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THE RELATIONSHIP BETWEEN MOTHER'S OCCUPATION AND THE INTENSITY OF TODDLERS' GADGET USE

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ABSTRACT
The use of digital devices among early childhood has increased significantly, which can impact aspects of child development. This phenomenon is also influenced by various environmental factors, including the role and activities of parents in their children's daily lives. The aim of this study is to determine the relationship between maternal occupation and the intensity of gadget use among toddlers in Gatak Village. This was a descriptive correlative study with a cross- sectional approach. The study involved 69 mothers who had children aged 1–3 years and were selected using purposive sampling. The demographic data questionnaire was used to evaluate the characteristics of children and mothers, while the gadget use was evaluated using the gadget usage questionnare with validity test results of r table 0.096 < r count (0.726-0.876) and reability test results of 0.742, which means that the questionannaire is proven to be valid and reliable.. Data analysis used the Chi-Square test. Statistical tests showed a p-value of 0.019 ($p < 0.05$), indicating a significant relationship between mothers' occupation and the intensity of gadget use among toddlers in Gatak Village. Mothers who work outside the home tend to have children with higher gadget use intensity compared to stay-at-home mothers.

Keywords: gadget use intensity; mother's occupation; toddler

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INTRODUCTION

Currently, technological development is growing significantly. This phenomenon is reflected in the widespread penetration of digital devices across all demographic segments of society. The adoption of gadget technology is no longer limited to teenagers and adults but has also reached elementary school children and even toddlers aged 1–3 years (Kemenkes, 2023). The duration of digital device use among toddlers shows a significant upward trend globally, including in Indonesia, with a relatively high prevalence.

Data from the World Health Organization (WHO) indicate an increase in screen time among two-year-olds, where the previously recommended maximum duration of one hour per day has now been exceeded, reaching more than two hours per day (Friantary, 2020). The global population of digital device users in 2019 reached 3.2 billion, an increase of 5.6% compared to the previous year. Projections for 2022 estimated that the number of smartphone users would rise to 3.9 billion (Kadata Media Network, 2022). Meanwhile, gadget usage in Indonesia ranks fourth globally, with a rate of 69%. The proportion of children under one year old who are given access to gadgets is 3.46%, while those aged 1–3 years reach 25.6%. The main purpose of providing this access is to allow children to play digital games and watch animated videos (BPS, 2022). In a regional context particularly in Central Java Province the prevalence of gadget use among young children was recorded at 38.48% in 2022 (BPS, 2022). Based on preliminary studies conducted in Gatak Village, the prevalence of gadget use among toddlers reached 66.67%.

The growth and development of toddlers can be negatively affected by excessive use of gadgets. According to a literature review by Nurmayanti et al. (2024), the use of gadgets among toddlers can lead to addiction, which in turn affects their growth and development. Disorders that may arise include delays in language, social-emotional, motor, and cognitive development. In addition, excessive use of technology by toddlers has been found to negatively impact their mental health (Fernando & Alpiah, 2024).

The intensity of digital device use among toddlers is influenced by various determining factors. A study by Khairani et al. (2024) revealed a significant correlation between the role of parents and the intensity of gadget use among children. Similar findings were also reported by J. N. Hidayat et al. (2023), who found a relationship between supervisory function and maternal parenting style in relation to children's gadget use. Furthermore, Chabibah et al. (2022) identified that the mother's occupational status is associated with the intensity of gadget exposure in children.

According to Xie et al. (2023), parental occupation refers to activities undertaken to earn income to meet the family's needs. There are substantial differences in time allocation and childcare methods between working and non-working parents. This suggests that parental occupation, particularly that of mothers, may be related to the time or intensity of gadget use by their children.

