

The Influence of Parenting Style and Stimulation on Social-Emotional Development: Study of Stunting and Not Stunting Toddlers in Bogor Regency

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Abstract

Stunting is a chronic nutritional problem that can disrupt children's growth and development, one of which is social-emotional development. This research generally aims to analyze the influence of parenting style and social-emotional stimulation on children's social-emotional development. The research design uses explanatory survey methods. The research involved 41 stunting toddlers and 41 non-stunting toddlers aged 2-3 years and their mothers as main caregivers who were selected purposively and lived in Cibodas Village, Rumpin District, Bogor Regency, West Java on July 2023. Data was analyzed using descriptive analysis and inference. The results show that stunting toddlers are more commonly found in boys, families with low-educated mothers and fathers, and low incomes. Even so, in this study no significant different test results were found. The results of the correlation test show that age of father and mother is significantly positively related to authoritative parenting style. It can be interpreted that as father and mother get older, the authoritative parenting style is possibly applied more frequently. The results of the regression test show that authoritative parenting styles and social-emotional stimulation have a significant positive effect on social-emotional development. The application of good authoritative parenting style and social-emotional stimulation will improve social-emotional development in both stunting and non-stunting children.

Keywords: parenting styles, social emotional development, social-emotional stimulation, stunting, toddlers

Abstrak

Stunting merupakan masalah gizi kronis yang dapat mengganggu pertumbuhan dan perkembangan anak, salah satunya perkembangan sosial-emosional. Penelitian ini secara umum bertujuan untuk menganalisis pengaruh gaya pengasuhan dan stimulasi sosial-emosional terhadap perkembangan sosial-emosional anak. Desain penelitian menggunakan explanatori dengan metode survei. Penelitian melibatkan 41 batita stunting dan 41 batita tidak stunting usia 2-3 tahun beserta ibu sebagai pengasuh utama yang dipilih secara purposive dan berdomisili di Desa Cibodas, Kecamatan Rumpin, Kabupaten Bogor, Jawa Barat pada bulan Juli 2023. Analisis data dilakukan dengan menggunakan analisis deskriptif dan inferensia. Hasil menunjukkan batita *stunting* lebih banyak ditemukan pada anak laki-laki, keluarga dengan ibu dan ayah berpendidikan rendah, serta pendapatan rendah. Meski begitu, pada penelitian ini tidak ditemukan hasil uji beda yang signifikan. Hasil uji korelasi menunjukkan usia ayah dan ibu berhubungan positif signifikan dengan gaya pengasuhan otoritatif. Hal tersebut dapat diartikan semakin bertambahnya usia ayah dan ibu, maka memungkinkan penerapan gaya pengasuhan otoritatif semakin sering dilakukan. Hasil uji regresi menunjukkan gaya pengasuhan otoritatif dan stimulasi berpengaruh positif signifikan terhadap perkembangan sosial-emosional. Penerapan gaya pengasuhan otoritatif dan stimulasi sosial-emosional yang baik akan meningkatkan perkembangan sosial-emosional pada anak stunting maupun tidak stunting.

Keywords: batita, gaya pengasuhan, perkembangan sosial emosional, stimulasi sosial-emosional, *stunting*

Introduction

Indonesia will experience a golden age in 2045 and is targeted to become a developed country and have superior, quality and characterful human resources (HR) (KEMENKO PMK, 2022). The generation that will create a Golden Indonesia 2045 is the younger generation. Children are the nation's assets and the successors of the nation's next generation. However, children's growth and development can be disrupted due to nutritional health problems, one of which is stunting. Based on research by Perkins et al. (2017), almost 40 percent of children under five years old experience growth and development disorders, one of the main factors is stunting. Reducing stunting has tremendous implications for child development and the formation of quality human resources (Perkins et al., 2017).

Stunting is a chronic nutritional problem caused by a lack of nutritional intake for a long time which is characterized by a height below standard (z -skor ≤ -2 SD and ≥ -3 SD) (Kemenkes RI, 2022). Stunting can occur in the first 1000 days of life caused by many factors such as socio-economic status, food intake, maternal nutritional status, infectious diseases, and micronutrient and environmental deficiencies (WHO, 2015). Research conducted by Setiawan and Machsus (2023) shows that family socio-economic status and health are the factors that most influence the incidence of stunting. The research results of Noviani et al. (2023) shows that families who marry at a young age are one of the factors in the family's low socio-economic status and have tendency to adopt a permissive parenting style in the family. In addition, research conducted by Podlesak et al. (2017) found authoritarian and permissive parenting styles were positively correlated with picky eating behavior in children and parent's mealtime strategies could have a negative impact on children's feeding. This can influence the incidence of stunting considering that the incidence of stunting is influenced by food intake factors given by parents (WHO, 2015).

The prevalence rate of stunting in Indonesia has decreased from year to year, from 27.7 percent in 2019 (SSGBI, 2019), 24.4 percent in 2021 (SSGI, 2021), and currently to 21.6 percent in 2022 (SSGI, 2022). Even so, this figure does not meet the standards set by WHO, namely less than 20 percent (WHO, 2015) and is still quite far from meeting the government's planned target of 14 percent in 2024 (KEMENSETNEG RI, 2023). Bogor Regency ranks 6th in West Java with a prevalence reaching 24.9 percent (SSGI, 2022). This figure is still above WHO standards, so special attention still needs to be paid to overcoming the problem of stunting.

Apart from affecting growth, stunting can also affect children's development in terms of cognitive, motor and psychosocial aspects (Murniati, 2022). According to Perkins et al. (2017), children affected by stunting are often associated with apathy, avoidance of social environments, low cognitive levels, and lower learning outcomes and educational attainment. This will have an impact on reducing economic prospects in the future and risks the transfer of nutritional problems and poverty between generations. According to research by Laily and Indarjo (2023), stunting has a significant relationship with social-emotional development ($p= 0.002$). Besides that, research by Ernawati et al. (2014) also found there is a significant relationship between stunting and social-emotional development with p -value 0.036.

Even though stunting can affect children's development, other research suggests that the development of stunted children can still be pursued (Ain et al., 2023; Boulom et al., 2022; Gibney, 2004). This can be done by knowing and practicing the habits of

families of children who are not stunted, who come from the same socio-economic status through a positive deviance approach (Gibney, 2004). Ain et al. (2023) stated that daily family habits can be a factor that supports children's development even though parents do not have adequate knowledge regarding health and come from families with low socio-economic status. According to Boulom et al. (2022), a combination of practices within the family such as access to food, social support, motivation, autonomy, and the mother's perspective on children's health can be an opportunity for stunted children to have good development. Based on this description, it can be assumed that families who have stunted children still have the opportunity to improve child development, one of which is improving aspects of parenting carried out by parents.

