

THE IMPACTS OF GADGET AND INTERNET ON THE IMPLEMENTATION OF CHARACTER EDUCATION ON EARLY CHILDHOOD

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Abstract

The use of gadgets, provided with the internet access, in early childhood today has become common in the daily lives of modern society. Various reasons are used by parents to permit young children to use gadgets. Even though it has benefits, it is undeniable that in fact internet access actually has negative effects on the growth and development process of young children. Using gadgets can even ruin the moral and character building of children which are not potentially expected by parents. This paper aims to describe the effects of Information Communication and Technology (ICT) on the character education of early childhood. This study belongs to descriptive qualitative where the data were gathered through library research and interviews. The result showed that giving access to gadget and internet in early childhood may contribute to positive and negative impacts. Children may have better motor skills, improved cognitive skills and competition skills while on the contrary, children may face serious issues such as speech delay, attention deficit, learning problems, even mental disorders that can impact to their characters. Therefore, serious attention is needed from the environment where the children grow and develop, such as parents, caregivers, educators in early childhood education schools, and the community holistically in order to minimize the negative influences of the internet towards the their character and moral buildings.

Keywords: Character Education, Early Childhood Education (PAUD), Information Communication and Technology (ICT)

INTRODUCTION

The advanced development of science and technology nowadays has brought convenience in all fields including communication, education, health and many other important things in daily live activities. Information Communications and Technology (ICT) is very important in human life to make life gets better, easier and more practical. As Wajszczyk (2014) says that the importance of ICT is rather based on its ability to broaden access to information and communication than its technological aspects. In fact, the progress of this technology is not an unusual thing to young children. Interestingly, the applications provided in gadget allows young children to easily use it just by viewing and touching the screen of the cellphone. Children do not need special time to learn how to use gadget like Android cellphone but they just pay enough attention to other people who use it and could easily imitate the way using it. In today's technologically advanced society, children typically spend around several hours each day using digital devices that can impact toward their early childhood development. The benefits of technology on early childhood development and learning

are evident. However, the overuse of technology can lead to a sedentary lifestyle and causes issues with behavior, development and the learning process.

According to psychologist Hadiwidjodjo (2014), the progress of ICT has a positive impact on life, which facilitates communication and builds children's creativity. In his opinion, gadgets provide a variety of information that can also encourage children to be more creative because children will be easier to find all the information and news they need, especially in terms of learning while playing or playing while learning. In this age, children are still in an exciting time to play. Even so, according to Hadiwidjodjo (2014), the learning process without gadgets must also be done by children because the continued use of gadgets will bring negative impact on children's behavior patterns in their daily lives, children who tend to continuously use gadgets will be very dependent and will do the activities routinely in their daily life, it is undeniable that nowadays children play gadgets more often than learning and interacting with their surroundings. Conversely, Goswami (2015) stated that the internet and technology like video games are most likely to affect children's development in morality and social development, neuroscience is revealing powerful learning in all domains of child development from the earliest months of life. In that sense, new media is another cultural tool that can be used strategically to affect a child's understanding of the world.

Henceforth, based on the elaboration above, it seems that the main problem at the moment is whether gadgets and the internet today have become obstacles to the implementation of character education in Indonesia? As a respond to this case, in Indonesia, character education has become a major concern of the Ministry of National Education (MoNE) since 2010 which is included in School Based Curriculum (KTSP). Character education has been pursued intensively to be inserted into the learning curriculum in each subject taught at school. Character education has become the main base in the national development vision as noted in the Presidential Regulation Number: 87 of 2017 concerning strengthening Character education. It is under the responsibility of the education unit to strengthen the character of students through harmonization of heart, feeling, thinking, and sports with the involvement and collaboration between educational units, families and communities as part of the national mental revolution movement. In line to this idea, Silvia (2013) noted in the article "Character Education to Improve the Nation's Civilization", Character Education (CE) is considered as the basis for creating a society with good deeds, morals, ethics, culture, and good civilization based on the philosophy of the Five Pillars of Indonesia, Pancasila.

