Impact of Gadgets on Children's Development

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ABSTRACT

Technology takes our health and full attention those days, which also plays vital role in our lives. Many studies shows that the most of children now a days spend their time by using gadgets and technology, such as telephones, I pads, laptops etc. One effect of gadget usage on children is self-isolation from social life and lack of emotional management. It has resulted in lack of interaction and communication. Child becomes introvert and impatient, interpersonal problem and lack of interpersonal communication skill keep them away from nature and surrounding environment. With various advantages and disadvantages of gadget, parents should be careful and wise in giving tool and facility, which are suitable to their children needs to support children development. A lot of research has been done on this type of phenomena. Should children use technology, has also been investigated. Questionnaire method to collect data and to investigate the answer of these questions were used. Questionnaire were designed, distributed among more than 500 parents and results were analyzed to know that how gadgets impacts on children and also describes the ways for parents to monitor their children by limiting their time of gadget usage.

Keywords: Children, Computers, Internet, Health, Development

1. INTRODUCTION

Staring at electronic screen continuously for long time causes distress [1]. Kids suffer various problems like eye irritation or difficulty in focusing for a while. Children who frequently use technology often ignore their surrounding environment. They prefer facing sophisticated technology than playing with their friends, in playground . So social communication between children and environment is increasingly reduced. Children use those technology gadgets for many purposes. Studying, chatting, playing and searching for new information. The problem is that they do not pay attention for the screen

time using and they do not think that will affect their health and their eyes. Set behind screen for long time affect us. "Recent correlation studies have shown that watching TV is related to occurrence of both anxiety and sleep disturbances. A survey of elementary and middle school children reported that the more children watch the more they feel the symptom of anxiety, depression and post-traumatic-stress" [2]. This research will be focusing on the negative effects of gadget for different ages. As we all know that gadgets have negative effect more than the positive effect, but we are not sure 100% about this. Therefore, we are going to do a survey, which contains many questions about gadgets and their effects on more than 500 children's lifestyle, health and many other questions related to the relationship between children and gadgets.

2. METHODOLOGY

Surveys were conducted to explain and answer questions related to the relationship between gadgets and children for ages start from 2 till 13.

Note: Website link

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2.1 Type of gadget used by different age group of Kids.

The survey shows that 50 % and 30% of parents with kids under the age of 12 reported were using iPad and cellphones, respectively. Rest 14 % and 9 % were using PlayStation and laptop, respectively (Figure 1).

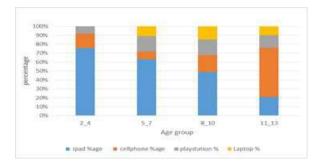


Figure 1. Types of gadget used by different age group

2.2 Average use of screen-time a day

The survey showed that 40% of 11-13 age group are using gadgets up to 3-5 hour per day following 35% percent those who are using gadget for 6 to 7 hours per day (Figure 2). Following this is the 2 hours for the ages 11 to 13, finally the lowest percentage for the ages 11-13 was using gadget 1 hour which shows, 11 to 13 ages are the most users of gadget, which for sure affect their lifestyle and their

studies. From 2 to 4 got 25% who do use gadget less than 30 minutes, following that 20% that's using gadget for 2 hours and it start decreasing for the hours of 6 and more, 3 to 5 and one hour.

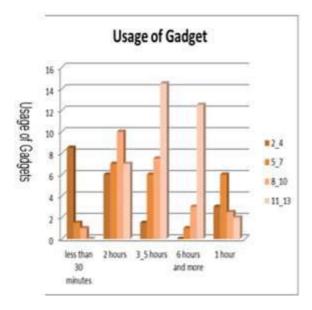


Figure 2. Average use of screen-time a day.

2.3 Does gadget interfere with your child studies, sleeping/eating habit or family activities?

For the age group 2-4, many of their parents agree (6.2 %) that usage affects but most of them disagree (12.5 %) as well. Parents can control their lifestyle and the sleeping time, but when they start to grow, they start to take their own charge. So parents could not control them. 52% Parents of age group 5 to 13 agree that they do control usage of gadgets, however 47 % disagree (Figure 3).

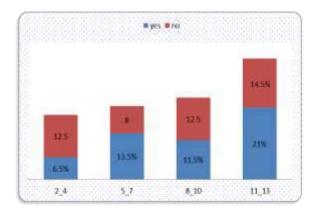


Figure 3. Figure 3. Show percentage of gadget that affect the children lifestyle at different age group.

2.4 Have parents manage, try to control or balance their child's gadget use?

Most of the parents (75 %) agrees that they are able to manage usage of gadget among their children. 13 % of age group of 11-13, 18 % 8-10, 19 % 5-7 and 13 % of age group 2-4 were recorded to control the usage of gadgets. However, 25% shows that parents responded negative and responded that do not control or try to balance their children use of gadget.

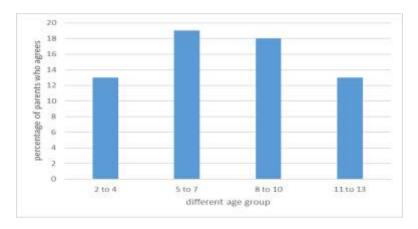


Figure 4. Shows percentage of parents that control or balance the gadget at different ages of children

2.5 Overuse of gadget affect the child growth or not

We conclude from survey that parents showed mix response for the overuse of gadgets by their children. 50 % response were yes but 50 % were disagreeing. Parents who agree explain that they observe the effect on children's weight and some of them lose weights and others gain weight. Either gaining or losing are the negative impact of gadgets. Some of the parents complain about the eye problem of their children because of using excessive gadget and some of them complain about the children are losing focused.

