Jurnal Teknologi Pendidikan, December 2024, 26 (3), 1107-1120

DOI: http://dx.doi.org/10.21009/JTP2001.6 p-ISSN: 1411-2744 e-ISSN: 2620-3081

Accredited by Directorate General of Strengthening for Research and Development



Analysis of Parental Restrictions on Smartphone Use for Early Childhood

Desni Yuniarni^{1(*)}, Endang R. Surjaningrum², Triana Kesuma Dewi³

^{1,2,3}Airlangga University, Surabaya, East Java, Indonesia ¹Tanjungpura University, Pontianak, West Kalimantan, Indonesia

Abstract

Received: November 11, 2024 Revised: December 21, 2024 Accepted: December 30, 2024 Smartphone's use in early childhood is increasing. Parents need to place restrictions on its use. The aim of this research is to analyze restrictions on children's smartphone use. This research is qualitative in form with a case study approach and purposive sampling technique. Participants were 20 parents of children aged 3-6 years in PAUD in the city of Surabaya who filled out the questionnaire online and answered questions directly during the interview. The data collection tool is in the form of a Google form and interview guidelines. Data analysis is in the form of descriptive qualitative. The research results show that all parents have restricted smartphones for their children. Most parents are concerned about the negative impact of smartphone use on children's development and hope that children can limit their use according to the agreement and not be exposed to the negative influence of smartphone use. Therefore, most of the parents allowing their children to use their smartphones only on Saturdays and Sundays for approximately 2 hours. Parents are only allowed to access YouTube Kids application content when accompanied when accessing it. Most parents set limits due to concerns that their children will be exposed to content that is not age appropriate (containing elements of violence and pornography) which will have a negative impact on their development. However, most parents still need time and adaptation to be consistent in doing this. The biggest obstacle is not being able to control the child's emotions, even though it has been conveyed and agreed upon previously. The most common response shown by children is rejection, anger and annoyance, so parents need patience to give them understanding. Consistency in implementing restrictions needs to be done so that children avoid the negative impacts of using smartphones.

Keywords: early childhood; parental restriction; smartphone use

(*) Corresponding Author: desni.yuniarni-2022@psikologi.unair.ac.id

How to Cite: Yuniarni, D., Surjaningrum, E. R., & Dewi, T. K. (2024). The Analysis of Parental Restrictions on Smartphone Use for Early Childhood. *JTP - Jurnal Teknologi Pendidikan*, 26(3), 1107–1119. https://doi.org/10.21009/jtp.v26i3.52007

INTRODUCTION

In the modern world, smartphone use is increasing worldwide at various age levels, and early childhood is no exception. A number of studies have shown that smartphone use among young children worldwide has increased at a relatively high rate in the last 10 years (Yadav & Chakraborty, 2022). The increase is getting higher year by year, especially in the last 5 years (Przybylski & Weinstein, 2019; Krogh et al., 2021; Byrne et al., 2021).

The phenomenon of increasing smartphone use in early childhood also occurs in Indonesia. The use of gadget media in children aged 5 years in Indonesia was 38% in 2011, and increased to 72% in 2013, in 2015 there was an increase to 80% (Oktafia et al., 2021). The results of a survey conducted by the Indonesian Internet Service Providers Association



(APJII) show that the penetration of internet users in 2018 at the age level of 5-9 years is 25.2% (Indonesian Internet Service Provider Association, 2018). The latest data from APJII in 2024 states that there are 48.10% of internet users who are less than 12 years old (APJII, 2024). The findings of Zaini & Soenarto's research (2019) show that 90% of parents stated that the type of gadget that their children aged 4-6 years often use is a smartphone, where 11% of children aged 4-6 years already have a personal smartphone. The penetration rate is the number of people connected to the internet compared to the population, therefore it can be concluded that the number of children connected to the internet using smartphones has increased from 2018 to 2024.

The increasing use of smartphones in early childhood will have a number of negative impacts on their development. Negative impacts will arise if children use their smartphones continuously and for a long period of time. These impacts can be divided into three categories, namely impacts on child development, psychosocial and physical health. The impact on child development includes the disruption of language development, cognitive and executive functions of thinking ability (Yang et al., 2023), the emergence of problems in gross motor development (Chaibal & Chaiyakul, 2022) and the disruption of children's social emotional social aspects (Fadilah Hsb et al., 2023). Psychosocial impacts include causing aggression (Oswald et al., 2020) and impacting on interactions between children and parents (Matthes et al., 2021). Impacts on physical health such as motor skills (Tigor & Simbolon, 2023), impaired vision and hearing, obesity, body imbalance (Abdulla et al., 2023) and physical performance (Abid et al., 2024).

The many negative impacts on children's development that arise due to the increase in the use of smartphones that continue for a long time raise parents' concerns (Zaini & Soenarto, 2019). Parents are starting to realise the importance of providing supervision of smartphone use for children, although this supervision has not been carried out optimally (Wulandari et al., 2021). The results of Mazdalifah & Moulita's research (2021) show that most parents carry out passive supervision, namely limiting children's time using smartphones and monitoring what sites are visited by children, but only a small number of parents carry out active supervision such as teaching, directing and accompanying children in using smartphones wisely. The form of supervision that parents usually provide is usually in the form of giving advice, time limits and imposing sanctions if children violate the agreement that has been made between parents and children. Nevertheless, parents still have to increase supervision of children in using their smartphones (Triani, 2023).