The parenting style used by parents has a big influence on children's growth and development (Konopka et al., 2018 & Bornstein et al., 2018). Parenting style is a typical way parents act, such as the way they think, feel and behave in raising children (Levin, 2011). The parenting styles that are usually applied are divided into three, namely: (1) authoritative, (2) authoritarian, and (3) permissive (Baumrind, 1991). According to Konopka et al. (2018), the authoritative parenting style is the most beneficial parenting style for children's development because parents exercise high levels of control but are also accompanied by emotional warmth. Other research shows that an authoritarian parenting style has a negative impact on children's social abilities (Mardiah & Ismet, 2021). This parenting style causes children to tend to close themselves off, lack self-confidence, and be embarrassed to face and interact with the social environment (Mardiah & Ismet, 2021).

Social-emotional skills in children appear starting from birth when children are stimulated consistently by their parents. Stimulation is participation by parents or caregivers in activities that focus on encouraging children's development (UNICEF, 2014). Stimulation will help children's social-emotional development to be optimal (Hasanah et al., 2018). Children who are given regular and targeted stimulation will develop more quickly than children who receive little or no stimulation (Latifah et al., 2010). According to Halle and Darling-Churchill (2016), the development of social and emotional competence in children is an indicator of success and a good quality of life in the future. Social-emotional development is a child's ability to regulate emotions and behavior as well as the willingness to participate and interact socially well (Achenbach & Rescorla, 2000). Children who have good social-emotional skills are better able to resolve conflicts with peers, able to understand emotions, enjoy helping, and cooperative with others (Jones et al., 2015).

According to Briggs-Gowan et al. (2006), social-emotional development problems in infants and toddlers are not temporary, so they will have an impact on the next stage of development. Based on research conducted by Rasheed et al. (2021), it was found that children with poor health status and parents who provide little or inappropriate developmental stimulation for their children are at risk of experiencing developmental delays and emotional problems. According to Black et al. (2017), children's development requires nurturing care that includes health, nutrition, security and safety, responsive (authoritative) care, and early learning (stimulation) provided through the interaction of parents, family and the child's environment.

There is not much research related to stunting that is linked to aspects of child care and development in Indonesia because most research focuses more on aspects of children's growth and physical health. Previous research related to parenting styles, social-emotional stimulation, and social-emotional development in stunting and non-

stunting children was conducted, among others, by Perkins et al. (2017), Ernawati et al. (2014), Hasanah (2023), Arsyad et al. (2020), and Nahar et al. (2020).

This research aims to (1) identify differences in child characteristics, family characteristics, parenting styles, social-emotional stimulation, and social-emotional development between stunted toddlers and the control group (not stunted); (2) analyze the relationship between child characteristics and family characteristics with parenting styles, social-emotional stimulation, and toddlers' social-emotional development; and (3) analyze the influence of parenting style and social-emotional stimulation on toddlers' social-emotional development.

Methods

Participants

This research used an explanatory design with a survey method via questionnaires as research data collectors. The research was conducted in Bogor Regency with the consideration that the prevalence of stunting in this district was ranked sixth (24.9 percent) highest in West Java in 2022 (SSGI, 2022). The research location was chosen using purposive sampling, namely in Cibodas Village, Rumpin District, Bogor Regency, West Java, taking into account that the number of stunting children in the village was ranked first. Data collection was carried out in July 2023. The sample criteria in this study are families that have toddlers (stunting or not stunting) aged 2-3 years and the mother as the main caregiver. From the list of stunted toddlers held by the Gobang Community Health Center, all stunted toddlers were taken to be used as research samples. Furthermore, from the list of toddlers owned by the Cibodas Village Posyandu, 41 toddlers who were not stunted were taken to be used as a control group. Thus, the total number of samples is 82, including mothers and toddlers, with 41 stunted and non-stunting toddlers each.

Measurement

Child characteristics are the child's identity including the child's age, gender, and stunting status. Family characteristics are the identity and characteristics of a family which include father's age, mother's age, father's education, mother's education, father's occupation, mother's occupation, mother's employment status, family size, and family income.

Parenting style is a stable way or characteristic of parents in raising children which is divided into authoritative, authoritarian and permissive parenting styles. Parenting Style uses the Parenting Style and Dimensions Questionnaire Short Version (PSDQ-Short Version) instrument developed by Robinson et al. (2001) and modified by researchers. The PSDQ instrument consists of 32 statements and has three dimensions, namely authoritative (15 statements), authoritarian (12 statements) and permissive (5 statements) parenting styles. The answer scale uses a 1-5 Likert scale with 1= never, 2= occasionally, 3= sometimes, 4= often, and 5= always. The Cronbach's alpha value for this measuring instrument is 0.760.

Social-emotional stimulation is stimulation or training given by parents to improve children's social-emotional development. Social-emotional stimulation was measured using the Etxadi-Gangoiti Scale: Stimulation of Social Emotional Development (SSED) instrument by Arranz et al. (2013) which was modified by researchers. The SSED instrument consists of 31 statements and has four dimensions, including emotional

expression, setting optimal boundaries and frustration, increasing self-esteem and autonomy, and mother-child interaction. This measuring tool uses a 1-6 Likert scale with 1= never, 2= only once, 3= rarely, 4= sometimes, 5= often, 6= always. The Cronbach's alpha value for this measuring instrument is 0.818.

Social-emotional development is the level of achievement of children's abilities related to social competence and emotional maturity. Children's social-emotional development was measured using the Age and Stage Questionnaires: Social Emotional Second Edition (ASQ:SE-2) instrument developed by Squires et al. (2015) and modified by researchers. This measuring instrument is intended for children aged 1-60 months, consisting of nine measuring instruments which are differentiated based on the child's age. Toddlers aged 2-3 years or 24-36 months use three different measuring instruments including those for ages 24 months (21 months 0 days-26 months 30 days) consisting of 34 questions, ages 30 months (27 months 0 days-32 months 30 days) consists of 36 questions, and age 36 months (33 months 0 days-41 months 30 days) consists of 38 questions. The answer choices consist of "Often/Always", "Sometimes", and "Rarely/Never", as well as the answer choice "Check if it is a concern". The Cronbach's alpha value for this measuring instrument is 0.840.

Parenting style scores were then grouped into authoritative, authoritarian, and permissive and categorized into <60 (low), 60-80 (medium), and >80 (high) based on the categorization cut off by Puspitasari et al. (2016). Social-emotional stimulation was categorized into <39 (low), 40-59 (medium), 60-79 (high), and >80 (very high) based on Arranz et al. (2017). Social-emotional development scores are categorized into low, medium and high according to the cutoff of the measuring instrument per child's age.

Analysis

Data processing was carried out using Microsoft Excel 2016 software and data analysis using IBM SPSS Statistics 26 software. Data was analyzed using descriptive analysis and inference. Descriptive analysis is used to determine the number, percentage, average, standard deviation, minimum value, and maximum value for child characteristics, family characteristics, parenting style, social-emotional stimulation, and social-emotional development. The inferential analysis used in this research is the difference test, correlation test, and linear regression test.

