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Conference article

A Research Study Focusing on Electronic Device Utilization in Addition to Its Impact on Health and Wellness in Order to Produce a Learning Brochure to the Schools Kids in Chosen School at Bengaluru

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Abstract

Introduction. A research study was conducted to evaluate the utilization of electronic devices and their impact on the health and wellness of schoolchildren, with the objective of developing an educational brochure for students. **Methodology.** The study was carried out at a selected school in Bengaluru using a descriptive research design. A total of 60 students from grades 8 and 9 were selected through a convenient sampling technique. Data was collected using a self-structured questionnaire focusing on patterns of electronic device usage and related health effects. **Results.** The results indicated that the majority of students (95%) had a moderate level of knowledge, while only 3.3% showed adequate knowledge and 1.7% had poor awareness. The mean knowledge score was 56.66%, and statistical analysis revealed a significant association between students' knowledge and demographic variables ($p < 0.05$). **Conclusion.** The study concludes that awareness among schoolchildren is limited, and recommends the implementation of structured educational programs and the distribution of informative brochures in schools.

Introduction

Mobile phone is considered as an important communication tool and became the integral part of the society, it is not only a communication device but it also a necessary social accessory [1,2,5,7]. Number of surveys conducted on the youth worldwide has figured out that they consider cell phones an integral part of survival and some have even gone to the extent of saying that they would rather go without food for a day than without their cell phones [3,4,12]. With constant texting, calling, listening to music, playing phone games or simply fiddling with the phone being such an integral part of their lifestyles [6,11]. According to Telecom Regulatory Authority of India, there are about 929.37 million mobile phone subscribers in India making it the

world's second-largest cell phone using developing country in the month of May, 2012 [7].

School-age child development describes the expected physical, emotional, and mental abilities of children ages 6 to 12 [8,9]. School-age children most often have smooth and strong motor skills. 9Mobile phone use in schools by students has become a controversial topic debated by parents and teachers. Parents who support the use of cell phones believe that these phones are essential for safety by allowing children to communicate with their parents and guardians [10,12]. Opponents of students using mobile phones during school believe that mobile phones cause disruption and may be used inappropriately such as by cheating on tests, taking inappropriate photographs, and playing mobile games [11]. Rather than paying attention to

More Information

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Keywords:

Electronic device, utilization, schools kids, impact on health, wellness.



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teachers, students are spending more time distracted by their phones [9,11]. To prevent distractions caused by mobile phones, some schools have implemented policies that restrict students from using their phones during school hours [6].

Goals for the Study

This study examined students' perception, views and opinions about the usage of mobile phones in an educational setting in a higher education institution located in Jamaica. The results of these findings were used to gain insights and to assist education policymakers in adopting most suitable approaches to integrating mobile technology in learning. A survey approach was used for this study. A total of 145 students participated in the study using structured questionnaire design containing 14 questions. The results indicated an overall positive student perception toward cell phones usage as a learning tool and integrating cell phones into learning activities. Students were keen on its usage as a social connectivity and collaborative tool, which they can use for flexible and personalized learning activities.

Methods

Research Approach

Research design is referred as "research" overall plan" for obtaining answer to the research question or for testing the research hypothesis. The design used for the present study was a descriptive research design to assess the usage of mobile phone and its impact on health and wellbeing with view to provide information booklet to the school children in selected school at Bengaluru."

Construction of the Tool and Teaching Approach

- Objectives of the study and the researcher has to answer for following question
- To evaluate the impact of schoolchildren's mobile phone use on their health and well-being.
- To evaluate how schoolchildren's health and well-being are affected by cell phones.
- Identify the relationship between the effects of using a mobile phone and the chosen socio-demographic indicator.
- Developing an information brochure to be given to kids.

The research tool and instruction module were developed under the guidance of subject matter experts and on the basis of an evaluation of pertinent literature. Five experts—four paediatricians and four child health nursing professionals—assessed the content validity of the tool. The final development of the tool comprised the necessary revisions and

recommendations. The tool's reliability was assessed using the test-retest method ($r = 0.08$). Findings confirmed the tool's reliability.

