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A study to assess the effectiveness of structured teaching programmeon knowledge regarding hazardous effects of smart phone addiction on children among the parentsof school going children in selected urba areas of vadodara

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ABSTRACT:- This study was conducted to assess effectiveness of structured teaching programme on knowledge regarding hazardous effects of smart phone addiction on children. The target population for the study was parents of school going children in selected urban areas of vadodara and in this study parents of school going children in that children age is 6 to 12 years has been preferred.The structured teaching programme was prepared and conducted focusing on introduction, definition smartphone, smartphone addiction definition, causes of smartphone addiction, sign and symptoms, hazardous effects of smartphone addiction on children, prevention of smart phone addiction.A quantitative research approach with pre-experimental research design was adopted for the study. A total 50 sample were selected by nonprobability convenient sampling technique.Data was collected using structured knowledge questionnaire. The data were collected and analyzed using both descriptive and inferential statistics to find out the significant difference between the pre-test and post-test knowledge. Mean pre-test knowledge score was **8.32±3.34** and mean post-test knowledge score was **20.16±3.50** with mean difference of **11.84** and ("t"value-21.16, df-49) was found statistically highly significant at $p<0.05$. Findings revealed that structured teaching programme was effective in improving knowledge of parents of school going children regarding hazardous effects of smart phone addiction on children.

Keywords: Knowledge , Hazardous effects, Prevention, Smart phone, Addiction ,Parent, school going children, Structured teaching programme.

1. INTRODUCTION:- In the last era of our time, the display of various types of mobile phones that contain Wi-Fi technology has increased, resulting in increased popularity among people, including children, to own such kinds of smart devices. The Wi-Fi devices in mobile phones have a key role in exchanging information and data to show image, audio, video, to transfer application from mobile emitting waves. The cause is that the frequency of radiations emitted from the mobile are utilize in range from 3 kHz to 300 GHz [1]

Smartphone technology has become an integral part of life for its numerous benefits. Smartphones users are throughout the globe, across all social and economic divides, for multiple different situations and purposes, and across all ages of adults, adolescents and children .As with adult trends, childhood smartphone use has increased dramatically in many countries worldwide. Despite the advantages, various negative smartphone consequences affect physical and mental health, reduce social interaction, cognitive disorders, vision, sleep quality, sedentary

lifestyle, obesity and psychological dependence which includes smartphone addiction in children. [2]

The mobile phone has many attributes and characteristics that make it very attractive to both young and old. Behavioral addiction for mobile phones has been variously termed as mobile phone dependence or addiction or problematic use which make a person unable to regulate its use leading to negative consequences in daily life. It has emerged as a challenging public health issue. Mobile phone addiction (MPA) not only has physical effects but also psychological and academic effect at the same time. Sleep deficit, anxiety, stress, and depression which are all associated with internet abuse, have been related to mobile phone usage too. [3]

Smartphone use was shown to affect children and adolescents, causing them to have insufficient, disturbed or poor-quality sleep which has emerged as a public health issue in technologically advanced societies Specifically, young people often tend to use their smartphones in their beds and before going to sleep leading to insufficient sleep duration and impaired sleep quality accordingly. It is also reported that excessive electronic media (e.g., smartphone) use at night is a risk factor for adolescents' sleep disturbance and depression Likewise, previous studies reported that smartphone addiction negatively affect sleep duration which may cause adverse health issues.[4]

Cell phones have become necessity in all age groups in current scenario. India has the highest mobile phone users in the world after Korea. In India among 143million social media users 12% are school children. Cell phones which emit and receive radio frequency electromagnetic radiations have become ubiquitous with estimated 6.9 billion subscriptions globally. India is not behind in the race of getting connected and is evident by 1,168.31 million subscription out of which 56.48% belongs to urban region and rest 43.52% is confined to rural region.in India among 143 million social media users 12% are school children. [5]

