

Parenting stress against symptoms of gadget addiction in elementary school age during the COVID-19 pandemic



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ABSTRACT

Introduction: The COVID-19 pandemic creates parenting stress for parents. When parents experience parenting stress, the solution that can be done is to give the gadgets to make children calm at home so they don't interfere with their parents' daily activities. This study aims to analyze the effect of parenting stress on symptoms of gadget addiction in elementary school-aged children.

Methods: The research design used the quantitative correlation method. The research was carried out in July - August 2021. The subjects of this study were parents whose children were in elementary school in Surabaya involving 130 respondents who were taken by random sampling technique. Determination of the parenting stress scale and gadget addiction symptoms using the Parental Stress Scale (PSS) and Internet Addiction Test (IAT) questionnaires. Data analysis used a simple linear regression test with a significance value of $p < 0.05$.

Result: The results of the analysis show that parental stress has an effect on symptoms of gadget addiction in elementary school-aged children ($F=6,821$, $sig.=0,000$, $R^2=0,554$) with the regression equation $Y=-17,198 + 1,360 X$.

Conclusion: The higher the stress level of parenting, the higher the symptoms of gadget addiction in elementary school-age children. The need to overcome the stress of parenting to prevent early symptoms of gadget addiction in children. Family and professional support is needed to overcome the stress of parenting and how to prevent gadget addiction in elementary school-aged children.

Keywords: Parenting Stress, Gadget Addiction Symptoms, Elementary School Children.

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INTRODUCTION

Parenting before the digital era that was applied by parents was more by giving love, meeting daily needs and monitoring the development of their children.¹ This shifts in the digital era, where parental care places more emphasis on monitoring children's development in the field of technology with its positive and negative effects.² In addition, during the COVID-19 pandemic, there has been a need and the need to maintain social distance in interacting as a form of effort to reduce the number of positive COVID-19 patients.³ The prevention carried out has an impact on changing the teaching and learning process of children where the Indonesian government enforces the learning of all students from elementary to university levels to implement learning from home with an online system.³ Busy

parents cause neglect in parenting, neglect to provide a comfortable environment for children and become less warm in giving affection to children. This triggers parenting stress on parents.⁴

Parenting stress is a problem that must be handled because it affects the emotional condition of parents and children, the problem of parenting stress in Indonesia is included in the high category.⁵ Research from Brown, Doom, Lechuga-Pena, Watamura, & Koppels (2020) which states that parents experience stress during the COVID-19 pandemic due to low income, job loss/inability to support family, uncertainty about the future, unable to socialize with others, friends or family, difficulty in relationships, general stress, poor physical and mental health, boredom with children, difficulty managing

children's academics, fear of viruses, lack of support, and difficulty managing work from home.⁶ Parents do not know and understand how to properly care for children in the digital era. Coupled with the process of learning from home during the COVID-19 pandemic using an online system, children interact more often with gadgets which can increase the incidence of gadget addiction. Online learning during COVID-19 makes parents provide gadgets with the aim that children follow the learning process well and calmly at home so that it does not interfere with parents' daily activities. The lack of experience and skills of parents makes their authority to their children decrease and weaken in the use of digital media, so that almost all parents (90%) allow their children to use games on smartphones⁷, YouTube (45%), and subscription video

viewing activities, for example: Vission plus, Viu, Vidio (40%).⁸ Some of these activities become the daily habits of parents who ignore the limitations of media use and prohibited content.⁹

The negligent behavior of parents is marked by an increase in the number of gadgets used in the Southeast Asia region. From 3,917 samples of children aged 3-8 years, 98% of respondents are gadget users, 67% of them are parent's gadgets, 18% use gadgets belonging to relatives or family, and the remaining 14% use their own gadgets (asian parents). Meanwhile, those who seek treatment and rehabilitate addiction to gadgets (online games) at the Mental Poly Regional General Hospital (RSUD) Dr Soetomo are 3 children/day.¹⁰ Data from interviews conducted with 17 guardians of SD Islam Saroja Kutisari Utara, Surabaya found that 10 parents forbade their children to use cellphones after online learning, but did not control their children's habits again, because they had to work. Meanwhile, the other 6 parents did not forbid their children to use their cellphones after online learning and only 1 parent took their cellphones back after lending their children to school.

