

A Study on Smartphone Addiction among School Children

Venkatesan MP ¹ K.Kamala ²

¹PhD Scholar, ² Guide,

^{1,2} Department of Pediatric Nursing, Vinayaka Mission's College of Nursing, Vinayaka Missions Research Foundation(DU)-Salem,Karaikal, (Puducherry), INDIA

ABSTRACT

Now a day's smartphone becomes integral part of every one life. Without smartphone they could not complete any work. School students are the riskiest age group since they may not aware the consequences faced by the excessive smartphone use. This study mainly focused on smartphone addiction among school children by using smartphone addiction scale (Short version) with descriptive survey design among 250 school students age between 13-17 years. It is found 67% (167) students having smartphone addiction, 33% (83) are with our smartphone addiction. Regarding knowledge 84 % (210) of them having inadequate knowledge, 14% (35) were having moderately adequate knowledge and 2% (5) of them having adequate knowledge on smartphone addiction. Selected demographic profiles were analyzed with level of knowledge among that gender, family type, daily usage of smartphone and sleep duration found to be significant at $p < 0.05$ while others were not found significant.

Keywords:

Smartphone,addiction,knowledge,students

1. Introduction

Smartphone is the personal device which has plenty of functionalities in the use such as internet, social media, gaming, banking and many more. Now a days it becomes the trend and social status having costly smartphone specifically with selected brands has been among students. They often have the access of the smartphone without knowing the positive way of using it.

WHO Expert Committee – 1964 stated addiction as dependence, as the continuous use of something for the sake of relief, comfort, or stimulation, which often causes cravings when it is absent. The two major categories of addiction involve either substance addiction, e.g. “drugs or alcohol addiction” or “behavioral addiction such as mobile phone addiction.” Addiction is a dangerous psychological problem that can be caused by using smartphone continuously for a long and periods of time. Such influence is similar to using drugs for a longer period of time.¹

Smartphone addiction it can be otherwise called as problematic smartphone use or excessive smartphone use. Smartphone addiction not only has physical effects but also psychological and academic effects at the same time.² Sleep disturbance, anxiety, stress, and, to a lesser extent, depression, which are also associated with Internet abuse, have been associated with problematic cell-phone use. In addition, the present review reveals the coexistence relationship between problematic cell-phone use and substance use such as tobacco and alcohol.³

People who are addicted to the smartphone often have the problem of nomophobia. It is described as a psychological condition of people has a fear of being without mobile /smartphone connectivity. Nomophobia has been labeled as a “phobia for a particular/specific thing in DSM-IV.it can be manifested by sigh and symptoms such as anxiety, anxiety, respiratory alterations, trembling, perspiration, agitation, disorientation and tachycardia.⁴

As per study by Durusoy R et al.,(2017) on mobile phone use and electromagnetic level among 2150 high school students identified 2021 (94.0%) were using mobile phones and 129 (6.0%) were not. Among users, 49.4% were speaking <10 min and 52.2% were sending/receiving 75 or

more messages per day. Headache, fatigue and sleep disturbances were observed respectively 1.90 (95% CI 1.30-2.77), 1.78 (1.21-2.63) and 1.53 (1.05-2.21) times more among mobile phone users. They are having problems headache, concentration difficulties, fatigue and sleep disturbances as general symptoms and warming of the ear and flushing as local symptoms. Decreasing the numbers of calls and messages, decreasing the duration of calls, using earphones, keeping the phone away from the head and body and similar precautions might decrease the frequencies or prevalence of the symptoms.⁵

Smartphone addiction can lead to physical and also psychological problems such as fatigue, headache, neck pain (Text neck), wrist pain (Texter's thumb), loss of sleep, digital eye strain, anger, irritation and depression. childrens with smartphone addiction can manifest the withdrawal symptoms of restlessness, anger/irritability, difficulty in concentration ,sleep disturbances and craving of smartphone use.⁶

2. Objectives of the study

To assess the smartphone addition, to assess the level of knowledge on smartphone addiction and to associate the selected demographic variables of school children with knowledge score on smartphone addiction.