Based on the exposure of these studies, it is necessary to know more about how the restrictions imposed by parents on their children's smartphone use, the reasons for providing restrictions, how restrictions on the frequency, duration and selection of content that children can access, the extent of consistency in the application of restrictions, what obstacles are encountered in its application and how children respond to these restrictions.

METHODS

This research used a qualitative method in the form of a case study. The basis for selecting a case study in this location was based on the results of pre-research interviews conducted previously with PAUD managers, which stated that most parents in PAUD allow children to use smartphones but still impose restrictions/controls on their use. The sampling technique used was purposive sampling, which has criteria, namely parents of early childhood children who send their children to Early Childhood Education (PAUD) and allow their children to use smartphones but still impose restrictions/controls on their use.

Data sources were obtained from primary and secondary sources. Primary data sources are obtained from the main source, while secondary data sources are obtained from

pre-existing data. Primary data comes from several sources, namely Person, Place and Paper. Person is obtained from respondents who fill out a questionnaire in the form of a google form which comes from 20 parents who send their children to PAUD Surabaya. Place is obtained from the location used as a research site, namely PAUD located in the city of Surabaya. While Paper is primary data can be taken from internal documents from the PAUD concerned in the form of demographic data of parents. Furthermore, the search for meaning is carried out to increase the researcher's understanding. The data analysis process can be seen more clearly in Figure 1 below:

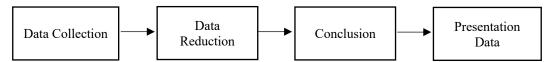


Figure 1. Research Analysis Process Chart

Data were collected from parents who send their children to PAUD Surabaya by using a google form link provided online through PAUD administrators. Before filling out the questionnaire, parents were asked to fill out a consent form (January, 2024). The Google form given to parents contained a number of questions regarding restrictions on smartphone use by parents to their children. Indicators of parental restrictions on children's smartphone use are the form of restrictions, frequency, duration, content selection, reasons for parents to impose restrictions, obstacles encountered, consistency of application of restrictions and children's response to restrictions. The time needed in the data collection process is 3 weeks.

The reduction of research results begins with the selection of data collected. Selection is done to focus the data used only on those that are relevant to the research questions and research objectives. Data that is irrelevant or insignificant will be ignored. Furthermore, data identification is carried out by labelling important parts of the data (the results of respondents' answers) with certain codes that represent certain themes, concepts or categorizations. Similar or related codes are then combined into larger categories or themes. After coding, similar or related data was grouped into broader themes or categories. These themes help to simplify and better organize the data, so that the researcher can focus on a few key themes that are most relevant to the research, and put aside less significant themes. Long and detailed qualitative data can be summarized into a shorter and clearer form, so that researchers can create a brief narrative that reflects the essence of the data that has been reduced. After that, the data that has been reduced and coded properly, is stored in a structured format, to facilitate further analysis.

Data were collected from parents who send their children to PAUD Surabaya by using a google form link provided online through PAUD administrators. Before filling out the questionnaire, parents were asked to fill out a consent form. The Google form given to parents contained a number of questions regarding restrictions on smartphone use by parents to their children. Indicators of parental restrictions on children's smartphone use are the form of restrictions, frequency, duration, content selection, reasons for parents to impose restrictions, obstacles encountered, consistency of application of restrictions and children's response to restrictions. The time needed in the data collection process is 3 weeks.

The next step is conclusion drawing. This step is carried out through five stages, namely first combining all findings and interpretations into a coherent and structured conclusion, identifying and emphasizing the most significant points that emerged from the analysis. The second step is to compare the conclusions with existing research and theory to place the findings in a broader context and explain how the research findings add to the

understanding of the topic. The third step is to explain the implications of the findings from a practical and theoretical point of view. Step four is to explain any limitations in the research design, methods, or context that may have affected the findings and discuss how these limitations affect the interpretation and generalization of the conclusions. The final step, step five, is to provide concrete suggestions based on the research findings for improvement or change and identify areas or questions that require further exploration in future research.

Data presentation is the final step in the data analysis process, namely the process of compiling and presenting research findings in a systematic and easy-to-understand manner, which helps researchers to tell narratives from the data that has been analyzed. This presentation aims to provide a clear picture of the themes, patterns, and meanings that emerge from qualitative data. Presentation of the data can be done in several forms, including by presenting qualitative data in the form of descriptive narratives. The narrative can explain the description of the data obtained so that the findings of the research are illustrated. In addition, the data can be presented by organizing it into the main themes that have been identified during the analysis process. Each theme is explained in detail so that it is easy to understand and describes the variables studied.

RESULTS & DISCUSSION

Results

Based on the results of data collection from google form and live interviews, it is illustrated that all respondents (20 parents) stated that they provide restrictions on giving smartphones to children. These restrictions are carried out in the form of restrictions on the frequency, duration and content contained in the child's smartphone.

