

The Relationship Between Gadget Use And Socio-Emotional Development Of Preschool Children In Islamic Kindergarten Integrated Raudhatul Jannah Senapelan Alwashliyah Pekanbaru City

Siti Qomariah¹, Selvi Panggabean², Dewi Sartika Siagian³

Universitas Abdurrah

siti.qomariah@univrab.ac.id

ABSTRACT

According to WHO in 2020, there were at least 3.9 billion preschool-aged children using gadgets in the world. According to WHO in 2017, it was reported that 5-25% of preschool children experienced social emotional development disorders. The purpose of this study was to determine the relationship between gadget use and social emotional development in preschool children. This research method was correlational analytic with a cross-sectional approach, conducted at the Raudhatul Jannah Alwashliyah Senapelan Integrated Islamic Kindergarten, Pekanbaru City on May 27-June 3, 2025 with a population of 74 students. The sampling technique was purposive sampling, with a sample of 62 respondents. The instruments used were a gadget use duration questionnaire and KMME (Mental Emotional Problems Questionnaire). Data analysis used univariate frequency distribution analysis and bivariate Spearman rho statistical test (0.05). The results of the study stated that the Spearman rho statistical test produced a p value of 0.000 ($p < 0.05$), which means. So, it can be concluded that there is a relationship between the duration of gadget use and the social and emotional development of preschool children.

Keywords: Gadgets, Social-emotional development, Children

INTRODUCTION

The rapid development of information technology has brought about significant changes in human life, including in children's interaction patterns and behavior. Gadgets such as smartphones, tablets, and computers are now part of everyday life, even in early childhood. According to data from the Indonesian Internet Service Providers Association (APJII, 2023), internet users in Indonesia have reached more than 210 million, and most children have been familiar with and using gadgets since preschool age. Essentially, preschool children (3–6 years old) are at a crucial stage of development, particularly in social and emotional aspects. During this period, children begin to learn about themselves, interact

with others, understand their feelings, and learn to control their emotions. According to Hurlock (2012), the social and emotional development of early childhood is greatly influenced by their environment, including parenting styles and the media children use in their daily activities.

In kindergartens (TK), this phenomenon is becoming increasingly common. Children prefer playing with gadgets during recess rather than interacting with their friends. Teachers often observe behavioral changes, such as children becoming more irritable, difficult to manage, or even reluctant to participate in group activities. This condition is a significant concern for educators and parents, as it can impact a child's readiness to enter the next level of education. School is a place to educate and develop students' abilities, both physical and spiritual, so that they can produce future generations with good character. However, not all students have good character, many problems occur in elementary schools where teachers experience difficulties in educating their students. This is caused, among other things, by student delinquency and the difficulty of managing students in elementary schools. The levels of child delinquency are categorized into three: (1) ordinary delinquency, (2) delinquency leading to violations and crimes, and (3) special delinquency (Gularso & Indrianawati, 2022).

Common delinquency includes fighting, hanging around, skipping school, and leaving home without saying goodbye. Delinquency that leads to violations and crimes involves taking parents' belongings without permission special shaped Drug abuse. The root of the problem could also be due to delays or social-emotional disorders early in life, leading to deviant or delinquent behavior (Gularso & Indrianawati, 2022).

Children who experience social-emotional delays early in life are more likely to experience undesirable behaviors such as antisocial behavior, crime, and drug use later in life. Psychological problems can arise if parents do not immediately warn their children about behavioral problems and do not take further action (Simanjuntak et al., 2022). Based on data from the World Health Organization (WHO) 2017, reported that 5-25% of preschool-age children experience emotional developmental disorders with a child population of 23,979,000. Approximately 9% of children experience anxiety disorders, 11-15% are easily emotional, and 9-15% experience behavioral disorders (Maula & Rahmayanti, 2020).

