HOW PARENTAL CO-VIEWING CAN REDUCE THE ADVERSE EFFECTS OF GADGETS ON EARLY CHILDREN

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Abstract: *This research is motivated by parents' concerns about the dangers posed by gadgets. Parental co-viewing has been suggested to prevent adverse harm from gadgets. This study aimed to determine parental co-viewing activities between parents and children and to find out that parental mediation can reduce parents' concerns about the adverse effects of gadgets. This study uses a qualitative method with a case study research design on three parents with children aged 2-5 years. The data collection technique uses interviews and field notes which are then processed using grounded theory analysis techniques. The results of this study indicate that parental co-viewing can reduce parents' worries about the dangers of gadgets because parents take the time to be directly involved in activities using gadgets for their children, including viewing, accompanying, and selecting content or applications that are accessed. Activities in parental co-viewing include watching educational videos on the YouTube application and playing educational game applications. Apart from that, this parental co-viewing also increases the closeness between parents and children. This research implies that parents directly involved in gadget activities can encourage safe and healthy use for their children. This study has limitations, and future researchers will explore parental co-viewing in more detail, including the benefits and activities of parental co-viewing with a broader scope of families.*

Keywords: *Early Childhood, Gadgets, Parents, Parental Co-viewing*

A. Introduction

The ease with which children can use gadgets in early childhood is often cause for concern among parents because gadgets can be friends and enemies to children. Devices can be a good tool for self-expression, interaction, and communication, as well as changing how children play and absorb knowledge more broadly (Dewi & Rachmaniar, 2018; Nikken & Jansz, 2014; Son et al., 2021). However, at the same time, gadgets can pose a danger to children because children tend to pay less attention to body posture, and the distance from the screen causes children to have headaches, memory problems, and fatigue, which have an impact on their health (Sergi et al., 2017). Another effect of the gadget is on psychopathological issues such as anxiety, depression, and impulsiveness. In addition, gadgets can have an impact on children's behaviour—cognitive, social, and emotional (Novitasari & Khotimah, 2016; Suhana, 2018). As a result, parental mediation is required to protect children from the risks and problems caused by gadgets. Parental co-viewing and parental involvement are effective ways to reduce or even prevent the negative impacts caused by gadgets.

Parental co-viewing stems from psychological theory and the importance of psychological needs between parents and children because parental co-viewing can be interpreted as actions taken together in viewing or using devices (Zaman et al., 2016). Besides that, parents can also act as helpers by providing guidance to children when introducing gadgets or when experiencing difficulties in using them. Parental co-viewing can also improve early childhood learning and understanding of the content on devices because parents can help children direct and understand ambiguous content by offering information that children can understand. In addition, this parental co-viewing can increase the closeness between children and parents (Nikken, 2018). Moreover, when parents have one child, they tend to be more involved with their child's digital activities so that children will form digital experiences and collaborative decision-making (Zaman et al., 2016).

This parental co-viewing has the potential to protect against the adverse risks posed by devices and support children in learning and engaging in digital activities (Connell et al., 2015). As added by Lin et al. (2019) and Hidayati & Zaman (2021), The interaction between parents and children when using gadgets can be considered valuable and important because it can encourage risk-taking, problem-solving, and questions that can promote critical attitudes in children and improve their digital skills. Although parental co-viewing can improve various aspects of children's lives, there are also negative impacts that can result from this practice. This can be seen from the research conducted by Livingstone et al. (2017), which found that parents sometimes, during shared use, direct children's attention to critical or scary themes, so that sometimes parents implicitly and unintentionally take advantage of violent content that children can interpret as support for the content.

According to Nikken (2018), parental mediation is a process of family dynamics and the socialisation of children with technology. There are three types of parental mediation. First, active parents discuss appropriate content and behaviour when using devices. Second, parents provide limits and rules to regulate the use of gadgets. Finally, co-viewing entails parents sharing their experiences with parents and a joint action taken by parents and children in viewing and using gadgets.