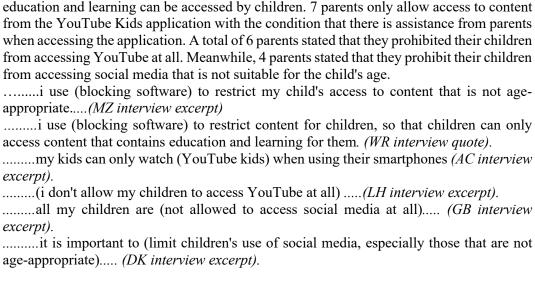
The restrictions on the frequency and duration of smartphone use

The application of restrictions on the frequency and duration of smartphone use in children is carried out differently by each parent. The application of frequency and duration of use that many parents do, namely only allowing children to use their smartphones on Saturdays and Sundays for approximately 2 hours (10 parents). A total of 5 parents limit the use of smartphones by children for 15-30 minutes. Other parents set a limit of 15 minutes (3 parents) and 2 other parents set a division of day and night time in the duration of their children's smartphone use, namely 15 minutes during the day and 15 minutes at night.

....... my child is restricted to using his smartphone only on (Saturdays and Sundays for 2 hours)..... (MZ interview excerpt)
....... i think children should be (limited to 15-30 minutes of smartphone use per day)....(WR interview quote).
...... i limit my child's smartphone use to (15 minutes per day)(AC interview excerpt).
.......my kids limit smartphone use to (15 minutes during the day and 15 minutes at night)....(LH interview excerpt).
.......restrictions need to be given to children, (at least twice a week on Saturday and Sunday).....(GB interview excerpt).
....... it is important to (limit children's smartphone use to 15-30 minutes per day)..... (DK interview excerpt).

The Limiting access to content on smartphones use

Limiting access to content on smartphones used by children is done by parents in various ways. A total of 3 parents use blocking software so that only content containing



The reasons given by parents for limiting the use of smartphones

The reasons given by parents for limiting the use of smartphones for children consist of different reasons. Most parents revealed that the reason for limiting the use of smartphones is due to concerns about children's exposure to content that is not age-appropriate (containing elements of violence and pornography) so that it has a negative impact on their development (11 parents). Other concerns included children's eye health if they were continuously exposed to the screen (5 parents), addiction (3 parents) and negative behaviour towards the environment, such as ignoring the surrounding environment (1 parent).

......restrictions on the use of smartphones) are very important. Because if it is not restricted, it is feared that they will be exposed to content that is not appropriate for their age, such as content that contains pornography or violent scenes.... (MZ interview excerpt)i think (restrictions on smartphone use) are important, because children's eyes will hurt constantly looking at the screen on their smartphones (WR interview quote).(restrictions on the use of smartphones) are very important for parents. Because

.......(restrictions on the use of smartphones) are very important for parents. Because without restrictions, children will continue to use it and can result in addiction.... (AC interview excerpt).

......parents need to give (restrictions on smartphone use) to their children, because children often ignore their parents when called or told to stop doing something else.... (LH interview excerpt).

.....very important... (GB interview excerpt).

.....it is important to do this, so that children do not constantly play with their smartphones, they also need to play with their friends in their home environment.... (DK interview excerpt).

The consistency in implementation imiting smartphone use in children

Limiting smartphone use in children requires consistency in implementation. A total of 4 parents stated that consistency is difficult to do in situations where children use smartphones with their friends or siblings. This is because the limit on the duration of smartphone use for children varies between parents. According to 3 parents, consistency is difficult to do when in a certain situation, such as when gathering with all extended family members, because there are differences in setting limits between each family. In addition, consistency is also difficult when travelling outside the home, for example during family recreation, where at certain times there is a condition where the child experiences boredom

and asks parents to allow him to use his smartphone. There were 5 parents who stated that consistency in implementing the use of children's smartphones had been carried out gradually and increasingly successfully implemented. However, as many as 8 other parents stated that they still needed time and adaptation in implementing the consistency of these restrictions.

-it's (hard for me to implement restrictions) on my child's smartphone use consistently.... (MZ interview excerpt)
-i have a (hard time limiting) my 3-year-old son's smartphone use because he sees his older brother using his smartphone to do all his schoolwork at home.....(WR interview quote).
-it is (very difficult to limit the use of smartphones) in children when they are gathered together with extended family where most of the children are not limited to the use of smartphones by their parents..... (AC interview excerpt).
-i find it (difficult to impose smartphone restrictions) on my children when they are out of the house, especially during holidays because children often experience boredom, especially when queuing and waiting for food orders to be delivered..... (LH interview excerpt).
-i try to be (consistent in limiting my children's use of smartphones).... (GB interview excerpt).
-we still (need time to implement consistent smartphone usage) with my children.... (DK interview excerpt).

The obstacles encountered by parents in implementing smartphone restrictions on children

In addition, there are obstacles encountered by parents in implementing smartphone restrictions on children. The most common obstacle faced by parents in order to be consistent is not being able to control their children's emotions when given restrictions on the use of their smartphones, even though the restrictions have been conveyed and agreed upon between parents and children (12 parents). Another obstacle is that there is no agreement between fathers and mothers regarding the restrictions. Father figures give more freedom to their children to use their smartphones than mother figures (3 parents). A total of 5 parents stated that another obstacle is when children refuse to eat if they are restricted from using smartphones. This happens because children are used to eating while watching YouTube from their smartphones.