Findings

Characteristics of Toddlers

Respondents in this study involved 41 stunting toddlers and 41 non-stunting toddlers. Toddlers are 54.9 percent male and 45.1 percent female. Toddlers in this study were children aged 24-36 months with an average age of 29.83 months or around 2.5 years. As many as 12.2 percent or 10 toddlers were 24 months old and 11 percent or 9 toddlers were 30 months old and the rest were spread across the age range of 25-36 months. The results of the different tests showed that there was no significant difference between gender ($p=0.123$) and age of the child ($p=0.582$) and stunting status.

Characteristics of Families

Family characteristics in this study consisted of parent's age, parent's education, parent's type of employment, mother's employment status, family size, and parent's income. The research results show that parental age is dominated by early adulthood (18-

40 years), with the percentage of toddler fathers being 68.3 percent (stunting) and 78.0 percent (not stunting). There is a tendency for fathers of non-stunting toddlers to be younger than fathers of stunting toddlers. Maternal age is also dominated by early adulthood with a percentage of 90.2 percent (stunting) and 97.6 percent (not stunting). As many as 31.7 percent (stunting) and 22.0 percent (not stunting) of toddler fathers were in the middle adulthood category (41-60 years), while mother's middle adulthood was 9.8 percent (stunting) and 2.4 percent (not stunting). In this study, there were no parents who were classified into the late adult age category (>60 years). The average age of toddler fathers is 36.29 years with an age range of 24-60 years, while the mother's age is 29.33 years with an age range of 19-45 years. The average age of mothers for stunting toddlers (29.61 years) tends to be higher than non-stunting toddlers (29.05 years), but the results of the difference test show there is no significant difference in father's age ($p=1,000$) and mother's age ($p=0.702$) of stunting and non-stunting toddlers.

The last level of education of parents in this study was dominated by elementary school graduates with the percentage of fathers being 61.0 percent (stunting) and 48.8 percent (not stunting), while mothers were 73.2 percent (stunting) and 61.0 percent (not stunting). The average length of education of fathers (8.26 years) and mothers (6.97 years) of non-stunting toddlers tends to be higher than fathers (7.68 years) and mothers (6.68 years) of stunting toddlers. However, in the results of different tests, no significant differences were found between the two. The type of work of fathers in this study was dominated by work as a laborer (63.4 percent) then entrepreneur/trader (18.3 percent). The mother's type of work is dominated by not working (86.6 percent), then entrepreneur/trader (11.0 percent). The employment status of mothers of stunting and non-stunting toddlers has the same percentage value, namely not working as much as 87.8 percent and working as much as 12.2 percent.

As many as 41.5 percent of families of toddlers with stunting are classified as small families (≤ 4 people), while 46.3 percent of families of toddlers without stunting are classified as medium families (5-7 people). The results of the different tests found no significant difference ($p=0.701$) in the family size of stunting and non-stunting toddlers. The research results show that as many as 46.3 percent (stunting) and 43.9 percent (not stunting) of toddler families have per capita income below the poverty line. Then, as much as 53.7 percent (stunting) and 56.1 percent (not stunting) of the per capita income of toddler families falls into per capita income above the poverty line. The average per capita income for families of stunted toddlers is IDR 527,860 and families of non-stunted toddlers is IDR 573,203. The average per capita income of families of stunted toddlers tends to be lower than that of non-stunting toddlers. Even so, the results of the different tests did not find any significant differences ($p=0.534$).

Parenting Style

In the results of the different tests shown in Table 1, no significant differences were found between authoritative ($p=0.298$), authoritarian ($p=0.307$), and permissive ($p=0.635$) parenting styles in stunting and non-stunting toddlers. The authoritative parenting style used by mothers of toddlers is classified as moderate with a percentage of 72.0 percent. Authoritarian parenting style is relatively low with a percentage of 95.1 percent. Permissive parenting style is relatively low with a percentage of 52.4 percent.

Table 1. Distribution of examples based on level of parenting style

Parenting style	Stunting		Non-Stunting	
	n	%	n	%
Authoritative				
Low	8	19.5	11	26.8
Moderate	29	70.7	30	73.2
High	4	9.8	0	0
Average ± SD	67.35±9.74		65.20±8.85	
Min-Maks	45.00-90.00		36.67-78.33	
p-value (t-test)	0.298			
Authoritarian				
Low	38	92.4	40	97.6
Moderate	3	7.3	1	2.4
High	0	0	0	0
Average ± SD	40.95±9.96		38.66±10.15	
Min-Maks	20.83-64.58		14.58-64.58	
p-value (t-test)	0.307			
Permissive				
Low	20	48.8	23	56.1
Moderate	20	48.8	18	43.9
High	1	2.4	0	0
Average ± SD	54.87±14.81		53.29±15.35	
Min-Maks	20.00-80.00		10.00-75.00	
p-value (t-test)	0.635			

Note: n= number of stunting and non-stunting children; %= percentage of number of stunting and non-stunting; min= minimum index value; max= maximum index value; SD= standard deviation; p-value=different test

Social-Emotional Stimulation

Social-emotional stimulation categories are divided into low, moderate, high and very high. In Table 2, the social-emotional stimulation provided by mothers for stunting and non-stunting toddlers is mostly in the high category with percentages of 73.2 percent and 80.5 percent. Based on the average index score, the social-emotional stimulation provided by mothers for stunting toddlers (69.91) tends to be higher compared to non-stunting toddlers (68.65). However, the results of different tests found that there was no significant difference (p=0.501) between social-emotional stimulation in stunting and non-stunting toddlers.

Table 2. Distribution of toddler samples based on level of social-emotional stimulation

Social-emotional stimulation	Stunting		Non-Stunting	
	n	%	n	%
Moderate	6	14.6	6	14.6
High	30	73.2	33	80.5
Very High	5	12.2	2	4.9
Average ± SD	69.91±8.50		68.65±8.34	
Min-Maks	49.68-82.58		49.68-86.45	
p-value (t-test)	0.501			

Note: n= number of stunting and non-stunting children; %= percentage of number of stunting and non-stunting; min= minimum index value; max= maximum index value; SD= standard deviation; p-value=different test

In Table 3, the dimensions of optimal limit setting and frustration have a significant difference between stunting and non-stunting toddlers ($p=0.047$), where the optimal setting of limits and frustration by parents of stunting toddlers is higher than non-stunting toddlers.