In Singapore, 12.5% of children aged 6–12 years have emotional and behavioral problems. Meanwhile, one and a half million children and adolescents in the United States are reported by their parents to have persistent emotional, developmental, and behavioral problems. For example, 41% of parents in the United States worry that their children have learning difficulties, and 36% worry that they will develop depression or anxiety disorders (Prihatiningsih & Wijayanti, 2019).

Based on the 2018 National Basic Health Research (Riskesdas), the overall development of children aged 4–6 years in Indonesia reached 88.3% with the overall socio-emotional development reaching 69.9%, physical development reaching 97.8%, and development of writing and reading skills reaching 64.6%. From this data, the socio-emotional development experienced by children aged 4–6 years is quite high, which is second only to physical development, followed by the development of writing and reading skills (Lisa Sepriana et al., 2023). After further examination, it turns out that whether a child's social and emotional development can develop well or not is influenced by several factors such as family and peer factors. influence children's social and emotional development, because they are the closest to the child. And according to one literature review, the use of gadgets is one of the factors that can influence the social and emotional development of early childhood (Nabila Salsabina Itha Ishmah Aurora et al., 2024).

According to the WHO (World Health Organization), in 2020, at least 3.9 billion preschool-aged children used gadgets worldwide. Data shows that Indonesia ranks 4th as the largest gadget user among preschool children in the world (Gerojokan et al., 2024). According to The Asianparent Insight, in the Southeast Asia region, involving approximately 2,417 people who have gadgets in children aged 3-8 years with a total of 3,917 children in 5 countries, namely Singapore, Thailand, the Philippines, Malaysia, and Indonesia. The results obtained were 98% of children aged 3-8 years have used gadgets. Among them, 67% use parental gadgets, 18% use their own gadgets. As many as 29% of early childhood children in Indonesia use cell phones, 3.5% are under 1 year old, 25.9% are toddlers 1-4 years old, and 47.7% are preschoolers 5-6 years old (Mirad et al., 2024). According to a survey conducted by the Central Statistics Agency (BPS) in 2020, 47.7% of preschool-aged children in Indonesia used gadgets (Gerojokan et al., 2024). Meanwhile, according to the Central Statistics Agency (BPS), gadget use in Riau had reached 67.78% in 2023 (BPS 2023).

Excessive gadget use can disrupt child development, especially in preschoolers. In preschoolers, emotional development is crucial because the ability to manage and recognize emotions is crucial when children enter the environment, which can influence their behavior (Yenn, 2022). *gadget* in a wayExcessive use of gadgets every day to the point of not being able to go a day without them will impact a child's personality and daily development. Children prefer playing with gadgets rather than socializing with their peers. (Rika Widianita, 2023). Preschool children have a very high curiosity and even want to try new things they encounter. Providing gadgets to children is a detrimental factor because preschool is a golden age where external and internal stimulation plays a vital role in a child's growth and development. 80% of a child's cognitive development will be achieved during preschool. In addition, children will achieve motoric, personal, social, and language development during preschool (Kunci, 2023).

METHOD

This research method used an observational approach with a correlational analytical research design. The sample in this study was preschool children who met the inclusion criteria, with a total of 62 respondents. Data analysis used univariate and bivariate methods. Data collection was conducted through a preliminary survey and distribution of a standardized questionnaire.

RESULTS AND DISCUSSION

Table 4.2 Distribution of Gadget Usage Frequency Among Preschool Children at Raudhatul Jannah Integrated Islamic Kindergarten

Duration of Gadget Use	f	%
Normal	19	30.6
Currently	32	51.6
Lam	11	17.8
Total	62	100

Based on table 4.2, data shows that the majority of respondents use gadgets for moderate duration (1-2 hours) as many as 32 respondents (51.6%) and a minority of respondents use gadgets for long duration (>2 hours) as many as 11 respondents (17.8%).

Table 4.3. Frequency Distribution of Social Development Emotional Behavior in Preschool Children at the Raudhatul Jannah Alwashliyah Integrated Islamic Kindergarten, Senapelan, Pekanbaru City.

