Parent's perception regarding mobile phone usage led behaviour changes in children.

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Abstract

Introduction: Children spend most of their time playing games. Olden days they were playing with toys and friends but now they just use mobile for play and that only has become their friend. Child enthusiasm towards it is more than any other age group. Mobile phones have become the integral part of child's life. The attraction towards mobile phone has created several physical, psychological and social changes in children and parents are concerned about the increased usage. Children will use mobile phones so excessively that it tends to change their behaviour. So this study was carried out to know the parents perception about behavioural changes of their children due to the usage of mobile phone

Methods: The present descriptive survey was conducted among parents working in Yenepoya deemed to be university campus including 110 parents of children aged between 6-12 years who were selected through non-probability purposive sampling technique method. The samples were administered with self-structured questionnaire regarding perceived behavioural changes after checking the validity and reliability (r=0.8) of the tool. The collected data were analysed using descriptive and inferential statistics.

Results: It was observed that 41.8% of parents perceived difficulty in calming down the child when child is aggressive. 36.4% parents perceived that children get distracted frequently. 36.4% of parents agreed that child becomes very sensitive for simple matters, 34.5% of parents agreed for child showing less interest in eating food. In behaviour score category which ranges from 1-80, 50.9% of children's falls in category of 21-40 grade of behaviour score, 45.4% between 41-60 grades of behaviour score, which depict that they are in the risk of getting addiction to mobile phone. In this study the association between behavioural score and selected demographic variable, indicates there is no significant association between demographic variable and behaviour change of the children at p<0.05 level of significance.

Conclusion: The study revealed that most of the parents have perceived behaviour changes in children. Most of the parents agreed that it effects on child's food eating patterns, frequently getting distracted, difficulty in calming down when they are in aggressive mood, their sensitivity for simple matters, and they like to stay at home rather than spending time with friends. All the findings affect the growth and development of the child.

Keywords: Perception, Mobile phone, Children, Behaviour change.

Accepted on December 17th, 2019

Introduction

Technological advancements have created many changes in the day to day life of people. It is reported that the India's telecommunication market is the second largest in the world. The mobile phone technology has brought the world closer. The mobile phones are very handy for the people either for calling or texting. Now, mobile phones are coming up with variety of features like internet access, sending e-mails, games, access to social networking sites like face-book, listening to music, playing radio, reading books, dictionary and so on. In simple words we can say that it has lots of features which are more helpful [1].

Mobile phone is not only being used by the corporate or highly qualified professional, it also be used the people from all type of social group. Usage of mobile phone is not increased only with all social groups but also with people of all age groups. Children are the more noticeable group as they are using cell phones of all types. The recent research study shows that children are really capable of using any advanced type of mobile phones even without any proper guidance and help. Though mobile phones are the effective mode of communication it is a well-known fact that it also has adverse side effects if being over used [2]. This changing trend of mobile phone for multitasking is day by day increasing as well as leading to certain changes in behaviour and personality of users [3].

Many parents are concerned about the harmful effects of smart phones on children that lead to health hazards and its effects on academic and hobbies, inappropriate behaviours. Now a day's excessive use of mobile phone is often considered a behaviour addiction along with other no chemical addictions such as pathological gambling compulsive shopping or video game addiction [4].

The radiation emitted by smart phones can have adverse effects on children. Children absorb more than 60 percent of the radiation in to the brain than the adults. Their developing nervous system makes them more vulnerable to this carcinogen. Children who used their mobile phones extensively experienced more sleep disruption, restlessness and fatigue than children who limited their cell phone usage. Exam results get suffer due to poor preparation or fatigue from using their smart phones well in the night [5]. Individual seek various ways to of cope with this problem. One way to cope with it is the problematic mobile phone use. Problematic mobile phone use, was among family members, negatively affects face –to-face interpersonal contact result in anti-social feelings [6]. So this study was carried out to assess the perception of parents about then behavioral changes associated with mobile phone usage among their children.

