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## The Effect of Gadget Toward Early Childhood Speaking Ability

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#### Abstract

This study examines the effect of gadget toward early childhood speaking ability especially those in the age range of 3-4 years. The 3-4 years old children generally have enthusiasm in speaking, their curiosity tend to be greater, such as telling something that happened around them to the closest person. However, the presence of gadget in this digital era has negative influences on their speaking ability. The majority of children in Indonesia spend time playing gadget. The study seeks to explain the use of gadget toward early childhood speaking ability. The methodological approach taken in this study is literature review by connecting this study with existing literature and previous researches which have limited investigations. The result obtained in this study indicates that the use of gadget can delay the children speaking ability, especially children aged 3-4 years.

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#### **INTRODUCTION**

The development of technology has been growing rapidly. Various digital media have emerged showing different features with all the exciting sensations offered to consumers. Technology is very easy to find even in rural areas due to the low prices with sufficient quality. Gadget is a technology product that is currently a trend and even becomes a primary need for most people. In 2013 Daily mail reported that 29% of children in early age can easily use gadgets and the remaining 70% are master by primary school age. According to the USA Centers for Disease Control and Prevention, an average child spends about 8 hours a day watching electronic screens. Gadgets are no longer a rare item especially in Indonesia. Indonesia is an "Asian digital technology giant that is sleeping". With a population of 250 million, Indonesia has been a large market. Indonesian smartphone users are also growing rapidly. Emarketer digital marketing research institute estimates that in 2018 the number of active *smartpho*ne users in Indonesia is more than 100 million people. With this amount, Indonesia will become the fourth largest smartphone active country in the world after China. India and America.

Based on the data from KOMINFO in 2014, the rate of gadget usage in Indonesia is very high. It is found that 98% of children and adolescents in Indonesia know about internet and 79.5% among them are internet users. Children who are frequently use technology often ignore their surroundings. They prefer facing sophisticated technology they have than playing with their peers in playground or in environment surrounding them. So social communication between children and environment is increasingly reduced.

The use of gadget in everyday life has an impact on adult behavior. Even children cannot escape the effect of using it. One of which is in the ability of social interaction. During early childhood, children experience development at the stage of exploring and interacting directly with their surroundings. They are usually happy with the new things they get through playing activities. They also often play and satisfy their curiosity through gadgets, because gadgets are interesting to them especially with the online game application, interesting features, sounds, so they spend all day playing gadgets. Even though children of their age must play and mingle with their peers.

Parents have a very important role for the growth of their children. Their role is not only

to provide for the material needs but to be able to make their children a good and useful person for the community. Every parent definitely wants their children to grow and develop optimally. The family is the smallest group in society where children are able to interact with people for the first time. Interaction in the family will be an experience for them to connect with their environment. The relationship between children and their parents and other family members can be considered as a system that interacts with each other. It is abvious that parenting and family care patterns will have a direct impact on children's growth.

In this sophisticated era that continues to grow, parents are required to be extra careful in maintaining and guiding the growth of their children. So that they could not fall into negative circumtances. Parents must be able to understand and follow the development of the technology so that they can guide and direct children when using these technologies, especially the use of gadgets that are currently a trend among early childhood.

In the result of this study the writer found that gadgets have a negative effect especially for 3 to 4 years old children. The writer concluded that the use of gadgets at the age of 1 to 2 years with a high intensity has an impact on the children speaking ability when they are 3 years old. They could not communicate smoothly as they should.

#### **METHOD**

The writer conducted literature study to get information as a basis in this study. It is carried out by understanding references through literature books or internet media as well as connecting with the observation result of the writer on one of the research subjects: a 3-year-old child who has experienced speech delay.

#### **RESULTS AND DISCUSSION**

### **Early Childhood Speaking Ability**

Speaking is essentially a communication process by using the sound produced by the human utterance tool in which a message is sent from one source to another. In communication there is a role as a messenger and message recipient. In order for a communication to be well established there needs to be good cooperation between the two parties.

Speech development is one aspect of language. The growth stage of children also includes the ability to speak. Language skills can be an indicator of their growth. Parents can detect delay or *abnormality* in their children language skills at the Socio-emotional Development stage. Psychosocial development is related to psychological aspects, such as emotions, motivation, personal development, and how a child relates to others. At this stage, children begin to learn responsibility and control their feelings.

According to Vygotsky (Santrock, 2007: 265): "children use speech not only to communicate socially, but also to help them complete the task". Children at an early age use language to plan, guide and monitor their behavior.

Speaking is not just the pronunciation of words or sounds, but it is a tool to express, convey, or communicate their thoughts, ideas, and feelings. Speaking is a language skill that develops and is influenced by listening skill. Speaking and listening are two-way or face-to-face communication activities conducted directly. Speaking skill related to vocabulary obtained by children from listening and reading activities.

