



Jurnal Pendidikan Usia Dini

<http://journal.unj.ac.id/unj/index.php/jpud>

Volume 14. Number 2. November 2020

e-ISSN (Online Media): 2503-0566

P-ISSN (Print Media): 1693-1602

Mother's Perspective About Using the Gadget Safeness for Children

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DOI: <https://doi.org/10.21009/JPUD.142.09>

Accepted: August 15th2020. Approved: September 4th2020. Published: 30th November 2020

ABSTRACT: The rapid development of technology makes it easier for mothers to provide stimulation related to growth and development using gadgets. However, parental knowledge is needed about the safe limits of using a gadget in early childhood. This study aims to determine the perspective and behavior of mothers about the use of gadgets in toddlers. The method used is quantitative research with a cross-sectional approach. The participants of this study were thirty-one mothers who have early childhood and who are empowering family welfare. The inclusion criteria were mothers who agreed to be respondents, the exclusion criteria for mothers who did not have gadgets. This study uses a questionnaire measurement instrument for data collection. Data analysis was performed univariate and bivariate using the chi-square test. The results of the study concluded that the mother's knowledge regarding the safety of using a gadget was still lacking, with a value of around 54.8%, while the mother's behavior related to the same thing was better, which was around 58.1%. The relationship test shows that there is a strong enough relationship between maternal knowledge and maternal behavior in introducing or using gadgets in toddlers.

Keywords: Early Childhood, Mother Perspective, Gadget Safeness

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1 INTRODUCTION

Today's digital devices have become an important part of everyday life, especially millennial. So that parents and children become gadget fans, and sometimes parents cannot prevent children from being intensely involved with gadgets. Digital devices these include electronic games, home computers, handheld devices, and different types of gadgets. Sundus's (2017) research exposes the positive and negative impact of gadgets on children. His research report concludes with recommendations for further study of better understanding of more problems in children by increasing the influence of gadget. Increasing numbers of children are using various technologies and digital devices (Jones & Park, 2015), and in younger children. Parents report the use of new technology by their children even at the age of one (Mifsud & Petrova, 2017). Mobile devices are prevalent among children between the ages of one to eight with a large number of young children playing with smart phones and tablets at home and have been little to say about the various factors that influence the use of technology in family settings (Plowman et al., 2012).

It is important to consider the online actions of young children in order to understand parenting in the modern age, since the behaviors that children participate in with digital technology will contribute to various kinds of consequences. Findings relating to harmful interactions and consequences and suggest that the usage of children's technologies may be connected to material risks (e.g., viewing images unsuitable for children), communication risks from strangers, and action risks such as online aggression (Sonia Livingstone et al., 2017). The emerging reality of the use of digital media by young children has prompted parents to balance the dangers and benefits of the material their children may experience online. Smahelova et al., (2017) results study has demonstrated that parental mediation is a complex mechanism that parents and children co-construct according to context.

Parents play an important role in influencing children's interactions with digital devices (Marsh et al., 2017). A broad accumulation of information on all facets of parental mediation is needed in order to achieve a better understanding of the challenges faced by parents in integrating their role in reducing and avoiding the negative impacts of the use of gadget by children, on the one hand, with that of offering them the digital provided by digital media, on the other (Zaman & Mifsud, 2017). Previous findings with Marsh et al., (2017); Plowman et al., (2012) have shown that Internet literacy is developed in young children early on (0-8), and they learn at home through technology. Plowman et al., (2012) concluded that the ways in which infants, family and technologies communicate help children understand the environment, teaching arrangements, and the role of technology in daily life. In fact, this has led to increased concern that the lack of technological, vital and social skills of young children may pose a danger (Livingstone et al., 2011). Based on the current phenomenon of using gadgets in children, as well as various solutions, this study aims to determine the perspective and behavior of mothers about the use of gadgets in toddlers.

