



THE INFLUENCE OF GADGETS IN STUDENT LEARNING DEVELOPMENT

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Abstract

Currently, the development of technology has a lot of influence on children, one of which is the use of gadgets. If a child is addicted and negatively impacted by gadgets, the child's development will be hampered. This poses a danger to children from gadgets. Playing with gadgets can pose risks to children's physical and mental health. Of course, here the role of parents and teachers needs to be expected so that children are not negatively impacted by the use of gadgets. The method used in this research is a qualitative approach. The aim of this research is to determine the influence of gadgets on the development of elementary school students. The results of this research show that excessive use of gadgets has a huge influence on children's development, both in terms of psychology, physical and social development. Apart from having a positive impact, gadgets can also.

Keywords : Gadgets, early childhood

Introduction

The development of technology and information has progressed very rapidly, marked by advances in the fields of information and technology. The Indonesian nation is one of the nations involved in advances in information media and technology. The increasing use of gadgets or tools that can be easily connected to the internet has increased from time to time. According to (Widiawati and Sugiman, 2014), gadgets are sophisticated items created with various applications that can provide various news media, social networks, hobbies, and even entertainment. Meanwhile, according to (Hudaya, 2018), a gadget is a device or electronic device that has a special function in its use which has changed human communication behavior by penetrating space and time. Gadgets do have a positive impact on children's thinking patterns, namely helping children regulate their playing speed, develop strategies in games, and help improve children's right brain abilities. But behind these advantages it can also have a negative impact on children's development abilities. In this era, gadgets with various applications can provide various social media, so they are often misused by students which can have a negative impact on their academic grades and learning. It is not surprising that gadgets in this era are liked by many children. Because gadgets in the current era have turned into interesting items, especially touchscreen technology and are also equipped with various applications that attract attention, especially for children. Excessive use of gadgets among students sometimes often causes problems in the learning process because gadgets have a detrimental impact on children's interpersonal skills if they are used too often. Another influence of gadgets on student learning is that students rely more on gadgets rather than studying. (According to Monks, et al, 2006), Development is a process towards perfection that cannot be repeated. Development is defined as a change that is permanent and cannot be reversed. For example, physical development, changes in form and psychological function will change since childhood and continue to grow towards becoming an adult human being. Development according to (Erik Erikson, 2018) is that human personality develops at several levels. One component of Erikson's theory is the development of ego equations. Ego equality is a feeling that develops from social interactions. Ego development changes based on experiences, social interactions, and new information obtained. Learning is a process of change in humans and

this form of change is shown in improving the quality and quantity of behavior such as increasing skills, knowledge, attitudes, habits, understanding, skills, thinking power and other abilities (Harahap & Ely, 2018; Sumiatun, 2013). Learning can also be said to be the result of interaction and response. A person is considered to have learned something if he can demonstrate his own achievements. Therefore, it is necessary to understand the influence of gadgets, especially for parents, so that their children can limit their use and their children's developmental abilities can develop well and become active, intelligent and interactive children towards other people. The reason for choosing this title is "The Influence of Gadgets on Student Learning Development" because parents still lack understanding regarding the impact of using gadgets on children which has an impact on the child's development abilities.

Research Methodology

This research uses a type of library study. According to Mestika Zed (2003), library or literature study can be defined as a series of activities relating to methods of collecting library data, reading and taking notes and processing research materials. Literature study is used to study reading sources that can provide information related to the problem being researched.

Result & Discussion

Understanding Gadgets

Gadget is a term originating from English which means a small electronic device with various special functions. Gadget (Indonesian: acang) is a term originating from English to refer to a device or instrument that has a specific practical purpose and function that is generally useful for something new. Gadgets in the general sense are considered to be electronic devices that have special functions for each device. For example: computers, cellphones, games and others. According to (Widiawati, 2014: 106) Gadgets are small electronic devices that have special functions. These include smartphones such as iPhones and BlackBerries, as well as notebooks, a combination of portable computers such as notebooks and the internet. Various types are currently easy to obtain. Because the prices of various types of technology vary, some are cheap and some are expensive. In accordance with the economic needs of its users. And everyone always wants to have increasingly sophisticated technology. Technology items are not rare items to find. Almost all activities related to education, socio-culture, sports, economics and politics always utilize sophisticated technology to search for information and help carry out each activity in solving a problem. According to Derry (2014), a gadget is an electronic device or instrument that has a practical purpose and function to help human work. Gadgets can make it easier for us to access all the information that exists in this world. Gadgets are small electronic devices that have many functions for their use so they are considered to make things easier for Garini (in Rohman 2017). So a gadget is one of the objects created with the aim of making everything easier and more practical compared to previous technologies. From this opinion it can be concluded that a gadget is an electronic device that has various service features and applications that provide the latest technology that helps human life become more practical and has special functions.