-the obstacle in implementing smartphone restrictions on my children is (consistency).... (MZ interview excerpt)
-we have difficulty in implementing smartphone restrictions on children because it is difficult to be (consistent) in doing so....(WR interview quote).
-(my husband and I do not have a clear agreement on limiting the use of smartphones to children), so it is difficult for us to implement these restrictions.....(AC interview excerpt).
-our difficulty in applying these restrictions is the (difference in application between father and mother), the father gives more freedom to the child than me, so it is difficult to be consistent with this..... (LH interview excerpt).
-(fathers tend to give their children freedom to use their smartphones, in contrast to mothers who always impose restrictions)..... (GB interview excerpt).
-the difficulty in implementing restrictions is because (children always use smartphones to eat and finish their meals), so if the time is up but the child has not finished eating, the child will still be given the opportunity to use it..... (DK interview excerpt).

The children's response to restrictions from their parents

Each child responded differently to the restrictions given by parents. The most common response shown by children when given restrictions by their parents is to refuse, get angry and upset, so it takes patience for parents to give understanding to children about the restrictions that have previously been agreed upon (7 parents). A total of 2 parents stated that the response shown by their children was to refuse and cry, although in the end the child complied with their parents' wishes. 3 parents stated that the child's response in responding to restrictions made by parents sometimes changes. Sometimes the child shows a positive response by obeying the parents' wishes, but at other times the child does not want to obey the parents' wishes and cries. There were 6 parents who stated that there was a change in the response given by their child at the beginning of the restriction and when the restriction had been carried out for a certain amount of time. At first the child refused at all when given restrictions, but after several months the child finally accepted the restrictions without any rejection at all. There were only 2 parents who stated that the child's response was still negative. The child showed tantrum behaviour when given restrictions by the parents.

......my son shows an (angry reaction) when told to stop playing with his smartphone.... (MZ interview excerpt)

...... the most common reaction my child shows when he is told to stop playing with his smartphone is (sadness and crying).... (AC interview excerpt).

......my son always (refuses) when asked to play with his smartphone, even to the point of (crying) when forced to stop (WR interview quote).

......sometimes my child immediately (obeys) when told to stop playing with the smartphone, but most often it is (refusal and anger).... (LH interview excerpt).

.......... At first, my son immediately (refused) when asked to stop playing smarrtphon, but lately he has become (obedient) and wants to stop playing if told to.... (GB interview excerpt).

...... my son immediately (refused) when asked to stop playing smarrtphon, but lately he has become (obedient) and wants to stop playing if told to... (DK interview excerpt).

Discussion

This study aims to find out how parents limit the use of smartphones in children, namely restrictions in terms of frequency, duration and selection of content applied. In addition, this study wants to find out the reasons for parents in imposing restrictions on the use of smartphones on children, how consistent the implementation is, what obstacles are faced in implementing it and how children respond in the face of these restrictions.

Most parents do this by allowing their children to use their smartphones on Saturdays and Sundays for approximately 2 hours. This condition is in accordance with the restrictions set by world health organisations. Recommendations for limiting screen time (especially smartphone use) in early childhood are made by a number of world health organisations, such as the American Academy of Pediatrics (AAP), the Canadian Society for Exercise Physiology, the UK Department of Health and the World Health Organization (WHO). A number of these organisations recommend limiting screen time (especially smartphone use to no more than 1 hour a day (60 minutes) or less than 420 minutes per week, for children aged 2-5 years (Hood et al., 2021). Specifically, the limits for screen time according to the AAP are that screen time is not recommended for children under 18-24 months of age and screen time for children aged 2-5 years for 1 hour per day (Hood et al., 2021). It can be concluded that the recommendation for screen time (especially in the use of smartphones) in early childhood by the AAP, WHO and other world health organisations is no more than 1 hour a day (60 minutes).

The advice given by the AAP is in line with research conducted by Zhao et al. (2018), which shows that screen time of more than one hour per day will increase various psychosocial developmental problems in early childhood. The longer the screen time, the more psychosocial developmental problems that arise. Therefore, it is very important to limit screen time in smartphone use in early childhood.

The view that young children should not spend too much time in front of screens (excessive screen time) because it is directly harmful to children's mental well-being and indirectly deprives children of activities other than sitting too long in front of a screen (Shalani et al., 2023) and causes them to have difficulty sleeping (Twenge et al., 2019). For example, when young children passively watch certain content on smartphones, it prevents them from engaging in exploratory play, connecting with parents, and connecting with peers.

Early childhood is the age when children are at the golden age of development, where every aspect of development must be optimally stimulated. When children receive proper stimulation at an early age, their physical and mental growth and development will proceed as expected (Yeni L, 2019). Excessive screen time results in children's development cannot be stimulated properly, so it is feared that their development will not be as expected, because it makes children just sit for a long time looking at the screen and not doing anything else (Shil, 2020).

Other research results show that most parents only allow access to content from the YouTube Kids application on condition that there is assistance from parents when accessing the application. In line with the findings of Sulastri & Rini's research (2022) which shows that the application most used by early childhood when using their smartphones is the YouTube Kids application. Based on the results of research by Khoiriyati & Saripah) 2018), it shows that providing stimulation in the form of YouTubeKids in early childhood can increase attention and concentration, curiosity, memory, imagination, creativity, and language in early childhood. In addition, children can also learn to read and write through videos in this application (Rizqiyah & Azzahri, 2022), can be used as an effective learning media for early childhood if they get assistance from parents (Pratiwi et al., 2024) and can provide stimulation for children's language development (Oktari, 2023). The YouTube Kids app can be used as a medium to stimulate attention and concentration, curiosity, memory, imagination, creativity, and language in early childhood.

