
Parenting Style and Stimulation of Psychosocial Development on the Psychosocial Development of Pre-School Children with Stunting

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ABSTRACT

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Stunting is a condition of impaired growth in children under five caused by chronic malnutrition, particularly within the first 1,000 days of life, resulting in children being too short for their age. This issue is crucial because stunting also impacts children's motor skills and psychosocial development. The problem of malnutrition predominantly occurs in developing countries, where approximately 80% of stunted children are found in 24 countries across Asia and Africa. Indonesia has the highest prevalence, followed by India, China, Nigeria, and Pakistan. This study analyzes the influence of parenting styles and psychosocial stimulation on preschool-aged children experiencing stunting development. The research design uses an analytical observational method with a cross-sectional approach. The study sample consists of stunted children aged 3-6 years and their parents in Nganjuk Regency, totaling 150 respondents. Sampling was conducted purposively, and data were collected through the PSDQ questionnaire for parenting style, the EC HOME for psychosocial stimulation, and the KMME for psychosocial development. Multiple linear regression analysis was employed, with a significance level of ($\alpha=0.05$). The analysis results indicate a significant effect of psychosocial stimulation on the psychosocial development of stunted children, with a p-value of $0.001 \leq \alpha = 0.05$. Responsive parenting and active parent-child interaction are crucial in supporting children's development. Therefore, it is essential to improve children's nutritional status through proper caregiving approaches to ensure they grow with normal nutritional status and achieve optimal development in the future.

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INTRODUCTION

Stunting is a condition of failure to grow in children under five years of age (toddlers) due to chronic malnutrition, especially in the first 1000 days of life, so the child is too short for his age and can impact his growth and development (Nurhayati et al., 2020). Growth becomes less than optimal, and developmental obstacles occur early in life, resulting in lower educational attainment in the future. Malnutrition occurs when the baby is still in the womb and in the early period after the child is born, but it only becomes apparent after the child is 2 years old (Black et al., 2017).

Stunting is a major nutritional problem that occurs in developing countries. UNICEF states that around 80% of stunted children are in 24 developing countries in Asia and Africa. Indonesia is the fifth country with the highest prevalence of stunted children after India, China,

Nigeria, and Pakistan. The Indonesian Nutritional Status Survey (SSGI) shows that the prevalence of stunting in Indonesia has decreased from 24.4% in 2021 to 21.6% in 2022, the target for reducing stunting in 2024 is 14%. Based on data from the health profile of East Java province in 2023, stunting was 18.4%, while in Nganjuk Regency, it was 6.99%. Stunting is a growth disorder that can indicate a disorder in the body's organs, where one of the organs most quickly damaged is the brain (Primasari & Keliat, 2020). This problem becomes crucial after it is known that stunting contributes to motor aspects and psychosocial disorders. Furthermore, detrimental psychosocial disorders can also continue into adolescence, where height can affect self-efficacy and peer interactions (Picauly & Toy, 2013). Children with stunting conditions tend to play at home because their physical condition is susceptible to infectious diseases, which makes

parents only allow children to play indoors without interacting with peers. By reducing egocentric feelings such as wanting to share toys, children tend to hesitate and be embarrassed when facing new situations, which impacts the success of achieving the next stage of development tasks if they are not met (Alifatin, 2022).

In a study conducted by Jumilia et al. (2023), it was shown that 46.7% of the impact of stunting is at risk for psychosocial development, and a study conducted by Amelia et al. 1 (2023) obtained a p-value of 0.002 ($\alpha \leq 0.05$) that psychosocial stimulation has a close relationship with the growth and development of children aged 3-5 years (Amelia et al., 2023), as well as research conducted by Ruswiyani and Irviana (2024) through a literature study, it was found that adequate psychosocial stimulation, good maternal support, and quality child care can play an important role in improving the cognitive, language, and motor development of stunted children (Ruswiyani & Irviana, 2024). So, it can be concluded that psychosocial development can be improved with the right parenting style and developmental stimulation given by parents to their children (Van De Kolk et al., 2019); active and responsive interaction from parents plays an important role in recognizing early developmental disorders in children and providing stimulation that supports the child's overall growth and development. However, many parents of stunted children do not yet understand the importance of parenting patterns and social stimulation in optimizing child development (Ruswiyani & Irviana, 2024).

There are still many problems that occur based on the data above, so researchers feel the need to conduct research on parenting style and psychosocial stimulation on the psychosocial development of pre-school children with stunting.