The Influence of Gadgets on Child Development

The influence of gadget use on children's development has both positive and negative impacts. The positive impacts include helping the development of a child's adaptive function, increasing the child's knowledge, expanding friendship networks, facilitating communication, and building children's creativity. While the negative impacts include, children become dependent on gadgets, so that in carrying out all their life activities children cannot be separated from gadgets, children find it difficult to concentrate in the real world, children become more likely to play with their gadgets than playing with their friends, and children become lazy about moving. and active. Apart from that, the positive impacts of using gadgets include, firstly, gadgets will help develop a child's adaptive function, meaning a person's ability to adapt to the surrounding environment and current developments. If gadgets are emerging in today's developments, then children must know how to use them because one of the adaptive functions of today's humans is that they must be able to keep up with technological developments. On the other hand, children who cannot keep up with technological developments can be said to have an adaptive function that is not developing normally. Another positive value is that gadgets give children the opportunity to freely search for information. Moreover, school children are now required to do assignments via the internet. Excessive use of gadgets for children will have a negative impact because it can reduce their ability to concentrate and increase their dependence on being able to do various things that they should be able to do themselves. Another impact is the increasingly open internet access on gadgets which displays everything that children should not have time to see. Many children are starting to become addicted to gadgets and forget to socialize with their surrounding environment, which has a psychological impact, especially a crisis of self-confidence, as well as on children's

physical development. Electromagnetic wave radiation from gadgets is not visible, and its effects cannot be felt directly. For this reason, parents must wisely supervise and select the game instruments that children use when playing. Children's habit of playing with gadgets nowadays cannot be denied, but it's a good idea not to always play, or at least limit the time they play with gadgets, because of the radiation reasons above. In fact, playing is the main activity of children starting from infancy. This activity is important for children's cognitive, social and personality development in general. Children can also begin to understand the relationship between themselves and their social environment through playing activities, learning to socialize and understanding social rules or procedures. However, now children spend more time playing with gadgets than playing with their peers, which can give rise to individualistic and egocentric traits, as well as lack of sensitivity to the surrounding environment. (Jonathan, 2015: 117).

According to Mohammad Nazir (2003:16), the following are some of the negative impacts of gadgets on children's development: (a) Difficulty concentrating on the real world Addiction or addiction to gadgets will make children easily bored, restless and angry when they are separated from their favorite gadgets. When a child feels comfortable playing with his favorite gadget, he will have more fun and enjoy being alone playing with that gadget. As a result, children will have difficulty interacting with the real world, making friends and playing with peers (b) Disruption of PFC function. Technology addiction can further affect a child's brain development. PFC or Pre Frontal Cortex is the part of the brain that controls emotions, self-control, responsibility, decision making and other moral values. Children who are addicted to technology such as online games, their brains will produce the hormone dopamine excessively which results in disrupted PFC function (c) Introvert. Children's dependence on gadgets makes them think that gadgets are everything to them. They will be confused and restless if separated from these gadgets. Most of their time is spent playing with gadgets. As a result, not only is there a lack of closeness between parents and children, children also tend to become introverts.

Positive and Negative Impacts of Using Gadgets

The impact of gadgets on children's development is very large. The impact given in terms of education in Indonesia is divided into two, namely, positive impact and negative impact.

Positive impact:

1. Increasing Knowledge, concluded that by using technologically advanced gadgets, children can easily and quickly get information about their assignments at school. For example, we want to browse the internet anywhere and anytime we want to know. Thus, from the internet we can increase our knowledge.
2. Gadgets can expand friendship networks because they can easily and quickly join social media. So, we can easily share with our friends.
3. Make Communication Easier. Gadgets are tools that have sophisticated technology. So everyone can easily communicate with other people from all over the world.
4. Train children's creativity. Technological advances have created a variety of creative and challenging games. Many children who fall into the ADHD category benefit from this game because of its high level of creativity and challenge.

According to Baihaqi and Sugiarmin (2006: 2) ADHD itself is an abbreviation of Attention Deficit Hyperactivity Disorder, which is a developmental disorder in increasing children's motor activity, causing children's activities to be unusual and tend to be excessive.