Tarigan (Suhartono, 2005: 20) stated that speaking is the ability to pronounce sounds or words to express and convey thoughts, ideas, and feelings. Language development of children, especially for 3 to 5 years old children, is where they can speak well. At this age children are able to compose simple sentences and start to enjoy listening to simple stories and start talking a lot (Nurbiana Dhieni, 2005: 92). According to Howard, Shaughnessy, Sanger, & Hux (in Seefeldt & Wasik, 2008: 75) conversation is a favorite activity of four-year-olds. When they talk while they play, they often describe what they are doing while playing.

At the age of 2 to 3 years, parents are often surprised to see the development of their own children's speaking abilities. Their vocabulary gets richer. Thus sometimes it is difficult to count. Children are also more adept at combining two or three words into one sentence. If they are already 3 years old, children's communication skills are more comprehensive. For example, being able to distinguish commands such as: "put it under the seat" or "please get the doll behind the door". Children who are 3 years old have also been able to distinguish colors and describe them. This is the time they start actively telling stories and are interested in listening to other people's stories. They can tell in detail what they experienced at school, using long sentences containing about 4 words or more per-sentence. They can also use the word in the plural, for example toys, bicycles, and friends. If you ask when, where, who, where, they are also able to answer it. They are even clever using pronouns, like me, you, him, us, them.

From the opinions above it can be concluded that speaking is a form of verbal communication that serves to convey intentions. By using vivid articulation or clear words and using complete sentences, people can understand what is conveyed by children.

# The Effect of Gadgets on the Speaking Ability of Children

The world has entered a new era; it is the era of information and communications technology (ICT). The development of technology and communication is arising rapidly. Technology continues to create various types of gadgets that have diverse classifications as high technology gadgets.

Basically, gadgets are created for the convenience of consumers in using communication media. The definition of communication according to Laswell (West and Turner. 2007: 30-31) is a process that explains who, what is said, with what channel, to whom, with what results. Gadgets when viewed through the Laswell communication model, is a medium in conveying messages between communicators and communicants.

In general, technology (gadgets) has become an inseparable part of one's life. Efforts are needed to increase awareness, knowledge and skills in order to keep using gadgets intelligently. However, today the use of gadgets often occurs excessively and affects various aspects of life, especially in the family environment. The impact can be sensed mainly on early childhood. Early childhood children are very good at imitating what is done by the people around them, including their parents. Early childhood children, especially those in the age range 1-3 years, are very good at imitating what their parents do, one of which is using their parents' gadgets. 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 tolerate, lost of control, and self-withdrawal. Kuss, D. J., & Lopez-fernandez, O. (2016).

Alyouby in his research results revealed:
1) early childhood children can often be seen using gadgets during certain activities. They will get pleasure in using gadgets that have positive and negative impacts. 2) various ways in using gadgets (application, intensity, and duration of gadget usage) in early childhood. 3) most of the early childhood children use gadgets only to play games and watch animated films even though

gadgets should be used for learning media for them. 4) supervision by parents is lacking, because most parents seem to easy to give their children permission and then being ignorant.

The effect of gadgets on a child is like two different sides of a coin. It can be positive when parents have control, it can also be negative when parents neglect their children who play the gadget. In fact, the gadgets are neutral. They are only tools that can provide positive benefits or give negative effects depending on the usage.

For parents who are ignorant about the long-term effects of using gadgets, they will allow their children to continue to play them even as a lure so children can be quiet. This happened to one of the children who were the subject of this study. The writer has found that the child experiences bridges in communicating with the surrounding environment such as his parents and his peers. It is because from the age of 1 to 3 years old he is addicted in playing gadgets. According to his parents (whose initial S) in a day their son can play gadgets for up to 10 hours and this lasts for two years. When the child enters the age of 2.5 years old, parents feel there was an abnormality in his speech abilities. He is not like other children at his age who can communicate with his parents. His responses to the surrounding people is also reduced. His ability to capture the language is lacking. Currently he enters the age of 3.5 years and is still experiencing delays in speaking. His vocabulary in saying one sentence is only two words, besides his ability to respond to the other person is very slow.

Speech delay also known as *alalia*, is resulted by many problems. Many researchers have studied this and also concluded many theories about it. By using S screening tool, researchers studied that the more time children spends on smart phones, tablets and electronic games and other handheld devices the more likely the child have delays in expressive speech.