Most parents provide restrictions due to concerns about children's exposure to content that is not age-appropriate (containing elements of violence and pornography) so that it has a negative impact on their development. The results of Soysal's research (2020) state that the restrictions given by parents on the use of smartphones in children are so that children's viewing is more controlled and positive content is introduced to children, so that children do not get the influence of negative content. Excessive use can cause children to become closed, experience sleep disturbances, tend to be aloof, show violent behaviour, inhibit to be withdrawn, exhibit violent behaviour, inhibit creativity, and increase the risk of cyberbullying (Ghofururrohim et al., 2023). In addition, children can be exposed to pornography. Exposure to pornography in children can cause brain damage, damage concentration and focus skills, and make children addicted to porn videos, experience sexual perversion, and become perpetrators of sexual harassment or violence in the future (Anggraini & Maulidya, 2020). Parents need to supervise, control and protect their children from pornographic content that children can access from their smartphones (Setiawan et al., 2022). Therefore, parents need to limit the use of smartphones for children, so that they can prevent children's exposure to negative content such as pornography and violence which can cause brain damage, damage concentration skills and no concentration.

The results of the study show that most parents still need time and adaptation in the consistent implementation of restrictions on smartphone use in children. Many research findings show why the consistency of restricting the use of smartphones in children tends to be difficult for parents to do. This is partly because parents play a role model for children and the use of smartphones by parents has a direct impact on the frequency of smartphone use by children (Konok et al., 2020). There are differences in the norms of smartphone use limits for children and for parents set by the parents themselves (San-martín-roldán, 2024) and parents often use their smartphones more secretly without the child knowing, even though the child eventually knows, causing child anger (Schubert & Eggert, 2018). This is because parents are an example for children in using their smartphones (Kushlev & Dunn, 2019). The difference in smartphone usage between parents and children causes conflicts between parents and children because parents tend to use smartphones more than their children, thus causing protests from children, because children want their parents to also limit the use of smartphones as much as they do. If parents do not practice what they teach, it becomes difficult for parents to consistently enforce rules on their children and children will also find it difficult to obey them consistently. These conflicts will eventually cause fluctuations in parental consistency in the implementation of smartphone restrictions for

The results of this study also show that the most obstacles faced by parents in the application of smartphone use for children are not able to control children's emotions, even though it has been conveyed and agreed beforehand. Parents need to get education on how to teach their children to use their smartphones properly (Feryando et al., 2022). This education can consist of various forms, for example communication techniques that are suitable for children, providing various reading books, sports equipment and games for children so that children are distracted from playing with their smartphones (Sa'diyah, 2020). Research from Irawan et al. (2020) shows that parent-child fun games can increase children's physical activity rather than just playing games on smartphones, causing creativity in playing these games and can divert from dependence on smartphones. In addition, it is necessary to modify traditional games so that they are interesting for children to play and can divert their attention to games on smartphones (Naafi' & Irawan, 2022). It can be concluded that the obstacles encountered by parents in implementing restrictions on the use of smartphones for children can be overcome by providing additional education for parents about communication techniques that are suitable for children, providing various reading books, sports equipment and games for children so that children are distracted from playing with their smartphones.

The most common response shown by children when given restrictions on the use of smartphones by their parents is rejection, anger and annoyance, so it takes the patience of parents to provide understanding to children regarding the restrictions that have been previously agreed. The results of this study are in line with the results of other studies, including children often whining when they are no longer allowed to play with smartphones (Hidayat & Maesyaroh, 2020), children show angry emotions when they are prohibited from using smartphones (Kontesa, 2022; Riswan, 2022) children ignore and even do not care about the people and events around them when they are using a smartphone and refuse to stop it (Hasibuan & Dalimunthe, 2023), children go berserk when they are not given more opportunities to use their smartphones (Sumiar, 2023; Khairunnisa, 2024) and also children cry and even go berserk if they are not given permission to play their smartphones (Hifayatin et al., 2024). Various kinds of negative emotional responses that children show when their parents are restricted in using their smartphones indicate that they enjoy using their smartphones and do not want to be limited in using them.

CONCLUSION

The results of the study show that all parents have restricted the use of smartphones for their children. Most parents do the restriction by only allowing their children to use their smartphones on Saturdays and Sundays only for approximately 2 hours. Parents are only allowed to access content from the YouTube Kids app on the condition that they have assistance when accessing the app. Most parents revealed that the reason for limiting the use of smartphones is because there are concerns about their children's exposure to content that is not appropriate for their age (containing elements of violence and pornography) so that it has a negative impact on their development. Another concern is about the health of children's eyes if they are constantly exposed to screens, giving rise to addiction and the emergence of negative behaviors towards the environment, such as ignoring the surrounding environment.

However, most parents still need time and adaptation to be consistent in doing so. The most obstacle faced by parents to be consistent is not being able to control their children's emotions if they are given restrictions on the use of their smartphones, even though these restrictions have been conveyed and agreed upon in advance between parents and children. The most common responses shown by children when given restrictions are rejection, anger and annoyance, so it takes parental patience to provide understanding to children.

ACKNOWLEDGEMENT

The research team would like to thank all participants in this study and other parties who have helped, facilitated and were involved in this study.