Based on the results of Al-Ayouby's study (2017) about the effects of gadget use on early childhood, the negative and positive effects of gadgets and the internet in forming the character of early childhood depend on the supervision and direction of parents and other people around the children on what is good for children at an early age. However, the negative impact is in full concern because the application of character education is disrupted when children pay more attention to the gadgets used and they choose to ignore the utterances of parents while they are using gadgets. Pornographic content also appears, unwanted, automatically when advertising in the game the child is playing especially when internet access is online. Al-Ayouby (2017) added that giving gadgets to children without the supervision of adults or older people

would tend to cause some negative effects because children would be easier to access various pornographic content from gadgets they have. This is why giving gadgets to children is still a matter of pros and cons among the community. A lot of reasearches has been carried out in order to see clearly about this phenomena. The writers purpose on carrying out this research is to describe the positive and negative impacts of ICT towards the implementation of character education in young children.

LITERATURE REVIEW

Character Education

Character education is an important aspect for our future generations. An individual is not enough just to be given the provision of learning in terms of mere intellectuals but also must be educated morally and spiritually. Kusumah (2007) noted that character education is a form of human activity in which there is an educational action intended for the next generation. The purpose of character education is to form individual self-improvement continuously and exercise self-abilities in order to lead towards a better life. Great Indonesian Dictionary (2008) defines character as a psychological trait, morals or manners that distinguish one person from another. Thus the characters are unique values - whether inscribed inside in behavior.

The purpose of character education is an effort to revive an ideal spiritual. Foerster in Kusumah (2017) said that the main purpose of education is to shape character because character is an evaluation of a person or individual and character can also give unity to strength in taking a position in every situation. According to Sunarti (2005), character education for individuals aims for children to know a variety of good human characters, can interpret and explain various characters, show examples of character traits in everyday life and understand the good side of carrying out character traits.

On September 6, 2017, President Joko Widodo signed Presidential Regulation (*Perpres*) Number: 87 of 2017 concerning the Strengthening of Character Education. In this Presidential Regulation it is stated, Strengthening Character Education, is an education movement under the responsibility of educational units to strengthen the character of students through harmonization of hearts, taste, thought, and sports with involvement and collaboration between educational units, families and the community as part of the National Mental Revolution Movement. According to this *Perpres*, the aim of this regulation is for building and equipping students, as a golden generation of Indonesia, in 2045 with the spirit of *Pancasila* and good character education in order to face the dynamics change in the future.

Character education should be in line with children's intellectual development, which in this case must be started early, especially from the family, as the core and closest environment to children, up to the educational institutions. Character education in schools can be started by giving examples that can be used as examples for students accompanied by the provision of learning such as religion and citizenship so that individuals can form socially minded, critical thinking, possess and develop noble ideals, love and respect others, and be fair in all respects.

Early Childhood Education

According to Cahyamaulidiyah (2014) stated that young children are aged 0-6 years, as in the Law of the Republic of Indonesia Number 20 of 2003 concerning the National

Education System in Article 1 paragraph 14 which states that early childhood education is education that intended for children from birth to 6 years of age. Stages of human development according to Hurlock (1980) the pre-natal period starts from the onset of the conception of birth, the baby's period is one day-two weeks, the infancy period is two weeks-one year, while childhood or young children is 1 year-6 years, final children is 6 years-12/13 years, adolescence is 12/13 years-21 years, adulthood is 21 years-40 years, middle-aged is 40 -60 years years and old age is 60 years died.

Early Childhood Education (PAUD) is a level of education prior to elementary education which is a coaching effort aimed at children from birth to the age of six years which is carried out through providing educational stimuli to help growth and physical and spiritual development so that children have readiness in entering further education, which is held on formal, non-formal and informal channels.

Early childhood education is one form of education that focuses on laying the foundation for growth and 6 (six) developments: religion and morals, motoric, cognitive, linguistic, social-emotional, and artistic, in accordance with uniqueness and stages development in accordance with the age group passed by early childhood as stated in Permendikbud 137 of 2014 concerning PAUD National Standards (replacing National Education Minister Regulation 58 of 2009).

