



IMPACT OF MOBILE PHONE USAGE ON LEARNING ACTIVITIES AMONG NURSING STUDENTS AT SELECTED COLLEGE, HOSUR.

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ABSTRACT

BACKGROUND OF THE STUDY

Mobile phones are widely used in education, providing quick access to resources and promoting self-directed learning. However, excessive use can cause distraction, poor concentration, and health issues. Nursing students, with their demanding academic workload, are at particular risk of smartphone overuse.

OBJECTIVES

1. To assess the mobile phone usage among students by using the Smartphone Addiction Scale – short version.
2. To identify the impact of mobile phone usage on learning activities.
3. To associate mobile phone usage with selected demographic variables.

METHOD

A non-experimental descriptive research design was adopted. One hundred B.Sc. Nursing students from a selected college in Hosur were chosen using convenience sampling. Data were collected using the Smartphone Addiction Scale–Short Version (SAS-SV) and a structured questionnaire on learning activities. The data were analyzed using descriptive and inferential statistics.

RESULTS

The study revealed that 69% of participants were male, and 51% were aged 18–20 years. Smartphone overuse was evident, with 45% reporting concentration difficulties and 39% experiencing physical discomfort. Learning activity scores were excellent in 56% of students, good in 41%, and average in 3%. There was no significant association between smartphone addiction and learning activity levels ($p=0.088$). However, addiction showed significant association with gender ($p=0.014$), type of family ($p=0.040$), and area of living ($p=0.011$).

CONCLUSION

The findings indicate that smartphones play a dual role in nursing education, enhancing access to information while also creating risks for concentration and well-being. Promoting responsible usage through awareness programs and digital balance strategies is recommended.

KEYWORDS

Smartphone addiction scale, Learning activities, Academic performance, Mobile phone usage.

INTRODUCTION

Mobile phones have become essential in contemporary education, significantly impacting the learning experiences of nursing students. With technological advancements, smartphones offer immediate access to educational materials, medical research, e-books, and virtual simulations, thereby enriching the learning journey and enhancing academic success.¹ They foster student-centred learning and contribute to improved academic performance.² However, excessive use is associated with distractions, ineffective time management, diminished focus, and health problems such as sleep disruption and eye strain³. Nursing students, facing demanding academic and clinical responsibilities, are highly vulnerable to these consequences.⁴

Research conducted in various countries has demonstrated that smartphones have a dual impact on education; while they can enhance self-directed learning and academic involvement, they also pose the risk of dependence, often referred to as smartphone addiction.⁵ This behavioural concern can hinder students' productivity, learning endeavours, and their overall well-being.⁶ Considering these mixed effects, it is essential to investigate how the use of mobile phones affects learning among nursing students. The current study aims to evaluate the influence of mobile phone usage on learning activities and to examine its relationship with selected demographic variables.

MATERIAL AND METHODS

Population and sample size:

A non-experimental descriptive research design was adopted for this study. The research was conducted at a selected nursing college in Hosur. A sample of one hundred participants was selected using a convenience sampling technique. Formal approval was acquired from the institutional authority. A comprehensive explanation regarding the study's objectives and confidentiality was provided, and informed consent was secured from the participants involved in the study.

Data and source of Data.

The data was collected using the standardized Smartphone Addiction Scale–Short Version (SAS-SV), was administered to assess the level of smartphone addiction. It consists of 10 items related to mobile phone addiction. The highest score is indicated as strongly agree, and the lowest score is 1. A structured questionnaire was used to assess the learning Activities, consisting of 10 items related to academic activities. Scoring from highest is 5 (Almost Always), and the lowest score is 1(Rarely). Using Jemovi Software, both descriptive and inferential statistics were done.

RESULTS

The description of demographic variables depicts that most participants (51%) were between 18 and 20 years of age, and 69% were male, (81%) belonged to nuclear families, and 75% resided in urban areas. Considering recreational activities, more than half of the participants, 64% reported listening to music or using media.

Responses from Table 1 show that most respondents, 35(35%), agreed that they missed planned work due to the phone, and 29(29%) have a hard time concentrating in class or writing assignments. 28 (28%) reported experiencing pain in the wrist and neck while using a phone. 23 (23%) participants were constantly checking their smartphones to avoid missing conversations between other people on Twitter and Facebook. The majority (33%) of students agreed to the statement, "Using my smartphone longer than I intend," and the statement, "People around me tell me that I use my smartphone too much." However, 38(38%), 35(35%), 36(36%) of students disagreed with statements such as I will not be able to stand not having a smartphone,

feeling impatient and fretful when I am not holding my smartphone, " and " Having a smartphone in my mind, even when I am not using it.