Research Methodology

The study used quantitative approach with descriptive survey design. The samples were selected based on nonprobability purposive sampling technique. Samples were 110 parents of children in the age group of 6-12 year and the selected samples were administered with self-structured questionnaires related to children behaviour change. An extensive review of literature helped in the preparation of data collection tools. The data collection tools were:

Part A: Demographic proforma to collect the basic information

It consisted of information regarding age, sex, education, socio economic status, age & sex of child, duration of mobile usage by child etc.

Part B: Self- structured rating scale

It consisted of information regarding behavioural changes like child getting aggressive, not into active play, school performance, being lonely, becoming more sensitive and anxious etc. The content for the rating scale was developed from expert's opinions, experiences of the researchers and from research articles

1. After obtaining the ethical clearance content validity was established by giving the tool 7 experts in the field of nursing and psychology.

2. The pilot study was conducted on 10-2-2019 to 13-2-2019 at Yenepoya medical college among 10 samples. During the pilot study the reliability of tool is checked r=0.8.

3. The final data collection was done during the period of 10-3-2019 to 4-4-2019 at Yenepoya deemed to be university campus. The tool was administered to 110 samples with prior consent. The data obtained was analysed using both descriptive and inferential statistics on the basis of objectives and hypothesis stated. The descriptive statistics used were frequency, percentage and presented graphically. The demographic proforma was analysed in terms of frequency and percentage. Association between the selected demographic variables and behavioural scores were calculated using chi-square test and p value using SPSS software.

Results

It was observed that highest percentage (64.5%) of the participants were in the age group of 31-40 years, most of them (80.9%) were females. Majority (36.4%) of their education was PUC, (58%) non- teaching staff, 65% of parents were belonging to rural area. Most 63.6% of the children's have mobile phone using habit of <1hr, 82.7% were from nuclear family. Among 110 samples 38.2% have Rs. 10000–15000 monthly family income. Majority of children 39.1% were belonging to 9-10 years of age. Majority 53.56% were boys.

In the present study, the subjects reported that 41.8% of children were difficult to calm down when they were in aggressive mood. Around 36.4% children get distracted frequently. Also 36.4% children become very sensitive for simple matters and 34.5% children show less interest in eating food. In the behaviour category score (1-80), 45.5% children's fall in category III (41-60) whereas 1.8% fall in category IV (61-80) which depict that those children are getting addicted to mobile phone usage (Tables 1, 2 and 3) and (Figure 1). There was a no significant association found between children behaviour change and selected demographic variables.

Discussion

Section 1: Demographic characteristics

It was observed that highest percentage (64.5%) of them were age group of 31-40 years, most of them (80.9%) were females. Majority (36.4%) of their education was PUC, (58%) non-teaching 65% of parents were from rural area. Most 63.6% of the children's have mobile phone using habit of <1hr 82.7% were from nuclear family. Among 110 samples 38.2% have Rs. <10000–15000 monthly family income. Many of children that are 39.1% were belong to 9-10 years of age. And Majority (53.56%) were boys.

Table 1. Distribution of sample based on demographic variables.

Demographic variables	Frequency (f)	Percentage (%)
Age in years		
<30	7	6.4
31-40	71	64.5
41-50	32	29.1
>50	0	0
Gender		
Male	21	19.1
Female	89	80.9
Education of the parents		
Primary	16	14.5

SSLC	21	19.1
PUC	40	36.4
Graduation	22	20
Post-graduation	11	10
Occupation		
Teaching	20	18.2
Non-teaching (receptionist, wards P.A., staff nurses, technicians)	58	52.7
Any other (class D workers, drivers, carpenters, canteen workers)		
Residence		
Urban	45	40.9
Rural	65	59.1
Duration of using mobile phone by children		
<1 hrs		
1-2 hrs	70	63.6
>2 hrs	35	31.8
Type of family		
Nuclear	92	83.6
Joint	18	16.4
Monthly Income		
<10,000	42	38.2
10,001-15,000	42	38.2
15,001-20,000	9	8.2
>20,001	17	15.5
Age of the child		
6-8 yrs	38	34.5
8-10 yrs	43	39.1
10-12 yrs	29	26.4
Sex of the child		
Male	59	53.6

Female	51	46.4

Section 2: Behaviour characteristics

The behaviour change of children's related to effect of mobile phone usage revealed that 41.8% of parents agreed that difficulty in calming down when children are in aggressive. 36.4% parents agreed for children's frequently getting distracted, 36.4% of parents agreed for children becoming very sensitive for simple matters 34.5% of parents agreed for children shows less interest in eating food. In behaviour score category 50.9% of children's fall in the category of 21-40 grade II of behaviour score, 45.5% between 41-60 grade III and of behaviour score and 1.8% of children belong to category IV which depict that they are in the risk of getting addiction to mobile phone.