Several studies on parental co-viewing focused on limited content and time and were mainly conducted with samples of families with children over six. This can be seen from the research undertaken by Sekarasih (2016) and Hidayati & Zaman (2021). Restriction in time and content is the primary approach parents use to reduce the adverse risk of gadgets for children. In line with that, Catherine et al. (2017) research was conducted on three mothers who use active and restriction meditation with their children aged 6–12 years when accompanying them using gadgets. As a result, parents who employ limitation and active mediation reduce the risks posed by devices. The study then fails to explain in detail parental co-viewing when using devices. Added to Son et al. (2021), limited assistance is the most effective for reducing the dangers of using machines. But we can

only limit the time and frequency of use without the aid of parents to reduce the harm caused by gadgets because young children are the most vulnerable to hazards related to the use of gadgets. Furthermore, children lack the self-regulation capacity and self-ability to deal with the dangers of gadgets. Based on the explanation above, the authors are interested in seeing how parental co-viewing and parental involvement in gadgets can reduce fear and worry. So, this research aims to determine parental co-viewing activities between parents and children and whether parental mediation can reduce parents' concerns about the adverse effects of gadgets.

B. Method

This research uses a qualitative approach with a case study research design. Case studies answer research questions about how or why something happened. So this qualitative case-study research wants to determine the extent to which the family environment provides simultaneous parental mediation and involvement in reducing risk and maximising the use of gadgets. So to find out, the authors collect data using in-depth interviews and field notes from three parents. The mother doesn't work, and the father works, so the mother has more time at home than the father. The participant has children aged 2–5 years living in Grenjeng, Cirebon City. The subjects and location of this study were chosen because parents and their children have been actively using gadgets in the home environment and have concerns about the dangers posed by devices.

Data collection, recording, and processing through interviews and field notes will be analysed using grounded theory analysis. Grounded theory analysis is an analytical technique that uses processing codes to gain an in-depth understanding through data collected through interviews. With that, this research will be processed using grounded theory analysis techniques to obtain in-depth parental co-viewing and parental involvement when children use or view gadgets.

This analysis technique will begin with collecting interview data, and then the oral data will be processed into text. After transcribing the data, the writer will see and re-read the transcript and the original recording. The author can find

exciting ideas for identifying patterns in the transcript results. When the writer understands and knows the data, the writer can do the coding using several stages, namely open coding, focus coding, axial coding, and theoretical coding (Kathy Charmaz, 2006). Open coding involves collecting and transcribing data from participants through interviews and field notes. Each piece of data will be analysed to get an initial picture of parental co-viewing by giving an initial label or category for each event. During the focus coding phase, the researcher investigates the emerging classes in a more focused, selective, and conceptual manner. Furthermore, this *axial coding* analyses the dominant categories at the coding focus stage to find predefined core categories or sub-themes. In *theoretical coding*, researchers will relate theories based on the sub-themes that have been found so that they become the main themes in this research.

C. Result and Discussion

Parental Concerns about Gadgets

Nowadays, gadgets are not only intended for adults; children are already familiar with and using devices. It raises concern and fear among parents about using gadgets in early childhood. Addiction and the loss of moments at an early age are very worrying for parents because when children use devices excessively, it will cause addiction, so they tend to lose their childhood. It can be seen from the following interview results.

> *Don't let him lose his childhood moments. That's correct if later use of the device causes the children less anxiety."* (Habi Mother, Parents Worry, 21 June 2022)

Parents are concerned that their children will miss out on childhood experiences and be unable to socialise with their surroundings, leading to their children becoming individualistic and even insensitive to their surroundings.

> *"I'm still afraid he will become an individualist in the future because if we leave our children alone with our gadgets, our sensitivity to their environment will be lost, and they won't want to hang out with their friends."* (Habi Father, Parents Worry, 20 June 2022)

Parents' worries do not end there. Parents are also worried about their children's health, especially the health of their eyes. In addition, parents avoid their children using gadgets excessively so as not to be rushed to the hospital.