Sample and Sampling Technique

The population that makes up the sample is involved in the research project. The study's sample size consists of sixty pupils from Bangalore's Ananda Social and Educational Society.

The process of choosing a subset of the population to represent the complete population is known as sampling. For the purpose of this inquiry, a convenient sampling strategy was used.

Inclusion and Exclusion Criteria

Students from a particular school. Students in school who are able to grasp both Kannada and English and who are present during the data collection time. The exclusion criteria were Students who were not willing to engage in this study; students who were absent from school when the data was being collected.

Ethical Consideration

The current study was carried out in our chosen permission from the school authority. Before the study began, the participants gave their consent in order to safeguard their legal right to participate in research. The school kids took part in the program voluntarily and were free to leave at any moment.

Data Collection

Formal approval was given by the relevant authorities to conduct the investigations. 60 samples were selected based on certain criteria. After each participant was assured of their privacy, permission was acquired. On the first day, a pretest was administered, followed by an educational intervention, and on the seventh day, a post-tests was administered using the same instruments.

Data Analysis

The collected data was coded and transformed to master sheets for analysis and analyses result was portrait in the form of charts after being sorted, totaled, and summarized, the data was put through both descriptive and inferential statistical analysis. The analysis was performed using the "t" test. The association between the selected demographic factors and knowledge was investigated and inferred using the χ^2 (chi-square) test.

Results

Distribution of schoolchildren's demographic factors in terms of frequency and proportion. Knowledge assessment on how mobile phones are used and how they affect schoolchildren's health and wellbeing. Correlation between knowledge levels and the chosen demographic factors.

Table 1. Classification of Sample Based on Their Demographic Variables

Sl.no	Sociodemographic variables	No of subjects	Percentage
1	Gender		
	Male	32	53.3
	Female	28	46.7
2	Age in years		
	10-12 yrs	15	25.0
	13-15 yrs	25	41.7
	16-20yrs	20	30.3
3	Religion		
	Hindu	29	48.3
	Muslim	15	25.0
	Christian	13	21.7
	Other	3	5.0
4	Type of family		
	Nuclear	27	45.0
	Joint	33	55.0
5	Education		
	9thstd	31	51.7
	8thstd	29	48.3
6	Occupation of the Father		
	Private	39	65.0
	Government	21	35.0
7	Type of electronic device use		
	Television	8	13.3
	Computer	8	13.3
	Mobile	43	71.7
	Play station video game	1	1.7
8	Phone with 3g capacity		
	Basic phone	4	6.7
	Feature phone	16	26.7
	Smart phone	40	66.7
9	Time spent with electronic device		
	1hour	2	3.3
	2 hours	22	36.7
	3 hours	18	30.0
	More than 4 hours	18	30.0
10	Frequency of Mobile use		
	Alternate day	11	18.3
	Every day	38	63.3
	Every 2 days	3	5.0
	Only on specific day	8	13.3

By gender, 46.7% of them were female and 53.3% of them were male. 25 percent of them were 13 years old, 41.7% were 14 years old, 18.3% were 15 years old, and 15% were 16 years old, based on age. In terms of religion, there were 48.3% Hindus, 25% Muslims, 21.7% Christians, and 5% other people. According to the above diagram, 45% of samples had nuclear families and 55% had joint families. 51.7% of the students meet the 9th standard, while the remaining 48.3% meet the 8th level. Residence data showed that 76.7% of them were lodging at home, 15% were staying at a hostel,

1.7% were paying guests, and 6.7% were staying with family. About the parents' jobs, 35% Of their parents' jobs, 35% were in government service and 65% were in the private sector. 13.3% of respondents reported using a computer, 13.3% a television, 71.7% a mobile device, and 1.7% a Play Station video game. When it came to phones having 3G capability, 6.7% said they had a basic phone, 26.7% said they had a feature phone, and 66.7% said they had a smart phone. 3.3% of students use electronic devices for one hour, 36.7% for two hours, 30% for three hours,

and 30% for more than four hours. In terms of how frequently people use their phones, 18.3% use them every other day, 63.3% use them every day, 5% use them every two days, and 13.3% only use them on rare occasions.