The main objective of early childhood education is to form quality Indonesian children, namely children who grow and develop according to their level of development so that they have optimal readiness in entering basic education and navigating life in adulthood. It also helps children to achieve academic readiness in school, so that they can reduce the age of dropping out of school and be able to compete in a healthy manner at the next level of education.

The range of early childhood according to Article 28 of the National Education System Law No.20 / 2003 paragraph 1 is 0-6 years. Meanwhile, according to the study of PAUD scientific clusters and their implementation in several countries, PAUD was implemented from the age of 0-8 years (golden age). The scope of Early Childhood Education, including: infants (0-1 years), toddlers (2-3 years), play groups (3-6 years), and early grade elementary schools (6-8 years).

Information Communication and Technology (ICT)

Information and communication technologies or ICT has become a very famous term and now has been widely used in educational research, policy, and practice. It used to be known as IT, or information technology, which was most often used in reference to computers and the internet. According to Bolstad (2004), in the past, the information dimension tended to predominate in the literature, and in people's thinking, about ICT. In recent years, the communication dimension of ICT has assumed an equal prominence. The term ICT encompasses much more than just computers. ICT can be defined as anything which allows people to get information, to communicate with each other, or to have an effect on the environment using electronic or digital equipment (Siraj-Blatchford & Siraj-Blatchford, 2003).

According to Bolstand (2004), in early childhood education (ECE), the term ICT could include the following types of hardware and software: computers (including desktop,

laptop, and handheld computers); digital cameras and digital video cameras; creativity and communication software and tools; the internet; telephones, fax machines, mobile telephones, tape recorders; interactive stories, simulated environments, and computer games; programmable toys and control technologies; videoconferencing technologies and closed-circuit television; data projectors, electronic whiteboards, and more.

METHOD

This study was done in a qualitative way where the data were obtained through library research and interviews. According to Narbuko (2003) the method of in-depth interviewing is a question and answer process in research that takes place verbally where 2 people or more face to face listen directly to information given by the informant interviewed. According to Moleong (1989), informants are people who are used to provide information about the situation and background conditions of the study, so they must have a wealth of experience in research settings and must voluntarily become members of the research team even if it is only informal. The technique of determining informants in this study was purposive sampling where the selection of informants was deliberately chosen based on certain criteria that had been determined based on the research objectives. The writer chose 10 interviewees randomly who were under 35 years old mothers. The question format was based on Sundus (2018) to see the impact of using gadget on children. The interview processes were carried out directly face to face to observe the samples and their interactions with their children.

RESULTS AND DISCUSSION

This study focuses on the positive and negative impacts of gadget and internet on young children towards their characters. To begin with, the writers would like to show parents background that indirectly may contribute the parenting methods in the family. The writers focus only on mothers because mothers play very important role in the life of young children. Mothers are usually the primary caregivers, look after and care about the needs of the children. The following result in Table 1 shows data of interviewees who are the mothers of young children that use gadget and internet access in daily life. The data describes about the age, educational background, profession and their children's age.

Table 1. Parents' background

No.	Initial	Age	Profession	Educational Background
1.	MY	29	Lecturer	S2
2.	NM	30	Lecturer	S2
3.	AF	29	Housewife	S1
4.	DW	34	Teacher	S1
5.	MK	29	Teacher	S1
6.	FD	29	Lecturer	S2
7.	TZ	29	Housewife	S1
8.	IP	31	Housewife	S1
9.	ZP	29	Lecturer	S2
10.	YN	35	Lecturer	S2

It can be seen that there are five of ten mothers who are lecturers and masters degree, three of them are housewives while the rest are teachers who are bachelor degree. It shows that the educational background and mothers's professions are diverse. In addition, data about their children are described in the following Figure 1.

