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The Social Cognitive Theory Model in Predicting Maternal Behavior for Healthy Child Development in Yogyakarta Indonesia

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Abstract

Early childhood development determines the quality of future generations. A mother is crucial in encouraging a child's growth and development. This research aims to determine the influence of social psychological factors that influence maternal behavior on healthy child growth and development using the Social Cognitive Theory (SCT) model. This cross-sectional study was conducted from July to October 2023 in Yogyakarta, Indonesia. A sample of 400 mothers with children under five (12-59 months). The dependent variable is the maternal behavior in child development, and the independent variables are observational learning, outcome expectations, self-efficacy, and family support. All variables were measured by questionnaire, and the data were analyzed by path analysis using Stata 13 statistical software. A maternal's behavior is directly and positively related to observational learning (b= 0.28, p<0.001), outcome expectations (b= 0.24, p<0.001), self-efficacy (b= 0.37, p<0.001), and family support (b= 0.09, p=0.005). The goodness of fit path analysis indicates p > 0.05, RSME< 0.001, TFI= 1.00, TLI= 1.00, and SRMR< 0.001. A maternal's behavior is directly and positively related to observational learning, outcome expectations, self-efficacy, and family support. Interventions to improve mothers' healthy behavior in accelerated child development should prioritize efforts to increase self-efficacy.

Introduction

According to a 2019 report by the United Nations, the proportion of the children population worldwide has reached a quarter (25.6%). By 2050, the number of children will continue to increase. It will be mostly accounted for by developing countries, including Indonesia (United Nations, 2019). The early childhood population in Indonesia, according to the results of the 2020 National Socio-Economic Survey (SUSENAS), has reached 32.96 million or 12.19% of the total population; furthermore, 10.3% of children under five experience developmental delays (Saptarini *et al.*, 2021; The Central Bureau of Statistics, 2020). Children in low-middle human development index countries are at the highest risk of failing to reach their developmental potential (Tran, Luchters and Fisher, 2017). This condition was exacerbated by the Learning From Home policy implementation in 2019 to control the transmission of COVID-19 related to their social development problems (Anggorowati, Desty and Fauzi, 2022). Yogyakarta is one of the provinces in Indonesia that has implemented the PUSPAGA (Family Learning Center) program. This program aims to provide services to increase the capacity of parents/families

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to carry out the responsibilities of caring for and educating children through the skills of stimulating children's growth and development (Ministry of Women's Empowerment and Child Protection, 2020). The implementation of this program's services is integrated with primary health services at Community Health Centers (Puskesmas), which makes it easy for families to access (Office of Women's Empowerment, Child Protection, Population Control Yogyakarta, 2021). The implementation of classes for mothers of toddlers has been proven to increase their knowledge about parenting patterns for toddlers (Meliati and Ekayani, 2018)

The World Health Organization (WHO) recommends the promotion of health to increase children's development through positive parenting by providing developmental stimulation from an early age (WHO, 2020). Developmental stimulation carried out by the family can improve children's cognitive, language, social, and emotional abilities. (Ma *et al.*, 2016; Barreto *et al.*, 2017). Providing stimulation to children depends on the role of a mother. According to reports from several studies, in general, mothers are considered to be the primary person responsible for caring for children under five (Fikree and Pasha, 2004; Ministry of Women's Empowerment and Child Protection, 2020). However, still many have limitations in stimulating their children's development because of their lack of knowledge and because they experience stress in their busy households (Emmers *et al.*, 2021). Another factor that influences mothers' behavior in caring for toddlers is the level of education and number of children (Simatupang *et al.*, 2022).

Extensive research on interventions that influence maternal behavior to improve toddler development has been carried out; however, research that analyzes the relationship between social psychological factors and maternal behavior to improve toddler development within a conceptual framework is still limited. Psychosocial factors include childcare quality at home, is a vital determinant of early childhood development (Tran, Luchters and Fisher, 2017). One crucial step in developing interventions to change maternal behavior to promote effective child development is understanding the relationships and interactions between all the factors that influence maternal behavior within a conceptual framework. The SCT model developed by Albert Bandura emphasizes reciprocal determinism, namely the reciprocal relationship between behavioral factors, personal factors, and environmental influences (triadic reciprocality). Human behavior comes from reciprocal interactions between external events and individual factors such as genetic abilities, learned competencies, reflective thinking, and initiative. Mindfulness factors include observational learning, hope, and self-efficacy (Bandura, 1998). The relationships between the constructs in the SCT model are considered capable of explaining maternal behavior that improves the development of children under five, both directly and indirectly. This research aims to analyze the factors that influence maternal behavior in the development of children under five using SCT modeling.