> *"I'm worried, I'm worried that my name is also a parent because I'm afraid that my eyes will continue, I'm afraid that something like this on TV will end up in a mental hospital."* (Fizi Mother, Parents Worry 18 June 2022)

Based on the statement above, parents have some concerns and fears about using gadgets with their children, including that children will lose their childhood because children spend more time on screens and less time in the real world, so they have less time for creative play, face-to-face social interaction, physical activity, and communication with parents and caregivers (Unicef, 2020). This activity contributes to the development of the child.

Furthermore, another concern is that children have individualistic traits even though parents know that this generation has less friendly, less creative, and more individualistic attitudes (Livingstone et al., 2017). Children who use gadgets are reluctant to communicate or socialise with their environment because devices are considered more attractive and fun for children (Nikken & Schols, 2015). Furthermore, parents believe that because their children use devices without limits, gadgets can hurt their children's health, particularly their eyes. Children who spend more than two hours in front of screens every day or more than 15 hours per week will experience several visual symptoms of eye strain, including burning eyes, neck, shoulder, or back pain, dry eyes, irritation, and redness; headaches during or after play; and overall body fatigue (Basnet et al., 2018).

The concern about the impact caused by this device makes parents provide parental supervision and involvement in using their child's device. When assistance and involvement are not offered, gadgets can negatively impact children, such as becoming lazy and less mobile and active. As a result, children become lazy and lack movement, which can cause weight gain (Aldimasi et al., 2018). Then it will bring out a highly individualistic nature and a low level of socialisation,

which makes the relationship with the surrounding environment quiet. Like Novitasari and Khotimah (2016), excessive use of gadgets can make children indifferent to the environment in the family and the community. Not only that, but children will also withdraw from the environment because they are comfortable with devices.

Withdrawal from the environment because children spend more time engaging in relationships in the virtual world can mean they need help maintaining interpersonal relationships in the real world. It is common for children to struggle to make friends with their peers (Son et al., 2021; Suhana, 2018).

Co-viewing Activities

Parents will not let their children play with devices alone when using gadgets, so they will always accompany their children on the side when using widgets. Parents are intended to be aware of the content their children access. It can be seen from the results of interviews and the field notes of parents.

> *"I'm always together like now you can say together, so I'm never empty. There's always a companion when I use the device."* (Habi Mother, Co-viewing Activities, 21 June 2022)

> *"To be honest, I'm always together like now. It can be said that even though I'm doing activities, I still keep an eye on children playing with their gadgets."* (Hami Father, Co-viewing Activities, 27 June 2022)

Parents will support each other in assisting, so they always keep their children from using it alone. So, when the father cannot accompany his child using a device, the father will ask the mother to accompany him, or if the parent cannot assist, the parent will look for an adult who can attend to his children, such as a brother, aunt, or another sibling. So parents need adult assistance to let their children use the device alone.

> *"His brother asked his brother to play with HAM, "Brother, invite HAM to play. Here's his cellphone. He's still talking." His brother also asked HAM, "HAM is his gadget. I'll watch Tayo's video later."* (Hami,

Parental Co-viewing Activities, 28 June 2021)

"Auntie is in front of FIZ to see what FIZ is playing. That's why sometimes FIZ doesn't understand when it comes to snake toys, presses which one, then asks what Auntie is like." (Fizi Mother, Co-viewing Activities, 18 June 2022)

"Never leave a child playing with his device alone, always by his side. So whatever it is, the mother is still there, so she never leaves. Even if I have to go, I have already left it to his brother." (Habi Mother, Co-viewing Activities, 21 June 2022)

Looking at the results of the interviews and field notes above, parents will support one another in assisting or being involved in using gadgets so that they will not let their children use their own devices. Because parents-both mothers and fathers-support each other, the interaction becomes more effective in preventing children from the dangers posed by gadgets (Nikken, 2018). Son et al. (2021) discovered that parents' use of the device at home could influence the frequency with which their children use it. If parents use widgets obsessively, it can be easy for children to access the gadget. The parents must work together to assist and maintain their children's access to the device so its use remains safe and monitored. Moreover, parents are the main social agents and gatekeepers for children to access digital media and devices, so watching activities with parents can ensure adequate device use for content and time (Nevski & Siibak, 2016).