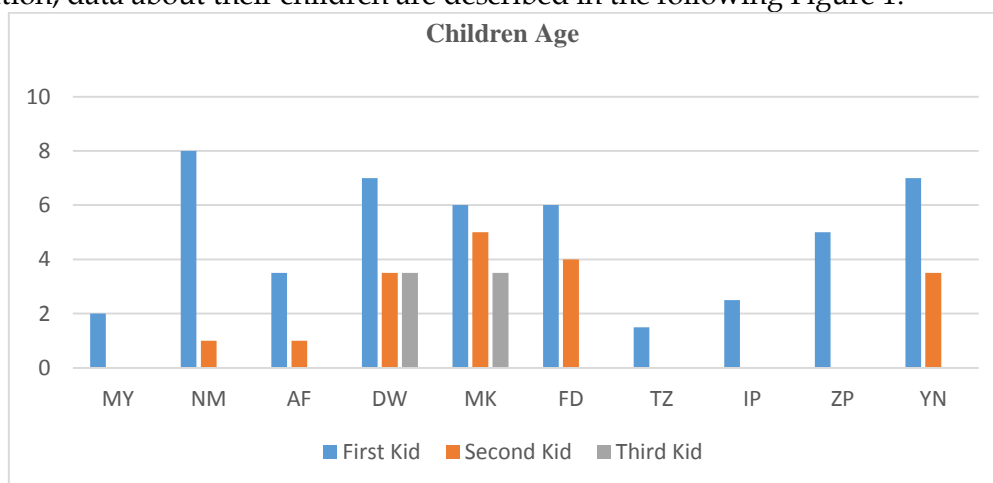


Figure 1. Data on children's ages

Figure 1 shows that most of the children are under 6 years old. It can be stated that there are two babies are under two years old, one baby is two years old, two young children under 3 years old, five young children are under 4 years old, two young children under 5 years old, two young children under 6 years old, two children are under seven years old and one is 8 years old. So there are variations on the age of the children which means that they get different experience on the introduction of technology. From the result of the interview, parents who have more than one kid tend to show more experience than those who have one. It can be seen when some mothers described the parenting methods which are mostly the second or third children are as the result of evaluation from the first kid.

The reasons of parents introducing gadget to young children are diverse from one another. Some parents see that young children should be introduced gadget as they see the other children have actively use it. This is because they think that the advanced technology must go in line with their parenting method. As stated by DW as follows:

Gadget was introduced because the young kids see their cousins use it. It feels strange to see that even the other babies have used it but my kids have not even understood what it is. I and my husband decided to introduce gadget when my first daughter 4 years old to see some creative videos about crafting and her twin sisters watch videos about animals.

DW herself, introduced gadget to her first daughters when they were 2 years old. She always guide her young children when they are using gadget. However, for her, playing outside the house is very important to develop children's motoric and cognitive skills. That is why they do not spend very long time on gadget. On the other hand, there are some children who know gadget because of the other young children or the other adult people who are not their parents. For clearer description, it shows in the table 2 as follows.

Table 2. Reasons of using gadget for young children

Mother's Initial	Children/ Age Boy (B) Girl (G)	Introduction of gadget technology	Reasons
MY	B/ 2 yo	6 mo	To watch educative videos about animals and listen to English songs.
NM	G/8 yo	6 mo	To watch educative videos about animals and listen to English songs.
	B/1 yo	8 mo	Because he sees his older sister uses it.
AF	A/3,5 yo	6mo	Gadget was introduced because the young kids see their cousins and friends use it.
	B/1 yo	10mo	Gadget was introduced because the young kids see their cousins and friends use it.
DW	G/7 yo	2 yo	Gadget was introduced because the young kids see their cousins use it. Parents introduced gadget to see some creative videos about crafting.
	G/3,5yo	1 yo	The babies watch videos about animals.
	G/3,5yo	1 yo	
MK	B/6 yo	6 mo	To watch educative videos about animals and listen to English songs.
	B/5 yo	8mo	Because he saw his brother used it.
	G/3,5 yo	2 yo	Because she saw her brothers use it.
FD	B/6 yo	1 yo	To watch English videos: Songs and cartoon movies.
	B/4 yo	1 yo	Grandparents introduced him to distract the kid's attention for a while.
TZ	B/1,5yo	1 yo	Gadget was introduced because the young kids see their cousins use it
IP	B/2,5 yo	6 mo	The grandparents gave the kid access on gadget then it is used to distract the kid's attention.