The table 2 shows the range was 10-21 mean 15.85, standard deviation was 2.193, mean percentage was 56.66% about knowledge on school kids about the mobile devices and its impact of health and wellbeing's

Table 2. Assessment of Knowledge Regarding Usages and Impact of Mobile Phone on Health and Wellbeing of School Children. Range, Mean, Standard Deviation and Mean Percentage of Knowledge

Sl.No	Domain	Range	Mean	SD	Mean (%)
1	Knowledge	10-21	15.85	2.193	56.66

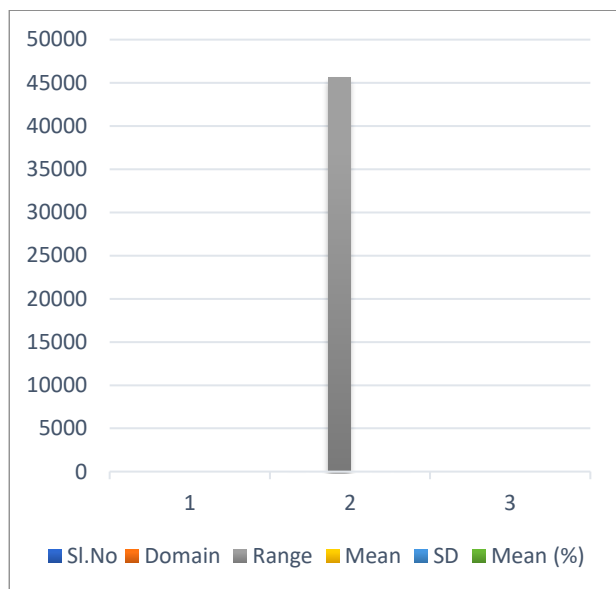


Figure 1. Assessment of Knowledge

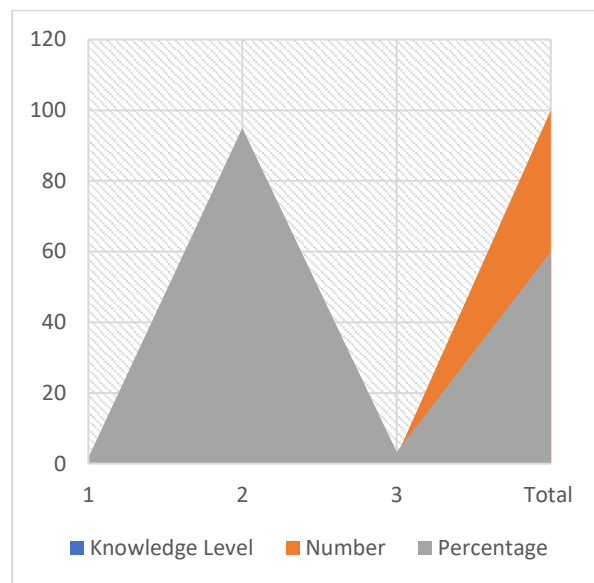


Figure 2. Frequency Distribution of Samples According to Test Level of Knowledge

Table 3. Frequency Distribution of Samples According to Test Level of Knowledge

Sl.No	Knowledge Level	Number	Percentage
1	Inadequate (1-10)	01	1.7
2	Moderate (11-20)	57	95
3	Adequate (21-28)	02	3.3
Total		100	60

The table 3 shows that 57 students (95%) had moderate knowledge on and its impact of health and wellbeing's and 2(3.3%) of children had adequate knowledge on

and its impact of health and wellbeing's and very few of them had inadequate knowledge

Table 4. Range, Mean, Standard Deviation and Mean Percentage of Aspect Wise Knowledge

No.	Knowledge Aspects	Statements	Range	Mean	SD	Mean (%)
01	Basic knowledge	05	1-5	3.25	0.95	65
02	Usage of mobile phones	04	1-4	2.25	0.816	56.25
03	Impact on daily life	08	1-7	4.2	1.64	52.5
04	Impact on health	07	1-7	4.1	1.23	58.57
05	Safety way of mobile use	04	0-4	2.05	1.09	51.25
	Overall knowledge	28	10-21	15.85	2.193	56.66

The table 4 shows the analysis of aspect wise knowledge. In the aspect of basic knowledge range was 1-5, mean 3.25, standard deviation was 0.95 and mean percentage was 65%. In the aspect of usage of mobile

phone, range was 1-4, mean 2.25, standard deviation was 0.816 and mean percentage was 56.25%. In the aspect of impact on daily life range was 1-7, mean 4.2, standard deviation was 1.64 and mean percentage was

52.5%. In the aspect of impact on health range was 1-7, mean 4.1, standard deviation was 1.23 and mean percentage was 58.57%. In the aspect of safety way of mobile use range was 0-4, mean 2.05, standard deviation was 1.09 and mean percentage was 51.25%.