Usually, individuals who experience smartphone addiction will not ignore the impact of their behaviour (Paramita & Hidayati, 2017). Ironically, the use of smartphones exceeds even primary needs, where a person is very dependent and cannot be far from his smartphone. According to Chiu (2014), this behaviour is often experienced by elementary-age children and teenagers, the main reason is to entertain themselves and divert stress through game application features on smartphones. One of the negative impacts that are feared to occur in students with smartphone addiction behavior is academic procrastination (Syifa, 2020). [6]

The recent studies also reported the increase of mobile phone dependence, and this could increase internet addiction. Over usage of mobile phones may cause psychological illness such as dry eyes, computer vision syndrome, weakness of thumb and wrist, neck pain and rigidity, increased frequency of De Quervain's tenosynovitis, tactile hallucinations, monophobia, insecurity, delusions, auditory sleep disturbances, insomnia, hallucinations, lower self-confidence, and mobile phone addiction disorders.[7]

According to the ASER survey, there were 36.5% smartphone users in rural India in 2018, 61.8% in 2020, and 67.6% in 2021. According to the most recent Annual Status of Education Report (ASER) survey, smartphone penetration has doubled in rural families over the last three years, yet a quarter of the kids who have access to digital devices at home don't use them. According to the poll, there were 36.5% smartphone users in rural India in 2018, 61.8% in 2020, and 67.6% in 2021. Additionally, this year, at least 27.9% of rural Indian households purchased a new smartphone for their children's schooling. However, the research issued a warning that having a smartphone did not automatically equate to having access to education. "Although more than 67.6% of all enrolled children have smartphones at home, more than a quarter of them (26.1%) do not have access to them. There is also a distinct trend by grade, with higher-class students having access to smartphones at a higher rate than those in lower classes, according to the study. Teachers conducted virtual lessons and delivered reading materials via smartphones for over a year. Only recently have schools across the nation begun to open. Of the 67.6% of the children surveyed who had a smartphone at home, 27% claimed they had full access, 47% said they occasionally had access, and 26.1% said they had no access at all. Due to the widespread usage of cell phones in our culture, addiction and excessive use have grown to be serious global problems. [8]

Nearly 62% admit that their children aged 13 to 17 spend 3 hours or more per day on their smartphones, said a survey More than 40 per cent of urban Indian parents acknowledge that their kids between the ages of 9 and 17 are dependent on social media, videos, and online gaming, according to a survey by Local Circles. The percentage is higher for kids between the ages of 13 and 17, though 40 per cent of respondents acknowledged that their children spend that much time online every day watching videos, using social media, and playing games. According to the survey, nearly 55 per cent of parents admit that their children aged 9 to 13 have access to a

smartphone for almost the whole day, while 71 per cent of respondents with children aged 13 to 17 say their children have smartphones for almost the whole day.[9]

Children in the 21st century are avid users of technology - more so than generations past. Research suggests that pre-schoolers become familiar with digital devices before they are exposed to books. Many groups concerned with children's health, including governments and medical societies, advocate for partially or fully limiting screen time for children and adolescents, The American Association of Paediatrics (AAP), a prominent international voice in child health, publishes guidelines for screen time in children, the most recent of which were made available in 2016. These guidelines include a number of provisions such as avoidance of screens for children under 18 months (except for video-chatting), and limits of 1 hour per day of high quality programming for children up to the age of 5. A systematic review of the literature uncovered 67 studies from 1999 to 2014 exploring sleep among school aged children in which 90% of the studies found adverse associations between screen time and sleep outcomes such as delayed timing and shortened duration.[10]

