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TITLE-

ASSESSMENT OF KNOWLEDGE AND PRACTICE REGARDING SMARTPHONE USAGE AND ITS EFFECTS AMONG SCHOOL CHILDREN.

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ASSESSMENT OF KNOWLEDGE AND PRACTICE REGARDING SMARTPHONE USAGE AND ITS EFFECTS AMONG SCHOOL CHILDREN.

ABSTRACT

Introduction- A mobile phone is a smart and advanced device that considerably improves day by day. In the 21st century, smart smartphones accommodate many features including email handling access, online shopping, biometrics, study contains, and gathering information related to academic affairs.

Objectives- To assess the knowledge of school children regarding smartphone usage and its effects. To assess the practice of schoolchildren regarding smartphone usage and its effects. To assess the smartphone dependency among school children. To assess the effect of smartphones on academic performance among school children.

Methods- A descriptive survey design was adopted in this study. The study included a total sample of 120 schoolchildren studying at Sunshine Public School, Bangalore. The non-experimental method was used in this study.

Result- The knowledge level found regarding smartphone effect on the sample was 41.77% inadequate, 23.33% moderate, and 5% adequate. The practice regarding smartphone addiction among the samples was 42.76% inadequate, 24.34% moderate, and 6% adequate. In level of smartphone dependency revealed that 21.6% have a high level of dependency and excellent academic performance only 0.80%.

Conclusion- A mobile phone is one of the most essential gadgets in our daily life and has adverse effects on every human being especially on young children's mental health. It is very essential to spread awareness about the effects of smartphones.

Key Words- Knowledge, practice, Schoolchildren, smartphone, effect.

INTRODUCTION

Among school-age children, smartphone use become very common as a daily essential for living life. Several research studies have revealed that about 97% of children are using mobile phones and tablets whose age group is under 4 years. In the present era, children are growing up in an intermediate-frequency environment that has never existed in human records before¹. The present generation is not oriented toward toys instead they are oriented toward modern technologies like smartphones, video games, tablets, high-tech gadgets, and social media².

According to a few studies it has revealed that in Canada one in four children ends a mobile phone or smart device⁴. Instead of physical activity, they are more involved in gadgets, and as a result of this children are not reaching their general growth and development milestones. Because of long-time screen exposure, their refluxes also are affected as well and concentration also decreases in one object smartphone addiction as negative³.

Smartphone addiction has negative impacts on student learning and overall academic performance. Nany new numerous studies suggest that the greater use of phone while studying the greater the negative impact on learning and academic achievements¹⁰. The 2023 global education monitoring UNESCO report shows that use of smartphones can disturb learning in classrooms. Even just having a mobile phone near with notifications coming through is enough to result in students losing their attention from the task at hand and it can take students up to 20 minutes to refocus on what they were learning once distracted. Driving smartphones from schools in Belgium Spain and United Kingdom was found to improve learning outcomes according to a study seated in the this report¹².

Now worldwide, this is one of the major problems and children are developing several mental health and developmental milestone issues because of this mobile phone addiction⁶. So, it is essential to find out the adverse impact of mobile phones on school-going children for awareness and prevention¹¹.

OBJECTIVES

- 1. To assess the knowledge of school children regarding smartphone usage and its effects.
- 2. To assess the practice of schoolchildren regarding smartphone usage and its effects.

- 3. To assess the smartphone dependency among school children.
- 4. To assess the effect of smartphones on academic performance among school children.

METHODOLOGY

Research approach- A descriptive survey approach was used in this study.

Research design- Non-experimental descriptive results design was adopted in this study.

Variables under study

- **Dependent variables-** knowledge and practice.
- Attributed variables- age, gender, religion, types of family, source of income.

Setting of study- The study was conducted at Sunshine Public School, Bangalore.

Population- The study consists of 5th to 8th standard schoolchildren.

Target population- The target population of the study was 120 of 5th to 8th standard schoolchildren studying at Sunshine Public School.

Simple sampling technique

- The sample of the study was selected through a purposive sampling technique.
- In the present study non-probability convenience sampling technique process to select 120 school children.

Sample size- The total sample of the study consists of 120 schoolchildren studying at Sunshine Public School.

Criteria for sampling selection

Inclusion criteria-

schoolchildren

- Schoolchildren studying at 5th to 8th standard.
- Who is willing to participate
- Who is having smartphone

Inclusion criteria-

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Schoolchildren

- Who is not available at the time of study.
- You are sick of the time of study.

Data collection tools

Part 1: Sociodemographic Variable-

This part is include 2 subpoints which is Participants details and Mobile phone uses details. Participants details include- age, Gender, Religion, types of family, number of siblings, family income per month and who will pay for cell phone currency.

Smartphone uses details includes- Age of receiving smartphone, In school days duration of using smart phone, Weekends uses duration, frequency of checking and smartphone using purpose.

Part 2: Standardized tool for smartphone dependence- Which has prepared in 2012 by Marino Choliz.

Part 3: Academic Performance of school children- This section will be evaluated on the basis of academic performance of the school children.

Ethical consideration

Before data collection approval was taken from the institutional ethical committee. Other permission also was obtained from the higher authority for data collection. Written consent was collected from all the samples.