In addition a research presented at the Pediatric Academic Societies Meeting in San Francisco explained this. Catherine Birken, a pediatrician at the Hospital for Sick Children in Toronto Canada found a connection between the use of gadgets and the ability to speak to children. From 2011 to 2015, Birken asked parents who have children aged 6 to 24 weeks, how long they would normally be given watching time through the gadget screen. Well, 20 percent of the children involved in this study used the gadgets for at least 28 minutes every day. As a result, they found that every additional 30 minutes of time used to play gadgets could increase the risk of late speech or

speech delay by 49%. While other forms of communication such as body language, emotions, to eye contact are not affected. Childhood depression is very common and severe medical illness that negatively affects child behavior. The way they think and act. Too much gadget use introduces depression in children of certain ages. It also leads mental health issues in childhood and adolescence. They may act depressed or we can see worst of these symptoms in a couple of days.

Delays in starting to speak can have other effects. Jenny Radesky, an expert from the University of Michigan in the United States, argues that when children are unable to express their frustration through words, they will tend to use their body movements or loud voices to attract attention. In other words, children will appear unable to control emotions. In addition, speaking delay can affect children's academic abilities at school. The ability to understand text and string words is not only important in language learning, but also in other subjects such as science, mathematics, art, and social sciences.

Whereas it should be noted that the period of growth of children who are very sensitive is at the age of 1 to 5 years. It is often called the golden age. At this time all aspects of intelligence, for example intellectual, emotional, and spiritual intelligence experience extraordinary development. When children are on the golden age all information will be absorbed quickly. They become reliable imitators, they are smarter than we think, smarter than they appear and will be the basis for the formation of their characters, personality and cognitive abilities. So we should never underestimate children at that age.

Actually, gadgets not only cause negative effects on children, because there are also positive effects, including in children's mindset that is able to help them to regulate their speed, process, strategies in games, and help to improve the ability of their right brain during good supervision. However, behind these advantages, it is more dominant in the negative effects that affect children's growth. One of them is radiation that can damage their nerve and brain tissue when they use gadgets frequently. In addition, they can also reduce children's active power and children's ability to interact with others. Children become more dependent on their comfort zones with gadgets so they are lack of caring attitude towards friends and even others.

Children who are addicted to gadgets can be assured that their eating time is irregular, children will only eat foods that they like and sleep less. Meanwhile, according to the Ministry of Education and Culture the negative effects of gadgets are as follows:

- 1. Children's eye health. Excessive exposure to smartphone use can trigger children's vision problems.
- 2. Sleep problem. It will occur because of too long seeing the digital screen, and the impact of digital media content.
- 3. Concentration difficulties. The use of digital media has the effect of being able to change children's attention so that it can increase overactive behavior and difficulties in concentration.
- 4. Decreasing learning achievement. Excessive digital use can reduce children's learning achievement.
- 5. Physical development. Digital use can limit physical activity that the body needs for children's growth and development.
- 6. Body weight imbalance. This is because children often resist hunger, thirst, and resist the urge to defecate which results in disruption to the digestive system.

According Maulida (2013) there are signs of early childhood addicted to gadgets:

- 1. Loss of desire to move;
- 2. Talk about technology continuously;
- 3. Tend to frequently refute an order if it prevents them from accessing the gadget;
- 4. Sensitive or easily offended, causing a mood that is easy to change;
- 5. Selfish, it's hard to share time in using gadgets with other people;
- 6. Telling lie frequently, in other words children will do anything to still be able to use the gadgets even though it interferes with their sleep time.

Referring to some of the results of the opinions and results of the research above, the writer concludes that gadgets can affect children's speaking ability. This also occurs in research subject where observations of the writer show that the child who play gadget every day will experience delays in speaking when he is 3 years old. In addition he experiences delays in responding to the other person, lack of focus when he interacts with parents or peers.

## Parents' Solutions

Seeing the advantages and disadvantages of introducing gadgets to children ultimately really depends on the readiness of parents to guide and watch them while playing gadgets. Therefore, all parents need to be reminded of their important role in the use of gadgets in children. They need to apply a number of rules to their children. To be able to use gadgets effectively, parents should be

able to understand and explain the content in the gadgets. Without the assistance from parents, the usage of gadgets will not be effective.

Parents should be aware of the effect of gadgets which can affect their children. The following are the things that can be conducted by parents and caregivers: 1. Giving good examples to children in using gadgets responsibly. 2. Giving attunement or attention and response to children. 3. Accompanying and not letting young children to play with gadgets without restraint. 4. Parents should be assertive and wise in giving gadgets to children aged under two years old. 5. Giving knowledge to children on how to use gadgets responsibly (Suhana, 2018: 227).

But on the other side give the children the opportunity to learn, such as: first, give them the opportunity to use gadgets as a medium of learning and interacting from an early age. Because the use of gadgets is something that cannot be avoided at this time and in the future.

