among Adolescents Students.

Sample Size (n) = $Z^2 Pq / L^2$

[Z- 1.96, P-Prevalence, q= 1-P, L- Allowable Error]

P=78, then q=100-78=22, L=10% of 78=7.8

N= $1.96 \times 1.96 \times 78 \times 22 \div 7.8 \times 7.8 = 108.35$ round off=110

Inclusion criteria: Students of classes 9th to 12th who were present during the visit and whose guardians/class teachers provided consent.

Exclusion criteria: Students without internet availability.

Study tool: A pre-tested semi-structured questionnaire was used. Internet addiction was assessed using Young's Internet Addiction Test (IAT) Scale consisting of 20 items on a five-point Likert scale.

Scoring of IAT

- 0-19 : No addiction
- 20-49 : Mild addiction
- 50-79 : Moderate addiction
- 80-100 : Severe addiction

Data collection and analysis: Data were entered in Microsoft Excel and analyzed using SPSS version 21.0. Frequency and percentages were calculated.

RESULTS

A total of 110 school-going adolescents participated in the study. Majority of participants were males (57%) and belonged to age group more than 14 years (75.45%). Distribution according to class was class 9th (28%), class 10th (21%), class 11th (26%) and class 12th (25%). Among fathers of participants, 42% were non-skilled workers, 37% skilled workers, 15% professionals and 6% unemployed.

Table 1: Socio-demographic characteristic of study subjects (N=110)

Variables		N (%)
Age of subjects(Years)	13	7 (6%)
	14	20 (18%)
	15	30 (27%)
	16	28 (25%)
	17	18 (16%)
	18	7 (6%)
	Mean±SD	
	15.5±1.87	

Gender	Male	63 (57%)
	Female	47 (43%)
Class in which studying	Class 9	31(28%)
	Class 10	23 (21%)
	Class 11	29 (26%)
	Class 12	27 (25)
Occupation of father	Unemployed	7 (6%)
	Non-skilled	46 (42%)
	Skilled	41 (37%)
	Professional	16 (15%)

When we assess the pattern of internet use 83 out of 110 students (75%) stated that they used internet regularly. When we find out the devices for assessing internet 76% were using smart phone, 19% using PC/laptop and only 5% using tablets. While assessing the distribution of different active social platform 42% Facebook/Instagram user, 28 % WhatsApp, 16% online study, 8% you tube,

Table 2: Distribution of Study Participants According to Internet Usage and Devices Used for Internet Access

Do you use Internet use?	Frequency	%
Yes	83	75
No	27	25
Devices for Accessing Internet	Frequency	%
Smart Phones	63	76
Laptop/PC	16	19
Tablet	4	5

Table 3: Distribution of Study Participants According to Levels of Internet Addiction Based on Young's Internet Addiction Test (IAT) Scale (N=83)

Level of Internet addiction	Score	N(%)
No Addiction	0-19	28(33.74)
Mild	20-49	37(44.58)
Moderate	50-79	18(21.68)
Severe	80-100	0

Table 3 shows the distribution of internet addiction levels among internet users assessed using Young's Internet Addiction Test (IAT) scale. Among 83 internet users, 28 (33.74%) students had no internet addiction, while the majority, 37 (44.58%), had mild internet addiction. Moderate internet addiction was observed among 18 (21.68%) students, whereas no participant was found to have severe internet addiction. These findings indicate that mild to moderate internet addiction was prevalent among school-going adolescents in the study population.

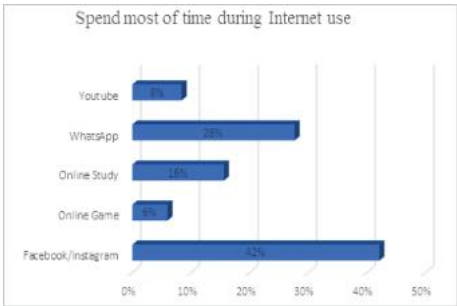


Figure 1: Distribution of Time Spent on Different Internet Activities among Study Participants

Figure-1 shows that Facebook/Instagram was the most commonly used internet platform among adolescents (42%), followed by WhatsApp (28%). Online study accounted for 16% of internet usage, while YouTube and online gaming were used by 8% and 6% students respectively.

Table 4: Distribution of Study Participants According to Social Media Platforms Used During Internet Access

Social Platforms	Usage (%)
Facebook/Instagram	42
WhatsApp	23
Youtube	8
Online game	6

Online study	16
--------------	----

Table 4 shows that Facebook/Instagram was the most commonly used social platform among adolescents (42%), followed by WhatsApp (23%). Online study accounted for 16% of internet usage, whereas YouTube and online gaming were used by 8% and 6% of students respectively.

