E-ISSN: 2987-209X
International Journal of Midwifery and Health Sciences
Vol. 3, Issue 3 (2025), November

Impact Use of *Gadgets* Against Growth and Development in Children Aged 2-5 Years at Posyandu Kenanga V Karawang Regency

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Submission date: 25-08-2025; Date of received: 29-08-2025

Abstract

Use *gadgets* not only by adults, but children aged 2 – 5 years; they also have Lots of uses. Use excessive *gadgets*. Of course can be influential to the growth and development of children. Research objectives The aim for know the connection intensity of using *gadgets* with growth and development. Children aged 2 – 5 years at Posyandu Kenanga V, Dawuan Tengah Village. Methodology design study. This uses descriptive analytics with a cross-sectional approach. Sample in the study This totaling 67 respondents. Retrieval technique sample with the use of *Purposive Sampling.* The research instrument consists of from questionnaire using *gadgets*, growth of BB/U and TB/U use curves, and the development of child use KPSP measurement. Data analysis using statistical tests, *Spearman Rho's* for known connection intensity, use *gadgets* against growth and development child ages 2 – 5 years at Posyandu Kenanga V, Dawuan Tengah Village. Research results using *the Spearman Rho's* test to obtain mark ρvalue = 0.000 with r value of 0.611 which shows that intensity use influential *gadgets* to development children, whereas *Spearman Rho's* test results were obtained mark ρvalue = 0.001 and ρvalue = 0.002 which shows that intensity use influential *gadgets* to growth of children's BB/U and TB/U ages 2 – 5 years at Posyandu Kenagan V, Central Dawuan Village. Conclusions obtained from the research This that there is a connection intensity use *gadgets* against the growth and development of children aged 2 – 5 years at Posyandu Kenanga V, Dawuan Tengah Village. It is hoped that the intensive use of *gadgets* for children will draw more attention to the growth and development of children in accordance with their age.

Keywords: use gadgets, growth, development, children

Introduction

Age period 1–5 years is period gold growth and development very decisive child quality health , learning , and behavior in the future . However , the report various institution show improvement case disturbance grow flowers , one of them consequence excessive gadget use . The American Academy of Pediatrics recommends children under 2 years old No using gadgets, while child 2 years old to on restricted maximum 2 hours per day . Facts on the ground precisely show children use up time screen Far longer . Condition This impact on disruption motor, language , emotional development , to social .

2018 Riskesdas data shows that 11.7% of Indonesian toddlers experience disturbance grow flowers , while in West Java the prevalence reached 32.6%. Gadget itself now become part from life everyday , especially smartphones which are the most used . With Thus , the role of parents in supervise Children's use of gadgets is very important for their benefits still can felt without sacrifice grow flower . Based on phenomenon this research done For study impact use of gadgets against growth and development child ages 2–5 years at Posyandu Kenanga V, Dawuan Tengah Village, District Cikampek .

Method

Research methods used is descriptive analytic quantitative with cross-sectional design , where observations and measurements variables done on one point time For evaluate connection use of gadgets against growth and development toddlers at Posyandu Kenanga V, Dawuan Tengah Village. Research This took place at the Integrated Health Post Kenanga V Dawuan Tengah Village, Karawang Regency , in 2025. Population study covers all over toddlers at the integrated health post the with a total of 67 children , who at the same time become sample use technique *Purposive Sampling* . Data obtained analyzed in a way descriptive through statistical tests using the SPSS program.

Research result

Table 1
Demographic Data Distribution Respondents (n=67)

Characteristics	Frequency (n)	Percentage (%)
Age		
24 – 36 months	24	35.8
37 – 48 months	19	28.4
49 – 60 months	24	35.8
Gender		
Man	25	37.3
Woman	42	62.7
Range Parents' Age		
20 – 30 years	18	26.9
31 – 40 years old	36	53.7
41 – 50 years old	13	19.4
Parental Education		
Elementary School	11	16.4
JUNIOR HIGH SCHOOL	9	13.4
High School/Vocational School	32	47.8
College	15	22.4
Parents' job		
housewife	39	58.2
Private	12	17.9
Self-employed	5	7.5
civil servant	11	16.4

Based on table 1, it is obtained own equality characteristics age most in range ages 24 – 36 months and 49 – 60 months as many as 24 children (35.8%). Meanwhile type Female gender as many as 42 children (62.7%) more Lots than men . In terms of Overall , the majority of parents respondents is individual with relative age continue , have background behind varied education and some big No working outside House or profession as Mother House ladder .

Table 2
Connection Intensity Use *Gadgets* with Child Development at Posyandu Kenanga V, Dawuan Tengah Village

Intensity Use *Gadget*	Development						Total		P value	r value
	In accordance		Doubtful		Deviation					
	N	%	N	%	N	%	N	%		
Low	7	87.5	1	12.5	0	0	8	100	0,000	0.611
Currently	28	57.1	20	40.8	1	2	49	100		
Tall	0	0	1	10	9	90	10	100		
Total	35	52.2	22	32.8	10	14.9	67	100		

Based on table 4. *Spearman Rho's* test results obtained ρ *value* (0.000) < (0.05) then

there is significant relationship between duration use *gadgets* with development child age 2-5 years , shown mark coefficient correlation of 0.611. This means that the more tall duration use *gadgets*, tend to followed by changes in development child .