Kamibeppu et al. [7] conducted a descriptive study on the impact of excessive use of cell phone by teens and their by distracted driving. The samples were 800 American students aged from 12-15 years. Result revealed that 71% of the student on a cell phone and there is an increased utility of mobile phone in high school children. As per the investigators view, their attention as well a perception were altered by the increased utility of mobiles while driving.

A similar study conducted regarding the smart phone use with behaviour problems in pre-schoolers was conducted at Leipzig University in Germany. 527 children of 2−6 years were evaluated and their parents filled questionnaires on electric media use. The results indicated that increased media consumption is a risk factor for developing behavioural problems [8].

Table 2. Descriptions of behaviour changes using self-structured rating scale.

S. No	Changes in behaviour	Strongly disagree f (%)	Disagree f (%)	Agree f (%)	Strongly agree f (%)
1	Becomes irritable or tearful more frequently when the mobile phone is not available	32 (29.1)	22 (20)	29 (26.4)	27 (24.5)
2	Have more difficulty in calming down when aggressive	27 (24.5)	22 (20.0)	46 (41.8)	15 (13.6)
3	Have frequent temper tantrum	44 (40.0)	36 (32.7)	24 (21.8)	6 (5.5)
4	Frequently getting distracted	38 (34.5)	21 (19.1)	40 (36.4)	11 (10.0)
5	Gets more anxious than before when exams are nearby	45 (40.9)	24 (21.8)	29 (26.4)	12 (10.9)
6	Needs mobile soon after getting up	63 (57.3)	22 (20.0)	21 (19.1)	4 (3.6)
7	Become very sensitive for simple matters	39 (35.5)	17 (15.5)	40 (36.4)	14 (12.7)
8	Frequently quarrels with parents for not giving the mobile phone	46 (41.8)	28 (25.5)	27 (24.5)	9 (8.2)
9	Prefers to stay at home rather than spending time with friends	45 (40.9)	18 (16.4)	36 (32.7)	11 (10.0)
10	Shows less interest towards studies and school activities	49 (44.5)	24 (21.81)	29 (26.36)	8 (7.27)
11	Locks up the room when mobile phone is in hand	78 (70.9)	11 (10.0)	15 (13.6)	6 (5.5)
12	May go to bed late and awakens frequently in the night	57 (51.8)	29 (26.4)	20 (18.2)	4 (3.6)
13	Reacts in an aggressive manner when contradicted or teased	40 (36.4)	29 (26.4)	33 (30.0)	8 (7.3)
14	Is nervous, high strung and tense most of the times	53 (48.2)	26 (23.6)	21 (19.1)	10 (9.1)
15	Is not as happy	71 (64.5)	23 (20.9)	11 (10.0)	5 (4.5)
16	Does not seem to feel bad after misbehaving	47 (42.7)	29 (26.4)	26 (23.6)	8 (7.3)
17	Frequently get into arguments with everyone	43 (39.1)	27 (24.5)	27 (24.5)	13 (11.8)

18	Child is more preoccupied	57 (51.8)	35 (31.8)	14 (12.7)	4 (3.6)
19	Wants to be alone all the time	62 (56.4)	24 (21.8)	18 (16.4)	6 (5.5)
20	Shows less interest in eating food	31 (28.2)	8 (7.3)	38 (34.5)	33 (30.0)

Section 3: Association between selected demographic and behaviour characteristics

In this study there was a no association between behavioural score as well as selected demographic variable such as educational status of the parents, occupation of the parents, duration of mobile phone using children, type of family, monthly family income, age of the child, sex of the child. All the calculated value of chi-square probability test is greater than the table value at 0.05 level of significance. That indicates there was no significant association between demographic variable and behaviour change of the children at $p < 0.05$ level of significant.