DISCUSSION

The present study found that 75% of adolescents were regular internet users. Smartphones were the most commonly used devices for internet access. Similar findings were reported in studies conducted by Bhatia et.al. and Sowndarya et.al.

The prevalence of internet addiction among adolescents was high, with 44.58% having mild addiction and 21.68% having moderate addiction. Excessive use of social networking platforms such as Facebook and Instagram was common among adolescents.

The increasing use of internet among school-going adolescents highlights the need for awareness programs regarding healthy internet practices and parental monitoring.

CONCLUSION

Internet addiction among school-going adolescents was found to be high in the present study. Majority of students had mild to moderate addiction levels. Smartphones and social media platforms were the major sources of internet use. Early interventions, awareness programs and parental supervision are essential to prevent harmful consequences of excessive internet use among adolescents.

LIMITATION

- The study was conducted in limited schools under one field practice area.
- Self-reported responses may introduce reporting bias.
- Cross-sectional design limits causal interpretation.

RECOMMENDATIONS

- Health education sessions should be conducted in schools regarding healthy internet use.
- Parents should monitor internet usage among adolescents.
- Schools should encourage outdoor and extracurricular activities.
- Counseling services should be made available for students with problematic internet use.

ETHICAL CONSIDERATIONS

- Permission was obtained from school authorities before conducting the study. Informed consent was obtained from parents/guardians and confidentiality of participants was maintained throughout the study.

REFERENCES

1. Bhatia, M., Rajpoot, M., & Dwivedi, V. (2016). Pattern of internet addiction among adolescent school students of a North Indian city. *Int J Community Med Public Health*, 3(9), 2459-2463.

2. Shalini, S., Gupta, S. A., Sharma, M., Gaikwad, M., Verma, S., & Verma, N. (2022). Assessment of status of internet addiction among adolescent school students residing in Raipur city, Chhattisgarh. *International Journal of Community Medicine And Public Health*, 10(1), 200.

3. India: Digital Market Overview: Digital Strategy consulting. <http://www.digitalstrategyconsulting.com/India/2012>

4. Sowndarya, T. A., & Pattar, M. (2018). Pattern of internet addiction among urban and rural school students, Mangaluru, India: A comparative cross-sectional study. *Int J Contemp Pediatr*, 5(5), 1750-1754.

5. Andrianie, P. S., Japar, M., Pratisti, W. D., Kasturi, T., & Purwandari, E. (2024). The role of peer relationships in problematic internet use among adolescents: A scoping review and meta-analysis. *The Open Psychology Journal*, 17(1).

6. Wang, P., Wang, X., Gao, T., Yuan, X., Xing, Q., Cheng, X., ... & Tian, M. (2023). Problematic internet use in early adolescents: Gender and loneliness differences in a latent growth model. *Psychology research and behavior management*, 3583-3596.

7. Kanu, P. A., Ugbe, M. J., Enyievi, P. B., Ebri, E. O., Omini, B. I., & Imo, U. F. (2025). Prevalence and associated factors of problematic internet use among in-school adolescents in Calabar municipality, Nigeria. *Discover Mental Health*, 5(1), 117.

8. Menezes, J., Nayak, S. G., & Yesodharan, R. (2026). Patterns of internet use, risky online behaviors, and protective practices among Indian adolescents: evidence from a school-based study. *Children and Youth Services Review*, 109018.

9. Şaşmaz, T., Öner, S., Kurt, A. Ö., Yapıcı, G., Yazıcı, A. E., Buğdaycı, R., & Şiş, M. (2014). Prevalence and risk factors of Internet addiction in high school students. *The European Journal of Public Health*, 24(1), 15-20.

10. Lam, L. T., Peng, Z. W., Mai, J. C., & Jing, J. (2009). Factors associated with Internet addiction among adolescents.

11. Li, Y., Zhang, X., Lu, F., Zhang, Q., & Wang, Y. (2014). Internet addiction among elementary and middle school students in China: A nationally representative sample study. *Cyberpsychology, Behavior, and Social Networking*, 17(2), 111-116.

12. Siomos, K. E., Dafouli, E. D., Braimiotis, D. A., Mouzas, O. D., & Angelopoulos, N. V. (2008). Internet addiction among Greek adolescent students. *CyberPsychology & Behavior*, 11(6), 653-657.