2. MATERIAL & METHODS:

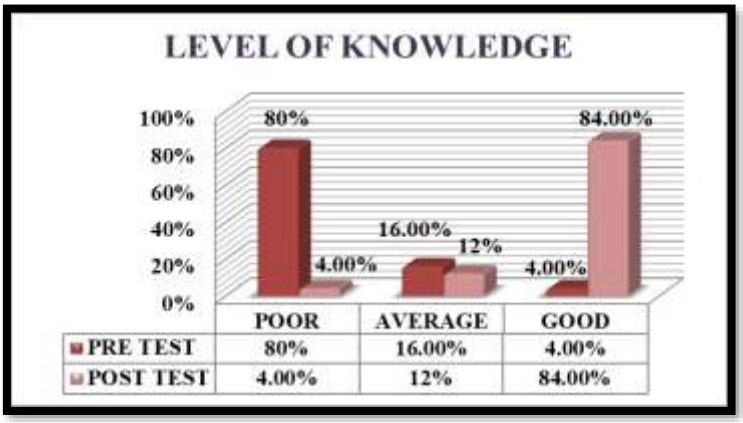
A Quantitative Research Approach with Pre-experimental design.one group Pre-test& Post-test research design was adopted for the study. A total 50 sample were selected by nonprobability convenient sampling technique from selected urban areas of Vadodara. The reliability of tool was measured by test-retest method. The tool was reliable for Knowledge (r = 0.97).Data collection was done from selected Urban Areas of Vadodara i.e. Ramdevnagar, Warasiya, Kisanwadi, Kapurai, Tarsali. A structured knowledge questionnaire was developed to assess the knowledge regarding hazardous effects of smart phone addiction on children. Tool is divided into 2 sections:

SECTION - I Consists of socio-demographic data of age, Gender, family monthly income, parents occupation, parents education level, previous knowledge regarding smart phone addiction, source of knowledge.

SECTION – II Comprise items on knowledge regarding. Total item will be 25 and each item carries 1 mark. Maximum score of the questionnaire is 25. Investigator gave 1 mark for correct answer and 0 mark for wrong answer.

Development of structured teaching programme: The selection of content and appropriate teaching learning activity was selected and organized in appropriate manner considering the sequence and level of samples. Structured teaching programme include: **smartphone, smartphone addiction definition, causes of smartphone addiction, sign and symptoms, hazardous effects of smartphone addiction on children, prevention of smart phone addiction.** Lecture cum discussion was adopted as the method of teaching along with appropriate A.V.Aids.

3. RESULT: In this study the pre-test among total 50 respondents; 40(80%) had poor knowledge, 8(16%) had average knowledge, and 2(4%) had good knowledge in pre-test. Whereas in the post-test 2(4%) respondents had poor knowledge, 6(12%) respondents had average and 42(84%) respondents had good knowledge.



Knowledge	Mean	S.D	Mean Difference	Paired t-test	P value	Table Value at 0.05	Results
Pre-Test	8.32	3.34					
Post-Test	20.16	3.50	11.84	21.16	0.000*	1.67	Significant

Table 1: Comparison within pre-test and post – test knowledge with "paired t-test" N=50

4. DISCUSSION : The purpose of present study was assess the effectiveness of structured teaching programme regarding hazardous effects of smart phone addiction on children among the parents of school going children. The Pre -experimental study one group pre-test post-test research design was used for this study. The Convenience sampling technique was used to select 50 samples. A structured knowledge questionnaire was used to assess the knowledge on hazardous effects of smart phone addiction on children. The data were collected and analyzed using both Descriptive and inferential statistics was used for analysis of data and to find out the significant difference between the pre-test and post-test knowledge scores. The pre-test and post-test knowledge of parents of school going children regarding hazardous effects of smart phone addiction on children was calculated by paired "t'' test and "t'' value of knowledge 21.16 shows the effectiveness of structured teaching programme. The mean post-test knowledge score was 20.16 & 3.50 was higher than mean pre-test knowledge score was 8.32 & 3.34 with mean difference of 11.84 ("t"value-21.16, df-49) was found statistically highly significant at $p<0.05$. Findings revealed that structured teaching Program was effective in improving the knowledge of parents of school going children regarding hazardous effects of smart phone addiction on children.

5. CONCUSION : In this study there was inadequate knowledge regarding hazardous effects of smart phone addiction on children among the parents of school going children from selected urban areas of Vadodara. The investigator had developed and conducted structured teaching programme which covers various aspects knowledge of parents of school going children regarding hazardous effects of smart phone addiction on children. The mean post-test knowledge score 3.50 was higher than the mean pre-test knowledge 3.34. The structured teaching programme had made significant influence over parents of school going children which resulted in significant increase in knowledge after implementation of programme.

DECLARATION BY AUTHORS

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Conflict of Interest: The authors declare no conflict of interest.

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