Table 3. Distribution of sample data based on dimensions of social-emotional stimulation

Social-emotional stimulation	Stunting		Non-Stunting	
	n	%	n	%
Emotional expressiveness (EE)				
Low	0	0	0	0
Moderate	5	12.2	4	9.8
High	31	75.6	33	80.5
Very high	5	12.2	4	9.8
Average \pm SD	69.75 \pm 10.58		68.00 \pm 8.71	
Min-Maks	40.00-100.00		44.00-88.00	
p-value (t-test)	0.415			
Setting of limits and optimal frustration (SLOF)				
Low	0	0	0	0
Moderate	1	2.4	2	4.9
High	20	48.8	31	75.6
Very high	20	48.8	8	19.5
Average \pm SD	77.26 \pm 9.91		73.56 \pm 7.51	
Min-Maks	48.00-94.00		56.00-94.00	
p-value (t-test)	0.060 (sig=0.047*)			
Enhancement of self-esteem and autonomy (ESEA)				
Low	1	2.4	3	7.3
Moderate	15	36.6	8	19.5
High	22	53.7	26	63.4
Very high	3	7.3	4	9.8
Average \pm SD	61.03 \pm 11.31		63.04 \pm 13.36	
Min-Maks	27.50-82.50		27.50-90.00	
p-value (t-test)	0.464			
Observation of parent-child interactions (OPCI)				
Low	3	7.3	3	7.3
Moderate	4	9.8	3	7.3
High	22	53.7	24	58.5
Very high	12	29.3	11	26.8
Average \pm SD	69.69 \pm 20.18		68.53 \pm 17.13	
Min-Maks	0.00-100.00		10.00-97.50	
p-value (t-test)	0.780			

Note: n= number of stunting and non-stunting children; %= percentage of number of stunting and non-stunting; min= minimum index value; max= maximum index value; SD= standard deviation; p-value=different test

The other three dimensions, namely emotional expression ($p=0.415$), increased self-esteem and autonomy ($p=0.464$), and mother-child interaction ($p=0.780$) did not have significant differences between stunting and non-stunting toddlers.

Social-Emotional Development

Social-emotional development is categorized into low, moderate, and high categories. In Table 4, most of the social-emotional development of stunting toddlers (56.1 percent) and non-stunting toddlers (39.0 percent) is classified as medium. Based on the average index value, the distribution of data on stunting (83.60) and non-stunting toddlers (83.61) tends to be the same. This is in line with the results of different tests which show there is no significant difference ($p=0.994$) between the social-emotional development of stunting and non-stunting toddlers.

Table 4. Distribution of samples of toddlers based on level of social-emotional development

Social-emotional development	Stunting		Non-Stunting	
	n	%	n	%
Low	10	24.4	15	36.6
Moderate	23	56.1	16	39.0
High	8	19.5	10	24.4
Average \pm SD	83.60 \pm 5.88		83.61 \pm 5.87	
Min-Maks	58.59-93.33		69.89-93.55	
p-value (t-test)	0.994			

Note: n= number of stunting and non-stunting children; %= percentage of number of stunting and non-stunting; min= minimum index value; max= maximum index value; SD= standard deviation; p-value=different test.

Relationship between Child and Family Characteristics, Parenting Style, Social-Emotional Stimulation and Social-Emotional Development

The correlation test results show that child characteristics (gender, child age, and stunting status) do not have a significant relationship with the main variables. However, in the correlation test of family characteristics, there are several items that have a significant relationship with the main variables.

Table 5. Correlation test results of the relationship between child characteristics, family characteristics, parenting style, and social-emotional stimulation with social-emotional development

Variable	Parenting Style			SES	SED
	AV	AN	PV		
Characteristic of child					
Sex	0.010	-0.170	-0.104	-0.010	-0.134
Child age	-0.194	0.015	-0.031	-0.081	0.022
Stunting Status	-0.081	-0.085	-0.046	0.072	0.054
Characteristic of families					
Father age	0.226*	0.171	0.004	0.091	0.125
Mother age	0.300**	0.190	0.162	0.096	0.036
Father education	0.044	-0.044	-0.085	-0.023	-0.242*
Mother education	-0.066	0.038	-0.015	-0.062	-0.079
Mother employment status	-0.008	-0.107	-0.073	0.095	0.100
Family income	0.096	0.118	-0.160	-0.018	0.034
Family size	0.047	0.123	0.026	-0.085	0.041

Note: *) significant at $p<0.05$; AV= authoritative; AN= authoritarian; PV= permissive

In Table 5, father's age ($r=0.226$, $p=0.041$) and mother's age ($r=0.300$, $p=0.006$) have a significant positive relationship with authoritative parenting style. This can be interpreted as the older the father and mother are, the better the authoritative parenting

style will be. Father's education has a significant negative relationship ($r=-0.242$, $p=0.028$) with social-emotional development. This means that the lower the father's education level, the higher the child's social-emotional development.

The Influence of Child and Family Characteristics, Parenting Style, and Social-Emotional Stimulation on Social-Emotional Development

The results of the regression test show that the coefficient of determination or adjusted R square has a value of 0.188 as shown in Table 6 below. This means that social-emotional development is influenced by parenting style and social-emotional stimulation by 18.8 percent or 19 percent. Another 81.2 percent was influenced by other factors outside the variables of this study. Factors that influence children's social-emotional development include authoritative parenting style and social-emotional stimulation.

Authoritative parenting style ($\beta=0.306$; $p=0.008$) has a significant positive effect on social-emotional development. This shows that for every one unit increase in authoritative parenting style, social-emotional development can also increase by 0.194 points. Social-emotional stimulation ($\beta=0.435$; $p=0.000$) also has a significant positive effect on social-emotional development. For every one unit increase in social-emotional stimulation, social-emotional development will also increase by 0.303 points. The results of the regression test show that there is no significant influence of authoritarian ($\beta=-0.111$; $p=0.377$) and permissive ($\beta=0.020$; $p=0.870$) parenting styles on social-emotional development.

Table 6. Regression test results on the influence of parenting style and social-emotional stimulation on social-emotional development

Independent variable	Non Standardized Coefficient (B)	Beta Standardized Coefficient (β)	Sig.
Parenting style			
Authoritative	0.192	0.306	0.008*
Authoritarian	-0.064	-0.111	0.377
Permissive	0.008	0.020	0.870
Social-emotional stimulation	0.303	0.435	0.000*
R Square		0.229	
Adjusted R Square		0.188	
F		5.702	
Sig.		0.000	

Note: *) significant at $p<0.05$.

Discussion

Stunting is influenced by various factors such as low levels of appropriate complementary feeding, gender, child food insecurity, socio-economic status, and low knowledge about stunting (Bukusuba et al., 2017). The results of the different tests showed that there were no significant differences between child characteristics, family characteristics, parenting styles, social-emotional stimulation, and social-emotional development of stunting and non-stunting toddlers. This is in line with research by Walker et al. (2015) found that there were no significant differences between the child's gender, child's age, education and employment of parents of stunting and non-stunting children. Research conducted by Purwestri et al. (2017) also found that there was no significant difference between the income of parents of stunting and non-stunting toddlers. There is

no significant relationship between the ages of mothers of stunting and non-stunting toddlers (Das et al., 2019).