RESULTS

A. Description of democratic variables

Participants details

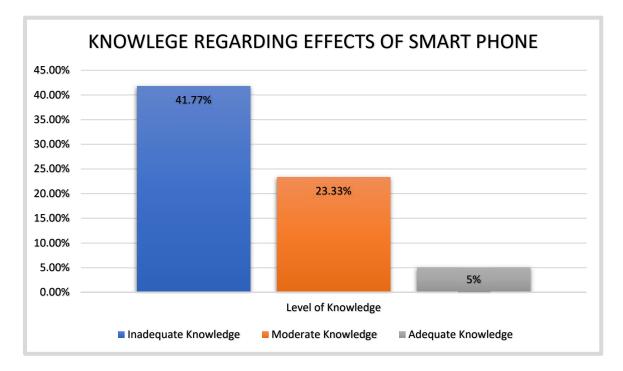
The majority of the sample belongs to the 10 to 11 years (21.7%), 11-12 years (21.7%), 12-13 years (31.7%), and 13-14 years (26.7%). The majority of the sample belongs to males (51.7%) and females (48.3%). A maximum of them were Christian (30%), some belonged to Muslim (28.3%), Hindu (26.7%), and others (15%). Most of the samples are nuclear family type (36.7%), joint family (21.6%), extended family (11.6%) and single parent (30%). The number of samples having one sibling is (30%), two siblings (20%), three and above (31.7%), and no

siblings (18.3%). The family income per month is 10,000 to 14,000 (18.3%), 15,000 to 19,000 (18.3%), 20,000 to 24,000 (20%), 25,000 to 30,000 (43.3%). The majority of the sample's cell phone currency was paid by the father (35%) mother (25%) brother/sister (16.7%) and others (23.3%).

Smartphone uses details

SL No.	Demographic Variable	Number	Percentage
1.	Age of receiving smartphone		
	6-8 years	68	56.6%
	9-11 years	37	30.8%
	12-14 years	15	12.5%
2.	In school days duration of using smartphone		
	1-3 hours	38	31.6%
	4-6 hours	56	46.6%
	7-9 hours	26	21.6%
3.	Weekend uses duration		
	1-4 hours	36	30%
	5-8 hours	54	25%
	9-12 hours	30	45%
4.	Frequency of checking smartphone		
	1-50 times	26	21.6%
	51-100 times	61	50.8%
	100-150 times	37	30.8%
5.	Smartphone using purpose		
	Communication	12	12%
	Photos	68	68%
	Social Media	52	52%
	Education	89	89%
	Game	91	91%

Table 1: Demographic variable (Smart phone uses details)



B. The knowledge level of school children regarding smartphone usage and its effects.

Figure 1 - Level of knowledge regarding the effects of smartphones among the samples

The data represented in Figure 1, shows the knowledge level of school-going children regarding smartphone usage and its effects 41.77% acquired inadequate knowledge, 23.33% acquired moderate knowledge and 5% acquired adequate knowledge.

C. The practice level of schoolchildren regarding smartphone usage and its effects.

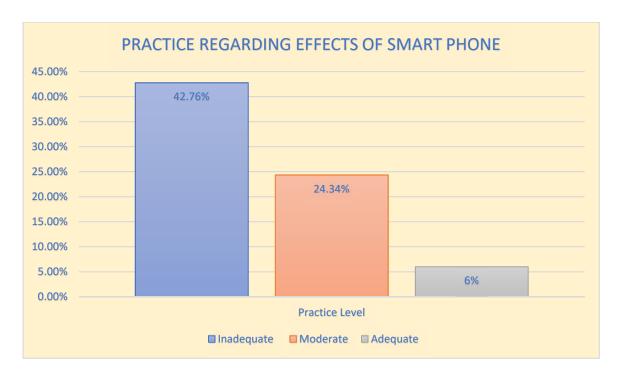


Figure 2 - Level of Practice regarding the effects of smartphones among schoolchildren.

The data represented in Figure 2, shows the practice level of school-going children regarding smartphone usage and its effects 42.76% had inadequate practice, 24.34% had moderate practice and 6% had adequate practice.

D. Level of smartphone dependence

Leve of Dependancy	Score	Frequency	Percentage
No dependancy	0-22	29	24.1%
Low dependancy	23-44	13	10.8%
Moderate dependancy	45-66	52	43.3%
High dependacy	67-88	26	21.6%

Table 2 – Level of smartphone dependanccy among schoolchildren

The details represented in Table 2, reveal the level of smartphone dependency among schoolgoing children. Majority of the schoolchildren found with a moderate dependency was 43.3% (52 samples), 21.6% (26 samples) Schoolchildren with high dependency,10.8% (13 samples) with low smartphone dependency, and 24.1% (29 samples) with no smartphone dependency.

E. Academic Performance of School Children

Academic performance	Percentage
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Fair	44.60%
Good	28.40%
Very good	25.20%
Excellent	0.80%

Table 3 – Level of academic performance among schoolchildren

The details presented in Table 3, reveal the academic performance level of schoolgoing children as an effect of smartphone dependency. The result shows the majority of the students came under the fair category which is 44.60%, 28.40% came under the good category, only 25.20% children performed very well score and the excellent score is very low among all samples which is 0.80%.

DISCUSSION

Using smartphones during schooling time is one of the major problems in the present generation and has adverse effects on their education as well as social life. After conducting this survey study revealed that the level of knowledge regarding the effects of smartphones among school-going children was 5% having adequate knowledge, 23.33% having moderate knowledge, and 41.77% having inadequate knowledge. The level of practice was 42.76% inadequate, 24.3% was moderate, and adequate practice was 6%.

CONCLUSION

After assessing the outcome of the study the knowledge of school children regarding the effects of smartphones on the academic purpose of children in which 41.77% of the students have adequate knowledge, 23.33% of students have moderate knowledge, and 5% of the students have adequate knowledge. Very few percent of children can score excellent academic scores and moderate dependency is more found in school-going children. Thus, it was concluded that proper knowledge of how smartphones affect school-going children is essential to improve academic performance by conducting different awareness interventions.

AUTHORS CONTRIBUTION

Dr. Mandira Gope: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. **Dr. Ramu K.:** Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. **Srinivas Nagula**: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization.

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