REFERENCES

- Abdulla, F., Hossain, M. M., Huq, M. N., Hai, A., Rahman, A., Kabir, R., Peya, F. J., Islam, S., & Khan, H. T. A. (2023). Prevalence, determinants and consequences of problematic smartphone use among preschoolers (3–5 years) from Dhaka, Bangladesh: A cross-sectional investigation. *Journal of Affective Disorders*, 329(October 2022), 413–427. https://doi.org/10.1016/j.jad.2023.02.094
- Abid, R., Ammar, A., Maaloul, R., Boudaya, M., Souissi, N., & Hammouda, O. (2024). Nocturnal Smartphone Use Affects Sleep Quality and Cognitive and Physical Performance in Tunisian School-Age Children. *European Journal of Investigation in Health, Psychology and Education*, 14(4), 856–869. https://doi.org/10.3390/ejihpe14040055
- Anggraini, T., & Maulidya, E. N. (2020). Dampak Paparan Pornografi Pada Anak Usia Dini. *Al-Athfaal: Jurnal Ilmiah Pendidikan Anak Usia Dini*, *3*(1), 45–55. https://doi.org/10.24042/ajipaud.v3i1.6546
- APJII. (2022). Profil Pengguna Internet Indonesia 2022. In *Asosiasi Penyelenggara Jasa Internet Indonesia* (Issue June). www.apjii.or.id
- Byrne, R., Terranova, C. O., & Trost, S. G. (2021). Measurement of screen time among young children aged 0–6 years: A systematic review. *Obesity Reviews*, 22(8), 1–28. https://doi.org/10.1111/obr.13260
- Chaibal, S., & Chaiyakul, S. (2022). The association between smartphone and tablet usage and children development. *Acta Psychologica*, 228(June), 103646. https://doi.org/10.1016/j.actpsy.2022.103646

- Fadilah Hsb, N., Kholida, N., Rahmi, N., & Sitorus, M. (2023). the Effect of Phone Use on Early Children'S Social Emotional Development. *Jurnal Scientia*, *12*(3), 2023. http://infor.seaninstitute.org/index.php
- Feryando, D. A., Wibowo, A. P. E., Darmawan, A., Triwijaya, S., & Sunardi, S. (2022). Edukasi Dini Penggunaan Smartphone Yang Baik Pada Anak-Anak. *JMM (Jurnal Masyarakat Mandiri)*, 6(2), 1102. https://doi.org/10.31764/jmm.v6i2.7004
- Ghofururrohim, N. M., Wicaksono, R. N., & Faristiana, A. R. (2023). Pengaruh Smartphone Terhadap Anak Usia Dini. *Education : Jurnal Sosial Humaniora Dan Pendidikan*, 3(2), 129–146. https://doi.org/10.51903/education.v3i2.340
- Hasibuan, S., & Dalimunthe, S. S. (2023). Dampak Media Gadget terhadap Perkembangan Sosial Emosional Anak Usia Dini. *At Turots: Jurnal Pendidikan Islam*, *5*(001), 371–377. https://doi.org/10.51468/jpi.v5i001.359
- Hidayat, A., & Maesyaroh, S. S. (2020). Penggunaan Gadget pada Anak Usia Dini. *Jurnal Syntax Imperatif: Jurnal Ilmu Sosial Dan Pendidikan*, 1(5), 356–368. https://jurnal.syntaximperatif.co.id/index.php/syntaximperatif/article/view/159/185
- Hifayatin, N., Astuti, N. M., & Faridah. (2024). Hubungan penggunaan gadget dan pendampingan orang tua dengan perkembangan sosial emosional pada anak prasekolah 1-2. *Cendekia Utama Jurnal Keperawatan Dan Kesehatan Masyarakat STIKES Cendekia Utama Kudus*, 13(2), 139–149.
- Hood, R., Zabatiero, J., Zubrick, S. R., Silva, D., & Straker, L. (2021). The association of mobile touch screen device use with parent-child attachment: a systematic review. *Ergonomics*, 64(12), 1606–1622. https://doi.org/10.1080/00140139.2021.1948617
- Indonesian Internet Service Provider Association. (2018). Penetrasi & Profil Perilaku Pengguna Internet Indonesia. *Asosiasi Penyelenggara Jasa Internet Indonesia* (APJII). www.apjii.or.id
- Irawan, F. A., Fajar, D., & Permana, W. (2020). Parent-Child Fun Games sebagai Upaya Meminimalisasi Smartphone Addiction pada Anak di Madrasah Ibtidaiyah Parent-Child Fun Games as an Effort to Minimize Smartphone Addiction atau perangkat seluler (Etaher &. *Jurnal Pemberdayaan Masyarakat Mandiri Indonesia*, *I*(1), 1–8. https://ikora.unw.ac.id/storage/file/research-and-service/40-Article_Text-87-1-10-20201021.pdf
- Khairunnisa, S. (2024). Smartphone Terhadap Perilaku Komunikasi Anak Usia 5-6 Tahun. *Jurnal Strategi Pembelajaran*, *I*(1), 27–35. https://ccg-edu.org/index.php/jsp/article/view/134/94
- Khoiriyati, S., & Saripah, S. (2018). Pengaruh Media Sosial pada Perkembangan Kecerdasan Kognitif Anak Usia Dini. *Aulada: Jurnal Pendidikan Dan Perkembangan Anak*, *I*(1), 49–60. https://doi.org/10.31538/aulada.v1i1.209
- Konok, V., Bunford, N., & Miklósi, Á. (2020). Associations between child mobile use and digital parenting style in Hungarian families. *Journal of Children and Media*, *14*(1), 91–109. https://doi.org/10.1080/17482798.2019.1684332
- Kontesa, F. (2022). Pengaruh Penggunaan Gadget Terhadap Perkembangan Sosial Emosional Anak Usia Dini. http://repository.iainbengkulu.ac.id/8773/1/FEBIA KONTESA.pdf
- Krogh, M. T., Egmose, I., Stuart, A. C., Madsen, E. B., Haase, T. W., & Vaever, M. S. (2021). A longitudinal examination of daily amounts of screen time and technoference in infants aged 2-11 months and associations with maternal sociodemographic factors. *Infant Behavior & Development*, 63. https://doi.org/10.1016/j.infbeh.2021.101543
- Kushlev, K., & Dunn, E. W. (2019). Smartphones distract parents from cultivating feelings of connection when spending time with their children. *Journal of Social and*