Negative impact

1. Disrupting Health
Gadgets can disrupt human health because the effects of radiation from technology are very dangerous for human health, especially for children aged 12 years and under. The effects of excessive radiation can cause cancer.
2. Can interfere with child development
Gadgets have sophisticated features such as cameras, videos, games and so on. These features can disrupt the learning process at school. For example, when the teacher explains a lesson in front of one of the students, he plays with his gadget behind his back or can also use it as a tool for bad things.
3. Vulnerable to Crime
Everyone must have something that has the ability to update anywhere. So people who want to commit crimes can easily find it from the results of updates which can be said to be too frequent.
4. Can Influence Children's Behavior
"Technological advances have the potential to make children quickly satisfied with what they get so that they consider what they get from the internet or other technology to be the most complete and final knowledge." (Ratih Ibrahim, 2012). In fact, there are so many things that must be explored through the

traditional learning process and the internet cannot replace the depth of knowledge. If we don't pay close attention, there will be a tendency for future generations to become a generation that is quickly satisfied and tends to think shallowly.

Technological advances bring many conveniences, the next generation has the potential to become a generation that cannot stand difficulties. In other words, children will think or feel that life should be easy and in the end children try to simplify problems and try to avoid difficulties. Technological advances speed up everything and without realizing it, children are conditioned to not tolerate delays. The result is that children become weaker day by day in terms of patience and concentration and are quick to demand that people give them what they want immediately. According to Romo (2013), playing with gadgets for a long duration and doing it continuously every day can make children develop into antisocial personalities. This happens because these children are not introduced to socializing with other people. Apart from that, it also has the potential to encourage children to form superficial relationships. Time to chat directly is reduced because now time is taken up to enjoy everything in solitude.

Gadget Usage Factors

There are several factors that influence a child's use of gadgets, namely as follows: (1) Rampant advertising on television and on social media. Advertisements often influence teenagers to follow current developments. So this makes children more interested and even curious about new things; (2) The gadget displays interesting features that make children curious about operating the gadget; (3) The sophistication of gadgets can facilitate all teenagers' needs. Teenagers' needs can be met, such as playing games, social media, even shopping online; (4) Affordable prices for gadgets due to a lot of technological competition; (5) The environment creates pressure from peers and society, because nowadays almost every activity requires someone to use gadgets; (6) Cultural factors have the most profound influence on adolescent behavior. So many teenagers follow trends in their cultural environment, which makes it mandatory to have gadgets; (7) Social factors that influence such as reference groups, family and social status; (8) Personal factors that contribute to adolescent behavior such as age and life cycle stage, work and economic environment, lifestyle, and self-concept.

Characteristics of Children Addicted to Gadgets

Wulansari (2017: 18) excessive use of gadgets can cause children to become addicted to gadgets. The following are the characteristics of gadget addiction: (1) Children use gadgets continuously and are accompanied by a lack of interest in socializing with other people (2) Children spend more than two hours using gadgets (3) Children often protest when they are restricted from using gadgets (4) Can't spend a day without gadgets (5) Children always ask to be given gadgets and children will throw tantrums if they are not given gadgets (6) Children do not want to do activities outside the home. For example, insisting on asking to go home early so you can play games at home (7) Children refuse to carry out daily routines and prefer to play with gadgets, such as not wanting to be told by their parents to sleep or take a shower.

Solutions so that children do not become dependent on using gadgets

The most influential figures in preventing and overcoming the negative impacts of gadgets are parents. So parents have a big role in guiding and preventing gadget technology from having a negative impact on children. The steps that parents must take are as follows:

a. Choose according to age

Judging from the child's developmental stages and age, the introduction and use of gadgets can be divided into several age stages. For children under 5 years old, giving gadgets should only be about introducing colors, shapes and sounds. This means, don't give too many opportunities to play with gadgets for children under 5 years old. Especially at this age, the main thing is not the gadgets, but the function of parents. The reason is that gadgets are only a means of educating children. From a neurophysiological perspective, the brains of children under 5 years old are still at a developmental stage. Children's brain development will be more optimal if children are given direct sensory stimulation. For example, touching objects, hearing sounds, interacting with people, and so on. If children under 5 years old use gadgets continuously, especially if they are not accompanied by their parents, the result is that the children only focus on the gadgets and do not interact with the outside world. Next, the front part of the brain is the part that functions to give orders and move other parts of the body. In the back of the brain, there is something called locomotion. In this section, there are endorphins which regulate the center of pleasure and comfort. When playing with gadgets, children will feel pleasure, thereby triggering an increase in endorphins. Addiction is related to this if it is done over a long period of time and continuously. As a result, in the future, children will seek pleasure by playing with gadgets, because this has been patterned since the beginning of their

development. From the aspect of social interaction, the development of children under 5 years of age should be more in the sensory-motor direction. Namely, children must be free to move, run, reach for things, feel rough and smooth. Indeed, gadgets also have color recognition or games where people jump. However, children do not gain the ability to interact directly with real objects in the outside world.