This study was limited to the working parents in inside the Yenepoya deemed to be university campus. The parents who were having children aged between 6-12 years only were taken for the study. The parents could have failed observing the behavioural changes in the child due to their busy schedule.

The parents perception about behavioural changes only were considered whereas school performance or teachers perception as the child spends most of the time in schools was not considered. The data could have been collected from the children too by observing them. A similar study can be conducted with large number of samples and with different age group.

Table 3. Children's behaviour changes score categorization.

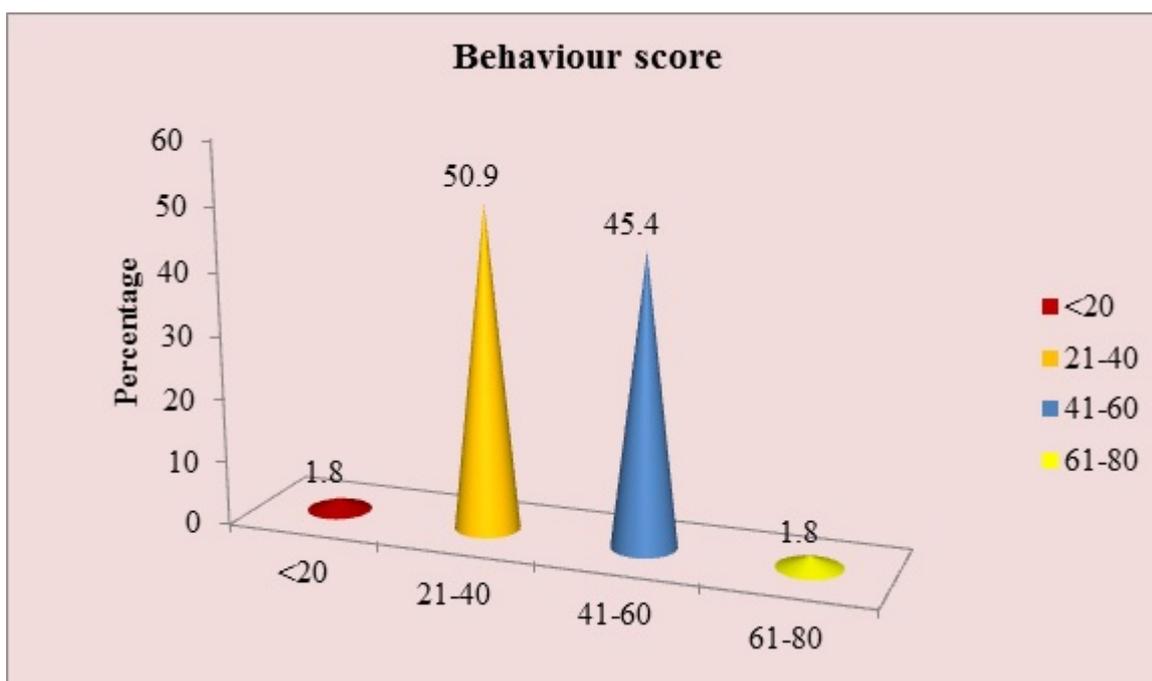| Categorization of children's behaviour change score	Frequency	Percentage
<20	2	1.8
21-40	56	50.9
41-60	50	45.5
61-80	2	1.8
Total	110	100

Figure 1. Bar diagram showing behaviour score of children.

Conclusion

The study revealed that most of the parents have perceived behaviour changes in children's. The perceived behavioural changes can affect the health, school performance and indirectly it affects the harmony of the entire family and community. So it is the individual responsibility of the parents and teachers to monitor their children for changes in their daily activity. Parents should restrict the mobile phone usage and if needed the timings of mobile phone usage should be limited to minimum time. Once the child gets addicted to the mobile phone usage then the child may need counselling and guidance to come out from the addiction.

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