- *Personal Relationships*, 36(6), 1619–1639. https://doi.org/10.1177/0265407518769387
- Matthes, J., Thomas, M. F., Stevic, A., & Schmuck, D. (2021). Fighting over smartphones? Parents' excessive smartphone use, lack of control over children's use, and conflict. *Computers in Human Behavior*, 116(November 2020). https://doi.org/10.1016/j.chb.2020.106618
- Mazdalifah, M., & Moulita, M. (2021). Model Pengawasan Orang Tua Terhadap Penggunaan Media Digital Anak. *Jurnal Pustaka Komunikasi*, 4(1), 105–116. https://doi.org/10.32509/pustakom.v4i1.1316
- Naafi', M., & Irawan, R. J. (2022). Studi Literatur: Efektivitas Modifikasi Dalam Permainan Tradisional Pda Eksistensi Permainan Anak Era Generasi Z. *Jurnal Kesehatan Olahraga*, 10(01), 129–136. file:///C:/Users/ASUS/Downloads/43433-Article Text-74676-1-10-20220103.pdf
- Oktafia, D. P., Triana, N. Y., & Suryani, R. L. (2021). Durasi Penggunaan Gadget Terhadap Interaksi Sosial Pada Anak Usia Pra Sekolah: literatur review. *Jurnal Kesehatan*, 4(1), 31–47. https://www.google.com/search?client=firefox-b-d&q=jurnal%3apeningkatan+pemakaian+gadget+pada+anak
- Oktari, R. (2023). Dampak Konten Youtube terhadap Perkembangan Bahasa Anak. *Journal on Teacher Education*, 5(1), 528–537. http://journal.universitaspahlawan.ac.id/index.php/jote/article/view/19387%0Ahttp://journal.universitaspahlawan.ac.id/index.php/jote/article/download/19387/14338
- Oswald, T. K., Rumbold, A. R., Kedzior, S. G. E., & Moore, V. M. (2020). Psychological impacts of "screen time" and "green time" for children and adolescents: A systematic scoping review. *PLoS ONE*, *15*(9 september), 1–52. https://doi.org/10.1371/journal.pone.0237725
- Pratiwi, A. I., Cahyo, E. D., Azizah, B. N., Wahyuningsih, H., & Fitria, L. (2024). Efektifitas Penggunaan Aplikasi Youtube Sebagai Media Pembelajaran Bagi Pendidikan Anak Usia Dini. *Jurnal Pendidikan Islam Anak Usia Dini Al-Amin*, 2(1), 7–18. https://ejournal.staialamin.ac.id/index.php/piaud/article/view/131
- Przybylski, A. K., & Weinstein, N. (2019). Digital Screen Time Limits and Young Children's Psychological Well-Being: Evidence From a Population-Based Study. *Child Development*, 90(1), e56–e65. https://doi.org/10.1111/cdev.13007
- Riswan, M. (2022). Strategi Orang Tua Dalam Mengurangi Ketergantungan Gawai Pada Anak Usia Dini Di Kecamatan Mattiro Bulu Kabupaten Pinrang. In *Skripsi*. https://dataindonesia.id/sektor-riil/detail/angka-konsumsi-ikan-ri-naik-jadi-5648-kgkapita-pada-2022
- Rizqiyah, R., & Azzahri, C. K. (2022). Upaya Meningkatkan Kemampuan Baca Tulis Anak Usia Dini Melalui Penggunaan Media Youtube Kids Pada Anak Usia 5-6 Tahun. *Jurnal Web Informatika Teknologi (J-WIT*, 3(2), 69–77. file:///C:/Users/ASUS/Downloads/5+Jurnal+Rifa+Rizqiyah-revisi+3fix.pdf
- Sa'diyah, H. (2020). Program Pembatasan Penggunaan Smartphone Pada Anak (Studi Kasus di RW 18 Leles, Condongcatur, Kabupaten Sleman). *Jurnal Pikom (Penelitian Komunikasi Dan Pembangunan)*, 21(2), 117–130. https://www.neliti.com/publications/481891/program-pembatasan-penggunaan-smartphone-pada-anak-di-rw-18-leles-condongcatur-y
- San-martín-roldán, D. (2024). Parental norms and perceptions regarding use of mobile devices by children under five years *. Rev. Latino-Am. Enfermagem. https://doi.org/10.1590/1518-8345.7137.4362
- Schubert, G., & Eggert, S. (2018). "Daddy, Your Mobile is Stupid, You Should Put it Away" Media Education from the Perspective of Professionals. 2018, 147–156. https://www.nordicom.gu.se/sites/default/files/kapitel-pdf/13 schubert eggert.pdf