Based on the results of frequency tests, stunting is more common in boy toddlers. This is in line with research by Nguyen et al. (2013) and Logarajan et al. (2023) who found that stunting children were more common in boys, especially in rural areas. Parental education in this study was dominated by primary school education, with the percentage of stunting toddlers being greater than non-stunting toddlers. This is in line with research by Rachmi et al. (2016) which states that there is a relationship between parental education and the incidence of stunting, especially maternal education. This research found that stunting toddlers have lower per capita family income than non-stunting toddlers. Low household income has a significant influence and a risk of 2.1 times the incidence of stunting (Apriluana & Fikawati, 2018).

Parenting styles in this research are divided into authoritative, authoritarian, and permissive parenting styles. Most of the mothers of toddlers in this study had a tendency to apply an authoritative parenting style in the moderate category and others had a tendency to apply a permissive parenting style in the low category. The authoritative parenting style in this study was more commonly found in stunting toddlers, despite the results difference test there was no significant difference between the two. This is not in line with research by Karuniawati (2023) which states that authoritative parenting styles tend to have healthier food intake that can prevent stunting. The possibility of the result of this research is because the social-emotional stimulation of mother's stunting toddlers is higher than non-stunting. According to Zena and Heeralal (2021), authoritative parenting style has a significant positive relationship with children's social-emotional development. There is no difference between parenting styles in families of stunting and non-stunting toddlers.

The social-emotional stimulation of stunting and non-stunting toddlers is relatively high. In stunting toddlers, social-emotional stimulation tends to be higher than in non-stunting toddlers, but there is no significant difference between the two. This could be because the number of family members of non-stunting toddlers in this study was greater than stunting toddlers. According to Briones et al. (2021), adding one family member will reduce the level of social-emotional stimulation because parents have to share it with other children.

Social-emotional development is the development of children's abilities related to social interaction and managing emotions. Social-emotional development in stunting and non-stunting toddlers is classified as moderate. According to Hurlock (1997), the emotional development of toddlers is still relatively unstable, so they still need to be given continuous stimulation to avoid experiencing developmental disorders.

The stimulation provided by mothers in this study was considered high, but social-emotional development was still considered moderate. This could be because the education of the mothers in this study was relatively low, with the average mother only completing her education up to elementary school. According to Barros et al. (2010), child development has a strong connection with maternal education and stimulation. Mothers who have higher education will stimulate their children better than mothers with low education. According to Barros et al. (2010) focusing on low-educated mothers is an appropriate initial strategy to improve child development, especially in low-income developing countries. In addition, the factor that causes a high level of stimulation but moderate social-emotional development could be due to the social-emotional stimulation measured in this study being stimulation carried out by the mother only, so that the

stimulation carried out by the father was not included in the research results. According to Jeong et al. (2016), increasing fathers' involvement in stimulation will improve children's development, especially in developing countries.

The results of the correlation test show that father's age and mother's age both has a significant positive relationship with authoritative parenting style. This is not in line with research which shows that the increasing age of parents results in lower physical abilities and allows them to dedicate less time to caring for children (Leigh & Gong, 2010). Based on Heuvel's (1988) research, the age gap between parents and children that is too far apart has a negative relationship with parent-child interactions, especially when children become teenagers. However, other research also finds in line with the result that young parents are likely to have lower parenting skills than older parents (Leigh & Gong, 2010). This could be due to young parents has limited experience and lack of ability to apply parenting values into actual parenting practices (Augustine et al., 2015). According to Bornstein et al. (2006), maternal age has a significant positive relationship with parenting behavior, so that as the mother ages, she will also gain more life experience, generate knowledge and maturity in caring for older children.

Father's education has a significant negative relationship with social emotional development. This means that the higher the father's education, the lower the social-emotional development of the child. According to the research's result, this could happen most likely because the majority of fathers' jobs in this study were laborers. Based on the results of interviews, some fathers who work as laborers only work according to existing offers or calls, so they have uncertain working hours. This uncertain working time allows fathers to spend more time at home with their family. This allows fathers to have higher interactions with their children. This is in line with research by Lang et al. (2020) who found that the interaction and bond between father-child will improve the child's social-emotional development.

The results of the regression test show that there is a significant positive influence of authoritative parenting style on social-emotional development. The research results of Syahrul and Nurhafizah (2022) also found a significant influence of authoritative or democratic parenting styles on children's social-emotional development. Social-emotional stimulation has a significant positive influence on social-emotional development. This is in line with research by Hasanah et al. (2018) who found stimulation had a significant influence on social-emotional development. Based on the research results of Jeong et al. (2016), an authoritative parenting style and providing good stimulation to children will protect children from developmental disorders. According to the research of Qudsi et al. (2023), social support can improve children's social emotional development. On the other hand, maternal stress can reduce children's social-emotional development.

In this study, no relationship was found between social-emotional development and the incidence of stunting. This is in line with research conducted by Casale et al. (2014), Pantaleon et al. (2015), Miller et al. (2016), and Kang et al. (2018) who found there was no significant relationship between social-emotional development and the incidence of stunting. Based on several previous research findings, the absence of a relationship between stunting and children's social-emotional development is thought to be because the impact of stunting at that age is not yet clearly visible. Stunting has long-term effects on children in terms of school, income and health (Miller et al., 2016). The absence of a significant relationship between stunting and social-emotional development is also most likely because the social-emotional stimulation provided by mothers in this study was

relatively high. According to Grantham-McGregor et al. (2007) the impact of stunting can be overcome with as early as possible effective intervention that includes nutritional needs and good developmental stimulation. Interventions carried out through responsive/authoritative parenting and providing good stimulation for stunting children can improve developmental outcomes for children (Shrestha et al., 2022). Based on research by Gertler et al. (2013), stunting children who were given social-emotional stimulation by their mothers after 20 years had 25 percent higher income than the control group. Therefore, social-emotional stimulation can be an effective strategy to correct delays in social-emotional development in stunting children, especially in developing countries and improve the quality of the workforce in the long term to create quality human resources.

The limitation of this research is the use of a sampling technique, namely purposive sampling, which means that the research results cannot be generalized to the population. This is because purposive sampling is included in the non-probabilistic sampling category. In addition, the research subjects in this study were relatively small (<100 subjects) because the number of stunted toddlers was limited in the research location due to age filtering in the sample.

Conclusion and Recommendation

Conclusion

Stunted and non-stunting mothers of toddlers tend to apply a medium category of authoritative parenting style. The social-emotional stimulation of stunted and non-stunting toddlers is relatively high. The social-emotional development of stunted and non-stunting toddlers is classified as moderate. Stunted toddlers are more commonly found in boys, families with mothers and fathers with less education, and families with low incomes. The results of different tests found that there were no significant differences in child characteristics, family characteristics, parenting styles, social-emotional stimulation, and social-emotional development between stunted and non-stunting toddlers.