Fathers and mothers will only allow their children to use devices with adult assistance, so parents ask for help from other adults, such as older siblings or siblings. Parents explain to their children the rules they follow when using devices. It is so that the rules that parents have applied run consistently (Catherine et al., 2017). So that parents give confidence to other families to accompany their children when using devices, in line with research conducted by Nikken and Haan (2015), children are permitted to use their own devices but with the assurance that the child is under the direct supervision of the closest parent or adult. He added that with this co-viewing, parents would know and monitor their children's

digital activities when accessing content and applications on the device, thereby reducing concerns about the device's dangers. But the research conducted by Sekarasih (2016) shows that siblings can influence the use of machines in their children, so people do not trust others to accompany children when they use devices, so children shouldn't use devices.

The activities in which fathers and mothers spend time with their children using gadgets are YouTube and game applications. *YouTube* is an application that parents often use for their children to see videos for learning, such as recognising letters, getting to know transportation, or introducing prayers, to optimise their development and increase their knowledge before they start school. This can be seen from the results of parent interviews.

> *"Yes, the application that I often use at the same time is YouTube. I look for learning videos such as introduction to the alphabet, prayers, recognizinrecognisingyers."* (FIZ's Father, Co-viewing Activities, 19 June 2022)

> *"Usually, with HAM, I often watch videos from YouTube about toy cars, animals, so HAM knows cement cars, tank cars, so it adds to the child's experience."* (Hami Mother, Co-viewing Activities, 26 June 2022)

Apart from watching videos related to learning, parents also watch singing videos and cartoons. Parents give children access to watch cartoons and videos of this song to optimise their language, cognitive, and social-emotional development. It can be seen from the following statement.

> *"Children sing songs, such as 'baby shark' and 'twinkle-twinkle', so they can think through the songs, and it can encourage their cognitive development. Then, if there is a prayer song, watch it. If there is a baby shark song, watch the song that follows, even without a tone. Yes, singing can help you develop your identity, as well as your self-confidence. HAM is also learning to speak so that singing can increase a child's vocabulary."* (Hami Father, Co-viewing Activities, 27 June 2022)

Not only using *YouTube* applications, but parents also accompany children when using game applications so that the application is appropriate for the child's age.

> *"The term is that when children are playing, human rights should at least be like playing games. Usually games that often play HAM are games related to vehicles."* (Hami Father, Co-viewing Activities, 27 June 2022)

> *"FIZ and I only play worm and Pou applications, nothing else."* (Fizi Father, Co-viewing Activities, 19 June 2022)

> *"...Most superhero games are toys, ninjas, which jump up and down into toy applications that are right on target or suitable for children."* (Habi Father, Co-viewing Activities, 20 June 2022)

Based on the description above, parents and children use gadgets as a medium for learning and entertainment. Digital activities carried out by parents during mentoring include choosing and watching educational content on *YouTube* apps and educational games. The educational content on *YouTube* that parents and children watch introduces transportation, numbers, colours, animals, and daily prayers. In addition, some songs have educational value, such as English children's songs and Religion Songs. Then, educational games like toy car games, Pou, Snake, and Superhero Using entertainment media in the family can foster closer family relationships. Shared movies and video games have been linked to more excellent connectivity between parents and children (Coyne et al., 2014). Parents spend more time with YouTube and game applications as learning and entertainment media (Connell et al., 2015). Parents believe that the applications on these devices provide a variety of types and functions, such as entertainment and education (Sergi et al., 2017). In line with that, Nevski & Siibak (2016) found that children aged 0–3 years use gadgets to watch videos, cartoons, or TV programs via YouTube. In addition, children use gadgets to play transportation-themed games, followed by fashion and design games, sports games, puzzle games, painting or drawing games, and adventure games.