Second, set the duration of gadgets usage. Do not let children be preoccupied with gadgets. All of these tools are exciting until children forget the time. For that reason, parents must be able to confirm the time limit for using gadgets for their children. Then parents must build good interactions with them and give examples of positive use of gadgets.

In children aged 2-5 years, parents can allow them to use the gadgets for a maximum of one hour per day. They must use the gadget with children and explain what is displayed and apply what is obtained from the media to the world around. At the age of 5 years and under, do not let children enjoy themselves with gadgets. Use a gadget like a book. Hold the gadget and sit beside the children while telling stories or explaining the pictures on the screen. Interact with children while doing this.

For children aged 6 years and over, parents do not need to always be by their side when using a gadget. However, they must be aware that there are many other learning media out there. For example, going to a zoo or other recreation area that can make children more active to move and interact than using a gadgets.

Provide interactive toys around children so they can divert their attention from playing gadgets and still accompany them when they play. For example toy beams, legos, puzzles and so on.

Ensure adequate sleep of your children: They must have enough sleep for about 10 hours a day. Good sleep also helps recover from eye strain and for efficient working of brain. Good sleep is also necessary for good health.

#### **CONCLUSION**

The development of technology is currently encounters rapid progress. Gadgets are the technology products that currently become a trend by presenting various models and prices that are affordable especially in Indonesia. Gadget users are not limited by age. Now the social life of children is more affected by technology. Early childhood children who interact with gadgets and cyberspace affect their thinking about something beyond those digital media. They will also feel unfamiliar with the surrounding environment due to lack of social interaction with their peers, which hampers their speaking ability. Parents should watch their children when they play gadgets so that they are not dependent on those tools and do not forget to socialize with the surrounding environment. Gadgets are indeed needed for means of communication, but supervision and guidance of parents on children must always be conducted. Because if the parents are not able to control their children in the use of gadgets, it will slow down their ability to communicate with the surrounding environment.

#### **REFERENCES**

- Kuss, D. J., & Lopez-fernandez, O. (2016). *World Journal of Psychiatry*, 6(1), pp. 143–176. https://doi.org/10.5498/wjp.v6.i1.143.
- Kemdikbud. (n.d.). *Buku Saku Mendidik Anak Di Era Digital*-edLina.pdf.
- Maulida, Hidayahti. (2013). Menelisik Pengaruh Penggunaan Aplikasi Gadget Terhadap Perkemban-

- gan Psikologis Anak Usia Dini. *Jurnal Ilmiah Teknologi Pendidikan 2013*. Semarang: FKIP Universitas Negeri Semarang.
- Muhibbin Syah. (2003). Dinamika Penelitian: Media Komunikasi Sosial Keagamaan Psikologi Belajar. Jakarta: PT. Rajagrafindo Persada, 2003). P.26.
- Novitasari, Wahyu. (2016). Dampak Penggunaan Gadget Terhadap Interaksi Sosial Anak Usia 5-6 Tahun. Surabaya: UNS.
- Nurbiana Dhieni, Lara Fridani, Gusti Yarmi, & Nany Kusniaty. (2005). *Metode Pengembangan Bahasa*. Jakarta: Universitas Terbuka.
- Nurrachmawati. (2014). Pengaruh Sistem Operasi Mobile Android Pada Anak Usia Dini. Jurnal pengaruh system operasi mobile android pada anak usia dini. Jurnal Pengaruh Sistem Operasi Mobile Android Pada Anak Usia Dini. Makkasar. FT Universitas Hasanuddin.
- Santrock, John W. (2007). *Perkembangan Anak*. Jakarta: Erlangga.
- Syafa'atun Nahriyah, *Tumbuh kembang Anak di Era Digital*. Volume. 4, Number. 1, December 2017.
- Suhartono.(2005). Pengembangan Keterampilan Bicara Anak Usia Dini. Jakarta: Departemen Pendidikan Nasional, Direktorat Jenderal Pendidikan Tinggi, Direktorat Pembinaan Pendidikan Tenaga Kependidikan dan Ketenagaan Perguruan Tinggi.
- Sundus M. (2018). The Impact of using Gadgets on Children.
  J Depress Anxiety 7: 296. doi:10.4172/2167-1044.1000296.
- Suhana. (2018). Influence of Gadget Usage on Children's Social-Emotional Development. Published by Atlantis Press. Volume 169.
- Seminar Internasional, "Pendidikan Pada Anak Usia Sekolah Dasar", 23 November 2017. UIN Malang.
- West, Richard dan Lynn Turner. (2007). *Introduction Communication Theory. Analysis and Application*. New York: McGraw Hill.