ZP	G/5 yo	2 yo	Gadget was introduced because the kid see her cousins and the other children use it.
YN	G/7 yo	15 mo	Nanny looked after the kids and parents gave the kids access on gadget and internet. The kids initially used it to watch videos later on she used it to play the games online or offline.
	B/3,5 yo	6 mo	

The above table shows the parents motives on the introduction of ICT to their young children. There are 11 young children access gadget because of their siblings surroundings have used it, even grandparents or nanny familiarized it to the babies. The other 7 babies were introduced gadget to watch videos and listen to songs. It is not a prohibition to introduce young children to gadget. Many researches have studied that there is a need to educate young children to face the advance technology. Case studies highlight a role for ICT in supporting parent involvement in their children's learning (Lee, Hatherly, & Ramsey, 2002)

Furthermore, the writers found that the duration and intensity of the use of gadgets are varied from one another. Some parents only permit their children to use gadgets every 3 or 2 days in a week but mostly gadgets are given everyday. Both variables of duration and intensity are described in the following figure.

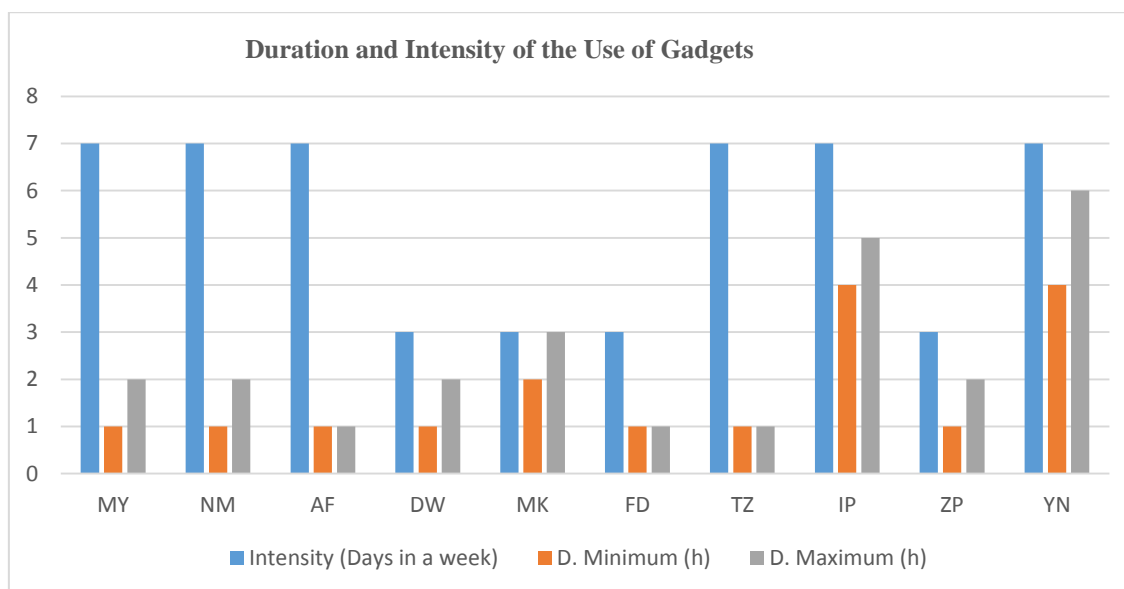


Figure 2. Duration and intensity of the use of gadgets

Figure 2 shows that 6 from 10 parents permit their young children to use gadgets everyday but in different duration. Two mothers give access only one hour in a day, two of them only permit maximum 2 hours, while the rest let the kids use gadget for 5 to 6 hours per day. The rest of the parents only permit oever every 3 days per week and 1 to 3 hours per use. According to Al-Ayouby (2017), as shown in Table 3, the category of

duration and intensity on the use of gadgets in young children are high if they are used more than three times a day or about 75-120 minutes, medium if it is 2-3 times a day 40-60 minutes, and low if the maximum use only 1-2 times a day 5-30 minutes per use.