2 THEORITICAL STUDY

Parents provide their children with an important role model, first, through their own viewing practices and interests, and secondly, through the acquisition of such gadgets and technology in the home setting. It is crucial to consider the difference in the media usage of young children at home, since early media exposures are necessary for the formation of preferences, cultures, and potential media behaviors of the child (Nikken, 2017). Parental interest in children's media use is a significant factor in driving the positive consequences of media use on children and controlling for the harmful effects of gadgets on children (Connell et al., 2015; Nikken & de Haan, 2015; Rasmussen et al., 2016). However, the participation of parents in using gadgets for young children varies from household to household. This is based on factors such as the demographic patterns of children and parents, parents' perceptions of the role of gadgets for children, and the experiences of parents and children with the use of media, technology and media applications (Cingel & Krcmar, 2013; Nevski & Siibak, 2016). It shows different challenges in implementing safety rules for using gadgets in early childhood.

It is important to look at the family atmosphere in order to gain more insight into the difference of media use of young children, since it is one of the most important pedagogical contexts for how children come to value the role of a gadget (Piotrowski, 2017). In this sense, much information has been gained over the years on the role of the parent for digital devices use by children. Parental instruction, herein, consists of multiple practices by which parents actively manage and govern the usage of the gadget by their children or any technique that parents use to influence, track or view children's media content (Nikken, 2017). However, speaking of Bandura (1977) social cognitive principles, which postulates that children adapt from and imitate relevant role models, parental mediation can often include unwanted actions that can also affect the child. This means that parents can show role models for their children without realizing it by picking up and finding these digital devices at home and setting up a new technological environment for the child.

In reality, Lauricella et al., (2015) observed that the parent's own use of multiple electronic technologies predicted the time spent on screen media, in particular television and laptops, and to a lesser degree smart phones and tablets, by their children aged 0-8 years. The concept of parents about the benefits and harms of advertising content and technology will determine how much and what media children can access (Lauricella et al., 2015). Several studies have shown a relationship between children's gadget use and mediation techniques for parents (Nevski & Siibak, 2016; Nikken & de Haan, 2015; Vaala, 2014). Children's television usage is often constrained and confined in households where parents are critical of the media (Cingel & Krcmar, 2013). Thus, parents of lower-use households would be more pessimistic about the media and more effectively apply stringent mediation on the media use of their offspring. On the other hand, Livingstone et al., (2015) indicated that parents who are very appropriate users of media technology themselves are less restrictive of the usage of media by their offspring, because, therefore, they cannot limit their own use of media.

Haines et al., (2013) observed that parents who think both about gadgets both for their children's enjoyment and for their parents' personal benefit as well, make children have greater online access in their bedrooms, and become higher media consumers. Therefore, it is possible that parents who have positive perceptions of digital media come from communities that are more widely used. These parents, who are enthusiastic about new media and technology, are also more likely to share media with their children (Lauricella et al., 2015). Parents in households who use gadgets more often feel more competent in implementing gadget use with their children. In addition, because parents are more familiar with computers and games, they are more tech-savvy and more likely to use their own media (Appel, 2012), this can increase the likelihood of parents sharing media with children or letting children use the media by themselves. Parents are also expected to be more proficient in educating families when families use gadgets a lot, compared to families who don't have gadgets.

3 METHOD

This research is a quantitative research with the cross-sectional approach. This research aims to identify the knowledge and behavior of the use of safe gadgets in mothers who have children under five and to analyze the relationship between the knowledge of mothers with the behavior / use of gadgets in their toddlers. This research was conducted through stages, namely data collection, classification, data processing / analysis and formulating conclusions. This research was conducted for two months, April-May 2017. The research location was conducted in Karangpucung Village, which is part of the South Purwokerto region in Banyumas Regency.

The variables in this study are the knowledge and behavior of mothers of toddlers about the use of safe gadgets in children under five. Mother's knowledge includes things that are understood by mothers related to what to do when introducing and using gadgets that are safe for toddlers such as when introducing gadgets according to the age of the child, when playing with children is permitted, mentoring the use of gadgets in children. The behaviors of using gadgets are things that mothers do when introducing / using gadgets to their toddlers.