The correlation test results show that child characteristics do not have a significant relationship with the main variables. Family characteristics including father's age and mother's age are significantly related to authoritative parenting style. Father's education has a significant negative relationship with children's social-emotional development. Authoritative parenting style is significantly related to social-emotional stimulation and social-emotional development. Social emotional stimulation is significantly related to social-emotional development. The results of the regression test show that social-emotional development in children is significantly influenced by authoritative parenting style and social-emotional stimulation.

Recommendation

The results of this research show that the authoritative parenting style has a significant effect on children's social-emotional development, so it is important for parents to implement and improve the authoritative parenting style that is carried out because the findings in this study authoritative parenting style is still relatively moderate. Suggestions that can be given to the government are to provide education regarding parenting and stimulation to parents, especially parents with low education. Apart from

that, the government can provide employment opportunities with adequate income and improve education for the next generation for family welfare considering that the incidence of stunting is related to parent's income and education. Suggestions for further research are to increase the number of samples and examine the social-emotional stimulation carried out by fathers because the findings show that the stimulation carried out by mothers is relatively high but social-emotional development is still moderate.

References

- Achenbach, T.M., & Rescorla, L.A. (2000). Manual for the ASEBA preschool forms and profiles: An integrated system of multi-informant assessment. Burlington: University of Vermont Department of Psychiatry.
- Ain, H., Solikhah, F.K., Pertami, S.B., & Kasiati, K. (2023). Dynamic self-determination of self-care and positive deviance model for stunting prevention in Indonesia. *Pesquisa Brasileira Em Odontopediatria E Clínica Integrada*, 23: e220012. <https://doi.org/10.1590/pboci.2023.043>
- Apriluana, G., & Fikawati, S. (2018). Analisis faktor-faktor risiko terhadap kejadian *stunting* pada balita (0-59 bulan) di negara berkembang dan Asia Tenggara. *Media Litbangkes*, 28(4), 247-256. <https://doi.org/10.22435/mpk.v28i4.472>
- Arranz, E., Olabarrieta, F., Manzano, A., Martín, J., & Galende, N. (2013). Etxadi-Gangoiti scale: a proposal to evaluate the family contexts of two-year-old children†, *Early Child Development and Care*, 184(6), 933-948. <https://doi.org/10.1080/03004430.2013.829823>.
- Arranz, E., Olabarrieta, F., Manzano, A., Barreto, F.B., Roncallo, C.P., Murciano, M.S., Rekorri, J., & Garcia, M.D. (2017). Assessment and preventive education for families, based on the principles of positive parenting. *Early Child Development and Care*, 189(5), 792-801. <https://doi.org/10.1080/03004430.2017.1344234>
- Arsyad, J.F., Umrah, A., & Setiawati, Y. (2020). Studi kasus gaya pengasuhan orang tua terhadap anak batita *stunting*. *Voice of Midwifery*, 10(1), 903-910. <https://doi.org/10.35906/vom.v10i1.105>
- Augustine, J., Prickett, K., Kendig, S., & Crosnoe, R. (2015). Maternal education and the link between birth timing and children's school readiness. *Social Science Quarterly*, 96, 970-984. <https://doi.org/10.1111/ssqu.12150>
- Barros, A.J., Matijasevich, A., Santos, I.S., & Halpern, R. (2010). Child development in a birth cohort: effect of child stimulation is stronger in less educated mothers. *International Journal of Epidemiology*, 39(1), 285-294. <https://doi.org/10.1093/ije/dyp272>
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance abuse. *Journal of Early Adolescence*, 11, 56-95. <https://doi.org/10.1177/02724316911111004>.
- Black, M.M., Walker, S.P., Fernald, L.C., Andersen, C.T., DiGirolamo, A.M., & Lu, C. (2017). Early childhood development coming of age: science through the life course. *The Lancet*, 389, 77-90. [https://doi.org/10.1016/S0140-6736\(16\)31389-7](https://doi.org/10.1016/S0140-6736(16)31389-7)
- Bornstein, M.H., Putnick, D.L., Suwalsky, J.T.D. & Gini, M. (2006). Maternal chronological age, prenatal and perinatal history, social support, and parenting of infants. *Child Development*, 77, 875-892. <https://doi.org/10.1111/j.1467-8624.2006.00908.x>

- Bornstein, M.H., Putnick, D.L., & Suwalsky, J.T. (2018). Parenting cognitions → parenting practices → child adjustment? The standard model. *Development and Psychopathology*, 30(2), 399–416. <https://doi.org/10.1017/S0954579417000931>
- Boulom, S., Bon, D.M., Essink, D., Kounnavong, S., & Broerse, J.E. (2022). Understanding discrepancies in nutritional outcomes among under-fives in Laos: a mixed-methods study using the positive deviance approach. *Food and Nutrition Bulletin*, 43(3), 303–322. <https://10.1177/03795721221096187>
- Briggs-Gowan, M.J., Carter, A.S., Bosson-Heenan, J., & Guyer, A.E. (2006). Are infant-toddler social-emotional and behavioral problems transient? *Journal of Child & Adolescent Psychiatry*, 45(7), 849–858. <https://10.1097/01.chi.0000220849.48650.59>
- Briones, L., Contreras, D., Otero, G., & Soto, G. (2021). Determinants of early childhood stimulation: Evidence using panel data from Chile. *Early Childhood Research Quarterly*, 57(7), 202–214. <http://dx.doi.org/10.1016/j.ecresq.2021.06.006>
- Bukusuba, J., Kaaya, A.N., & Atukwase, A. (2017). Predictors of stunting in children aged 6 to 59 months: a case-control study in Southwest Uganda. *Food and Nutrition Bulletin*, 38(4), 542–553. <https://doi.org/10.1177/0379572117731666>
- Casale, D., Desmond, C., & Richter, L. (2014). The association between stunting and psychosocial development among preschool children: a study using the South African Birth to Twenty cohort data. *Child Care Health Development*, 40(6), 900–10. <https://10.1111/cch.12143>
- Das, S., Alam, M.A., & Mahfuz, M. (2019). Relative contributions of the correlates of stunting in explaining the mean length-for-age z-score difference between 24-month-old stunting and non-stunting children living in a slum of Dhaka, Bangladesh: results from a decomposition analysis. *BMJ*, 9: e025439. <https://10.1136/bmjopen-2018-025439>
- Ernawati, F., Muljati, S.S., & Safitri, A. (2014). Hubungan panjang badan lahir terhadap perkembangan anak usia 12 bulan. *Jurnal Penelitian Gizi Dan Makanan*, 37(2), 109–118. <https://dx.doi.org/10.22435/pgm.v37i2.4014.109-118>
- Gertler, P., Heckman, J., Pinto, R., Zanolini, A., Vermeersch, C., Walker, S., Chang, S.M., & Grantham-McGregor, S. (2014). Labor market returns to an early childhood stimulation intervention in Jamaica. *Science*, 344(6187), 998–1001. <https://10.1126/science.1251178>
- Gibney, G. (2004). *Positif deviance/hearth (buku panduan pemulihan yang berkesinambungan bagi anak malnutrisi)*. Jakarta: Jejaring Positive Deviance.
- Grantham-McGregor, S., Cheung, Y.B., Cueto, S., Glewwe, P., Richter, L., & Strupp, B. (2007). International Child Development Steering Group. Developmental potential in the first 5 years for children in developing countries. *Lancet*, 369(9555), 60–70. [https://10.1016/S0140-6736\(07\)60032-4](https://10.1016/S0140-6736(07)60032-4)
- Halle, T.G., & Darling-Churchill, K.E. (2016). Review of measures of social and emotional development. *Journal of Applied Developmental Psychology*, 45, 8–18. <https://10.1016/j.appdev.2016.02.003>
- Hasanah, J., Achdiani, Y., & Widiaty, I. (2018). Upaya ibu dalam menstimulasi keterampilan sosial anak usia sekolah di Kelurahan Kebon Lega Kota Bandung. *FamilyEdu: Jurnal Pendidikan Kesejahteraan Keluarga*, 4(2), 103–112.
- Hasanah. (2023). Hubungan perkembangan motorik halus, perkembangan motorik kasar dan sosial emosional terhadap kejadian *stunting* pada usia 24 – 59 bulan di