- Setiawan, E., Susanty, M., & Yunita, A. (2022). Sosialisasi Alat Pengawasan dan Pembatasan Penggunaan Gawai Untuk Perlindungan Anak dari Konten Pornografi. *Jurnal Pengabdian Pada Masyarakat Menerangi Negeri*, 5(1), 15–21. https://jurnal.itpln.ac.id/terang/article/view/1529/1081
- Shalani, B., Azadfallah, P., Farahani, H., & Brand, S. (2023). Why Do Iranian Preschool-Aged Children Spend too Much Time in Front of Screens? A Preliminary Qualitative Study. *Children*, 10(7). https://doi.org/10.3390/children10071193
- Shil, P. R. (2020). Parental Perceptions On The Effect Of Prolonged Screen Time On Family. https://dspace.bracu.ac.bd/xmlui/bitstream/handle/10361/14763/19355005_BIED.pdf?sequence=1&isAllowed=y
- Soysal, A. (2020). Penggunaan Smartphone Pada Anak Usia Dini Di Taman Kanak-Kanak (Tk) Kharisma Bangsa Penggunaan Smartphone Pada Anak Usia Dini Di Taman Kanak-Kanak (Tk) Kharisma Bangsa. In *Repository.Uinjkt.Ac.Id.* http://repository.uinjkt.ac.id/dspace/handle/123456789/52233%0Ahttps://repository.uinjkt.ac.id/dspace/bitstream/123456789/52233/1/SKRIPSI FIX ADEMIYE SOYSAL %28WATERMARK%29.pdf
- Sulastri, S., & Rini, S. H. S. (2022). Hubungan Jenis Aplikasi Gadget Terhadap Perkembangan Anak Usia Pra Sekolah Di Kecamatan Weleri. *Jurnal Surya Muda*, 4(2), 118–132. https://doi.org/https://doi.org/10.38102/jsm.v4i2.201
- Sumiar, N. (2023). Pola pendampingan orang tua dalam penggunaan gadget pada anak usia dini di desa bumi agung kecamatan tegineneng. https://repository.metrouniv.ac.id/id/eprint/9253/1/SKRIPSI NURINDAH SUMIAR 1801031012 PIAUD.pdf
- Tigor, M., & Simbolon, A. P. H. (2023). The Impact of Smartphone Use on Students' Motor Skills and Emotional Well-being: A Comprehensive Study. *Jurnal Ilmu Pendidikan Dan Humaniora*, 12(3), 152–166. https://doi.org/10.35335/jiph.v12i3.8
- Triani, T. (2023). Peran Orang Tua Dalam Mengawasi Penggunaan Smartphone Pada Anak Usia 9 Tahun Di Desa Lemahsubur. *Pengabdian Mahasiswa*, *2*(1), 1221–1231. http://www.akrabjuara.com/index.php/akrabjuara/article/view/919
- Twenge, J. M., Hisler, G. C., & Krizan, Z. (2019). Associations between screen time and sleep duration are primarily driven by portable electronic devices: evidence from a population-based study of U.S. children ages 0–17. *Sleep Medicine*, *56*, 211–218. https://doi.org/10.1016/j.sleep.2018.11.009
- Wulandari, H., Asiah, D. H. S., & Santoso, M. B. (2021). Pengawasan Orang Tua Terhadap Anak Usia Prasekolah Dalam Menggunakan Gawai. *Jurnal Penelitian Dan Pengabdian Kepada Masyarakat (JPPM)*, 2(2), 118. https://doi.org/10.24198/jppm.v2i2.32690
- Yadav, S., & Chakraborty, P. (2022). Child–smartphone interaction: relevance and positive and negative implications. *Universal Access in the Information Society*, 21(3), 573–586. https://doi.org/10.1007/s10209-021-00807-1
- Yang, X., Jiang, P., & Zhu, L. (2023). Parental Problematic Smartphone Use and Children's Executive Function: The Mediating Role of Technoference and the Moderating Role of Children's Age. *Early Childhood Research Quarterly*, 63(January 2022), 219– 227. https://doi.org/10.1016/j.ecresq.2022.12.017
- Yeni L, N. G. A. M. (2019). Program Parenting Untuk Menumbuhkan Kesadaran Pentingnya Keterlibatan Orang Tua Di Paud. *Pratama Widya: Jurnal Pendidikan Anak Usia Dini*, 4(1), 8. https://doi.org/10.25078/pw.v4i1.1064
- Zaini, M., & Soenarto, S. (2019). Persepsi Orangtua Terhadap Hadirnya Era Teknologi Digital di Kalangan Anak Usia Dini. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 3(1), 254. https://doi.org/10.31004/obsesi.v3i1.127

Zhao, J., Zhang, Y., Jiang, F., Ip, P., Ho, F. K. W., Zhang, Y., & Huang, H. (2018). Excessive Screen Time and Psychosocial Well-Being: The Mediating Role of Body Mass Index, Sleep Duration, and Parent-Child Interaction. *Journal of Pediatrics*, 202, 157-162.e1. https://doi.org/10.1016/j.jpeds.2018.06.029