Social Development	<i>f</i>	%Child Emotional
Preschool		
In accordance	12	19.4
Disturbance	50	80.6
Total	62	100

Based on table 4.3, data shows that the majority of respondents have social emotional development in the disorder category, namely 50 respondents (80.6%) and a minority of respondents in the disorder category appropriate, namely 12 respondents (19.4%).

Table 4.4. The Relationship Between Gadget Use and Social-Emotional Development in Preschool Children at the Raudhatul Jannah Alwashliyah Integrated Islamic Kindergarten, Senapelan, Pekanbaru City

Social Emotional Development							
Duration of Gadget Use	In		Disturbance		Total		p Value
	accordance						
	f	%	f	%	f	%	
Normal	11	17.74	8	12.9	19	30.65	0.000<0.005
Currently	1	0.61	31	50	32	51.61	
Long	0	0	11	17	11	7.74	
Total	12	19.35	50	62	62	100	

Based on table 4.4, data shows that the majority of respondents use gadgets for moderate duration (1-2 hours) and experience social emotional development disorders, namely 31 respondents (50.00).

DISCUSSION

The results obtained during the study on the duration of gadget use among preschool

children at the Raudhatul Jannah Alwashliyah Senapelan Integrated Islamic Kindergarten, Pekanbaru City, showed that the majority of respondents used gadgets in the moderate category (1-2 hours), namely 31 respondents (51.6%) out of 62 respondents (100%). This study is comparable to research conducted by Ulfa Mursyidah in Sungai Pua, Agam Regency, West Sumatra in 2023 with 35 respondents, which showed that more than half of the respondents, namely 24 respondents. (68.6%) with duration gadget usage is categorized as moderate. Meanwhile according to theory which was put forward by Starsburger in 2011 that preschool-aged children should only be in front of a screen for < 1 hour every day (Fatimah & Hutasoit, 2022).

This opinion is supported by Sigman (2010), who stated that the ideal time for preschool children to use gadgets is 30 minutes to 1 hour per day. The American and Canadian Pediatric Associations suggest that children aged 0-2 years are not exposed to gadgets. Children aged 3-5 years are limited to 1 hour per day, and children aged 6-18 years to 2 hours per day. However, in Indonesia, many children use gadgets 4-5 times more than recommended. American pediatrician Cris Rowan stated that there needs to be a ban on gadget use at an early age, namely children under 12 years old. The reason is that numerous studies have proven the negative impact of gadgets on them (Kompasiana.com) in (Yenn, 2022). Excessive use of gadgets has an impact on children's health, gadget radiation is very dangerous, and excessive use of gadgets can affect children's aggression levels (Irman et al., 2021).

Based on the results of research conducted by researchers on social emotional development in preschool children at the Raudhatul Jannah Alwashliyah Integrated Islamic Kindergarten with 62 respondents, it was found that the majority of respondents were included in the disorder category, namely 50 respondents (80.6%).

This research aligns with research conducted by Ulfa Mursyidah in Sungai Pua, Agam Regency, West Sumatra, in 2023. The difficulty scale, with 35 respondents, showed that half, 24 (68.8%), fell into the impaired category. On the strength scale, 14 (40%) respondents fell into the same category, between normal and impaired.

The importance of preschoolers' social and emotional development in their developmental stages. This phase, in shaping a child's social development, can determine their future development. Montessori described early childhood as a sensitive period, during which they begin to receive stimuli that they will remember and carry forward into adulthood.

Social problems in early childhood can negatively impact children mentally, physically, and socially and emotionally (Nur'zahra & Wulandari, 2023).

The problems in children are that children have difficulty focusing when studying, adapting to peers, and establishing good relationships with peers, children will have difficulty socializing, not having many friends, being inactive, like to argue or fight their parents, for example rebelling when called or asked to do something, crying if their gadget is taken. Nurzahra and Wulandari (2023), wrote about social emotional problems in children, namely children have difficulty focusing when studying, adapting to peers, and being able to establish good relationships with peers (Astuti et al., 2024).

