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SMARTPHONE USE AND ITS RELATIONSHIP WITH ADDICTION AMONG UNDERGRADUATE ALLIED STUDENTS IN DADELDHURA, NEPAL

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Abstract: Objective: To examine smartphone usage patterns and their relationship with smartphone addiction among undergraduate allied students. **Study Design:** Cross-sectional study. **Setting:** Allied health departments at the Faculty of Health Sciences, Far Western University, Dadeldhura, Nepal. **Methods:** A total of 350 students aged 18-25 years were selected using multistage random sampling. Data were collected using validated tools including the Smartphone Addiction Scale (SAS). Statistical analysis was performed using SPSS version 25. The chi-square test was used to determine association between smartphone usage and addiction. A p-value <0.05 was considered statistically significant. **Results:** Nearly half of the participants (49.7%) used smartphones for more than six hours daily. High levels of smartphone addiction were observed in 49.1% of students. Addiction was significantly higher among excessive smartphone users ($p<0.05$). **Conclusion:** Excessive smartphone use is significantly associated with addiction among allied students and may negatively influence academic performance and overall wellbeing.

Keywords: Allied students, Smartphone usage, Smartphone addiction, Undergraduate students.

INTRODUCTION

Smartphones have become deeply integrated into daily life, particularly among university students. These devices provide communication, academic access, entertainment, and social networking in a single platform, which increases their daily exposure time. Research shows that smartphone usage among young people has increased substantially over the last decade, raising concerns about behavioral dependence [1].

Problematic smartphone use is increasingly described as a behavioral addiction associated with compulsive checking, loss of control, and interference with daily activities [2]. Excessive smartphone use has been linked with poor sleep quality and reduced academic performance among university students [3].

Meta-analytic evidence suggests that smartphone addiction is common among Asian allied students, with prevalence estimates exceeding 40% [4]. Studies also show that excessive use is associated with psychological distress and behavioral dependence [2,5].

Allied students represent a high-risk group due to academic stress and continuous engagement with digital resources. Previous studies among allied undergraduates have demonstrated significant levels of smartphone addiction and related mental health concerns [6,7].

However, limited data are available regarding smartphone addiction among undergraduate allied health students in Nepal, particularly in Far Western regions. Therefore, this study aimed

to investigate smartphone usage patterns and their relationship with addiction among undergraduate allied students in Dadeldhura.

METHODS

A descriptive cross-sectional study was conducted among undergraduate students of allied health sciences at the Faculty of Health Sciences, Far Western University, Dadeldhura, Nepal.

A total of 350 students aged 18–25 years were selected using multistage random sampling. Data were collected using a structured self-administered questionnaire that included demographic details, smartphone usage characteristics, and the Smartphone Addiction Scale (SAS).

Ethical approval was obtained from the relevant institutional authority, and informed consent was secured from participants prior to data collection.

Data were analyzed using SPSS version 25. Descriptive statistics were calculated. Smartphone usage duration was categorized into low (0–2 hours), moderate (3–5 hours), and high (≥6 hours). The chi-square test was applied to assess the association between smartphone usage and addiction. Statistical significance was set at $p < 0.05$.

RESULTS

Among the 350 participants, the mean age was 21.86 ± 1.88 years. Nearly half of the students (49.7%) reported using smartphones for more than six hours per day, while 48.9% used them for 3–5 hours daily.

Table -1: Demographic Characteristics of Respondents (n=350)

Demographics	Frequency (%)	
Age of Respondents	Less than 20 yrs	40 (11.4)
	20-22 years	172 (49.1)
	23-25 years	138 (39.4)
Mean ± SD	21.86 ± 1.88 years	
	BMLT	120 (34.3)
	BPH	115 (32.9)
	BSN	115 (32.9)
Year of Study	1st Year	90 (25.7)
	2nd Year	88 (25.1)
	3rd Year	87 (24.9)
	4th Year	85 (24.3)

Based on SAS scoring, 45.4% of students demonstrated moderate addiction, 49.1% showed high addiction, and 4.3% had very high addiction levels.

Table II: Smartphone usage

Smartphone usage		participants, n=350 n (%)
Duration of mobile phone usage per day	0-2 hour	5 (1.4)
	3-5 hour	171 (48.9)
	6 or > 6 hours	174 (49.7)
Frequency of mobile phone checking	Rarely	44 (12.6)
	Occasionally	169 (48.3)
	Frequently	137 (39.1)
Checking mobile phone in between sleep	Rarely or never	271 (77.4)
	Occasionally	79 (22.6)
	Frequently	0 (0.0)
Total scoring of Smartphone usage	Mild	5 (1.4)
	Moderate	208 (59.4)
	High	137 (39.1)
Mean± SD	2.38±0.514	

A statistically significant association was observed between smartphone usage duration and addiction level ($p<0.05$). Students with high daily usage were more likely to exhibit high addiction levels.

TABLE - III

Level, mean and standard deviation: smartphone addiction. (n=350)

Variable	n (%)
Low addiction	4 (1.1%)
Moderate addiction	159 (45.4%)
High addiction	172 (49.1%)
Very high addiction	15 (4.3%)

Table-III shows the level of addiction among allied students. Out of the total, 49.1% of participants have exhibited high addiction, 45.4% moderate addiction, and 4.3% very high addiction levels.

TABLE-IV

Related Frequency between Smartphone usage with smartphone addiction

Total scoring of variables	Smartphone Usage			P-Value
	Limited	Moderate	High	
	n (%)	n (%)	n (%)	
Smartphone Addition				
Low addition	4 (100%)	0 (0.0%)	0 (0.0%)	< 0.001
Moderate addiction	1	142	16	

	(0.6%)	(89/3%)	(10.1%)
High addiction	0 (0.0%)	66 (38.4%)	106 (61.6%)
Very high addiction	0 (0.0%)	0 (0.0%)	15 (100%)
Total	5 (1.4%)	208 (59.4%)	137 (39.1%)

Table-IV represents the distribution of smartphone usage with addiction, depression, and anxiety levels. Out of the total of 350 undergraduate students, among moderate smart phone users 142 (89.3%) were having moderate addiction, 130 (79.8%).

DISCUSSION

This study demonstrates extensive smartphone use among undergraduate allied students, with nearly half spending more than six hours daily on their devices. Similar usage patterns have been reported among allied students in Switzerland and other countries [8].

The prevalence of smartphone addiction observed in this study is comparable to findings reported in Asian populations [4]. Studies among allied students have consistently shown that excessive smartphone use is associated with addictive behaviors and psychological disturbances [6,7].

The significant relationship between usage duration and addiction observed in this study aligns with previous evidence suggesting that prolonged screen exposure increases the likelihood of dependency [2,5]. Excessive smartphone use has also been associated with poor sleep quality and academic challenges [3,9].

These findings highlight the importance of promoting responsible smartphone usage among allied students to prevent behavioral dependence and its negative consequences.

CONCLUSION

Greater daily smartphone use was linked with higher levels of addictive behavior among undergraduate allied students, indicating a growing dependence on digital devices in this population. Longitudinal and multi-center studies are needed to better understand long-term effects and causal relationships.

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