Factors Influencing Cognitive Development In Early Childhood: A Systematic Literature Review

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Abstract. Apart from problems in cognitive and psychosocial development, nutrition also affects inadequate nutrition in children aged 4-5 years which can cause stunting, which is a condition of chronically stunted growth. Stunting can have an impact on children's physical and cognitive development, including their brain development and cognitive abilities. Therefore, it is important for parents and caregivers to ensure that children receive balanced and sufficient nutrition to support their growth and development properly. So cognitive development is intended so that children are able to explore the world. The aim of the research is to determine the factors that influence the cognitive development of early childhood (4-5 years) in terms of several literatures. Search for relevant literature data sources using Google Scholar and Sciendirect using the keywords: “Factors influencing development” + “Cognitive development” + “Psychosocial development” + “In children”. The search articles were selected using inclusion and exclusion criteria using population, intervention, conclusion and output (PICO) analysis. Apart from that, the articles were taken from the last 7 years and are in full text form. The results of searching the Google Scholar and Scientdirect data bases. The result literature review From the 5 journals, the results obtained mostly stated that there were several factors, namely psychosocial, nutritional, environmental and genetic. The conclusion regarding the factors that influence cognitive development in early childhood (4-5 years), such as psychosocial and nutrition, is that these two factors play an important role in shaping children’s cognitive abilities. Psychosocial factors, such as social interaction, emotional support, and cognitive stimulation from the surrounding environment, can help enrich children’s learning experiences and influence their brain development.

Keywords: Cognitive, Psychosocial, Nutritional.

INTRODUCTION

Early childhood 4-5 years old is at an important developmental stage in their lives. They are experiencing rapid growth in various aspects such as physical, cognitive, social and emotional (Ekholuenetale et al., 2020). This is the period where children begin to develop their basic social,

language, and cognitive skills through interactions with the environment and people around them. The role of parents and educators is very important in providing the right stimulation and supporting the development of these young children (Saracho, 2023). The cognitive development of children aged 4-5 years includes various cognitive abilities that are important in shaping their understanding and problem solving. Several aspects of cognitive development at this age children at this age experience rapid language development. They begin to expand their understanding, understand and use more complex sentences, and are able to follow more complicated instructions. Children begin to develop the ability to solve simple problems. They learn to use basic logic and experiment with different ways to find solutions (Widya Masitah & Pasaribu, 2021).

Children's imagination develops rapidly at this age. They start role-playing, creating stories, and using their imaginations to explore the world around them. Children begin to learn to classify objects based on shared characteristics and sort objects by size, shape, or color. At this age, children begin to understand basic concepts such as numbers, letters, shapes and colors (Bjorklund, 2022). They also begin to understand simple cause-and-effect relationships. Cognitive development at the age of 4-5 years is greatly influenced by their experiences in exploring their environment and interactions with the people around them. Therefore, it is important for parents and caregivers to provide appropriate stimulation and support the cognitive development of children at this age (Philip & Cherian, 2020).

The physical development of children aged 4-5 years also shows many significant changes. Several important aspects of the physical development of children at this age. Children at this age generally experience rapid body growth, although the rate of growth can vary between children. They may get taller and gain weight. Children's fine motor skills begin to develop rapidly (Xiong et al., 2020). They can perform tasks that require finer control such as writing with a pencil, drawing, cutting with scissors, and assembling puzzles. Gross motor skills also continue to develop at this age. Children can jump, run, climb and use play equipment such as bicycles or balls better (Sahlberg & Doyle, 2019).

Children begin to develop better balance and body coordination. They can perform tasks such as walking upright on a line or jumping over it with their feet together without falling. Physical exercise and active play help in muscle development and increase body strength of children (Veitch et al., 2020). It is important for parents and caregivers to provide an environment that supports children's physical development, including providing safe play spaces and providing opportunities for movement and physical activity. Support for healthy physical development at this age will help children build a strong foundation for their future health and well-being (Lorenz et al., 2020).

The psychosocial development of children aged 4-5 years includes various aspects in their relationships with themselves and others around them. Several important aspects of psychosocial development at this age children begin to develop more complex social skills. They learn to interact with

peers, share and play together. They also begin to understand basic social rules and norms (Zhao et al., 2018). At this age, children begin to understand their own feelings and emotions as well as the emotions of others. They learn to identify and express emotions better, and begin to show empathy for others. Children begin to develop greater independence in performing daily tasks such as dressing themselves, cleaning themselves, and preparing snacks. They also begin to learn to make their own decisions in appropriate situations. At this age, children begin to form an initial understanding of who they are and how they are different from other people (Shan et al., 2019).