Gadget addiction in children has negative consequences that need to be understood by parents¹¹, most parents in Indonesia apply indifferent parenting (lack of communication, lack of support and low control) regarding the internet, so that it has an impact on drowning out the internet. children to the negative side of the internet.¹² The attitude of parents who are less attentive plus a little knowledge and experience in digital parenting tends to make parents give up giving smartphones to control children's obedient behavior.^{4,13} A survey on parenting practices of parents in Indonesian and Australian populations with children aged 2-12 years, shows that most parents still use dysfunctional parenting practices (yelling) resulting in emotional and behavioral problems in children which makes parents less satisfied and frustrated with themselves (no autonomy, lack of competence in parenting and weak parent-child attachment), parenting is also strongly influenced by age maturity, whether they care as single parents, low level of education. high school, steady work, away

from poverty and within the scope of the nuclear family.^{14,15}

METHODS

Study Design

This research design uses the quantitative correlation method.

Data Collection

The population in this study were all parents whose children attended the Saroja Kutisari Utara Surabaya Islamic Elementary School of 336 people. The research sample was 130 respondents who were taken by probability sampling with proportional random sampling technique in July-August 2021. The reason for taking the research place at the Saroja Kutisari Utara Surabaya Islamic Elementary School was due to the results of a preliminary study through interview techniques with 17 parents, stating that they allowed and gave gadgets to children, both gadgets belonging to parents and gadgets intended for their own children. The reason for the permission to use gadgets that parents gave their children was to facilitate online learning, but it was found that 10 parents forbade their children to use cellphones after online learning, but did not control their children's habits again, because they had to work. Meanwhile, the other 6 parents did not forbid their children to use their cellphones after online learning and only 1 parent took their cellphones back after lending their children to school.

Measurement of parenting stress using the Parental Stress Scale (PSS) questionnaire¹⁶ and measuring gadget addiction using the Internet Addiction Test (IAT) questionnaire.¹⁷ The Parental Stress Scale (PSS) questionnaire according Berry & Jones (1995) showed a high level of internal reliability of 0.83 and test-retest reliability of 0.81. The validity of the scale was assessed by comparing the PSS questionnaire with several other forms of stress measuring tools, where the results indicated that the scores on the PSS were significantly related to the results on these other measuring instruments. While the Internet Addiction Test questionnaire, tested the validity with a sample of 154 people, the correlation value of each question was obtained with a range of 0.328-0.689 and the Cronbach alpha

reliability of 0.895.¹⁸ These results state that the Parental Stress Scale (PSS) and Internet Addiction Test (IAT) questionnaires are valid and reliable for use in research.

The first procedure in this research is that after obtaining permission from the research ethics commission and the research site, a questionnaire is distributed using the google form media to parents in the respondent group who are willing to participate in the study with evidence of filling out informed consent. In this study, participants received questionnaires in the form of demographic data (parental age, child age, occupation, parental education, and child gender), a Parental Stress Scale (PSS) questionnaire, and Internet Addiction Test (IAT).

Data Analysis

Data analysis using Simple Linear Regression test with hypothesis $p < 0.05$. The results of the data obtained will be analyzed through the pre-requisite test stages of analysis starting with the normality test, linearity test, heteroscedasticity test, and hypothesis testing.

RESULTS

The characteristics of the respondents consisted of the age of the parents, the age of the child, the education of the parents, the occupation and the sex of the child. The results showed that from 130 parents the mean age was 34.98 (late adult age) with most (66.9%) having a secondary education background and almost half (44.6%) working as private employees. The mean age of the child respondents is 10.15 (childhood) and most (71.5%) are male.