Table 3
Connection Intensity Use *Gadgets* with Child Weight Growth at Integrated Health Posts Kenanga V, Dawuan Tengah Village

Intensity Use *Gadget*	Growth (Body Weight)								Total		P value	r value
	BB Very Less		BB Less		Normal		BB Risk More					
	N	%	N	%	N	%	N	%	N	%		
Low	0	0	3	37.5	5	62.5	0	0	8	100	0.002	0.369
Currently	2	4.1	26	53.1	21	42.9	0	0	49	100		
Tall	0	0	0	0	4	40	6	60	10	100		
Total	2	43.3	29	43.3	30	44.8	6	9	67	100		

Based on table 5. *Spearman Rho's* test results obtained ρ *value* (0.002) < (0.05) then there is significant relationship between duration use *gadgets* with growth child 's weight age 2-5 years , shown mark coefficient correlation of 0.369. This means that the change duration use *gadgets* tend to followed by changes weight in children in accordance with his age .

Table 4
Connection Use *Gadgets* with Child Height Growth at Integrated Health Posts Kenanga V, Dawuan Tengah Village

Intensity Use *Gadget*	Growth (Height)								Total		P value	r value
	Very Short		Short		Normal		Tall					
	N	%	N	%	N	%	N	%	N	%		
Low	0	0	2	25	6	75	0	0	8	100	0.001	0.395
Currently	1	2	23	46.9	24	49	1	2	49	100		
Tall	0	0	0	0	2	20	8	80	10	100		
Total	1	1.5	25	37.3	32	47.8	9	13.4	67	100		

Based on table 6. *Spearman Rho's* test results obtained ρ *value* (0.001) < (0.05) then there is significant relationship between duration use *gadgets* with growth child 's height age 2-5 years , shown mark coefficient correlation of 0.395. This means that there is trend that change duration use related *gadgets* in a way positive with change height in children in accordance with his age .

Discussion

Study This implemented in July 2025. After the data processing and presentation process along with results obtained , stage furthermore is discussion that is prepared based on variables that have been researched .

1. Connection Use *Gadgets* with Child Weight Growth

Analysis with the Spearman Rho test obtained value of $\rho = 0.002$, indicating existence connection significant between gadget use and growth child 's weight age early . Duration high gadget usage make child more passive , reducing activity physical , and lower expenditure energy , so that increase risk excess body weight (Putri & Kartikawati , 2020). On the other hand , some child who is too focus on gadgets can experience pattern Eat No regular , like forget Eat or lost lust eating , which causes weight loss (Kurniawati et al ., 2021). In line with findings Rachmawati et al. (2020), the use of gadgets in general excessive impact on imbalance energy that triggers obesity and nutrition not enough .

With Thus , the arrangement duration gadget use , involvement child in activity physical , as well as pattern eat well is factor main For guard growth optimal body weight in children age early . So from that , the findings This confirm importance parental supervision in arrange duration gadget use and maintenance balance between time playing gadgets with activity physical and pattern healthy eating is crucial For support growth optimal body weight in children age early . Interventions that include time gadget usage and improvement activity physique need implemented in a way consistent For prevent impact negative to growth child 's weight .

2. Connection Use *Gadgets* with Child Height Growth

Research result show existence significant relationship between intensity gadget use and growth child 's height ages 2–5 years with value ($\rho = 0.001$; $p < 0.05$). Excessive use of gadgets potential reduce activity physical and disturbing quality sleep , two factors important things that influence production hormone growth . Previous studies support findings This includes Johnson et al. (2024) who found that children with duration more use of gadgets from one hour per day risky experienced stunting, and Kim et al. (2023) which makes the connection exposure to gadgets with disturbance pattern sleep and activity physical . In addition , Lee et al. (2025) emphasized that exposure ray blue from

screen can lower secretion hormone growth consequence disturbance Sleep chronic .

Based on findings this , settings use of gadgets wise become an important step For support optimal growth , accompanied by with improvement activity physical , pattern Eat balance and supervision Sleep child . Support education from power health is also needed For minimize risk growth hampered by the improper use of gadgets controlled .

3. Connection Use of Gadgets With Child Development

Analysis results show existence significant relationship between intensity use of gadgets with development child aged 2–5 years (ρ value = 0.000). Childhood is period important thing that will influence development next , so that duration and type use of gadgets must be be aware of excessive use of gadgets can hinder development social-emotional , language , cognitive , and motor skills (Nurmayanti et al., 2024; Nuraini et al., 2023). In addition , the impact other negatives such as disturbance sleep , decline interaction social , and the emergence of behavior aggressive can also be happened . Even though Thus , the use of gadgets in a precise and controlled can give benefit educational and broadening outlook children (Mata & Aceh, 2018; Sunita & Mayasari , 2018). Therefore that , parental supervision with election appropriate content age , and restrictions duration become the key to having an impact on gadget use positive (Iswidharmanjaya , 2014).

Limitations

Study This own a number of limitations , including difficulties in filling questionnaire Because some parents / guardians not enough understand question so that need explanation additional , measurement the child's height and weight are less than optimal as a result condition busy integrated health posts , as well as delay filling questionnaire Because researchers must wait availability respondents who are unable to attend present .

Conclusion

There is significant relationship between intensity use of gadgets with growth and development child ages 2-5 years . The majority child using gadgets with intensity moderate . Excessive use of gadgets cause risk disturbance development and growth , including suboptimal weight and height . Therefore that 's important for parents For

supervise and limit duration use of gadgets to grow flower child can walk in accordance age .

Consideration Ethical

In research This No there is conflict interest ethics .

Saying Thank You

Majority child using gadgets with intensity medium , and found that improvement intensity gadget use has an effect negative to development child as well as growth weight and height . Supervision strict and restrictive duration The use of gadgets is very necessary for growth and development child can be optimal according to with his age .

Conflict Interest

In research This No there is conflict interest .

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