Method

This research was an analytical observational study with a cross-sectional design. It was conducted in the Special Region of Yogyakarta Province, Indonesia, from July to September 2023. The study's population comprised mothers with toddlers aged 12-59 months. The sample size was 400 mothers of toddlers from areas covered by 20 community health centers (*Puskesmas*) selected using a cluster random sampling technique. The mothers of toddlers were selected according to predetermined criteria. The criteria for mothers of toddlers were those (1) able to read/write fluently; (2) who lived at home with their partner (husband); and (3) who had healthy toddlers. Data collection was by home visits; each mother of a toddler signed a letter of consent to become a respondent before completing the survey. If the respondents had more than one child in this age group then they were asked to respond to survey questions with the youngest child in mind. The research was carried out after obtaining ethical feasibility approval from the research ethics committee and permission from the regional heads of Yogyakarta and Bantul Regency.

The research instrument is a questionnaire to measure the influence of

the five variables observational learning, outcome expectations, self-efficacy, family support, and maternal behavior on improving the development of children under five. The indicators for measuring observational learning consist of seven statements with a 3-point Likert scale (0= no, 1= undecided, and 2= yes). The indicators for measuring outcome expectations consist of five statements with a 3-point Likert scale (0= no, 1= undecided, and 2= yes). The indicators for measuring self-efficacy consist of five statements with a 3-point Likert scale (0= no, 1= not sure, and 2= yes). The indicators for measuring family support consist of 11 statements of support with the answers "yes" and "no" (0=no 1=yes). The indicators for measuring maternal behavior consist of 10 statements with a 3-point Likert scale (0= no, 1= sometimes, and 2= always). The analysis used in this research was path analysis. The data analysis was conducted using the Stata 13 statistical software application. The benefit of using path analysis is that it allows testing the mediation between variables and provides estimates of the magnitude of influence, significance, and direction of relationships between variables as suggested by the hypothesized model (Ayuningrum and Murti, 2019).

The path analysis carried out by the researchers went through the following stages: first, creating a path diagram based on the SCT model (model specifications). The path diagram of the variables to be measured is in Figure 1. The next step was identifying the model by determining the degree of freedom. To determine the suitability of the model, the researchers checked the influence between variables according to the SCT model. Based on these relationships, a model was obtained consisting of direct relationships and indirect relationships. The estimated interaction parameters between variables are shown by the regression coefficient (b). The parameters in the structural model were estimated using goodness of fit and path coefficients. The model is suitable (good fit) by looking at the Chi2 between the model compared to the saturated model, the Root Mean Square Error of Approximation (RMSEA), the Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI), and the Standardized Root Mean Square Residual (SRMR).

Result And Discussion

A total of 400 respondents completed

Table 1. Characteristics of Mothers of Toddlers

Characteristic Variables	Frequency	
	N=400	%
Age (years)		
20-30	142	35.50
>30	258	64.50
Education		
Junior High School	91	22.75
Junior High School/Equivalent	202	50.50
Higher Education	107	26.75
Employment Status		
Unemployed	220	55.00
Employed	180	45.00
Parity		
Primipara	139	34.75
Multipara	261	65.25
Another Caregiver		
No	178	44.50
Yes	222	55.50

Source: Primary Data, 2023

the survey. The characteristics of respondents, mothers of toddlers, are in Table 1. The majority (64.50%) of the mothers of toddlers were aged 30-40 years, and those with low education accounted for 22.75%. Most of the mothers did not work (55.00%), had more than one child (65.25%), and most were assisted by other caregiver (55.50%).

Most mothers are middle-aged, have less than one education, already have more than one child, and are not working. According to previous researchers, these maternal characteristics are the reason for the mother's limitation in parenting. Low levels of education will reduce parental involvement in stimulating activities for their children due to lack of information and skills (Britto *et al*., 2017). Having more children to take care of will also reduce the mother's capacity to provide good stimulation (Price & Kalil, 2019).