A study conducted by Chabibah et al. (2022) identified a correlation between mothers' occupational status and the intensity of digital device use among children. However, these findings are inconsistent with those of Xie et al. (2023), who found no statistically significant relationship between mothers' occupational status and the intensity of gadget exposure among children. Therefore, this study aims to determine the relationship between mothers' occupational status and the intensity of gadget use among toddlers in Gatak Village. The results of this study are expected to provide scientific insights for readers, particularly regarding the correlation between mothers' occupational status and the intensity of gadget exposure among toddlers.

METHOD

This was a descriptive correlational study with a cross-sectional approach. The research was conducted in Gatak Village, Klaten, using a purposive sampling technique involving 69 mothers who met the inclusion criteria, namely mothers who had toddlers aged 1–3 years, were willing to participate, and were able to read and write. The research instruments consisted of a demographic questionnaire containing information about the mother's name, age, and occupation, and a gadget-use questionnaire adapted from a previous study by Ayub Dana Wandela (2022). The latter comprised seven items, three measuring gadget use and four providing complementary data on the intensity of gadget use.

The instrument was assessed using a coding system with score intervals of 3–5 (low), 6–7 (moderate), and 8–9 (high). It had previously been tested for validity and reliability, yielding validity results of r-table = 0.396 < r-count = 0.726–0.87 and a reliability coefficient of 0.742, indicating that the questionnaire was valid and reliable. Data were analyzed using the chi-square test. This research has received an ethics permit from the Research Ethics Committee of the Faculty of Health Sciense, Universitas Muhammadiyah Surakarta with No. 1559/KEPK-FIK/X/2025.

RESULT

Table 1 shows that most mothers were aged 25–30 years (26 respondents, 37.7%), and the majority (40 respondents, 58.0%) were housewives. Meanwhile, most children were aged 25–30 months (23 respondents, 33.3%), and more than half were male (37 respondents, 53.6%)

Table 1.
Respondent characteristics

Variable	Category	f	%
Mother's Age	20-25 years	9	13.0
	25-30 years	26	37.7
	31-35 years	19	27.5
	36-40 years	15	21.7
Mean: 31.20	Modus: 36	Min: 20	Max: 43
Mother's Occupation	Housewife	40	58.0
	Factory workers	10	14.5
	Entrepreneur	10	14.5
	Civil servant	9	13.0
Child's Age	12-18 months	17	24.6
	19-24 months	9	13.0
	25-30 months	23	33.3
	31-36 months	20	29.0
Mean:26.06	Modus: 28	Min: 12	Max: 36
Gender	Male	37	53.6
	Female	32	46.4

Table 2.
Gadget Usage

Variable	Category	f	%
Type of gadget	Handphone	46	66.7
	Television	23	33.3
Intensity of use	Low	33	47.8
	Moderate	25	36.2
	High	11	15.9
Type of application	YouTube	44	63.8
	Game	12	17.4
	TikTok	13	18.8
Parental supervision	Never	9	13.0
	Rarely	17	24.6
	Often	43	62.3

Table 2, it was found that most children used mobile phones (66.7%) and had a low intensity of use (47.8%). The table also shows that YouTube was the most widely used application (44%), and parental supervision was frequently provided (43%).

Tabel 3.
Crosstabs

		Intensity of gadget usage			Total	*p- value*
		Low	Moderate	High		
Mother's Occupation	Housewife	22	17	1	40	0,019
	Factory workers	4	2	4	10	
	Civil servant	4	2	4	10	
	Entrepreneur	3	4	2	9	

In the analysis above, the data processing results showed that a p-value of 0.019 was obtained, with a significance level of $p < 0.05$. This indicates that there is a significant relationship between the mother's occupation and the intensity of gadget use among toddlers in Gatak Village, Klaten.

DISCUSSION

In the age distribution of mothers, most were between 25 and 30 years old. This finding supported by research revealing that mothers in this age range demonstrate maturity and experience in raising children. Mothers in early adulthood (26–35 years) can perform their roles optimally because they generally possess a mature mindset and the ability to adapt well to technological developments (Sezgin & Punamäki, 2020). This can influence how mothers control their children's gadget use. One study found that younger mothers tend to view gadgets as a form of entertainment and a safe

educational tool for children, whereas older mothers are more cautious regarding their children's gadget use (A. Hidayat & Maesyaroh, 2022).