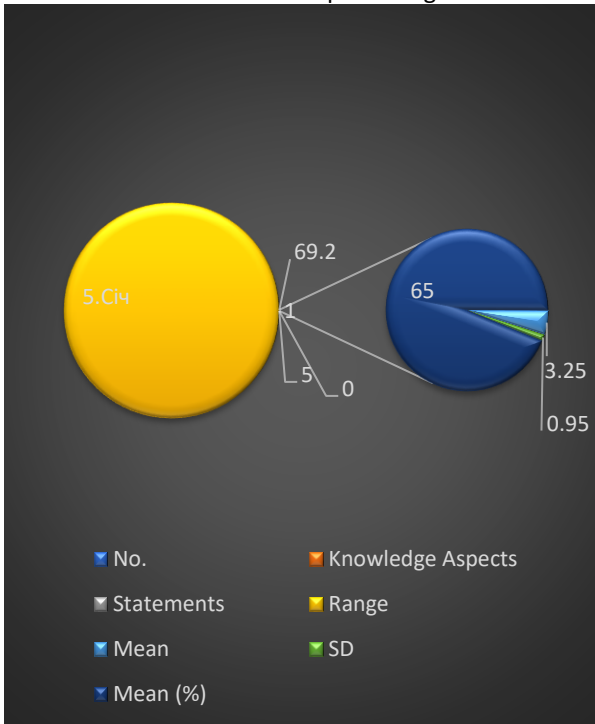


Figure 3. Range, Mean, Standard Deviation and Mean Percentage of Aspect Wise Knowledge

The association between knowledge with their selected demographic variables. Demographic variables like Age, education, type of electronic device use and how often they use the mobile phone showed statistically significant association with knowledge at $p < 0.05$ level. Hence null hypothesis (H_0) is rejected and the research hypothesis (H_1) was accepted. It provides the evidence that there is a statistically significant association between knowledge and demographic variables

Discussion

Based on the study's findings, which were as follows, the conclusions were made. Regarding cell phone usage and its effects on health and wellness, schoolchildren's knowledge scores were mediocre [8,10]. The mean percentage was 56.66%, the standard deviation was 2.193, and the range was 10–21 mean 15.85. 95% of the participants in the study exhibited moderate knowledge, 3.3% had appropriate knowledge, and 1.7% had poor knowledge [10]. The demographic characteristics and knowledge were found to have a statistically significant connection [8]. The general conclusion is that schoolchildren had a moderate understanding of mobile phone usage and how it affects their health and well-being [9,10].

Conclusion

The goal of the current study is to evaluate mobile phone usage and its effects on health and welfare in order to offer schoolchildren in particular Bangalore schools with information booklets. Descriptive research design was used for the investigation. Using a self-administered questionnaire, 60 school pupils (8 and 9 Standards) were the sample from which the data were gathered. Bangalore's Ananda Social and Educational Society was the study's chosen location. In this investigation, a convenient sampling strategy was employed. The study's objectives informed the tool material, which was distributed to three community health nursing experts and one biostatistician expert. Both descriptive and inferential statistics were applied to the data analysis. The results were made public. To evaluate the parents' expertise, a study such to this one could be carried out. The public should receive as much publicity as possible through mass media to raise awareness of the effects of social media. Additional investigation was required to comprehend the ways in which parents can manage their children's attitudes toward the use of social networking sites, which can impact their health and academic achievement.

Sources of Funding

None

Conflict of Interest

None

References

[1] European Environment Agency. Environment and health [cited 2021 Aug 10]. Available from: <https://www.eea.europa.eu/themes/human/intro>

[2] Rioux RM, Zaman TA. Proper Waste Disposal. J Vis Exp 2021;(1910):e10403.