3.1 Participant

The population of this research is all mothers with children under five in Karang Pucung, South Purwokerto. The samples in this study were mothers of toddlers who were active in the management of Dasawisma PKK (ten houses in family welfare program) in Karang Pucung Sub-District, South Purwokerto. Inclusion criteria are mothers of children under five who are willing to be respondents. Exclusion criteria are mothers who do not have gadgets such as smart phones, tablets and laptops.

The ethic of the research was conducted was that mothers were offered to volunteer to become respondents and then stated their willingness and filling out on the questionnaire sheets which were distributed to mothers of children under five. Data collection was obtained through a questionnaire that was distributed to research respondents so that answers were obtained from respondents regarding maternal knowledge and behavior.

3.2 Research Instrument

The instrument used in this study was a questionnaire containing questions about gadget knowledge, functions and benefits for toddlers. This instrument also measures the role played by mothers in introducing gadget functions to children, and the supervision carried out by mothers under five in using gadgets to children under five. This questionnaire uses a content validity approach for gadget usage behavior. It shows the extent of the question, assignment or items in a test or instruments are able to represent the overall and proportional behavior of the sample subjected to the test them. The meaning of the test is valid if the test items reflect the entire content or material that is tested. To find out whether the test is valid or not, you must conduct through reviewing the test grid to ensure that the test questions already represent or reflect the whole content or material that should be mastered proportionally. Therefore, the content validity of a test has no magnitude statistically calculated, but it is understood that the test is valid based on a review of the test grid. Hence, validity content is actually based on logical analysis, does not constitute a validity coefficient that is calculated statistically. The validity test carried out in this study is to use the construct validity test. From the results of the Knowledge validity test, there are seven valid questions in a question about knowledge, whereas there are 3. Invalid questions we change the sentence order so that the sentence of the question can be more easily understood by the respondent. The reliability test results of the knowledge questionnaire obtained by Cronbach alpha value of 0.604.

3.3 Data Analysis

Univariate data analysis was performed by describing the distribution and percentage of each variable. Bivariate analysis was carried out to determine whether there was a relationship between the variables of knowledge and the behavior of the use of safe gadgets in toddler mothers. The correlation test used in this study is a chi-square-square test.

4 RESULT AND DISCUSSION

4.1 Result

Table 1 shows the characteristics of the respondents which represent having children, work, and equipment used at home. The total number of participants is 31 people, with 3 kinds of job criteria, three kinds of digital devices used at home.

Table 1. Respondent Characteristics of mother

No.	Variable	n	%
1	Mother Age		
	a. 20-30 years	9	29
	b. 31-40 years	27	71
2	Toddler Age		

	a. < 4 years	14	45%
	b. 4-5 years	17	55%
3	Mother Jobs		
	a. Seller	1	3,25
	b. Teacher	1	3,25
	c. Housewife	27	27
4.	Gadget Ownership		
	a. Smart phone	23	74
	b. tablet	3	10
	c. laptop	5	16
	Amount	31	100

From the table 1, as much as 74% mothers use smartphone as gadgets used. Table 2 shows the distribution of the amount of the mother's perspective on the safety of using gadgets for children and the habits of using gadgets by mothers, both for themselves and for their children.

Table 2 Distribution Perspective and gadget Usage Behaviour

No.	Variable	n	%
1	Perspective of Gadget Usage		
	a. Less	17	54,8
	b. Well	14	45,2
2	Gadget Usage Behaviour		
	a. Less	13	41,9%
	b. Well	18	58,1%
	Amount	50	100,0

In table 2, the results showed that the behavior of the introduction / use of mother gadget is included in both categories. Mother still limits the use of gadgets to childhood, such as the use of gadgets less than 30 minutes a day. Mothers introduce gadgets to childhood. From the age of over 4 years, at the age of less than 4 years, mothers have not introduced gadgets to childhood.