Also, in co-viewing activities, parents limit the educational content and games on the YouTube application that children can access to optimise their development because, through gadgets, children can add vocabulary in Indonesian and English and learn various colours, shapes, animals, and sounds. Not only that, but gadgets can also develop mathematics, literacy, science, problem-solving skills, and self-efficacy, as well as serve as a means of entertainment for children (Dewi & Rachmaniar, 2018; Kabali et al., 2015; Sergi et al., 2017).

Benefits of Co-Viewing

a. Avoid Exposure to Harmful Content

This parental co-viewing is essential when parents and children use or view devices together. This parental co-viewing is important so that children do not use gadgets excessively and are protected from content unsuitable for their age, such as violent or sexual content. Moreover, children are in the "golden age," imitating and exemplifying what they see, hear, or get. They are in a period of character building. This can be seen from the following interview results:

> *"Parental co-viewing is very important because it is feared that childhood is a period of character building so that if the children do not accompany it, it will open violent content and also the name of the child cannot distinguish between good and bad, which means there needs to be assistance from us as parents"* (Habi Mother, Exposure Bad to Content, 21 June 2022)

> *"Parents need to be with us not to let human rights recognise and use it excessively."* (Hami Mother, Exposure Bad to Content, 26 June 2022)

Because the child is in the character planting period, through this co-viewing, parents can find out the content accessed by the child and know what the child likes and dislikes when using the device, as expressed by the following FIZ father.

> *"If accompanying is important, yes, because it is for educating and preventing children from the negative effects of gadgets because when*

FIZ is playing on a smartphone, parents can see what the child is seeing, and if FIZ asks, we can answer and tell him what he is asking." (Hami Father, Exposure Bad to Content, 27 June 2022)

Based on the description above, to protect children from the dangers of using devices, parents will accompany children and be directly involved in selecting accessible content. This selection is because the child is in a period of character cultivation and still needs to gain the knowledge or emotional skills to choose the right content for himself. In addition, children do not know how to use devices that are safe and beneficial for them. So that the selection of this content can increase children's understanding and enjoyment of the content, resulting in an excellent digital experience for children (Connell et al. 2015).

Apart from paying attention to content, parents also carry out parental monitoring of applications accessed by children. Applications that are in various gadgets, especially in game applications and social media applications. The co-viewing of applications carried out by parents aims to protect children from the harmful risks posed by applications because parents can see and communicate with children when they play through applications. What's more, if children watch content that is inappropriate for their age, parents can stop it, and if children ask questions, parents can answer them (Connell et al., 2015; Livingstone et al., 2015; Nikken, 2018) because children imitate the characters or other things that are interesting to them. When children imitate certain character traits on gadgets, they often feel inspired to acquire them too. Parents do not always agree with the information presented on the device. So, parents need to act as mediators when watching videos with their children. Parents can then amplify certain content they agree with and talk about the content they don't agree with (Work, 2017).

b. Avoiding Negative Impact on Children

Parental co-viewing is also done to keep children from developing and having health problems. Parents

will adjust the distance between the screen and their eyes when children play with gadgets. If the child uses it, the parents will ask the child to keep it away. The reason is that children do not experience eye pain.

> "I told FIZ not to get close to watching it and took his device away becauses I was afraid his eyes would be red and he was wearing glasses." (Fizi Mother, Avoiding Negative Impact, 18 June 2022)

Parents also pay attention to body position when accompanying children using gadgets. Parents will ask the child to use the device in a sitting place; children are not allowed to use it lying down. So that when the child uses it in the wrong position, the parents will warn the child.