Children's social and emotional behavior can be influenced by the home environment, such as family and parents, as well as the school environment, such as teachers and peers. Because children spend most of their daily time at home or at school, parents and teachers play a crucial role in the social and emotional development of preschoolers. This finding aligns with (Al-Abrar, 2022), who stated that teachers and parents who pay insufficient attention to their children's social and emotional development can lead to loneliness, depression, anxiety, nervousness, impulsivity, and aggression.

Based on research conducted by researchers on 62 respondents, it was stated that there is a significant relationship between the use of *gadget* to Social emotional development in preschool children at Raudhatul Jannah Alwashliyah Senapelan Integrated Islamic Kindergarten, Pekanbaru City. The results of the Spearman Rho statistical test obtained a value of $\rho = 0.000$, which means that $\rho < 0.05$.

This is also in line with research conducted by Febia Kontesa in Pematang Gubernur Village, Muara Bangka Hulu District, Bengkulu City in 2022 using the chi-square statistical test, data homogeneity test using the F test formula and hypothesis test using the product moment correlation formula with the results of the coefficient $r \geq r$ table, namely $0.381 \geq 0.384$, which means there is an influence of the use of *gadget* to social emotional development in preschool children in Pematang Gubernur Village, Muara Bangka Hulu District, Bengkulu City in 2022. This is also the same as research conducted by Sinta Prihatini et al. at Al-Hikmah Kindergarten, South Jakarta in 2024 with the Chi-Square test obtained a p value of $0.000 < 0.05$ which shows that the development of personal social and language aspects of preschool children (4-6 years) has a significant relationship with gadget use.

According to Chusna's theory in 2017, children will have difficulty concentrating in the real world. When children are kept away from their gadgets, they will easily become bored, restless, and their anger cannot be controlled (Chusna P. A, 2017: 322 in Putri Rahmawati, 2022). Features available on gadgets such as videos, games, and others will interfere with children's development because children will be more interested in their gadgets than those around them. As a result, children will have difficulty socializing, not have many friends, be inactive, like to argue or fight with their parents, for example, rebelling when called or asked to do something, crying if their gadgets are taken away. Misuse of gadgets will affect students' attitudes, which tend to be lazy. Students are accustomed to using gadgets only for online games, so that within them only a lazy soul is embedded and it is difficult to develop (Marhumi & et al., 2022).

Children who spend too much time with gadgets will have a significant impact on their personality and daily behavior. They will become dependent on them and even be unable to go a single day without them, rather than studying or socializing with friends in their community (Yenn, 2022).

From this study, researchers assume that the use of gadgets has good and bad impacts depending on how parents supervise them in providing gadgets. For the good impacts, it can hone children's creativity and knowledge if using gadgets under supervision, while for the bad impacts, there are more, especially if children use gadgets outside adult supervision, it will result in gadget addiction which will cause children to be indifferent to what is around them, like to be alone, don't care about other people's feelings, don't like to mix, tantrums and even behave in a consumerist manner.

CONCLUSION

Based on the research results that have been obtained regarding the relationship between the use of *gadget* to Social emotional development in preschool children at the Raudhatul Jannah Alwashliyah Senapelan Integrated Islamic Kindergarten, Pekanbaru City, can be concluded that:

The use of gadgets in preschool children at Raudhatul Jannah Alwashliyah Integrated Islamic Kindergarten Most of them are in the moderate category, namely 32 (51.6%) respondents. Social emotional development in preschool children at Raudhatul Jannah Alwashliyah Integrated Islamic Kindergarten Most of them are in the disorder category,

namely 50 (80.6%) respondents. There is a significant relationship between the duration of gadget use and social emotional development in preschool children at Raudhatul Jannah Alwashliyah Integrated Islamic Kindergarten with the results of the Spearman rho statistical test obtained a value of $\rho = 0.000$ which is known that $\rho < 0.05$.

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