The distribution of respondents' occupational status shows that the majority of respondents were housewives. This finding aligns with research by Wijayanti et al. (2025) in Klaten, which revealed that most mothers in their study were housewives (78.9%). A mother's work experience can influence her knowledge and skills in making decisions related to child care (Irdawati et al., 2023). However, a mother's occupation may also directly affect her interaction with her children. Mothers who work outside the home usually have less time to supervise their children's daily activities, increasing the likelihood that children will spend more time using gadgets for entertainment. This is consistent with research showing that mothers who work formally tend to have children with higher screen time on both weekdays and weekends (Xie et al., 2023).

Respondent characteristics based on the age of the child indicate that most children were aged 25–30 months. This is in line with the findings of Chabibah & Ersila (2022), who reported that the majority of children's gadget exposure occurs at around three years of age (47.83%). The toddler years represent a golden period of growth when children actively explore their surroundings. At this age, children are particularly drawn to visual stimuli, including the sounds and vibrant colors emitted by gadget screens (Hijriyani & Astuti, 2020).

The distribution of respondent characteristics based on the child's gender indicates that the largest proportion were male. This finding is consistent with statistics released by the Klaten Regency Central Statistics Agency in Delanggu Subdistrict in Figures 2023, which reported that the percentage of male toddlers reached 50.55% (BPS, 2023). Gender can influence children's activity preferences. Boys are generally more active and tend to prefer digital games with strong visual elements, which may lead to higher gadget usage compared to girls (Apriloka, 2020). However, these differences also depend on the parenting style applied by parents.

The findings of this study indicate that the majority of gadgets used were mobile phones. These results correspond with research by Azwi et al. (2022), which reported that the range of gadget use among children includes mobile phones, tablets, and laptops. Similar findings were also reported by Mulyantari et al. (2019), who revealed that mobile phones were the dominant type of gadget used by children, with no subjects in their study using television.

The criteria for high gadget use are defined as a duration exceeding 120 minutes per day or more than 75 minutes in a single session. Children who use gadgets more than three times a day for 30–75 minutes have a higher risk of developing addiction. Moderate use is characterized by a duration of 40–60 minutes and a frequency of two to three times per day, while low use is defined as less than 30 minutes per session with a frequency of fewer than two times a day (Putriana et al., 2019). The results of this study show that the majority of respondents fell into the low category. This indicates that technological development has a substantial influence on children's behavior.

The distribution of applications used by children in this study shows that most children used YouTube. This suggests that most mothers prefer YouTube to TikTok or games for their children. This finding is consistent with research showing that most children use YouTube (55.5%) more frequently than TikTok or games (Zuhra et al., 2022).

Parents who work outside of home often face obstacles in allocating time to supervise their children, resulting in uncontrolled and prolonged gadget use. This is reflected in the univariate analysis of parental supervision of children's gadget use, which showed that parents who work outside the home more often fall into the "rarely" and "never" supervision categories. These findings correspond with research identifying an association between parental supervision during

gadget use and children's language and speech development outcomes (Aulia Septyani et al., 2021).

Mothers job often encounter challenges in accompanying their children, particularly during gadget use. This is supported by the results of the bivariate analysis, which revealed a significant relationship between mothers' occupational status and the intensity of their children's gadget use (p-value = 0.019). This finding aligns with other studies that also found a significant relationship between maternal occupation and the duration of gadget use among toddlers (p-value = 0.03), indicating that parental supervision of children's gadget use is essential and that working mothers need to allocate time to accompany their children (Chabibah et al., 2022).

CONCLUSION

Mothers who work outside of home tend to allow their children to use gadgets more intensively than mothers who are housewives. The most gadgets used by toddlers, was mobile phones. The most application was accesed by toddlers was YouTube. The housewife supervised their children's more frequently than those who work outside.

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