Table 2 shows the results of univariate analysis for each variable. The average value of maternal behavior is a mean of 14.44 (SD ±3.21), with a minimum score of 7 and a maximum of 20. The value of the observational learning variable is a mean of 9.71 (SD ±2.34) with a minimum score of 3 and 14 for the maximum score. The results of measuring the outcome expectancy variable showed a mean of 7.67 (SD ± 1.14) with a minimum score of 5 and a maximum of 10. The mother's self-efficacy variable obtained a value of a mean of 7.28 (SD ± 1.36), with a minimum score of 4 and a maximum of 10. The family support variable obtained a value of a mean of 7.27 (SD ±1.78), with a minimum score 3 and a maximum of 11.

Each statement item to measure the variables studied has been tested for validity and reliability on 20 respondents; the alpha coefficient results for the observational learning variable is 0.88, the outcome expectations variable is 0.86, the self-efficacy variable is 0.83, the family support variable is 0.85, and the maternal behavior variable is 0.91. All variables have a Cronbach's alpha value > 0.70, which confirms internal consistency and reliability. The value df=1 indicates that path analysis can be carried out. The structural model was tested with all the paths depicted in Figure 1. The results of the path analysis of the SCT model to predict healthy maternal behavior to improve the development of children under five are in

Table 2. Results of Univariate Analysis of the SCT Construct

Variables	Mean	SD	Min	Max
Observational Learning	9.71	2.34	3	14
Outcome Expectancies	7.67	1.14	5	10
Self-Efficacy	7.28	1.36	4	10
Family Support	7.27	1.78	3	11
Maternal Behavior	14.44	3.21	7	20

Source: Primary Data

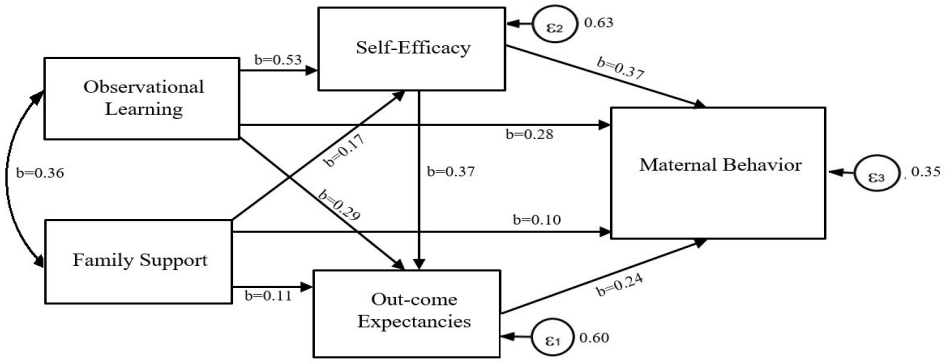

Figure 1. Path Analysis of Observational Learning Variables, Outcome Expectations, Self-Efficacy, Family Support, and Mother's Behavior to Improve the Development of Children with standardized path coefficients.

Table 3. The Direct and Indirect Effects of Social Cognitive Theory Model on Maternal Behavior for Healthy Child Development

Dependent Variables	Independent Variables	Path Coeff. (b)	CI (95%)		p
			Lower Limit	Upper Limit	
Direct Effect					
Maternal Behavior	Self-Efficacy	0.38	0. 291	0.444	< 0.001
	Out-come Expectancies	0.24	0.169	0.318	< 0.001
	Observational Learning	0.28	0.209	0.359	< 0.001
	Family Support	0.10	0.040	0.167	0.001
Indirect Effect					
Self-Efficacy	Observational Learning	0.53	0.452	0.598	< 0.001
	Family Support	0.17	0.090	0.255	< 0.001
Out-come Expectancies	Observational Learning	0.29	0.195	0.382	< 0.001
	Self-Efficacy	0.37	0.273	0.457	< 0.001
	Family Support	0.11	0.024	0.189	0.011
p > 0.05 RMSEA<0.001 CFI= 1.00 TLI= 1.00 SRMR< 0.001					

Source: Primary Data

Table 3.

