Is it Necessary to Ban Gadget in Early Childhood?

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ABSTRACT
The advancement of gadget has progressed rapidly in the past 20 years, turning gadget as a basic need for everyone without exception, including to early childhood. However, the excessive use of gadgets may cause negative impacts. While parents cannot completely ban early childhood from using gadgets, they can apply mediation strategy to the children as gadget is indeed necessary for them to adapt in this digital era. The purpose of this article was to know the impact and mediation strategy of the parents towards the use of gadgets in early childhood. This article was made based on the review of some literature regarding the impact of gadget usage and parental mediation strategy from the perspective of parental mediation theory. The result of this article provides information to parents that there are three mediation strategies and positive impact from use of gadget on early childhood.

Keywords: Gadget, early childhood, parental mediation strategy.

1. INTRODUCTION
The advancement of gadgets has been advancing rapidly in the last 20 years, making gadgets have a lot of enthusiasts. This can be seen from a survey conducted by Statistics Indonesia (BPS) in 2018, Indonesia experienced an increase in the number of Information and Communication Technology users with a percentage of 62.41% smartphone users, followed by people with internet access 66.22% [1]. The rapid development of gadgets has made gadgets a part of everyday life. This is because gadgets can be used anywhere and anytime according to their needs. Not only that, the features contained in it are also multifunctional so that it makes it easy to do everything [2].

Thanks to its simplicity, gadgets are not only intended for workers, but also early childhood have started to be introduced to and use gadgets. It can be seen from the research conducted by Hendriyani et al. [3] and Shaik [4] that children aged 0-6 years have access to a touch screen and spend more than two hours using gadgets per day. However, excessive use of these gadgets can make children addicted and can have a negative impact on their daily behaviour and even the mental and health of children because, when children use these gadgets, children pay less attention to the body posture, brightness, and distance between the screen and the eyes [5]. Then from the research Rowan [6] is calling on parents, teachers, and etc to ban the use of gadgets for children under the age of 12 years. But is it necessary for parents to ban children from using gadgets?

Even though these gadgets are needed for children to adapt to the digital era. Furthermore, gadgets offer many benefits for early childhood lives. Then, Parents cannot completely ban children from using gadgets. But, with restrictions and good supervision by parents, children can grow and develop well. Therefore, parental mediation can be a strategy in the use gadgets for early childhood because this strategy looks at the extent to which the family environment, especially parents, is involved in supervising, guiding, implementing limits for children in using gadgets and the efforts of parents to maximize benefits and reduce harm from gadgets use [7], [8], [9].

Through a literature review, this article will show that using these gadgets is like a two-edged sword which may either provide benefits or harm. This article offers parental mediation strategies in the use of gadgets for early childhood by looking at the parental mediation theory framework.

The idea in this paper is to see gadgets not only have a negative impact but have a positive impact, that parents cannot completely ban early childhood from gadgets to adapt to the digital era. Rather, parents can use parental mediation strategies from the perspective of parental mediation theory.

The structure in this paper is as follows. The first section is about the introduction which contains the conditions of gadget development and the use of gadgets in early childhood. Then, Section 2 describes early childhood, such as its characteristics. Gadgets have a positive impact for early childhood in section 3. The next section discusses parental mediation strategies when
using gadgets, such as active mediation strategies, restrictive mediation strategies, and co-view mediation strategies. Finally, section 5 is the conclusion for the paper.

2. EARLY CHILDHOOD CHILDREN

Early childhood are children aged 0-6 years in accordance with law no. 20 of 2003 concerning the National Education System. During that age, children experience rapid development and growth that cannot occur in the next period. And now it has entered an era where technology develops rapidly so that everyone, especially children aged 2 months to 8 years, are born and grow in a digital environment so that they have been introduced to even using gadgets as part of their lives. The gadgets used by children include smartphones, iPads, tablets, and computers. However, the most commonly used gadgets in children are smartphones or tablets [10], [11].

These technological advances have led to different characteristics in early childhood where they tend to have high abilities and are fast in accessing information so that they get more open opportunities to develop themselves using gadgets. In addition, they have a high curiosity attitude, when faced with a gadget they will automatically try to master what is needed in order to be able to apply it [12].

3. IMPACT OF GADGET USE

Excessive and inappropriate use of gadgets can have a negative impact on early childhood. It can be seen from the research conducted by Rosen et al [13] that when children spend more time using gadgets, it can cause psychological, behavioural, and attention problems. In addition, reduced physical activity can lead to obesity. Nadar [10] adds that excessive use of gadgets can have an impact on vision, learning, and sleeping hours.

Not only that, gadgets can also make children indifferent to the environment, both family and community environment because they spend more of their time involved in using gadgets [14]. In line with that, Kabali et al. [15] and Sundus [5] say that this does not only have an impact on aspects of social development but also affects other aspects of developments, such as speech delay, passive attitudes, and suboptimal development of eyes functions.

However, it cannot be denied that gadgets can also provide benefits for children. Kabali et al. [15] describe that gadgets have a positive impact on children such as being a means of entertainment and being a means of communication. Not only understanding, communicating, and using information through gadgets but also can improve children’s cognitive development. Through interactive applications, video games can help children develop these learning skills more quickly because they are more interested in gadgets than books.