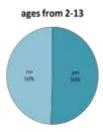


Figure 5. Showing percentage of effect of gadgets among different age group of children

2.6 Gadget helps children to have better motor skills?

Figure (6) explain the answers of parents regarding the question of that do gadget let children to have better motor skills. Results showed that gadget do not let children or help children to have better motor skills. The highest percentage (68 %) for all ages from 2 to 13 disagrees that it helps however in contrast of that 12% of parents agrees. Survey showed that parents are sure that gadget do not help children to have any skills that may benefit them.

Ages from 2_13



Figure 6. Shows that effect of gadget to develop better skills of children

2.7 Prolonged use of gadget delay speech ability

This figure 7 shows 66% of the parents agree that gadgets affect the speech ability of the child, however, 34 % of them disagree.

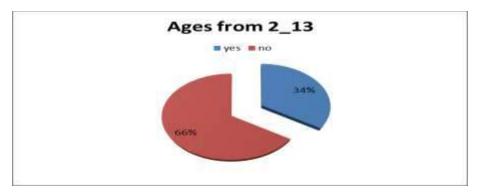


Figure 7. Showed that most of the parent agree that prolonged use of gadget delay the speech ability of their kids at early age.

3. DISCUSSION

By reviewing all graphs we can conclude that I Pad got the must use gadget for all ages start from 2 years until 13 years old. 2-4 years got the highest percentage as a result of that they are still kids and all kids use iPad more than any other gadget, because of the games and learning application that iPad offer

more than any gadget. Computers/laptop was the less used among children of all age group, because computers are more complicated to be used by children. Usage of gadget was observed more in age group of 11-13, which was 3 to 6 hours per day. It has been seen that as the age increase the usage of gadgets also increases. Too much gadget use can also affect the long-term vision problem [3]. 42% of children of all ages has to use gadget more that it intended. The gadget usage excessively in children will result in addiction. Children are good imitator. They will do everything they see and hear. The criteria of addiction including preoccupation, less tolerance, loss of control, and self-withdrawal [4]. Using gadget more than intended or even just using gadget interfere the children lifestyle, sleeping. 52% of parents agree affect on children lifestyle. Although home education games encourage positive prosaically behaviors (when players cooperate or share they are often rewarded), many popular entertainment software (action and adventure games) involve competition and aggression. Although violence is an integral part of computer games today [5]. Although gadgets have a bad side effects on children, it is also sometimes benefit them for example by education which was observed by our survey when parents (77 %) that it helps in education. However, survey also help us to conclude that prolonged use of gadget delay the speech ability among children. Children throw many different behaviors while gadgets has tried to take away from them. Using gadget from children let them to be competent as shown from the surveys that 51% said yes and 49% said no, they will not be competent. In our study we found that using gadgets affects negatively in children's and teenager's development a high percentage, somehow, a low percentage of those how have positive effects on them as it helps them with their education level and a way to enjoy their time and having fun.

4. CONCLUSIONS & FUTURE DIRECTIONS

Available estimates of time use vary and are mostly based on self-reports, suggesting the need for more reliable estimates. Teenagers use the gadgets more than younger children or adults. The main time of emotional development of a child is found in the age under ten years old. In that time, brain take the series needed to experience and control basic emotions. Therefore, we concluded that parents should monitor and to be aware of what children are watching. To avoid watching videos of sex or violence, smoking or playing, parent should monitor bad games or websites. Secondly, attending lectures and educational events so that the parents are aware and have a full knowledge about this issue. Parents should be encouraged to learn about social media and websites and to monitor their children social websites they have. Parents should control their children with a fixed timing and duration of using those gadgets and spreading awareness and educational lectures for children and adolescences in schools.

Parents should use smart parenting because it will strongly influence on child individual. Letting children to use gadget for a long time or excessively will make them become addicted to gadget and it gives negative effect to their emotional development and they will less understand social adjustment in environment because their lack of interaction.

5. REFERENCES

- 1. Subrahmanyam K, Kraut RE, Patricia M. Greenfield PM, Gross EF. "The impact of home computer uses on children's activities and development". Future Child 2000,10: 123-144
- 2. Singer, Slovak, Friersonv, V."Media and fears in children and adolescents" 2003 Gentile p187.
- 3. Subrahmanyama K, Patricia G, Robert K, Elisheva "The impact of computer use on children's and adolescents' development". Appl Devlop Psychol 2001, 22: 7-30.
- 4. Kuss, D. J., & Lopez-fernandez, O. "Internet addiction and problematic Internet use: A systematic review of clinical research". W. Jr. Psychiatry 2016, 6(1):143–176.
- 5. Singer, Slovak, Friersonv, V."Media and fears in children and adolescents", 2003 Gentile p187.
- 6. Provenzo, E. F. Jr. "Video kids: Making sense of Nintendo" (1991) Cambridge, MA: Harvard Univ. Press.http://dx.doi.org/10.4159/Harvard.9780674422483.
- 7. 8ttps://drive.google.com/file/d/1mMXvsCJHxWRpLpqLMuvAkloYZ_zcSgJb/view?usp=sharin hg