3. Material and Methods:

In the present study non experimental descriptive design was used to identify the smartphone addiction and level of knowledge on smartphone addiction among adolescent school students in Jeevanagar community area at Karaikal. 250 adolescent school children belongs to the community area were selected for this study. Informed consent was obtained from all the students who have accepted to participate in the study. Smart phone addiction scale short version (SV) and Semi structured questionnaire on knowledge about smartphone addiction was used to collect the data.

4. Result of the study:

Table1. Frequency and percentage distribution shows demographical variables of school students considering age maximum 105 (42%) in the age of 14-15 years, similar 80 (32%) were in the age of 12-13 years and 65 (26%) were in the age of 16-17 years. Based on the gender 150 (60%) students were male were female 100 (40%). According to religion 200(80%) of the students belongs to Hindu, 30(12%) belongs to Muslim and 20(8%) belongs to Christian. According to the standard studying 71(28%) of them studying 9th standard, 45(18%) of them studying 11th standard, 43(17%) of them studying 8th standard, 37(15%) of them studying 7th standard, 34(14%) of them studying 10th standard and 20(8%) of them studying 12th standard. Based on family type of the students 162(65%) of them belong to the nuclear family whereas 88(35%) of them from joint family. Regarding daily use of smartphone time 145(58%) of them using more than 2-4 hour per day, 105(42%) of them using more than 4 hours per day and none of them found to be using less than 1 hour per day. According to the sleep duration of the students 130(52%) of them sleeps 4-6 hours daily, 80(32%) of them sleeps 6-8 hours and 40(16%) of them sleeps less than 4 hours.

Table 1: Frequency and percentage distribution of demographic variables n=250

S.no	Demographic variables	Frequency	Percentage
1.	Age		
	12-13	80	32%
	14-15	105	42%
	16-17	65	26%
2.	Gender		
	Male	150	60%
	Female	100	40%
3.	Religion		
	Hindu	200	80%
	Muslim	30	12%
	Christian	20	8%
4.	Standard studying		
	7 th standard	37	15%
	8 th standard	43	17%
	9 th standard	71	28%
	10 th standard	34	14%
	11 th standard	45	18%
	12 th standard	20	8%
5.	Family type		
	Nuclear family	162	65%
	Joint family	88	35%
6.	Daily using time		
	Less the 1 hour	0	0
	2- 4 hours	145	58%
	More than 4 hours	105	42%
7.	Sleep duration		
	6-8 hours	80	32%
	4-6 hours	130	52%
	Less than 4 hours	40	16%

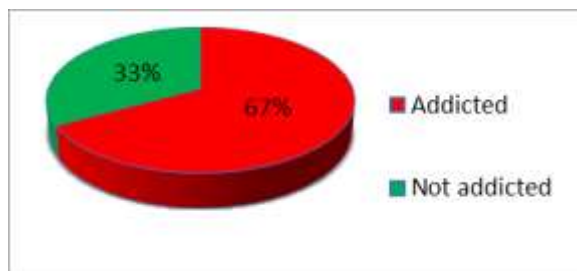


Figure 1: Smartphone addiction among school students

Figure 1 illustrates the smartphone addiction level among school children 167 (67%) of the students had addiction, (83) 33% of them are without smartphone addiction.

Table 2: Knowledge of the students on Smartphone addiction n =250

S.no	Knowledge on Internet Safety	Frequency	percentage
1	Inadequate (1-31)	210	84
2	Moderate (32-46)	35	14
3	Adequate (47-62)	5	2
	Total	250	100