Table 3. Duration and intensity of using gadgets in young children

Category	Duration	Intensity
High	75-120 minute	More than 3 times a day
Medium	40-60 minute	2-3 times a day
Low	5-30 minute	Max: 1-2 times a day

Source: Al-Ayouby (2017)

In line with this case, Ferliana (2016) stated that children under the age of 5, may be given gadget but it must be considered the duration of its use, for example, they may play games in gadget but only half an hour and only during leisure time, or only introduce the gadget once a week, for example Saturday or Sunday. The rest, they must continue to interact with others. She also added that early childhood who use gadgets at least 2 hours a day can affect children's psychological condition, for example, children become addicted to playing gadgets rather than doing activities that are supposed to be learning directly through books or interactive games with parents, friends, caregivers and other family members.

The Positive Impacts of Gadget Use

To analyze the positive impacts of gadgets on young children, the writers would focus on three aspects; better cognitive and motoric skills, gadgets as children distractions and the improvement of competition skill. As stated by Sundus (2018), the positive impact of gadget use on children include; better motor skills, improved cognitive skills, cause of distraction in children, more fun for kids, educating young ones, and competition skills.

To begin with, all interviewees agreed that ICT denotes positive impacts towards their cognitive and motor skills. MY, a mother of a 2 years old son, says:

After reading him a book about animals, then he watches online videos about the same topic, he finds out the objects through the moving pict's like videos about animal and becomes very enthusiastic in real life.

The other positive impacts on the improvement of young children cognitive skill is they tend to easily collect new vocabulary while listening to songs whether they are in English or in Indonesian language. The young children may conveniently learn the language. ZP, a mother of 5 years old daughter stated that her daughter was given access on gadget and internet when she was 2 years old and she watched English songs. She has seen a significant improvement on her daughter's ability in acquiring English language. Her young daughter even may pronounce the language fluently although she only permits her kid to use gadget only 3 times a week and maximum 2 hours per use. In line with the idea, NM a 30 years old mother who works as a lecturer has different experiences between her two kids, she stated:

For my first daughter, when she was 2 years old, I bought a special tablet that has puzzle games in it, it contributes to her cognitive and motoric skills which are improving rapidly.

She also learns and gets vocabulary of English language through the videos in youtube or laptop. Now she is 8 yers old, she gets internet access to have new friends like penpal from the instagram. She is able to interact with her new friends around the world. She also searches about the knowledge through the google. For example, she wants to know about America, it's hard for me to explain it, then she may find it on the internet. For my second kid, he is now 1 year old, he at first attracted by the TV then I try to show him the videos from smaller dimension to handphone or videos from the laptop.

This statement revealed that Sundus (2018) research about the positive impacts of gadget. He stated that motor skills are the skills which are linked with muscles of small movements like lips, fingers, wrists, tongue and toes. So when toddlers play games on tablet or any other gadgets their fingers and hands get a workout. This is such a healthy exercise for growing children. Using modern keyboards and keypads or other handheld devices they have no risk of any injury or any kind of threat as compared to playing outside.

In addition, some parents, especially mothers need to leave their kids with somebody else whether the kids' grandparents or nanny. In this situation, the caregivers have parents' permission and they give access on gadget in order to make the children controllable and calm down. This reason has the same idea like Sundus (2018) statement in the journal of depression and anxiety that parents or caregivers do not have to worry about the child because there is no risk of getting injured or harmed by these gadgets nor about any other major mess like painting a wall or disturbing others. Technology has changed all that. Simply a Smartphone can keep a child busy for hours, whether he is playing games or watching videos etc. As stated by YN:

Nanny looks after the kids and she gave the kids access on gadget and internet. The kids initially used it to watch videos later on she used it to play the games online or offline. The same as his sister, he was introduced by the nanny to distract him while eating so that he can sit properly while having meals.

The same idea has also become the basic reason for some parents to let their children use gadget. Some mothers sometimes are in the urgent situation where they can not involve their young kids in the activities such as cleaning the house, cooking, or going to the toilets. The kids may cry out loud when they need to be left alone because they do not have siblings, friends or other people in the house. In this situation, mothers will leave them with videos on gadget. in this case, gadget might be very helpful for them. It can be seen from table 2 that most of parents decided to introduce gadget to young children to distract their attention while parents are in urgent to do other things. When parents cannot play with the young kids and the young kids feel bored after playing outside handphone can calm down the kids.