Table 3 shows the results of the use of data analysis regarding the relationship of the mother's perspective regarding the safety of using gadgets for children in the habit of using gadgets for children.

Table 3 Relationship perspective of Gadget Usage and Gadget Usage Behaviour

Perspective of Gadget Usage	Gadget Usage Behaviour				Amount		<i>p value</i>
	Less		Well				
	n	%	n	%	n	%	
Less	10	58,8	7	41,2	31	100,0	0,036
Well	3	21,4	11	78,6	31	100,0	

The less gadget usage behavior of mothers, comparison of mother's perspective between those who have well knowledge and less of a greater percentage of mothers who have a less level of knowledge than mothers who have well knowledge of 21.4% (see table 3). The results of statistical tests to determine the relationship between the perspective of Gadget Usage and Gadget Usage Behavior. Based on Table 3, it is known that the statistical test results to determine the relationship between the perspective of gadget usage and gadget usage behavior. The test results obtained p-value 0.036 ($p < 0.05$). The results of this study indicate that there is a significant relationship between perspective of gadget usage and gadget usage behavior. This relationship shows the better the mother's perspective in knowledge of the safety of using gadgets for children, the better the behavior of mothers in using gadgets both for themselves and for their children.

4.2 Discussion

The findings show that the number of mothers who are well-behaved in using gadgets for their children is higher than those who do not have the habit of using gadgets less well. Some 58% still limit the use of gadgets for childhood, such as using gadgets for less than 30 minutes a day. However, this is inversely proportional to the mother's perspective regarding the safety of using gadgets for children. The results show that the mother's perspective is still not good for knowledge about the safety of using gadgets for children. However, the results of statistical analysis in looking for relationships, the findings are that there is a significant relationship which shows that the better the mother's perspective in knowledge of the safety of using gadgets for children, the better the behavior of mothers in using gadgets both for themselves and for their children.

Parents provide their children with important role models through the practice of using gadgets and such technology in the home environment. Recent research shows three ways parents use gadgets that affect the safety of using gadgets in children. First, by examining the suitability between parent and child time spent by high, low, and medium families, the result is a high number of gadget users and a very large use with various types of electronic and print media. Second, by examining how household, parent and child characteristics differ for these families in absolute terms; and third, by exploring the distinctive relative characteristics of these four family types. It is very important to consider differences in children's media use at home, because early media exposure is necessary for the formation of children's media preferences, culture, and potential behavior.

Based on this opinion, shows how important it is to build a culture of knowledge about gadget safety not only for mothers, but all adults around children. However, the results of this study, which show that many parents limit the use of gadgets to their children, and the data show that mothers' lack of knowledge on the safety of using gadgets has shown a quite sad phenomenon. Parents limit the use of gadgets to children not based on their knowledge of the safety of using gadgets, but rather not knowing how to use or maximize the use of gadgets in children. This is in line with Appel's (2012) research, which states that parents who use gadgets more often feel more competent in implementing gadget use with their children. In addition, because parents are more familiar with computers and games, they are more tech-savvy, tend to use media, and are more willing to introduce technology media to children from an early age. Recent research also states that the use of media by young children demands a mediating role from parents to keep up with the times (Troseth et al., 2017).

The researchers concluded that the research finding that shows a contradiction between the value of the mother's perspective on knowledge of the safety of using gadgets in children with the value of the behavior of using gadgets is a phenomenon in developing countries. Information that reaches parents is the dangers and dependence of children on gadgets that make parents afraid and tend to put excessive limits on the use of gadgets. However, excessive fear of parents makes children who are digital experts lose the opportunity to develop their skills in the field of digital technology. Children will have a hard time dealing with artificial intelligence. The importance of digital skills in parental mediation, however, could exacerbate the very inequalities that certainly explain observed differences in digital skills for parents or children. Parents who are more fearful or less skilled (or whose child is less skilled) reduce both the online opportunities of the child and their chance to develop resilience by reducing their exposure to adversity (Livingstone et al., 2017). In the meantime, more qualified children and parents are likely to be freer to explore and benefit from online and digital devices opportunities, while at the same time building resilience to harm by meeting a degree of online risk. Therefore, recommend not only that digital skills be taken care of in future parental knowledge research, but also that parental knowledge be taken care of in future digital inclusion and exclusion research.