Figure 2: Level of knowledge on smartphone addiction among students

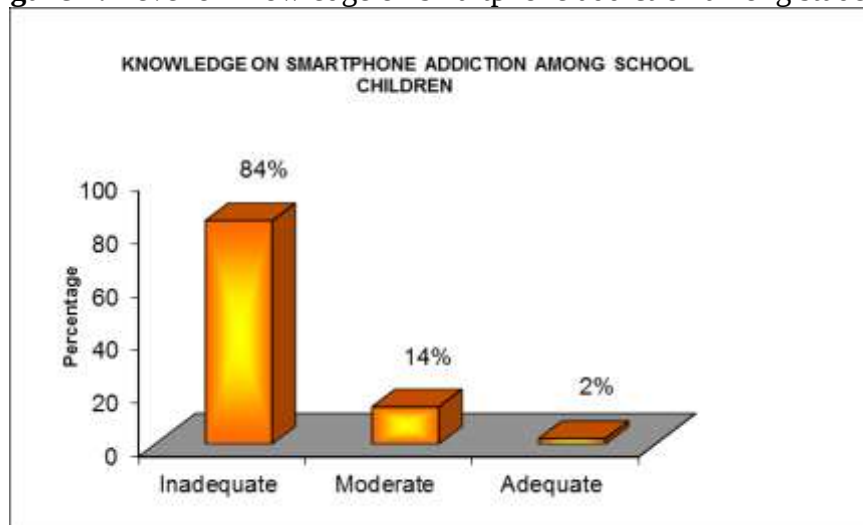


Table 2 and figure 2 illustrates the level of knowledge on smartphone addiction among students found to be 210(84%) of them had inadequate knowledge, 35(14%) of them had moderately adequate knowledge and 5(2%) of them had adequate knowledge.

Table 3: Association of students on smartphone addiction n =250

S.no	Demographic variable	X ² value	p-value	Level of significant
1.	Age	5.82	0.0544	NS
2.	Gender	4.84*	0.0278	S
3.	Religion	3.81	0.1488	NS
4.	Standard studying	9.36	0.9553	NS
5.	Family type	5.52*	0.0188	S
6.	Daily smartphone using time	8.42*	0.0149	S
7.	Sleep duration	7.84*	0.0198	S

*Significant at $p < 0.05$

Table 3 illustrates the demographic variables collected from the students gender, family type, daily smartphone using time and sleep duration found to be significant at $p < 0.05$ level. Age, religion, standard studying found to be non-significant.

5. Discussion:

The present study identified smartphone addiction level among school children 167 (67%) of the students had addiction, (83) 33% of them are without smartphone addiction. Priyanka Dichwalkar and Anjali Puntambekar identified in their study on smartphone addiction among urban children. The data of 45 participants (N=45) with 19 boys (N=19) and 26 girls (N=26) in the age group of 13 to 16 years of age (mean=14.5years) was collected. The percentages of addicted was calculated and graphically represented in Microsoft Excel. From collected data we found that 73.33% of children were addicted and 26.66% were non-addicted.⁷

In the present study level of knowledge on smartphone addiction among students found to be 210(84%) of them had inadequate knowledge, 35(14%) of them had moderately adequate knowledge and 5(2%) of them had adequate knowledge. Jincy joy et al.,(2017) conducted a study on internet addiction among 70 adolescent (15-17 years) students revealed that in pre-test 81% of the students had average knowledge about 19% of them had below average knowledge on internet addiction. After administration on self-instructional module 69% of the student shad above average knowledge, 31% of them had average level of knowledge and none of them had below average on internet addiction. This effectiveness was found to be significant at p value < 0.05 ⁸

In the Present study demographic variables collected from the students sex, family type, daily smartphone using time and sleep duration found to be significant at $p < 0.05$ level. Age, religion, standard studying fount to be non-significant. Nikhita CS, Jadhav PR, Ajinkya SA in their Cross-sectional, observational study on prevalence of mobile phone dependence among the secondary school students in schools at Navi Mumbai (India) identified Mobile Phone Dependence was found in 31.33% of sample students. It was significantly associated with gender ($p=0.003$,

OR=1.91, CI: 1.23-2.99), family type ($p=0.0012$), type of mobile phone used ($p<0.001$, OR=2.6, CI: 1.63-4.35), average time per day spent using mobile phone ($p<0.001$) and years of mobile phone usage ($p=0.004$, OR=2.4, CI: 1.31-4.55).⁹

6. Conclusion:

Smartphone over use becomes common problem among all the age groups. School children are the most vulnerable age group that they have little or no knowledge on effective and safe use of smartphone hence becomes over used or addicted towards it. School students having smartphone addiction not only facing the physical or psychological/behavioral issues, it can also closely affect the academic levels. Students faces the problems of poor academic performance, lack of motivation in the school, poor relationship with peer group and teachers, loss of interest in school works, poor self-esteem and causing indiscipline in school. It is essential to plan more number of research, teaching plan, training strategy, and therapeutic sessions on consequences of smartphone addiction among school children.

Ethical clearance: Taken from IEC committee of VMCN.

Conflict of interest: NIL

Source of funding: Self

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