Direct relationships: The independent variables that are positively and significantly related to maternal behavior are observational learning (b= 0.28, p< 0.001), outcome expectations (b= 0.24, p< 0.001), self-efficacy (b= 0.38, p< 0.001), and family support (b= 0.10, p= 0.001). Indirect relationships: There is an indirect relationship between the observational learning and family support variables and maternal behavior through the self-efficacy variable. Both are positively and significantly related, namely observational learning (b=0.53, p<0.001) and family support (b= 0.17, p< 0.001). There is an indirect relationship between observational learning, self-efficacy, and family support variables and the mother's behavior through the outcome expectancy variable. The three are positively and significantly related, namely observational learning (b= 0.29, p< 0.001), self-efficacy (b= 0.37, p< 0.001), and family support (b= 0.11, p= 0.011). The model suitability values (goodness of fit) are p> 0.05, RMSEA< 0.001, CFI= 1.00, TLI= 1.00, and SRMR< 0.001.

There has not been much research on health promotion models for changing maternal behavior to improve child development in Indonesia. In Indonesia, research priorities are on nutrition programs and preventing stunting (Lawn *et al*., 2014). This research explores the relationship between individual factors, social environmental support, and maternal behavior that improves the development of children under five in Yogyakarta, Indonesia. Maternal behavior that improves child development comes from reciprocal interactions between external events and personal factors (Bandura,

2004). By exploring and developing an understanding of the interactions between constructs according to the SCT model, it is hoped that researchers will find opportunities for health promotion interventions that focus on efforts to improve the development of children under five.

The results of path analysis conducted on the direct and indirect relationships in the construction of the SCT model and maternal behavior in the development of children under five yield several key findings: The findings in this study show that mothers with more observational learning have a greater possibility of exhibiting healthy behavior that improves the development of their toddlers. Most of a person's behavior and cognitive skills are learned through observing models (observational learning). Behavior is more likely to be adopted if the behavior is valued positively, it produces external rewards, and it is beneficial to the model itself (Bandura, 1998). The findings in this study follow previous research that showed that mothers of toddlers who received exposure to information about parenting from professionals, health cadres, and visits from family and peers had better knowledge and demonstrated higher quality parenting practices; mothers interact more often with children and provide an environment providing developmental stimulation for children under five (Bandura, 1998, 2004; Pitchik *et al*., 2018; Singla *et al*., 2015; Zhong *et al*., 2020).

The findings in this study indicate that mothers who have high self-efficacy have a greater possibility of adopting healthy behavior that improves children's development. Self-efficacy in parenting refers to parents' self-confidence about how well they can carry out their responsibilities. Parents who feel more confident in caring for children will take more role in caring for them (Merrifield *et al*., 2015). Mothers who have high self-efficacy are likely to have lower levels of anxiety/stress/depression and exhibit quality parenting outcomes and better child development (Albanese *et al*., 2019). This finding follows the results of previous research that showed that mothers who have high self-efficacy are more active in stimulating development and providing better childcare (Albanese *et al*., 2019; Hamadani *et al*., 2019; Luo *et al*., 2019).

The findings in this study show that mothers with expectations of better outcomes have more opportunity to engage in behavior that improves child development. Outcome expectations are a person's beliefs regarding the effectiveness of an action, even though they do not necessarily consider themselves capable of carrying out that action. Outcome expectations include social, physical, and self-evaluation outcomes (Hajal *et al*., 2019). The findings in this study are in accordance with previous research that showed that mothers of toddlers who have assessed their children's developmental outcomes as better after participating in an early childhood education (PAUD) program exhibit an increase in their responsiveness in interacting with their children. It demonstrates that the hope for positive child development results influences the mother's desire to carry out developmental stimulation activities, such as those carried out by caregivers in PAUD programs (Yazejian *et al*., 2017).