> *"The device is propped up against an object, and the child sits while leaning back."* (Fizi Father, Avoiding Negative Impact, 19 June 2022)

> *"The child sits next to me while I look for the video the child wants to watch."* (Hami Father, Avoiding Negative Impact, 27 June 2022)

> *"At first, I freed the position to play with the device, but the child had complained of neck and body pain, so now I ask the child to sit while playing. I will turn off the device if the child starts to sleep."* (Habi Father, Avoiding Negative Impact, 21 June 2022)

Based on the statement above, parents conduct parental co-viewing to prevent children from having health problems because parents can arrange the correct position by accompanying their children using gadgets. Ignoring your sitting position can cause problems with your health, such as dizziness, neck pain, and increased body temperature. Kokiwar et al. (2020) added that the average use of devices causes the onset of pain. The pain is much more pronounced in the standing and mixed positions than in the lying position. Then, when the device is held against the stomach, the most pain is felt. Then, if the child's health is disturbed, it can affect academic achievement and development optimisation (Son et al., 2021).

c. Increasing proximity between parents and children

Parental co-viewing is one way for parents to spend time (quality time) with their children and to increase their closeness to each other, in addition, to protecting children from the dangers posed by devices, as seen from the results of the following interview.

> *"Yes, sometimes we have a job outside, so the one at home to watch over his son is his mother. In addition, children also feel comfortable being accompanied or watched by their parents, feeling cared for."* (Hami Father, Increasing Proximity, 27 June 2022)

Limited time means children spend more time playing with gadgets with their mothers. However, the father will still accompany his child when he is at home because this co-viewing becomes essential for parents, especially fathers, because of the limited time the father is at home, which makes the father take advantage of playing with gadgets to be closer to his child.

> *"My time is limited because of work, so I take advantage of quality time at home"* (Habi Father, Increasing Proximity, 20 June 2022)

> *"Yes, so keep talking closer to FIZ."* (Fizi Father, Increasing Proximity, 19 June 2022)

> *"I spend more time looking after stores than I do at home, so playing with gadgets is one way for me to get closer to my kids."* (Hami Father, Increasing Proximity, 27 June 2022)

From the description above, this joint parental mediation can increase the closeness between parents and children with limited time; mediation can also create a sense of security and comfort for children using gadgets. In line with Work (2017), this parental co-viewing can increase the closeness of parents with children because they spend time together using gadgets. Correspondingly, when children spend time playing with gadgets with their parents, it can improve the relationship between parents and children. Not only that, but this parental mediation

can also improve prosocial behaviour compared to children who are not accompanied by their parents and can affect children's ability to operate gadgets (Son et al., 2021). Moreover, because fathers are rarely at home, this co-viewing becomes a place for fathers to spend time together to increase the closeness between fathers and children. Also, the father does co-viewing when using the device to replace the lost time with his son.

D. Conclusion

This study found several concerns parents feel when children know and use gadgets. They are excessive use, losing their childhood, being individualistic, not caring about the surrounding environment, addiction, inhibiting child development, and interfering with their health, such as sore eyes and neck pain. To reduce and avoid the dangers posed by gadgets, parents provide parental co-viewing and are directly involved in digital activities. This parental co-viewing can prevent and reduce children's health problems, developmental disorders, and academic problems because parents are next to their children when selecting and watching content and applications accessed by children, such as YouTube and game applications, so these applications become friendly for children.

Parents also regulate the position in which their children use the device. The position of use allowed is the sitting position, and the device is leaning against a particular object so that when the position is not proper, the parents will reprimand and correct the position so that the child is spared from neck pain and stiffness. After that, the father and mother accompany the child while using the device. They will only let their children use the device with the supervision of an adult nearby. Parents, fathers, and mothers should collaborate and provide support for using gadgets on their children.

In addition, this co-viewing becomes a forum for parents, especially fathers, to make up for the lack of time with their children. So that this co-viewing is not only to reduce or avoid the dangers of devices for children, but parental co-viewing also provides other benefits, such as increasing closeness between

parents and their children. Although parental co-viewing can control and reduce destructive content, parents should pay attention to avoid negative impacts on children's health problems, such as developmental disorders and academic issues. However, future researchers are expected to explore parental co-viewing in more detail, including the benefits and activities of parental co-viewing with the broader scope of families.

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