Normality Test

Based on the P-P plot graph above, it can be seen that the distribution of the data seen from the points follows and approaches the diagonal line which indicates that the research data has a normal distribution and distribution.

Heteroscedasticity Test

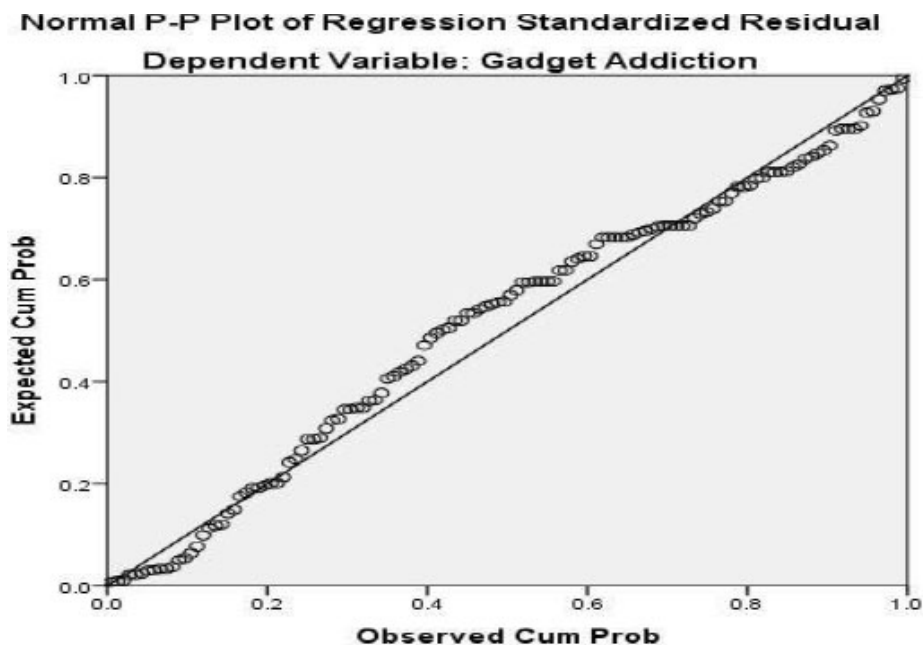
The scatterplot shows the scattering of the data points and does not form a pattern. So it can be concluded that the simple linear regression model is free from heteroscedasticity problems.

Table 1. Characteristics of Respondents Aged Parents and Children.

Age	Mean	Median	SD	Min-Max
Parent	34.98	35.00	4.82	25-50
Child	10.15	11.00	1.59	7-12

Table 2. Characteristics of Respondents Based on Occupation, Parents Education, Gender of Children.**Gender of Children**

Variable	Frequency (n)	Percentage (%)
Parent Education		
Basic Education	3	2.3
Middle Education	87	66.9
High Education	40	30.8
Total	130	100
Occupation		
Housewife	29	22.3
Private sector employee	58	44.6
Civil servant	26	20.0
Entrepreneur	17	13.1
Total	130	100
Child Gender		
Male	93	71.5
Female	37	28.5
Total	130	100

**Figure 1. Normality Test Results.**

Based on table 4 below, a simple linear regression equation is obtained as follows $Y = -17,198 + 1.360 X$. From the regression equation above, it can be explained that the constant value indicates that if parenting stress is considered zero, then the symptoms of gadget addiction

are 1.360. While the coefficient value shows that parenting stress has increased by one point, it will cause an increase in symptoms of gadget addiction by 1.360.

Based on Table 5. Showing that the results of the t-test, the value of $t_{count} = 12,601 > 1,978 t_{table}$ and the value of

$sig = 0.000 < 0.05$, it can be concluded that parenting stress significantly affects the symptoms of gadget addiction in elementary school-age children.