b. Limit time

Children under 5 years old may be given gadgets. But you must pay attention to the duration of use. For example, you can play but only for half an hour and only in your free time. For example, introduce gadgets once a week, for example on Saturday or Sunday. After that, he must continue to interact with other people. Applications that can be opened should also be applications that focus more on color, shape and sound recognition features. As children get older, when children enter pre-adolescence, parents can give them more freedom, because children of this age also need gadgets for their social networking functions. Over the age of 5 years (from 6 years to 10 years) parents can increase the time their children spend with gadgets. At this age, children have to explore information from the environment. So, if previously it was only once a week for half an hour with supervision from parents, now it is every Saturday and Sunday for two hours.

c. Avoid addiction

Cases of addiction or misuse of gadgets usually occur because parents do not control their use when their children are still small. So even when he is a teenager he will do the same learning method. It will be difficult to change because this habit has already been formed. This is why parents must strictly apply the rules to their children, without having to be authoritarian. And don't forget, parents must implement reward and punishment. If this is done successfully, children will be able to do it responsibly and avoid addiction. The characteristics of children who are addicted include children spending most of their time playing with gadgets. Children ignore/put aside other needs just to play with gadgets. For example, forgetting to eat, forgetting to shower, forgetting to sleep. Children ignore warnings from people around them.

d. Adapt to the times

One of the positive impacts of gadgets is that they will help develop a child's adaptive functions. This means a person's ability to adapt to the surrounding environment and developments over time. If gadgets are emerging nowadays, then children must know how to use them. This means that the child's adaptive functions develop. A child must know the function of gadgets and must be able to use them because one of the adaptive functions of today's humans is that they must be able to keep up with technological developments. On the other hand, children who cannot keep up with technological developments can be said to have an adaptive function that is not developing normally. However, adaptive functions must also adapt to the culture and place a person lives. If a child lives in a village where gadgets are a rare item, then it is natural that the child does not know or know what a gadget is. Parents' attitudes towards children regarding gadgets today include: (1) Choose according to the child's age. If the child is under 5 years old, it would be best to just introduce the gadget first, namely understanding what a gadget is and the rest regarding its use should be limited. Just introduce the shape and use. For children under 5 years old, it is enough to introduce them to the colors, shapes and sounds contained in the gadget features or applications (2) Be selective in choosing game applications on your gadget. If your child insists on using a gadget to play, make sure the application is appropriate for the child's age and limit the application, so that the child is not too interested in the existing games. Choose applications that can also support children's intelligence and children's thinking patterns (3) Accompany children in playing. Accompany children in playing using gadgets, direct their use properly. Try to invite children to play using other media besides gadgets or invite children to play with their peers, so that children are not focused on playing with their gadgets. Parents must also accompany their children in using gadgets and introduce them to the real world (4) Limit children's gadget playing time. Limit children's use of gadgets. Children can use gadgets but the time is limited, for example half an hour, or during free time or on Saturdays or Sundays. The time when children are relaxed and their learning tasks have been completed (5) Invite children to do positive activities. Encourage children to do positive activities, for example exercising every morning, helping clean the house, reading books, tidying their room, reciting the Koran, taking English lessons, visiting grandma's house, going on holiday and many more positive activities that can be done to prevent children from becoming addicted to playing. gadgets.

The explanation above is just a few ways that parents can do so that their children are not addicted to using gadget games, but it all depends on the parents themselves, there are still many ways to overcome this. Good parents can definitely understand what is best for their child. Accompanying children when playing, guiding them,

straightening out wrongs, inviting them to communicate and how to think and argue by relating it to the real world. Educate their children to care more about the environment around them.

Conclusion

Gadget is a term originating from English which means a small electronic device with various special functions. Gadget (Indonesian: acang) is a term originating from English to refer to a device or instrument that has a specific practical purpose and function that is generally useful for something new. Gadgets in the general sense are considered to be electronic devices that have special functions for each device. For example: computers, cellphones, games and others. A gadget is an electronic device that has various features and application services that provide the latest technology that helps human life become more practical and has unique functions. From the discussion above, technology clearly influences children's development. Because a technological device is a very effective learning medium. With the display of images that can run, sound effects or singing, learning media using technological devices is very popular with children. And because technological advances can also help children's creativity, if the benefits are balanced with interaction with the surrounding environment, especially parents. Gadgets can influence a child's brain development in their growth. The influence of gadget use on children's development has both positive and negative impacts. Gadgets are only a means for children to play and search for information, but parents are the guides and directors who can guide their children so they don't get addicted to gadgets. The role of parents is very important and influences their children to overcome the use of gadgets today.

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