

Original Article

THE USE OF GADGETS WITH THE PSYCHOSOCIAL DEVELOPMENT OF PRESCHOOL-AGE CHILDREN

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ABSTRACT

Background. Preschool-age children experience several developments, one of which is psychosocial development. Uncontrolled use of gadgets as a distraction so that children are not fussy or lonely will cause children not to learn to communicate and socialize naturally with the environment. This study aims to determine the relationship between gadget use and psychosocial development of preschool children in TK Pertiwi 1 Sambirejo, Tanjunganom District, Nganjuk Regency. **Research Method.** This study used an analytical survey design with a cross sectional study approach. The population are all mothers and children of preschool children was 48 mothers and children. Used Purposive Sampling technique. A sample of 46 respondents according to the inclusion and exclusion criteria. The independent variable was the use of gadget and the dependent variable was psychosocial development. Data collection used questionnaires, observations and interviews. Statistical test using Coefficient Contingency with a significant level of $\alpha = 0.05$. **Findings.** From 46 respondents, most had a moderate category of gadget use as many as 24 respondents (52.2%) and most showed psychosocial development of guilt as many as 25 respondents (54.3%). The results of the statistical test obtained p value $0.002 \leq \alpha 0.05$ with $r = 0.469$ which shows the closeness of the relationship so that H_a was accepted which means there was a relationship between the use of gadgets and psychosocial development of preschool children. **Conclusion.** The use of gadgets can affect the psychosocial development of preschool children. Good stimulation, optimal use of gadgets so that children's psychosocial development develops well.

Keywords: Gadget Use, Preschool Children, Psychosocial Development.

BACKGROUND

At preschool age, children are in their golden age, a time when children begin to be sensitive to receiving various stimuli or stimulation. One of the characteristics of psychosocial development of preschool children is the expansion of the child's social environment, at this age children begin to feel the need to carry out routine activities outside the home environment [1].

Ironically, the problem encountered today is that there are still many parents who deliberately give and let their children play gadgets where they are not yet eligible to use

them on the grounds that the children sit quietly and are not fussy [1]. In general, the use of gadgets will have a positive impact on child development if utilized effectively such as developing imagination, training intelligence and being able to develop children's ability to read and solve problems. However, excessive use of gadgets can have a negative impact such as children becoming a closed person, their eye health is disturbed, and can hinder their psychosocial development because children begin to be interested and accustomed to using gadgets which causes children not to get used to interacting with the surrounding environment [2].

The World Health Organization (WHO) reports that 5 to 25% of preschool children experience developmental disorders such as motor, language, and psychosocial delays that have increased in recent years [3]. Several islands in Indonesia with the highest level of gadget use are occupied by Java Island with a population of around 86.3 million people or constituting 65% of the total number of gadget users [4]. The results showed that 42.1% of preschool children who used gadgets were relatively high as evidenced by preschool children watching videos or playing games [5]. According to the 2018 Riskesdas data in East Java, social-emotional development disorders in preschool children reached 28.1%. In Nganjuk Regency, 2% experienced deviations in social development of independence, feelings of jealousy, angry outbursts, and communication difficulties while playing [6].

Incorrect stimulation such as uncontrolled use of gadgets to children can hinder their psychosocial development. Busy parents usually use distraction with gadgets to avoid fussing or loneliness which will make their children addicted. Children who are addicted to gadgets will lose control of their desires and feel confused when not using gadgets. Whereas, the use of gadgets among preschool children is increasingly concerning which will have a negative impact on children's growth and development. Learning opportunities are limited because gadgets only communicate in one direction, namely responding. Children do not learn to communicate and socialize naturally, nor are they able to recognize and share various emotions such as sympathy, sadness and joy which in turn children become emotional or become unable to respond verbally [7].

The use of gadgets can have positive and negative impacts on children's development. This is influenced by several factors including frequency, duration, supervision and parental awareness. Therefore, parents can check or control the data in the gadget at least once per week so that children use it wisely and are not negatively affected. Then parents can also limit the time of gadget use so that children develop according to age [8]. This is supported by the opinion of Pratama (2020) which states that the role of parents

in providing, supervising or controlling their children's gadget use is very important [9]. Because letting parents give full control of gadgets without any restrictions or supervision certainly has an impact on their children. It can also be a boomerang for parents if their children spend more time playing gadgets than interacting and communicating with family members and other people.

RESEARCH METHOD

This study used an analytic survey design with a cross sectional study approach. The research was conducted on May 22, 2023 at TK Pertiwi 1 Sambirejo Kindergarten, Tanjunganom District, Nganjuk Regency. The population of this study were all mothers and preschool children as many as 48 mothers and children. The sampling technique used purposive sampling technique. The sample in this study was 46 respondents according to the inclusion and exclusion criteria. The independent variable is the use of gadgets and the dependent variable is psychosocial development. The independent variable was gadget use and the dependent variable was psychosocial development. Data collection using questionnaires, observations and interviews. The research instrument on the use of gadgets used a questionnaire filled out by the mother, the instrument was modified from Riyanti Imron's research, while the psychosocial development instrument for preschool children with interviews and observations on preschool children adopted from Rahayu budi Utami's research. Statistical tests used Coefficient Contingency with a significant level of $\alpha = 0.05$.