The findings in this study show that mothers with better family support have more opportunity to exhibit healthy behaviors that improve the development of their toddlers. Family support includes information, facilities, costs, and emotional support. Support can come from husbands, grandmothers, or other relatives. Family support behavior can be realized by providing play equipment, playing with children, inviting children to play outside the house, and teaching such as reading books, telling stories, singing, counting songs, and drawing with children (Frongillo *et al*., 2017). This finding follows previous research that showed that the support provided by the family (father) in child care reduces stress levels and the risk of maternal depression, thereby enabling mothers to provide more effective and quality care(Angley *et al*., 2015; Merrifield *et al*., 2015; Saptarini *et al*., 2021). The availability of funds and facilities provided by the family has been proven to increase the mother's activity in practicing stimulating a child's development (Cuartas *et al*., 2020; Yu *et al*., 2023).

The findings in this study show that self-efficacy is a mediating variable between observational learning, family support, and maternal healthy behavior in improving the

development of children under five. The findings in this study follow previous research that showed that mothers who received exposure to information and family support (fathers) exhibited positive changes in attitudes and self-efficacy, reduced anxiety in caring for children. Therefore, the quality of interactions with children was increased (Cuartas *et al*., 2020; Yu *et al*., 2023). More support from a partner can increase a mother's self-efficacy in parenting (Angley *et al*., 2015). Maternal education and previous parenting experience increase maternal self-efficacy regarding their ability to successfully implement parenting strategies (Merrifield *et al*., 2015). Mothers whose families have a higher socioeconomic status have been proven to be in a better psychological condition, so they can carry out responsive parenting practices (Scherer *et al*., 2019).

The findings in this study show that outcome expectations are mediating variables between observational learning, self-efficacy, and family support and maternal healthy behavior improving child development. These findings follow previous research that showed that mothers who receive more observational learning (information) higher social/family support, and increased self-efficacy have the opportunity to have higher outcome expectations, which ultimately shows higher quality parenting behavior for children. (Angley *et al*., 2015). A mother's achievement of expected outcomes in caring for a child is influenced by previous experience, knowledge gained from the family, and self-efficacy. Social support for prospective parents is needed as early as possible to increase the mother's and partner's self-efficacy as well as parenting competence (Angley *et al*., 2015).

This research is interesting because it explores the relationship between the three constructs of the SCT model and family support with maternal behavior in improving the development of children under five in one of the provinces that have good access to education and health services in Indonesia. Some limitations need to be considered from the results of cross-sectional analysis, namely that they limit causal inference. This study had a fairly large sample size (N=400), although it did have sufficient power to detect the effects required in the statistical analysis (Cohen, 1992). The multivariate analysis carried out did not take into account variables outside the SCT model's construction which could have contributed to the analysis results, such as family income, family support, mother's education level, and others; this is because this research phase aimed to explore the model's goodness of fit. This research is only based on the mother's answers and not accompanied by observations of the mother's behavior, so there may be information bias influenced by recall bias. Our study was conducted in children aged 12–59 months, so the findings may not be generalizable to other age groups.

Conclusion

The SCT model can be used to explain the complex relationship between the construction of social psychological factors and maternal behavior that improves the development of children under five in Yogyakarta, Indonesia. This model can aid in understanding the predictors of maternal behavior and future programs to improve the development of children under five. This research provides important insights into variables associated with maternal behavior in the population of Yogyakarta, Indonesia. Future research should utilize these findings to develop healthy behavior change programs for mothers to improve the development of children under five through interventions that focus on addressing self-efficacy and outcome expectations.

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References

Albanese, A.M., Russo, G.R., & Geller, P.A., 2019. The Role of Parental Self-Efficacy in Parent and Child Well-Being: A Systematic Review of Associated Outcomes. *Child: Care, Health and Development*, 45(3), pp.333–363.

Anggorowati, L., Desty, R.T., & Fauzi, L., 2022. Implementation of Learning from Home as a Determinant of Social Development Problems for Preschool Children. *Jurnal*

Kesehatan Masyarakat, 18(2), pp.209–216.

Angley, M., Divney, A., Magriples, U., & Kershaw, T., 2015. Social Support, Family Functioning and Parenting Competence in Adolescent Parents. *Maternal And Child Health Journal*, 19(1), pp.67–73.

Ayuningrum, I.Y., & Murti, B., 2019. *Aplikasi Path Analysis dan Structural Equation Model dengan Stata*. Surakarta: Program Studi Ilmu Kesehatan Masyarakat UNS.

Bandura, A., 1998. Health Promotion from The Perspective of Social Cognitive Theory. *Psychology And Health*, 13(4), pp.623–649.