- Puskesmas Karet Kuningan, Kecamatan Setiabudi Tahun 2022. *Jakarta Journal of Health Sciences*, 2(4), 681-687. <https://doi.org/10.53801/oajjhs.v2i4.128>
- Heuvel, A.V. (1988). The timing of parenthood and intergenerational relations. *Journal of Marriage and the Family*. 50, 483–491. <http://10.2307/352013>.
- Hurlock, E.B. (1997). *Perkembangan Anak Jilid 1*. Edisi 6. Jakarta: Erlangga.
- Jeong, J., McCoy, D.C., Yousafzai, A., Salhi, C., & Fink, G. (2016). Paternal stimulation and early child development in low- and middle-income countries. *Pediatrics*, 138(4), 1-12. <http://dx.doi.org/10.1542/peds.2016-1357>
- Jones, D.E., Greenberg, M., & Crowley, M. (2015). Early social-emotional functioning and public health: The relationship between kindergarten social competence and future wellness. *American Journal of Public Health*, 105(11), 2283-2290. <https://doi.org/10.2105/AJPH.2015.302630>
- Kang, Y., Aguayo, V.M., Campbell, R.K., & West, K.P. (2018). Association between stunting and early childhood development among children aged 36–59 months in South Asia. *Maternal Child Nutrition*, 14(4), e12684. <https://doi.org/10.1111/mcn.12684>
- Karuniawati, B. (2023). Peningkatan asupan gizi anak, apakah pola asuh dapat memperbaiki asupan gizi anak?: literature review. *Jurnal Kesehatan Karya Husada*, 11(1), 66-73. <https://doi.org/10.36577/jkhh.v11i1.571>
- [Kemenkes RI] Kementerian Kesehatan Republik Indonesia. (2022). Laporan Akuntabilitas Kinerja Instansi Pemerintah (LAKIP) Direktorat Gizi dan Kesehatan Ibu dan Anak.
- [KEMENKO PMK] Kementerian Koordinator Bidang Pembangunan Manusia dan Kebudayaan Republik Indonesia. (2022). Indonesia Emas 2045 Diwujudkan Oleh Generasi Muda. <https://www.kemenkopmk.go.id/indonesia-emas-2045-diwujudkan-oleh-generasi-muda>
- [KEMENSETNEG RI] Kementerian Sekretariat Negara Republik Indonesia. (2023). Presiden Targetkan Angka Stunting di Indonesia Turun hingga 14 Persen pada 2024. https://www.setneg.go.id/baca/index/presiden_targetkan_angka_stunting_di_indonesia_turun_hingga_14_persen_pada_2024
- Konopka, A., Rek-Owodziń, K., Pełka-Wysiecka, J., & Samochowiec, J. (2018). Parenting style in family and the risk of psychopathology. *Postępy Higieny i Medycyny Doświadczalnej*. 72, 924-931. <http://10.5604/01.3001.0012.7026>
- Laily, L., & Indarjo, S. (2023). Literature review: dampak stunting terhadap pertumbuhan dan perkembangan anak. *HIGEIA (Journal of Public Health Research and Development)*, 7(3), 354-364. <https://doi.org/10.15294/higeia.v7i3.63544>
- Latifah, E., Hastuti, D., & Latifah, M. (2010). Pengaruh pemberian asi dan stimulasi psikososial terhadap perkembangan sosial-emosi anak balita pada keluarga ibu bekerja dan tidak bekerja. *Jurnal Ilmu Keluarga & Konsumen*. 3(1), 35-45. <https://doi.org/10.24156/jikk.2010.3.1.35>
- Lang, S.N., Jeon, L., & Schoppe-Sullivan, S.J. (2020). Associations between parent–teacher cocaring relationships, parent–child relationships, and young children’s social emotional development. *Child Youth Care Forum*. 49, 623–646. <http://10.1007/s10566-020-09545-6>
- Leigh, A., & Gong, X. (2010). Does maternal age affect children’s test scores? *Australian Economic Review*. 43, 12–27. <http://10.1111/j.1467-8462.2009.00573.x>