FINDINGS

1. Gadget Use Among Preschool-Age Children

Table 1 Frequency Distribution of Gadget Use Among Preschool-Age Children

Gadget use	Frequency (<i>f</i>)	Percentage (%)
Low	1	2.2
Medium	24	52.2
High	21	45.7
Total	46	100.0

Based on the results of the study table 1 shows that out of 46 respondents, most of them have a moderate category in the use of gadgets, namely 24 respondents (52.2%).

2. Psychosocial Development of Preschool-Aged Children

Table 2 Frequency Distribution of Psychosocial Development in Preschool Age Children

Psychosocial Development	Frequency (<i>f</i>)	Percentage (%)
Sense of Initiative	21	45.7

A sense of guilt	25	54.3
Total	46	100.0

Based on the results of table 2, it shows that out of 46 respondents, most experienced psychosocial development of guilt, namely 25 respondents (54.3%).

3. Relationship between Gadget Use and Psychosocial Development of Preschool-Age Children

Table 3. Analysis of the Relationship between Gadget Use and Psychosocial Development of Preschool Age Children

Gadget Use	Psychosocial Development					
	Sense of Initiative		A sense of guilt		Total	
	<i>f</i>	%	<i>F</i>	%	Σ	%
Low	0	0	1	2.2	1	2.2
Medium	17	37.0	7	15.2	24	52.2
High	4	8.7	17	37.0	21	45.7
Total	21	45.7	25	54.3	46	100
<i>p value</i> = 0,002 \leq α 0,05 <i>r</i> = 0,469						

Based on the results of the study in table 3, the results of the coefficient contingency statistical test were obtained, namely the p value of $0.002 \leq \alpha 0.05$ with $r = 0.469$ which shows the strength of the relationship is moderate so that H_a is accepted, which means that there is a relationship between the use of gadgets and the psychosocial development of preschool-age children at TK Pertiwi 1 Sambirejo Kindergarten, Tanjunganom District, Nganjuk Regency.

DISCUSSIONS

Based on the results of this study, it shows that of the 46 respondents, most have a moderate category in the use of gadgets as many as 24 respondents (52.2%) and most show psychosocial development of guilt as many as 25 respondents (54.3%). The results of the coefficient contingency statistical test showed a p value of $0.002 \leq \alpha 0.05$ with $r = 0.469$ which shows a moderate relationship so that H_a is accepted, which means that there is a relationship between the use of gadgets and the psychosocial development of preschool-age children at TK Pertiwi 1 Sambirejo Kindergarten, Tanjunganom District, Nganjuk Regency. This is in line with the findings of Setiawati et al, stating that there is a significant relationship between the duration of gadget use and children's social-emotional behavior [10]. This is supported by the findings of Firmawati & Biahimo, stating that there is a

relationship between gadget use and the psychosocial development of preschool children [3].

States that one of the factors that can affect children's psychosocial development is stimulation, one of which is the use of gadgets. The influence of gadgets in children's growth and development is not too significant because it is one-way [11]. In addition, mother's education greatly influences the use of gadgets in children, this is in accordance with the results of research Asgaf, which states that mothers with good education also have more open minds, are easy to accept new sources of information and filter this information, and can make the right decisions in educating their children, so that mothers can choose things that are good and do not interfere with child development [12]. Conversely, the lower the mother's education, the less knowledge about the problem of gadget use, so that mothers will more easily give gadgets to children without thinking about the impact that will be obtained. In addition, gender factors also affect the excessive use of gadgets in children. According to Mulyati & Frieda, men and women use gadgets in different ways, such as men are more likely to use gadgets to play games while women use gadgets only to watch interesting videos from an application [13].

According Gunawan, Ideal length of preschool children using gadgets is about 30 minutes to 1 hour per day. The use of gadgets will have a positive impact if used wisely and with supervision [8]. Conversely, if used excessively, it will have a negative impact such as children becoming sensitive, easily emotional and can interfere with their health, especially on the psychosocial development of children. The impact is not only visible in the short term, but is increasingly visible during the child's development process. This is in accordance with research Mitsalia & Sari, which states that gadgets do not always have a negative impact but can also have a positive impact if used wisely, such as being used as an exciting learning tool so that children do not feel bored [7].

From the description above, researchers argue that the use of gadgets is related to the psychosocial development of preschool children. Children with high gadget use will experience problems with their psychosocial development which is in the guilt stage. At this stage, children do not take initiative, are not confident in what they do, and have poor social interactions.

This study makes a significant contribution to scientific knowledge regarding the relationship between gadget use and preschool children's psychosocial development. The results provide further understanding of the impact of gadget use on children's psychosocial aspects.

The findings of this study may have important implications in designing educational policies and guidelines for gadget use in preschool-aged children. An understanding of the positive and negative impacts can help relevant parties develop wiser guidelines for gadget use in children.

This study emphasizes the importance of understanding the impact of gadget use on children's psychosocial development holistically. Factors such as guilt, initiative, and social interaction are recognized as integral to preschoolers' development, and the results of this study provide practical recommendations to parents and caregivers regarding children's gadget use. Such recommendations include limiting screen time, supervision, and selecting appropriate content to support children's positive development.

CONCLUSION

The use of gadgets in preschool children at Pertiwi 1 Sambirejo Kindergarten, Tanjunganom Subdistrict, Nganjuk Regency mostly has a moderate category in gadget use, and most experience psychosocial development of guilt. There is a relationship between the use of gadgets and the psychosocial development of preschool-age children in Pertiwi 1 Sambirejo Kindergarten, Tanjunganom District, Nganjuk Regency with a moderate correlation strength.

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Conflict of Interest

The authors declare no conflict of interest because of release of this article

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