Table 2. Comparing the learning Activity Scale with mobile phone usage among students shows that most students in excellent and good learning activity are in the smartphone addicted category. There was no significant association found between mobile phone usage and learning activity at p-value 0.088. However, the proportion of At Risk is slightly higher in the Average (3 out of 7 $\approx$ 42.9%) compared to Good (7 out of 61 $\approx$ 11.5%).

Table 1: frequency and percentage distribution of mobile phone usage among students

S.no	Items	Strongly disagree	Disagree	Weekly Disagree	Weekly Agree	Agree	Strongly agree
1	I Miss the work that I planned due to smartphone use	11(11%)	20(20%)	5(5%)	13(13%)	35(35%)	16(16%)
2	I have a hard time concentrating in class, while doing assignments, or while working, due to smartphone use.	9(9%)	(20)20%	11(11%)	15(15%)	(29)29%	16(16%)
3	I feel pain in my wrist or at the back of my neck while using a smartphone	8(8%)	30(30%)	13(13%)	10(10%)	28(28%)	11(11%)
4	I will not be able to stand not having a smartphone	14(14%)	38(38%)	10(10%)	13(13%)	18(18%)	7(7%)
5	Feeling impatient and fretful when I am not holding my smartphone	20(20%)	35(35%)	11(11%)	7(7%)	13(13%)	14(14%)
6	Having smartphone in my mind, even when I am not using it.	25(25%)	36(36%)	7(7%)	7(7%)	7(7%)	8(8%)
7	I never give up using my smartphone, even if my daily life is greatly affected by it	20(20%)	41(41%)	12(12%)	7(7%)	16(16%)	4(4%)
8	Constantly check my smartphone so as not to miss conversations between other people on twitter and Facebook.	11(11%)	25(25%)	19(19%)	18(18%)	23(23%)	4(4%)
9	Using my smartphone longer than I intend	5(5%)	28(28%)	15(15%)	17(17%)	33(33%)	2(2%)
10	People around me tell that I use my smartphone too much	9(9%)	14(14%)	12(12%)	10(10%)	33(33%)	22(22%)

Table 2. Assessment of the impact of mobile phone usage on learning activities among students.

Learning Activity	Mobile Phone Usage		Total	χ^2	P-Value
	Addicted	Risk for Addiction			
Excellent	26	6	32	4.87	0.088
Good	54	7	61		
Average	4	3	7		
Total	84	16	100		