Bandura, A., 2004. Health Promotion by Social Cognitive Means. *Health Education & Behavior*. Sage Publications, 31(2), pp.143–164.

Barreto, F.B., Shanchez de Muguel, M., Ibarluzea, J., Andiarena, A., & Arranz, E., 2017. Family Context and Cognitive Development in Early Childhood: A Longitudinal Study. *Intelligence*, 65, pp.11–22.

Britto, P.R., *et al.* 2017. Nurturing Care: Promoting Early Childhood Development. *The Lancet*, 389(10064), pp.91–102.

Cohen, J., 1992. A Power Primer. *Psychological Bulletin*, 112(1), pp.155–159.

Cuartas, J., Jeong, J., Rey-Guerra, C., McCoy, D.C., & Yoshikawa, H., 2020. Maternal, Paternal, and Other Caregivers' Stimulation in Low-And-Middle-Income Countries. *PloS One*, 15(7), pp. e0236107.

Emmers, D., Jiang, Q., Xue, H., Zhang, Y., Zhang, Y., Zhao, Y., Liu, B., Dill, S.E., Qian, Y., Warrinnier, N., Johnstone, H., Cai, J., Wang, X., Wang, L., Luo, R., Li, G., Xu, J., Liu, M., Huang, Y., Shan, W., Li, Z., Zhang, Y., Sylvia, S., Ma, Y., Medina, A., & Rozelle, S., 2021. Early Childhood Development and Parental Training Interventions in Rural China: A Systematic Review And Meta-Analysis. *BMJ Global Health*, 6(8), pp. e005578.

Fikree, F.F., & Pasha, O., 2004. Role of Gender In Health Disparity: The South Asian Context. *BMJ*, 328(7443), pp. 823.

Frongillo, E., Kulkarni, S., Basnet, S., de Castro, F., 2017. Family Care Behaviors and Early Childhood Development in Low- and Middle-Income Countries. *Journal of Child and Family Studies*, 26, pp.1–9.

Hajal, N.J., Teti, D.M., Cole, P.M., & Ram, N., 2019. Maternal Emotion, Motivation, and Regulation During Real-World Parenting Challenges. *Journal of Family Psychology: JFP*, 33(1), pp.109–120.

Hamadani, J.D., Mehrin, S.F., Tofail, F., Hasan, M.I., Huda, S.N., Baker-Henningham, H., Ridout, D., Grantham-McGregor, S., 2019. Integrating an Early Childhood Development Programme Into Bangladeshi Primary Health-Care Services: An Open-Label, Cluster-Randomised Controlled Trial. *The Lancet: Global Health*, 7(3), pp.e366–e375.

Lawn, J.E., Blencowe, H., Oza, S., You, D., Lee, A.C.C., Waiswa, P., Lalli, M., Bhutta, Z., Barros, A.J.D., Christian, P., Mathers, C., & Cousens, S.N., 2014. Every Newborn: Progress, Priorities, and Potential Beyond Survival. *The Lancet*, 384(9938), pp.189–205.

List, J.A., Pernaudet, J., & Suskind, D.L., 2021. Shifting Parental Beliefs About Child Development to Foster Parental Investments and Improve School Readiness Outcomes. *Nature Communications*, 12(1), pp.5765.

Luo, R., Emmers, D., Warrinnier, N., Rozelle, S., & Sylvia, S., 2019. Using Community Health Workers to Deliver a Scalable Integrated Parenting Program in Rural China: a Cluster-Randomized Controlled Trial. *Social Science & Medicine*, 239, pp.112545.

Ma, X., Shen, J., Krenn, H.Y., Hu, S., & Yuan, J., 2016. A Meta-Analysis of The Relationship Between Learning Outcomes and Parental Involvement During Early Childhood Education and Early Elementary Education. *Educational Psychology Review*, 28(4), pp.771–801.

Meliati, L., & Ekayani, N.P.K., 2018. Children Under Five Year Mother Class Program to Detect the Children Growth and Development. *KEMAS: Jurnal Kesehatan Masyarakat*, 14(1), pp.106–114.