The degree to which families make use of media devices is often correlated, as predicted, with the capacity of the child to manage these digital media, at least in a cognitive context. Children have a lower understanding of how to operate the gadget as parents make less use of the gadget and what drawbacks can occur. It is too early to conclude that the gadget consumption of the parent functions as a direct example of the use of gadget by young children and thus an improvement in understanding how to manage gadget content (Nikken, 2017). However, these findings

suggest that a child's willingness to understand how gadgets work is a significant influence even at a very early age and is often linked to the extent to which their parents use gadgets other than the child's own media exposure. In comparison, lower class parents still lack confidence in applying their children's knowledge of gadget usage. Further analysis of the relationship between parental familiarity with the content of new gadgets, new ability to use their gadgets, and their capacity to limit children's gadget use, suggests a harmonious relationship. When parents themselves are less familiar with modern gadgets, helping their child with new technology new become more difficult for them.

The results of this study are expected to open the eyes of the government or related agencies in order to educate parents, especially mothers, who have a lot of interactions with early childhood at home. In order to meet the needs of parents in various types of knowledge related to gadgets or other digital devices, so that parents able to balance the use of gadgets at home and able to protect children from the bad effects of digital devices.

5 CONCLUSION

The research findings show that there is a relationship between the mother's perspective on the safety of using gadgets and the behavior in using gadgets for children, so that there is a tendency for maternal knowledge to be in line with the behavior of using gadgets. The most important outcome is the mother's understanding of gadget use in childhood. Mothers must understand the functions and benefits of using gadgets for children, but in providing assistance in the use of gadgets for children, parents must limit usage time and pay attention to the appropriateness of the content introduced. The implication of this research is that it is necessary to disseminate information to childhood mothers regarding the approach to using gadgets in childhood, because this information will provide direction to mothers in providing efforts to introduce gadgets in childhood.

6 REFERENCES

- Appel, M. (2012). Are heavy users of computer games and social media more computer literate? *Computers and Education*, 59(4), 1339–1349. <https://doi.org/10.1016/j.compedu.2012.06.004>
- Bandura, A. (1977). *Social learning theory*. Prentice-Hall.
- Cingel, D. P., & Krumar, M. (2013). Predicting Media Use in Very Young Children: The Role of Demographics and Parent Attitudes. *Communication Studies*, 64(4), 374–394. <https://doi.org/10.1080/10510974.2013.770408>
- Connell, S. L., Lauricella, A. R., & Wartella, E. (2015). Parental Co-Use of Media Technology with their Young Children in the USA. *Journal OfChildren and Media*, 9(1), 5–21. <https://doi.org/10.1080/17482798.2015.997440>
- Haines, J., O'Brien, A., McDonald, J., Goldman, R. E., Evans-Schmidt, M., Price, S., King, S., Sherry, B., & Taveras, E. M. (2013). Television Viewing and Televisions in Bedrooms: Perceptions of Racial/Ethnic Minority Parents of Young Children. *Journal of Child and Family Studies*, 22(6), 749–756. <https://doi.org/10.1007/s10826-012-9629-6>
- Jones, I., & Park, Y. (2015). *Virtual worlds: Young children using the internet. Young children and families in the information age. Educating the young child (Advances in theory and research, implications for practice)* (I. K. Heider & J. M. Renck (eds.); Volume 10). Springer.
- Lauricella, A. R., Wartella, E., & Rideout, V. J. (2015). Young children's screen time: The complex role of parent and child factors. *Journal of Applied Developmental Psychology*, 36, 11–17. <https://doi.org/10.1016/j.appdev.2014.12.001>
- Livingstone, S., Görzig, A., & Ólafsson, K. (2011). *Disadvantaged children and online risk*.