METHOD

This research passed ethical clearance on August 28, 2024, with number 001651/EC/KEPK/I/08/2024. This study uses an analytical observational research design with a cross-sectional approach. The study was conducted in Nganjuk Regency. The sample in this study was stunted children aged 3-6 years and parents in Nganjuk Regency, totaling 150 respondents. The sampling technique in this study used purposive sampling. Parenting style data collection used the PSDQ questionnaire

consisting of 32 questions to assess parenting style with a score of 5 for always answers, a score of 4 for often answers, a score of 3 for sometimes answers, a score of 2 for rarely answers, a score of 1 for never answers. Psychosocial stimulation data collection used the EC HOME questionnaire consisting of 55 questions with a score of 1 for yes and 0 for no answers. Psychosocial development used the KMME questionnaire with a score of 1 for yes and 0 for no answers.

Data analysis was performed using univariate, bivariate, and multivariate analysis. Univariate data analysis aims to describe each independent and dependent variable. Data is collected, then grouped according to each data type, and entered into a frequency distribution table. Bivariate analysis aims to see the relationship between independent variables and dependent variables. Multivariate analysis determines the effect of more than one independent variable on one dependent variable.

RESULTS

Table 1. Respondents characteristics

Variables	f	%
Parental Education Level		
No school	0	0
Elementary school	0	0
Junior high school	18	12.0
Senior high school	129	86.0
College	3	2.0
Number of children		
1 child	75	50.0
2 children	45	30.0
3 children	15	10.0
>3 children	15	10.0
Income		
< 1 Million	30	20.0
1-2 million	45	30.0
>3 million	75	50.0
Child Age		
24-<36 months	45	30.0
36-<48 months	60	40.0
48-<60 months	45	30.0
Child Gender		
Man	105	70.0
Woman	45	30.0

Table 1 shows almost all respondents have a high school education level of 129 (86.0%). Almost half of the respondents with 2 children are 45 (30.0%). Almost half of the respondents with an income of 1-2 million are 45 (30.0%). Almost half of the respondents with children aged 26-<48 months are 60 (40.0%). Most of the respondents who have boys are 105 (70.0%).

Table 2. Relationship between parenting style and psychosocial development

Characteristics	Good			Enough		
	N	f	%	f	%	
Parenting style	Authoritative	60	50	83.3	10	16.7
	Authoritarian	30	30	100.0	0	0
	Permissive	60	40	66.7	20	33.3
Total	150	120		30		

Notes: X1=14,583 ; significant p value = 0.001

Table 2 shows the influence of parenting style on the psychosocial development of pre-school children with stunting in Nganjuk Regency. In the parenting style variable, 83.3% of the case subjects (stunting) obtained an Authoritative parenting style, and from the case

subjects (stunting) obtained 66.7% a Permissive parenting style. The chi-square test analysis showed a significant relationship between parenting style and the psychosocial development of pre-school children with stunting with a p-value=0.001.

Table 3. Relationship between psychosocial stimulation and psychosocial development

Characteristics		Good			Enough	
		N	f	%	f	%
Psychosocial Stimulation	Currently	122	107	87.7	15	12.3
	Tall	28	13	46.4	15	53.6
Total		150	120		30	

Notes: X2=24,250; significant p value = 0.000

Table 3 shows the influence of Psychosocial Stimulation on the psychosocial development of pre-school children with stunting in Nganjuk Regency. In the Psychosocial Stimulation variable, 87.7% of the case subjects (stunting) had moderate psychosocial

stimulation. The analysis using the chi-square test showed a significant relationship between Psychosocial Stimulation on the psychosocial development of pre-school children with stunting with a p-value=0.000.

Table 4. Logistic regression analysis of parenting style and stimulation of psychosocial development on the psychosocial development

Variables in the Equation					
Variables	B	SE	df	Sig.	Exp(B)
Constant	-1.386	.204	1	.18	.073
Parenting style	-.981	.477	1	.159	.421
Psychosocial Stimulation	1,821	.488	1	.001	8.294

Notes: significant (p = 0.001), and beta value 8.294

The results of the multivariate analysis between the independent variables and the dependent variable with the logistic regression test in Table 4.3 show that the independent variable that is a factor influencing the psychosocial development of pre-school children with stunting is psychosocial stimulation (p-value=0.001), and the beta value of 8.294 statistically obtained significant results. It can be interpreted that psychosocial stimulation is a factor influencing the psychosocial development of pre-school children with stunting.