N=100

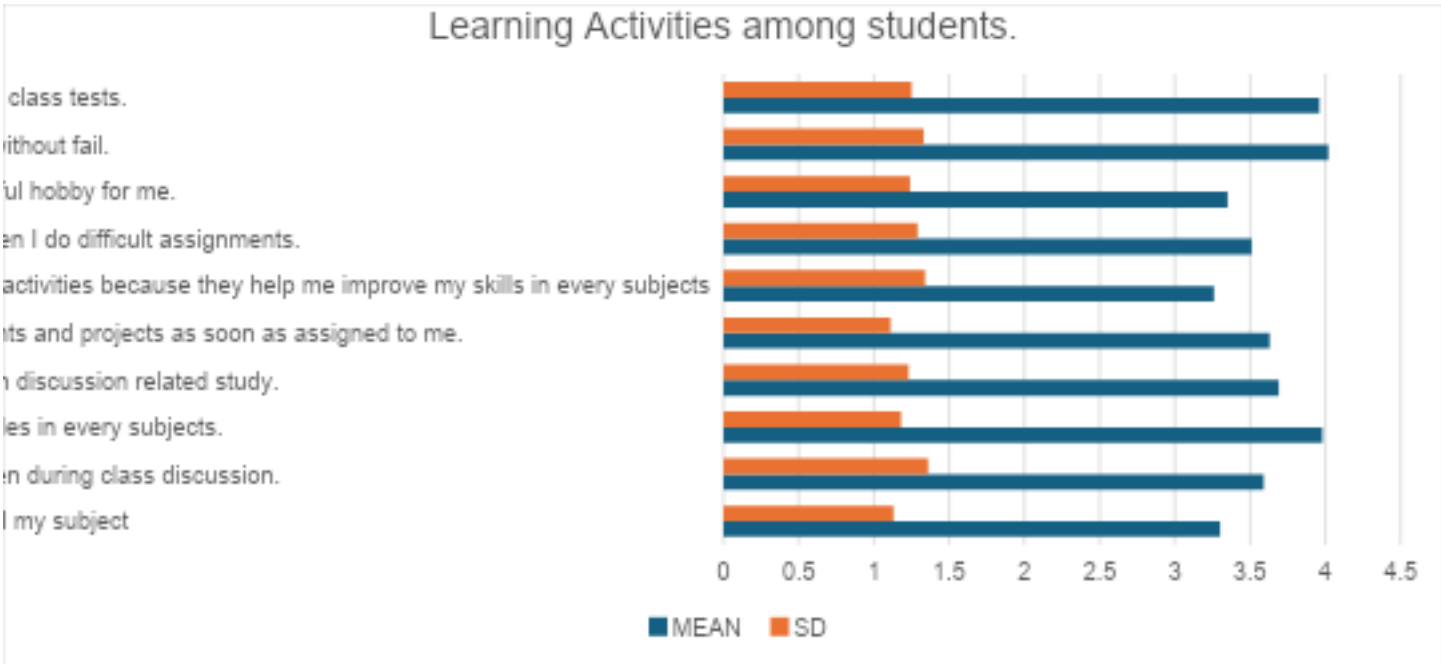


Figure .1. Mean, SD of Learning activities among Nursing Students.

Table 3. Association between mobile phone usage and demographic variables.

N=100

Demographic variables	Category	Addicted	Risk for addiction	χ^2 Value	P value
Gender	Male	54	5	6.06	0.014
	Female	30	11		
Age	18-20	23	7	1.71	0.19
	20-23	61	9		
Type of family	Joint family	71	10	4.24	0.04
	Nuclear family	13	6		
Birth order	1st child	47	7	3.44	0.329
	2nd child	27	5		
	3rd child	8	4		
	4th child	2	0		
Recreational activities	Listening music	56	11	0.806	0.848
	Reading book	19	4		
	Playing in ground	5	1		
	Doing artwork	4	0		
Area of living	Urban	50	12	6.45	0.011
	Rural	34	4		

Table 3 showed that Chi-square analysis of mobile phone usage and selected demographic variables revealed that there was no significant association between smartphone addiction and learning activity scores ($p=0.088$). However, significant associations were found between smartphone addiction and gender ($p=0.014$), family type ($p=0.040$), and area of living ($p=0.011$).

Discussion:

The present study revealed that the frequency and percentage distribution of the phone addiction scale showed Difficulties in concentrating in class (29%), and physical discomfort like wrist and neck pain (28%).

The present study results are consistent with a similar study conducted on Relationships among smartphone addiction, stress, and academic performance among university students. This study reported that 46% had difficulties concentrating due to frequent mobile phone use, which also correlated with lower academic performance.⁷

Similarly, another study's results found that 31% of students experienced musculoskeletal discomfort, particularly neck and wrist pain, linked to prolonged mobile phone use.⁸

The present study revealed that there was no significant association found between mobile phone usage and learning activities, $\chi^2 = 4.87$, $p < 0.08$. The results are analogous to a study conducted on the effect of mobile phones on learning and memory. The results are evident that there was no significant relationship between smartphone addiction and memory recall accuracy, $r = -.03$, $n = 119$, $p = .76$.⁹

The present study results are consistent with a similar study conducted on the prevalence of smartphone use and its addiction among adolescents, which revealed a significant association between smartphone use and age ($p < 0.004$), Area of residence ($p < 0.027$), and duration of smartphone usage ($p < 0.000$). Male students were more likely to be addicted than females.¹⁰

A similar study found that 62% of students from nuclear families and 70% of urban students showed signs of addiction compared to 48% of rural students. No significant associations were found with age, birth order, or recreational activities.¹¹

Nursing Implications:

There is a need for Awareness programs focusing on healthy digital habits to be implemented in academic settings and promoting healthy study habits. Creating knowledge on digital hygiene will ensure technology support learning without compromising academic and personal well-being.

Conclusion

The present study assessed smartphone usage, addiction, and its association with demographic variables among nursing students. The study concluded that there was significant physical discomfort and a decrease in concentration in class. However, there was no significant impact on mobile phone usage with academic activities. There were significant associations found between smartphone addiction and demographic factors such as gender, family type, and area of living.

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