The table below shows that the coefficient of determination is $0.550 = 55\%$, this means that the independent variable parenting stress affects the game addiction variable by 55% and the rest is influenced by other variables not included in the study. Based on the analysis, it can be concluded that there is an influence of parental stress on the symptoms of gadget addiction in elementary school-aged children.

DISCUSSION

Stress usually appears in various aspects, including parenting stress. One of the triggers of stress felt by parents is the COVID-19 pandemic situation and the child's learning process during the pandemic which is carried out online from home which makes parents reduce their authority over their children and weaken the use of digital media so that parents allow children to use gadgets for longer interactions.^{6,7} The results of the study indicate that parenting stress has an effect on symptoms of gadget addiction in elementary school-aged children. Parenting stress arises due to environmental stressors or demands related to their role as parents.¹⁹ The COVID-19 pandemic has changed all aspects of life, forcing parents to be smart in managing work matters, taking part in their children's education, as well as taking care of household chores that require a lot of energy and time. This situation can increase the risk of stress and the emergence of negative emotions in parents so that parents behave indifferently to their children.²⁰ The negligent behavior of parents and the lax rules for using gadgets accepted by children, make children interact more often with gadgets which can ultimately increase the incidence of gadget addiction.

Research from Dong, Yang, Lu & Hao (2020) states that children and adolescents in China use gadgets excessively during the COVID-19 pandemic. This happens because children and adolescents use gadgets to study, play online games, shop, watch movies, social media and chat.²¹ This

Table 3. Linearity Test Results.

			Sum of Squares	df	Mean Square	F	Sig.
(Combined)			19093.844	31	615.930	6.821	.000
Gadget	Between	Linearity	15470.844	1	15470.844	171.333	.000
Addiction	Groups	Deviation	3623.000	30	120.767	1.337	.145
*		from					
Parenting		Linearity					
Stress	Within Groups		8849.087	98	90.297		
	Total		27942.931	129			

Table 4. Simple Linear Regression Test Result.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-17.198	6.736		-2.553	.012
	Parenting	1.360	.108	.744	12.601	.000
	Setress					

Table 5. Hypothesis Test Result.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-17.198	6.736		-2.553	.012
	Parenting	1.360	.108	.744	12.601	.000

Table 6. Coefficient of Determination Test Result (R2).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.744 ^a	.554	.550	9.871

is also supported by research which found that there was an increase in excessive internet use in children accompanied by parental attention to fewer children and low family function.²² The decrease in parental attention to children and the lack of family roles are evidence that parents are experiencing parenting stress caused by the COVID-19 pandemic factor.

Parents in Indonesia apply indifferent parenting (lack of communication, lack of support, and low control) regarding the internet so that it has the effect of sinking children into the negative side of the internet.¹² The attitude of inattentive parents plus a little knowledge and experience in digital parenting tends to make parents give up giving smartphones to control children's obedient behavior.^{4,13} This is supported by the results of research where most of the respondents have a secondary education background and from the results of interviews, almost half of them

do not know about good digital parenting, so when the learning system is carried out online, respondents tend to give more flexibility to the use of gadgets with the aim that children follow the learning process well and calmly at home so that it does not interfere with the parents' daily activities which can add to the stress experienced. The lack of experience and skills of parents makes their authority over their children reduced and weakened in the use of digital media so that almost all parents allow their children to use games on smartphones.⁷

The economic conditions faced by parents during the COVID-19 pandemic are also a factor that affects parenting stress. From the results of this study, it was found that almost half of the respondents worked as private employees, and from the results of interviews, respondents said that almost all of the finances during the pandemic situation were very impactful, and some were affected by salary cuts

to termination of work contracts which caused loss of financial resources. The family's economic instability and low-income cause parents to care for their children with limited resources further exacerbating parenting stress.¹⁹ The emergence of negative emotions in parents if not handled will affect the welfare of children at home.²⁰ So that children tend to use gadgets to seek pleasure due to a lack of parental attention and affection.