In competition skills, conversely, the young children do not seem to really compete because the gadgets do not have competition games. Most of parents only install application to watch videos like youtube, instagram and educative applications. There are only two from ten parents who say that their kids have the competition skill. FD, a mother of two sons said that the kids like to compete with his brother while playing games like legos.

The Negative Impacts of Gadget Use

Despite the positive impacts of gadget toward young children as stated previously, gadget also leads to negative influences on the development and growth of young children. In this paper, the writers focus on three negative effects of gadget; speech delay, attention deficit and mental disorder. There are 6 parents who admit that their children's ability in speaking is disrupted because of the early use of gadget on their young children. NM, a lecturer and a mother of two, shared her experience in parenting her first kid.

I gave access my first daughter to technology when she was 6 months old. I thought it would be good for her. In reality, as she grew up, I realized she was always silent. She did not express or lazy to say a word. When I see this, I tried to analyze whether it is because of the gadget then I reduced the gadgets. When she was 7 years old she seemed to be more expressive.

According to Sundus (2018), a child with a language delay might pronounce words well but only be able to put two words together and a child with a speech delay might use words and phrases to express ideas but be difficult to understand. Various studies have proved 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.

Attention deficit and mental disorder are also found in this study. Children tend to not care about their surroundings when they are using gadgets. They do not move and only focus on the screen. In addition, there are 5 from 18 children who may easily get angry if they are not permitted to use gadget. the older kids even express their anger and do like what they see in the videos or games they play in the gadgets. However, MY, a mother of 2 years old kid, stated that if the baby does not see the handphone he always uses, he will not ask to use it. The young kid will only get mad if he sees the gadget he usually uses but her mother does not give it to him. In different cases, YN, a mother of two, stated:

According to their nanny, my kids will act like what they see on the games or the videos they watch. If they are angry they will state as the characters they always watch. They will scream out loud if they are not permitted to use gadget.

This case will only happen if YN is not at home and can not control her kids directly. When she is at home, she tries to reduce their kids access on gadget. In relation to the misbehaviour of young children, parents might face the threat of Hyperactivity Disorder (ADHD), a mental disorder, refers to problems like paying attention, excess activity or has difficulty controlling behaviour which is not appropriate. This behaviour can be easily notice. Dr Graham says 'Child gets upset or shows anger when by small things and when they get online they become calmer.

The Impact of Technology towards the Implementation of Character Education

The implementation of character education to children experiences obstacles if the child is exposed to gadgets and the internet in high intensity and duration. Gadgets addiction can have fatal consequences such as the appearance of childhood depression symptoms. Childhood depression has a very negative impact on children's attitudes

and behavior, especially their behavior and mindset. Sundus (2018) states that too much gadget use introduces depression in children of certain ages which also leads to mental health issues in childhood and adolescence. It is clear that the negative influence of the internet is the disruption of children's character. They can just apply the wrong behavior as they receive from the screen they always watch. It is unfortunate if the next generation of the nation forgets or rejects the prevailing moral values.

Basically, parents are very aware of the negative impacts and feel it as a problem that must be evaluated in parenting. However, some parents are forced to leave or even live within the scope of a large family (with grandparents and uncles / aunts), so it is difficult to make improvements to parenting because it is contrary to the existing circumstances. In this case, parents acknowledge that the involvement of Father & Mother, the closest persons around the child, and the school where the child is entrusted is important in the process of applying character education to children. The closest people should be able to understand the positive and negative things that are caused by gadgets and the internet in the process of growth and character formation. It is highly recommended that parents, grandparents, caretakers, and all parties limit the use of gadgets and internet to children.

Actually, the use of gadgets in a constructive way can produce children who are "literate" gadgets so that they grow into children who know the limits of good and bad, things that are allowed and may not be used in the use of gadgets and the internet as stated in BECTA (2004) on the following:

...as part of their early childhood education, children should find out about and identify the uses of everyday technology, and that children should have opportunities to use ICT to support their learning.