[3] Verma M. Why is there need for Waste Management in India? [Internet]. Corpbiz; 2021 [cited 2021 Aug 10]. Available from: <https://corpbiz.io/learning/why-is-there-need-for-waste-management-in-india/>

[4] Block P, editor. Managing in the media. New Delhi: Focal Press; 2001.

[5] Khan S. Mobile Phone Usage of Graduate Students in Rawalakot—A study about the psychosocial and physical effects. Germany: Verlag GmbH; 2017.

[6] Saxena A, editor. Social media and new techniques. New Delhi: Kanika Publishers; 2014.

[7] Verma S. Invention story of cell phones. 2012 [cited 2018 Sep 19]. Available from: <http://www.engineersgarage.com/inventionstories/mobile-phone-history>

[8] Acharya J, Acharya I, Waghey D. A study on some of the common health effects of cell-phones amongst college students. Community Med Health Educ. 2013;3(4):214. doi:10.4172/2161-0711.1000214

[9] Cain J, Gradisar M. Electronic media use and sleep in school-aged children and adolescents: a review. *Sleep Med.* 2010;11(8):735-742. doi:10.1016/j.sleep.2010.02.006

[10] Kaur N, Kaur P. A study to assess the effect of mobile usage on health among adolescents. *Int J Nurs Educ Res.* 2018;6(1):76-79. doi:10.5958/2454-2660.2018.00018.4

[11] Kuss DJ, Griffiths MD. Social networking sites and addiction: ten lessons learned. *Int J Environ Res Public Health.* 2015;12(3):1286-1306. doi:10.3390/ijerph120201286

[12] Pew Research Center. Mobile technology and home broadband 2019 [Internet]. 2019 [cited 2025]. Available from: <https://www.pewresearch.org/internet/2019/06/13/mobile-technology-and-home-broadband-2019/>



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A Study to Access the Effectiveness of Psychoeducation Module on Managing Anger Adolescent Students in Selected School, Bangalore

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Abstract

Adolescents are suffering with many physical, social, emotional, and psychological problems which enhance the level of anger. Hence, anger management is an intervention which involves the adolescent students in the active recollection of life experiences. It allows them to relieve the personal events from their past in a way that is vivid and engaging, and encourages them to communicate those experiences to a listener. The results of the study were based on the statistical analysis. The effectiveness of the education module on anger management was assessed by paired “t” test and association between the post- test levels of anger with selected demographic variables was assessed by chi-square test. Study result: The finding of the study revealed that anger is decreased with paired t- test $p \leq 0.001$. There is a very High statistical significance difference in the effectiveness of psycho education modules to decrease anger among adolescent students in St Mary’s public School, kanshiram nagar, Bangalore. The adolescents have reduced their anger score from 65.61 to 46.49 after the administration of the psycho education module. The comparison of overall anger score before and after psycho education module mean \pm SD = 65.61 \pm 15.83, post-test mean \pm SD = 46.49 \pm 12.5, mean difference mean \pm SD = 19.12 \pm 20.31, students paired t-test $t=9.41$ $p=0.001^{***}$, DF=99 significant. Very high significant at $*P \leq 0.001$ DF=Degrees of freedom.

List of Abbreviations Used:

PMT – Parent Management Training, CBT – Cognitive behavioral therapy, WHO - World Health organization, MHN - Mental health nursing, PE - Psycho Education, Df - Degree of freedom, M – Mean, MD - Mean Deviation, NS-Non-Significant, r - Correlation Coefficient, SD - Standard Deviation, S – Significant, X² - Chi Square, % - percentage, Tab – Table, Fig - Figure.

Introduction

Anger is present in all of our lives. We have all “lost it” with family, friends or work colleagues at some time. Anger is both good and bad – it is a signal to resolve any

difficulties surrounding it, and it can also motivate us [1,11]. We can all remember that the time an argument cleared then we took positive action because of anger. An emotional state known as anger is characterized by

More Information

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Keywords:

anger management, adolescents, demographic variables, psycho education.



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