Merrifield, K.A., Gamble, W.C., & Yu, J.J., 2015. Using Social Cognitive Theory to Understand Meta-Parenting in Parents of Young Children. *Family Science*, 6(1), pp.362–369.

Ministry of Women's Empowerment and Child Protection., 2020. *Profil Anak Indonesia 2020*, *Ministry of Women's Empowerment and Child Protection, Republic of Indonesia*. Jakarta.

Office of Women's Empowerment, Child Protection, Population Control., & F. P., 2021. *Laporan Kegiatan Puspaga*. Kota Yogyakarta.

Pitchik, H.O., Fawzi, W.W., McCoy, D.C., Darling, A.M., Abioye, A.I., Tesha, F., Smith, E.R., Mugusi, F., & Sudfeld, C.R., 2018. Prenatal Nutrition, Stimulation, and Exposure to Punishment are Associated With Early Child Motor, Cognitive, Language, and Socioemotional Development in Dar es Salaam, Tanzania. *Child: Care, Health and*

Development, 44(6), pp.841–849.

Price, J., & Kalil, A., 2019. The Effect of Mother-Child Reading Time on Children's Reading Skills: Evidence From Natural Within-Family Variation. *Child Development*, 90(6), pp.e688–e702.

Saptarini, I., Rizkianti, A., Arfines, P.P., Suparmi., & Maisya, I.B., 2021. Associations Between Parental Depression and Early Childhood Development in Indonesia: A Cross-sectional Study. *Journal of Preventive Medicine and Public Health*, 54(6), pp.451.

Scherer, E., Hagaman, A., Chung, E., Rahman, A., O'Donnell, K., & Maselko, J., 2019. The Relationship Between Responsive Caregiving and Child Outcomes: Evidence From Direct Observations of Mother-Child Dyads in Pakistan. *BMC Public Health*, 19(1), pp.252.

Simatupang, E.J., Novfrida, Y., Mafluha, Y., & Nugraha, R.D.G., 2022. Determinats of The Parenting Experiences for Toodlers and Pre-School Children. *KEMAS: Jurnal Kesehatan Masyarakat*, 17(4), pp.566–573.

Singla, D.R., Kumbakumba, E., & Aboud, F.E., 2015. Effects of a Parenting Intervention to Address Maternal Psychological Wellbeing and Child Development and Growth in Rural Uganda: A Community-Based, Cluster-Randomised Trial. *The Lancet Global Health*, 3(8), pp.e458–e469.

The Central Bureau of Statistics (BPS)., 2020 *Profil Anak Usia Dini 2020*. Indonesia: Badan Pusat Statistik Subdirektorat Statistik Pendidikan dan Kesejahteraan Sosial.

Tran, T.D., Luchters, S., & Fisher, J., 2017. Early Childhood Development: Impact of National Human Development, Family Poverty, Parenting Practices and Access to Early Childhood Education. *Child: Care, Health and Development*, 43(3), pp.415–426.

United Nations., 2019. *World Population Prospects 2019. Volume II: Demographic Profiles (ST/ESA/SER.A/427)*. New York: Department of Economic and Social Affairs, Population Division.

Wang, L., Wang, T., Li, H., Guo, K., Hu, L., Zhang, S., & Rozelle, S., 2022. Parental Self-Perception, Parental Investment, and Early Childhood Developmental Outcomes: Evidence From Rural China. *Frontiers in Public Health*, 10, pp.820113.

WHO., 2020. *Improving Early Childhood Development: WHO Guideline*. World Health Organization.

Yazejian, N., Bryant, D.M., Hans, S., Horm, D., Clair, L.S., File, N., & Burchinal, M., 2017. Child and Parenting Outcomes After 1 Year of Educare. *Child Development*, 88(5), pp.1671–1688.

Yu, W., Guo, Z., Tian, J., Li, P., Wang, P., Chen, H., Zcm, D., Li, M., Ge, Y., & Liu, X., 2023. Parental Anxiety, Practices, and Parent-Child Relationships among Families with Young Children in China: A Cross-Sectional Study. *Children (Basel, Switzerland)*, 10(8).

Zhong, J., He, Y., Chen, Y., & Luo, R., 2020. Relationships between Parenting Skills and Early Childhood Development in Rural Households in Western China. *International Journal of Environmental Research and Public Health*, 17(5).