Parental attention and control when children use gadgets are very necessary. This is supported by the statement of Dong et al., (2020) which states that gadget addiction is associated with a lack of parental attention, the environment, and parenting patterns.²¹ Excessive use of gadgets in children will have a negative impact because it can reduce concentration power and increase children's dependence to be able to do various things that they should be able to do on their own. Another impact is the increasingly open internet access in gadgets that display everything that should not be seen by children.²³ If it is not immediately addressed, gadget addiction can harm children's health and

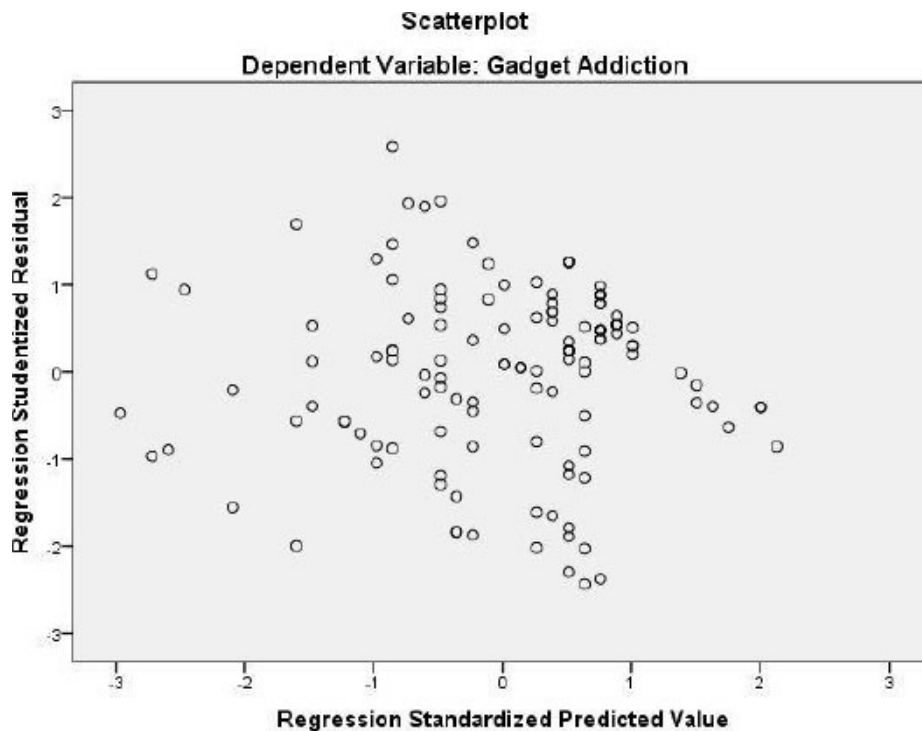


Figure 2. Heteroscedasticity Test Result

can even affect their psychology.²⁴ Parents should also know the part of utilizing and improving technology so that its use in children is more efficient.²⁵

CONCLUSION

The stress of parenting plays a very important role in the symptoms of gadget addiction in elementary school-aged children during the COVID-19 pandemic. Continuous stress will make the family unhappy and stress levels will increase. Parents must immediately realize and overcome the stress of parenting experienced and pay attention to their children to the problem of gadget addiction because early prevention can prevent this incident. In addition, the role of each family member also plays an important role in helping children overcome gadget addiction symptoms.

DISCLOSURE

Author Contribution

All authors have contributed to this research process, including conception and design, analysis and interpretation of the data, drafting of the article, critical revision of the article for important

intellectual content, final approval of the article, collection and assembly of data.

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Conflict of Interest

There is no conflict of interest for this manuscript.

Ethical Consideration

This research was approved by the Health Research Ethics Committee of Nahdlatul Ulama Surabaya University. Letter of exemption No.179/EC/KEPK/UNUSA/2021.

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