- Levin, E. (2011). Baumrind's parenting styles. *Encyclopedia of Child Behavior and Development*, https://doi.org/10.1007/978-0-387-79061-9_293
- Logarajan, R.D., Nor, N.M., Ibrahim, S., & Said, R. (2023). Social determinants of stunting in Malay children aged <5 years in Malaysia. *Nutrition*, 111, 112030. <http://10.1016/j.nut.2023.112030>
- Mardiah, L.Y., & Ismet, S. (2021). Dampak pengasuhan otoriter terhadap perkembangan sosial anak. *JCE: Journal of Childhood Education*. 5(1), 82-95. <https://doi.org/10.30736/jce.v5i1.497>
- Miller, A.C., Murray, M.B., Thomson, D.R., Arbour, M.C. (2016). How consistent are associations between stunting and child development? Evidence from a meta-analysis of associations between stunting and multidimensional child development in fifteen low- and middle-income countries. *Public Health Nutrition*, 19, 1339–1347. <https://doi.org/10.1017/s136898001500227x>
- Murniati, C. (2022). Perkembangan motorik, bahasa, psikososial balita stunting: literature review. *Jurnal Keluarga Berencana*. 7(1), 11-21. <https://10.37306/kkb.v7i1.123>
- Nahar, B., Hossain, M., & Mahfuz, M. (2020). Early childhood development and stunting: Findings from the MAL-ED birth cohort study in Bangladesh. *Maternal Child Nutrition*, 16, e12864. <https://doi.org/10.1111/mcn.12864>
- Nguyen, H.T., Eriksson, B., Petzold, M., Bondjers, G., Tran, T.K., Nguyen, L.T. (2013). Factors associated with physical growth of children during the first two years of life in rural and urban areas of Vietnam. *BMC Pediatrics*. 13(1), 149. <https://doi.org/10.1186/1471-2431-13-149>
- Noviani, I., Ajrania, S., & Wahyuni, F.A. (2023). Analysis marital quality and parenting style in adolescence marriage family: analysis marital quality and parenting style in adolescence marriage family. *Journal of Family Sciences*, 8(1), 109-122. <https://doi.org/10.29244/jfs.v8i1.42863>
- Pantaleon, M.G., Hadi, H., & Gamayanti, I.L. (2015). Stunting berhubungan dengan perkembangan motorik anak di Kecamatan Sedayu, Bantul, Yogyakarta. *Jurnal Gizi dan Dietetik Indonesia*, 3(1), 10-21. [http://dx.doi.org/10.21927/ijnd.2015.3\(1\).10-21](http://dx.doi.org/10.21927/ijnd.2015.3(1).10-21)
- Perkins, J.M., Kim, R., Krishna, A., McGovern, M., Aguayo, V.M., & Subramanian, S.V. (2017). Understanding the association between stunting and child development in low- and middle-income countries: Next steps for research and intervention. *Social Science & Medicine*, 193, 101-109. <https://doi.org/10.1016/j.socscimed.2017.09.039>
- Podlesak, A.K., Mozer, M.E., Smith-Simpson, S., Lee, S.Y., & Donovan, S.M. (2017). Associations between parenting style and parent and toddler mealtime behaviors. *Current Developments in Nutrition*, 1(6), 1-7. <https://doi.org/10.3945/cdn.117.000570>
- Purwestri, R.C., Renz, L., & Wirawan, N.N. (2017). Is agriculture connected with stunting in Indonesian children living in a rice surplus area? A case study in Demak Regency, Central Java. *Food Sec*, 9, 89–98. <https://doi.org/10.1007/s12571-016-0634-2>
- Puspitasari, R., Hastuti, D., & Herawati, T. (2016). Pengaruh kecerdasan spiritual ibu terhadap karakter anak usia sekolah dasar di pedesaan. *Jurnal Ilmu Keluarga dan Konsumen*, 9(2), 101–112. <https://doi.org/10.24156/jikk.2016.9.2.101>
- Qudsi, H.A., Rizkillah, R., & Alfiasari. (2023). The social support, maternal stress, and social-emotional development of preschool children among working mothers'

- family during COVID-19: social support, maternal stress, and social-emotional development of preschool children among working mothers' family during COVID-19. *Journal of Family Sciences*, 8(1), 70-85. <https://doi.org/10.29244/jfs.v8i1.42737>
- Rachmi, C.N., Agho, K.E., Li, M., & Baur, L.A. (2016). Stunting, underweight and overweight in children aged 2.0–4.9 years in Indonesia: Prevalence trends and associated risk factors. *PLoS ONE*, 11(5), e0154756 <https://doi.org/10.1371/journal.pone.0154756>.
- Rasheed, M.A., Mughis, W., Niaz, M., & Hasan, B.S. (2021). Do parental stimulation practices modify the effect of child's health status on early developmental risk? Findings from a hospitalized cohort. *Early Child Development and Care*, 192(12), 1998-2007. <https://doi.org/10.1080/03004430.2021.1964492>
- Robinson, C., Mandlco, B., Roper, S., & Hart, C. (2001). The parenting styles and dimensions questionnaire (PSDQ). *Handbook of Family Measurement Techniques*, 3, 319-321.
- Setiawan, E., & Machsus, S. (2023). The role of social and economic dimensions of the family in preventing and reducing stunting in Bekasi District. *Journal of Family Sciences*, 66-79. <https://doi.org/10.29244/jfs.vi.49943>
- Shrestha, M.L., Perry, K.E., Thapa, B., Adhikari, R.P., & Weissman, A. (2022). Malnutrition matters: Association of stunting and underweight with early childhood development indicators in Nepal. *Maternal & Child Nutrition*, 18, e13321. <https://doi.org/10.1111/mcn.13321>
- Squires, J., Bricker, D., & Twombly, E. (2015). Ages & stages questionnaires®: socialemotional, second edition (ASQ®:SE-2). A parent-completed child monitoring system for social-emotional behaviors. Baltimore, London, Sydney: Brookes Publishing Co
- [SSGBI] Studi Status Gizi Balita Indonesia. (2019). Kementrian Kesehatan Republik Indonesia.
- [SSGI] Studi Status Gizi Indonesia. (2021). Buku Saku: Hasil Studi Status Gizi Indonesia (SSGI) tingkat Nasional, Provinsi, dan Kota/Kabupaten 2021.
- [SSGI] Studi Status Gizi Indonesia. (2022). Buku Saku: Hasil survei Status Gizi Indonesia (SSGI) 2022.
- Syahrul, S., & Nurhafizah, N. (2022). Analisis pola asuh demokratis terhadap perkembangan sosial dan emosional anak di masa pandemi covid-19. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(6), 5506-5518. <https://doi.org/10.31004/obsesi.v6i6.1717>
- [UNICEF] United Nations Children's Fund. (2014). The formative years: UNICEF's work on measuring early childhood development. UNICEF: New York.
- Walker, S.P., Chang, S.M., Wright, A., Osmond, C., & Grantham-McGregor, S.M. (2015). Early childhood stunting is associated with lower developmental levels in the subsequent generation of children. *The Journal of Nutrition*, 145(4), 823-828. <https://doi.org/10.3945/jn.114.200261>.
- Winsler, A., Madigan, A.L., & Aquilino, S.A. (2005). Correspondence between maternal and paternal parenting styles in early childhood. *Early Childhood Research Quarterly*, 20(1), 1-12. <https://doi.org/10.1016/j.ecresq.2005.01.007>.
- [WHO] World Health Organization. (2015). Global nutrition targets 2025: Stunting policy brief. (WHO/NMH/NHD/14.3). Geneva: World Health Organization.

Zena, Y.M., & Heeralal, P.J.H. (2021). The relationship between parenting style and preschool children's social-emotional development. *Universal Journal of Educational Research*, 9(8), 1581 - 1588. <https://10.13189/ujer.2021.090810>