DISCUSSION

The influence of parenting style on the psychosocial development of pre-school children

The analysis results show that parenting style influences the development of pre-school children with stunting. The results of this study are in line with (Yulianto et al., 2017), which states that there is a relationship between parenting patterns and psychosocial development. Good parenting patterns can affect the psychosocial development of their children. According to Dhiu & Fono (2022), authoritative and democratic parenting patterns can develop psychosocial aspects in children and affect the

child's personality. If the parenting pattern applied by parents is positive, it will also have a positive impact. Likewise, if the parenting pattern applied by parents is negative, it will also have a negative impact.

Parenting patterns in feeding stunted children without considering nutritional needs, correct feeding frequency, and types of food that are suitable for growth and development can be caused by the lack of knowledge of mothers about balanced nutrition due to low maternal education. Food availability in the household will impact the variety and type of food given (Putri et al., 2023). Stunting will have an impact on the growth and development of children. Psychosocial development is a psychological, behavioral, and social adjustment in line with a person's development from infancy to adulthood based on eight stages of human psychological and social maturity (Sutriyanti, 2020).

Child development can be improved by applying an interactive parenting pattern between parents and children that stimulates children to help improve their development. This can also be applied to stunted children, even though children with stunting have lower development (Primasari & Keliat, 2020). One of the factors in the family that plays an important role in forming children's psychosocial development is childcare practices. The family is the environment that first accepts the presence of children (Neherta et al., 2023).

The influence of psychosocial stimulation on the psychosocial development of pre-school children

There is an influence between psychosocial stimulation and the psychosocial development of pre-school children with stunting. Stimulation will create a sense of security and comfort and increase children's self-confidence so that children are more developed and more sensitive to the environment. The brain's communication system between nerve cells greatly influences children's cognitive, physical, and mental development (Rahmawati & Agustin, 2020). Stimulation or stimulation is either from family or from outside, and one of them is school. Stimulation can be in toys, child socialization, and involvement of mothers and other family members. Stimulation can affect child development if given routinely or continuously to children (Maghfuroh & Salimo, 2020).

The results of this study are not in line with the research of Fathadika and Pudjiati (2023), which stated that there was no effect of psychosocial stimulation on psychosocial

development in stunted children with a p-value = 0.063. Children with stunting cannot receive maximum stimulation due to nutritional problems they experience. So that the stimulus or stimulation does not have a significant effect (Fathadika & Pudjiati, 2023). Psychosocial stimulation is not only an important component in supporting optimal child development but is also a strategy for overcoming the impact of stunting. Psychosocial stimulation must be a program that aims to reduce the prevalence of stunting. So, it is necessary to provide appropriate stimulation to children with stunting to facilitate their development (Ruswiyani & Irviana, 2024)

The influence of parenting style and psychosocial development stimulation on pre-school children's development

The results of the multivariate analysis can be interpreted that psychosocial stimulation is a factor influencing the psychosocial development of pre-school children with stunting. The results of this study are not in line with Azrimaidaliza et al. (2021), which state that parenting patterns are related to child growth and development with a p-value of 0.033. Stunting is the most important factor in child growth and development, so efforts are needed to improve children's nutritional status to overcome this. Good parenting patterns are expected to be maximized during children's growth and development so that they have normal nutritional status in adulthood and will also impact brain and social-emotional development.

The results of this study are not in line with the research of Fathadika and Pudjiati (2023), which stated that there was no effect of psychosocial stimulation on psychosocial development in stunted children with a p-value = 0.063. Children with stunting cannot receive maximum stimulation due to nutritional problems they experience, so the stimulus or stimulation does not have a significant effect (Fathadika & Pudjiati, 2023).

Psychosocial stimulation is an important component in supporting optimal child development and a strategy for overcoming the impact of stunting. Psychosocial stimulation should be a program aimed at reducing the prevalence of stunting. So, providing appropriate stimulation to children with stunting is necessary to facilitate their development (Ruswiyani & Irviana, 2024).

CONCLUSION

The psychosocial development of children characterized by stunting is influenced by parenting patterns (Parenting Style) and psychosocial stimulation provided. Positive parenting patterns, such as authoritative and democratic and regular psychosocial stimulation, can support the optimal psychosocial development of children even though the child is

stunted. However, low parental knowledge about nutrition and education is an inhibiting factor. Psychosocial stimulation plays an important role in creating a sense of security, comfort, and confidence in children so that it can help reduce the impact of stunting. Therefore, programs that focus on improving parenting patterns and providing appropriate psychosocial stimulation need to be implemented to support the development of children with stunting.

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