<http://eprints.lse.ac.uk/39385/>

- Livingstone, Sonia, Mascheroni, G., Dreier, M., Chaudron, S., & Lagae, K. (2015). *How parents of young children manage digital devices at home: The role of income, education and parental style* (Issue September).
- Livingstone, Sonia, Ólafsson, K., Helsper, E. J., Lupiáñez-Villanueva, F., Veltri, G. A., & Folkvord, F. (2017). Maximizing Opportunities and Minimizing Risks for Children Online: The Role of Digital Skills in Emerging Strategies of Parental Mediation. *Journal of Communication*, 67(1), 82–105. <https://doi.org/10.1111/jcom.12277>
- M, S. (2017). The Impact of using Gadgets on Children. *Journal of Depression and Anxiety*, 07(01), 1–3. <https://doi.org/10.4172/2167-1044.1000296>
- Marsh, J., Hannon, P., Lewis, M., & Ritchie, L. (2017). Young children’s initiation into family literacy practices in the digital age. *Journal of Early Childhood Research*, 15(1), 47–60. <https://doi.org/10.1177/1476718X15582095>
- Mifsud, C. L., & Petrova, R. (2017). Young Children (0-8) and Digital Technology. In *JRC Science and Policies Reports*.
- Nevski, E., & Siibak, A. (2016). The role of parents and parental mediation on 0–3-year olds’ digital play with smart devices: Estonian parents’ attitudes and practices. *Early Years*, 36(3), 227–241. <https://doi.org/10.1080/09575146.2016.1161601>
- Nikken, P. (2017). Implications of low or high media use among parents for young children’s media use. *Cyberpsychology*, 11(3 Special Issue). <https://doi.org/10.5817/CP2017-3-1>
- Nikken, P., & de Haan, J. (2015). Guiding young children’s internet use at home: Problems that parents experience in their parental mediation and the need for parenting support. *Cyberpsychology*, 9(1). <https://doi.org/10.5817/CP2015-1-3>
- Piotrowski, J. (2017). Media exposure during infancy and early childhood: The effect of content and context on learning and development. In I. R. Barr & D. Linebarger (Eds.), *The parental media mediation context of young children’s media use*. (pp. 205–219). Springer International Publishing.
- Plowman, L., Stevenson, O., Stephen, C., & McPake, J. (2012). Preschool children’s learning with technology at home. *Computers and Education*, 59(1), 30–37. <https://doi.org/10.1016/j.compedu.2011.11.014>
- Rasmussen, E. E., Shafer, A., Colwell, M. J., White, S., Punyanunt-Carter, N., Densley, R. L., & Wright, H. (2016). Relation between active mediation, exposure to Daniel Tiger’s Neighborhood, and US preschoolers’ social and emotional development. *Journal of Children and Media*, 10(4), 443–461. <https://doi.org/10.1080/17482798.2016.1203806>
- Smahelova, M., Juhová, D., Cermak, I., & Smahel, D. (2017). Mediation of young children’s digital technology use: The parents’ perspective. *Cyberpsychology*, 11(3 Special Issue). <https://doi.org/10.5817/CP2017-3-4>
- Troseth, G. L., Strouse, G. A., & Russo Johnson, C. E. (2017). Early Digital Literacy: Learning to Watch, Watching to Learn. In *Cognitive Development in Digital Contexts*. Elsevier Inc. <https://doi.org/10.1016/B978-0-12-809481-5.00002-X>
- Vaala, S. E. (2014). The Nature and Predictive Value of Mothers’ Beliefs Regarding Infants’ and Toddlers’ TV/Video Viewing: Applying the Integrative Model of Behavioral Prediction. *Media Psychology*, 17(3), 282–310. <https://doi.org/10.1080/15213269.2013.872995>
- Zaman, B., & Mifsud, C. L. (2017). Editorial: Young children’s use of digital media and parental mediation. *Cyberpsychology*, 11(3 Special Issue), 9. <https://doi.org/10.5817/CP2017-3-xx>