Parents and educators can reduce their use of technology by designating specific non-digital hours and days during the week. When technology is being used, the sessions should follow a pattern of an hour of technology then an hour without technology in order to reduce the negative impact of these digital resources on early childhood development (Kindergarten Prep Child Care Center, 2017).

CONCLUSION

The rapid development of ICT will contribute to good effects to young children if parents use it in a positive way. Thus, parents as the closest people to their children should always observe their kids while using gadgets. In other words, children are allowed to use gadgets as long as they are under their parents' control. It is suggested that parents should limit children's access to gadgets because it is not easy to avoid the children from gadgets. Encouraging child to use ICT in educational field or study purpose can lead to drastic change in their lives. It can help them to enhance their skills. The use of gadgets in a constructive way can lead to healthier and efficient minds. Further research on how gadgets affect children should be carried out. The study suggests that practitioners need guidance, and opportunities to become capable, competent, and informed about the educational role and potential of ICT, and support to make the most of the opportunities that ICT presents for strengthening all aspects of early childhood education practice.

REFERENCES

- Al-Ayouby, M. H. (2017). *Dampak penggunaan gadget pada anak usia dini (Studi di Paud dan TK Handayani Bandar Lampung)*. (Skripsi). Universitas Lampung, Bandar Lampung
- BECTA. (2004). *Video conferencing in the Curriculum. Case study 2: Chalvey Early Years Centre, Slough. E-storytelling*. British Educational Communications and Technology Agency. Retrieved from <http://www.ltscotland.org.uk/earlyyears/casestudies.asp>
- Bolstad, R. (2004). *The role and potential of ict in early childhood education: A review of new zealand and international literature*. Wellington.
- Cahyamaulidiyah, E. (2014). *Anak usia dini 6*. Retrieved from http://ekacahyamaulidiyah.blogspot.co.id/2014/02/anak-usiadini_6.html
- Narbuko, C., et al. (2003). *Metodologi penelitian*. Jakarta: Bumi Aksara.
- Goswami, et al. (2015). *Impact of mobile phone addiction on adolesent's life: A literature review*. *Internasional Journal of Home Science*, 2(1), 69-74.
- Hadiwidjodjo. (2014). *Dampak positif penggunaan gadget bagi anak*. Retrieved from <http://www.satuharapan.com/life/8-dampak-positifpenggunaan-gadget-bagi-anak>
- Han, Y. S., & Jun, W. P. (2013). *Parental involvement in child's development: Father vs. mother*. *Open Journal of Medical Psychology*, 2, 1-6. doi:10.4236/ojmp.2013.24B001
- Hurlock, E. B. (1980). *A life-span approach*. Jakarta: Erlangga
- Kusumah, A. D. (2007). *Pendidikan karakter*. Jakarta: Grasindo.
- Lee, W., Hatherly, A., & Ramsey, K. (2002). *Using ICT to document children's learning*. *Early Childhood Folio*, 6, 10-16.
- Moleong, L. J. (1989). *Metode penelitian kualitatif*. Bandung: PT. Remaja Rosdakarya.
- Siraj-Blatchford, J., & Whitebread, D. (2003). *Supporting information and communications technology in the early years*. Berkshire: Open University Press.
- Sunarti, E. (2005). *Menggali kekuatan cerita*. Jakarta: Elek Media Komputindo.
- Sutomo, I. (2014). *Modification of character education into akhlaq education for the global community life*. *IJIMS, Indonesian Journal of Islam and Muslim Societies*, 4(2), 291-316.
- Kindergarten Prep Child Care Center. (2017). *Technology and its impact on early childhood development*. Retrieved from: <https://kindergartenprepchildcare.com/technology-impact-early-childhood-development/>
- Sundus, J. (2018). *The impact of using gadget on children*. *Lahore Garrison University Journal of Depression and Anxiety*, 7(1). DOI: 10.4172/2167-1044.1000296.
- Wajszczyk, R. (2014). *A study of the impact of technology in early education*. (Unpublished thesis). Uppsala Universitet, Uppsala.