Then motor skills get better when children play games on tablets or other gadgets because their fingers and hands can exercise. Through gadgets, children also have fun and they understand simple aspects of cause and impact, actions, and reactions so that they can hone a sense of critical, confident, and creative thinking in early childhood [5].

In addition, this gadget can help children in learning as described by Dewi et al. [16] that through children’s devices can enrich vocabulary in Indonesian and English, become a means of learning various colours, shapes, animals and sounds.

4. PARENTAL MEDIATION STRATEGY

Parental mediation strategy is a behaviour of parents in managing and controlling children by discussing and imposing, limits, on children’s gadget use [17], [18], [19]. This mediation is also an attempt by parents to maximize the benefits and reduce the dangers of using gadgets [7]. In the use of gadgets for children, there are forms of parental mediation strategies namely active mediation, restrictive mediation or restriction mediation, and co-view or co-use [7], [8], [19].

4.1. Active Mediation Strategy

First, the active mediation strategy is the most important parental mediation strategy for children in using gadgets [20]. In this mediation, parents talk or discuss with children about appropriate content and behaviour in using gadgets [8], [19]. Apart from that, Bybee et al. [21] explained that when parents use an active mediation strategy it can have a positive impact on children because through this discussion the parents provide more critical encouragement and positive meaning in its use. So, in this strategy, the role of parents in introducing gadgets both content and behaviour can greatly affect the use of gadgets in early childhood.

In the research of Catherine et al. [22], it is explained that some parents do not find problems in introducing and explaining the content. But on the other hand, parents have difficulty explaining some content, such as sexual content and worry that when they introduce the content, the children will be more curious and not old enough to see it. This is because sexual content is considered taboo for parents. Then, Livingstone et al. [17] added, there are some parents who have difficulty explaining the gadget because they are less skilled at using gadgets. So, when parents find it difficult to introduce it, parents will apply restrictions such as the frequency and duration of use.
4.2. Restrictive Mediation Strategy

This second is a restrictive mediation strategy in which parents apply rules or restrictions to control the use of children’s devices [8]. This strategy applies rules that must be obeyed by children, both in terms of duration and frequency of use. Thus, limiting the frequency and duration is one of the first mediation strategies that parents will undertake in controlling children in their use of gadgets. This strategy is most effective and commonly used by parents because this strategy is more convenient for parents and there are positive results in managing gadget use [8], [22], [20].

In addition, the use of this mediation strategy is carried out because parents see that the child does not have good self-control. For example, children have not been able to manage the time between learning and playing gadgets, so children tend to ignore homework while playing gadgets because they are too immersed in their gadgets. Therefore, it is not uncommon for parents to experience problems in stopping it [22].

In order to make gadget use to have a positive impact on children, parents must strictly provide rules and time limits for children in using gadgets. On the other hand, if parental supervision is not strict in giving a time limit to its use, it can have a negative impact on the children [23].

According to Rosen et al [13], the time limit for children under 10 years, regarding the use of gadgets, must be less than 40 minutes per day and the frequency of use should be less than three times a day and one to three days per week. Parents can give a warning to their child five minutes before the set time. Then after the time is up, parents can take the gadget from the children. However, when it comes to the time limit that the children complain and refuses to end its use, the children will express a variety of resistance according to his age. If the child is 2-4 years old, they will resist by crying and screaming. In contrast to children who are more than 5 years old, they will talk with their parents [24].

On this basis, parents will provide various ways of overcoming resistance according to the age of their children. For example, if the child is 2-4 years old, parents will persuade the child to do other activities. However, unlike children aged 5 years, they will do more approaches and discussions about the time limits in using gadgets [24].

After that, parents must be consistent with the rules that have been made and agreed upon by the children. However, in this research of Smahelova et al. [25], the majority of families do not have strict rules of using gadgets, but the rules are agreed upon situationally so that there are no specific rules. Even so, there are general rules that are used, such as using gadgets in their spare time after homework is done or when they want to play gadgets, children have to ask their parents for children to be exposed to unwanted content or forms of media.

4.3. Co-View Mediation Strategy

Furthermore, this co-view mediation strategy or shared use can be interpreted as an action between children and parents who are carried out jointly in watching or using gadgets. Through this co-view mediation, parents can monitor and limit the use of gadgets in children but do not always involve conversations in it [9]. Added by Valkenburg et al [19] that this mediation strategy can increase the closeness between parents and children because they spend time together using gadgets.

5. CONCLUSION

In this digital era, gadgets are no longer limited to certain groups, but for everyone including early childhood. No matter how much parents try to ban or even keep children away from gadgets, this may be difficult to do because, like it or not, children grow and are born in an environment of technological advancement, therefore this gadget is needed for children to adapt.

Thus, there is nothing wrong with introducing gadgets to children if they are used in proper mentoring and supervision so that gadgets can have a positive impact on children’s development and reduce the negative impacts caused by them. Parents can provide parental mediation strategies using parental mediation theory, such as active mediation strategies, restrictive mediation strategies and co-view mediation strategies. This strategy can be a way for parents to maximize benefits and reduce the dangers of using gadgets.

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