They begin to identify themselves in relation to their family, friends, and environment. Children begin to form their own self-concept and increase their self-confidence. Support and acceptance from parents and their social environment is very important to build a positive sense of self-confidence (Urke et al., 2018). At the age of 4-5 years, children are still strongly influenced by their experiences in their everyday environment. Therefore, it is important for parents and caregivers to provide consistent support and facilitate healthy psychosocial development by providing positive examples, facilitating good social interactions, and providing opportunities to explore and learn about themselves and the world around them (Bally et al., 2020; World Health Organization, 2020).

Fulfilling adequate nutrition is very important in supporting the cognitive development of children aged 4-5 years and preventing stunting. Several key nutrients that play a role in children's cognitive development include protein, which is an important building material for the brain and nervous system (Handryastuti et al., 2022; Saleh et al., 2021; Wulandary & Sudiarti, 2021). Ensuring children get enough protein from food sources such as meat, fish, eggs, nuts and dairy products will help support optimal cognitive development. Omega-3 fatty acids, especially DHA (docosahexaenoic acid), are essential for brain development and good cognitive function. Food sources rich in omega-3 include fatty fish such as salmon, sardines and tuna. Iron is an important nutrient for transporting oxygen to the brain. Iron deficiency can cause cognitive problems and memory loss (Utami et al., 2019).

Foods rich in iron include red meat, liver, green leafy vegetables, and nuts. Vitamins and minerals such as vitamin A, vitamin C, vitamin D, vitamin E, as well as minerals such as zinc and selenium also play an important role in supporting healthy brain function and cognition. Ensuring children have a balanced diet by consuming a variety of nutrient-rich foods will help prevent stunting and promote optimal cognitive development. Apart from that, it is also important to provide adequate fluid intake and encourage children to engage in regular physical activity to support their overall growth and development (Maulidiana & Sutjiati, 2021).

Children aged 4-5 years face several problems in cognitive development that parents and caregivers may need to pay attention to. Children at this age may have difficulty solving complex problems or dealing with situations that require abstract thinking. Children aged 4-5 years tend to have

short endurance. They may be easily distracted by external stimuli or other activities around them. Although language development is rapid at this age, some children may experience limitations in vocabulary or language expression, which can affect their ability to communicate and understand instructions (Setyowati et al., 2022).

Children aged 4-5 years are still learning to recognize and regulate their emotions well. They may be prone to anger, anxiety, or frustration in challenging situations. Some children may experience delays in reaching certain cognitive milestones, such as difficulty remembering information or understanding more complex concepts. To help overcome this problem, it is important for parents and caregivers to provide a supportive environment for children's cognitive development, such as providing age-appropriate stimulation, encouraging active exploration and learning, and providing emotional support and opportunities to practice social and social skills. Cognitive (Beckmann et al., 2021).

Children aged 4-5 years can also face several problems in psychosocial development that parents and caregivers need to pay attention to. Some children may have difficulty interacting with peers or following basic social rules such as sharing or taking turns. At this age, children are still learning to recognize and regulate their emotions. They may experience conflicting emotions, such as anger, anxiety, or sadness, and may have difficulty expressing or coping with these emotions. Some children may experience excessive dependence on parents or caregivers, which can hinder the development of independence and self-confidence (Catherine, 2018).

Children at this age are still learning about their roles in social and family relationships. They may have difficulty understanding social expectations or how to behave in various situations. Some children may experience excessive fear or anxiety about certain situations or things, such as fear of ghosts or the dark. To help children overcome these psychosocial problems, it is important for parents and caregivers to provide consistent emotional support, create a safe and supportive environment for exploration and learning, and provide opportunities to practice social skills such as sharing, collaborating, and resolving conflict (Mulyanti et al., 2023).

Apart from problems in cognitive and psychosocial development, nutrition also affects inadequate nutrition in children aged 4-5 years which can cause stunting, which is a condition of chronically stunted growth. Stunting can have an impact on children's physical and cognitive development, including their brain development and cognitive abilities. Therefore, it is important for parents and caregivers to ensure that children receive balanced and sufficient nutrition to support their growth and development properly.

So cognitive development is intended so that children are able to explore the world. The aim of the research is to determine the factors that influence the cognitive development of early childhood (4-5 years) in terms of several literatures.

METHOD

Search for relevant literature data sources using Google Scholar and Sciendirect using the keywords: “Factors influencing development” + “Cognitive development” + “Psychosocial development” + “In children”. The search articles were selected using inclusion and exclusion criteria using population, intervention, conclusion and output (PICO) analysis. Apart from that, the articles were taken from the last 7 years and are in full text form. The results of searching the Google Scholar and Scientdirect data bases using the specified keywords resulted in 359 research articles, then screening was carried out according to the title and year of publication, resulting in 17 articles. Then, eligibility was screened through abstracts and full text, resulting in 10 articles. The final stage was screening with inclusion and exclusion criteria, 5 articles were obtained.

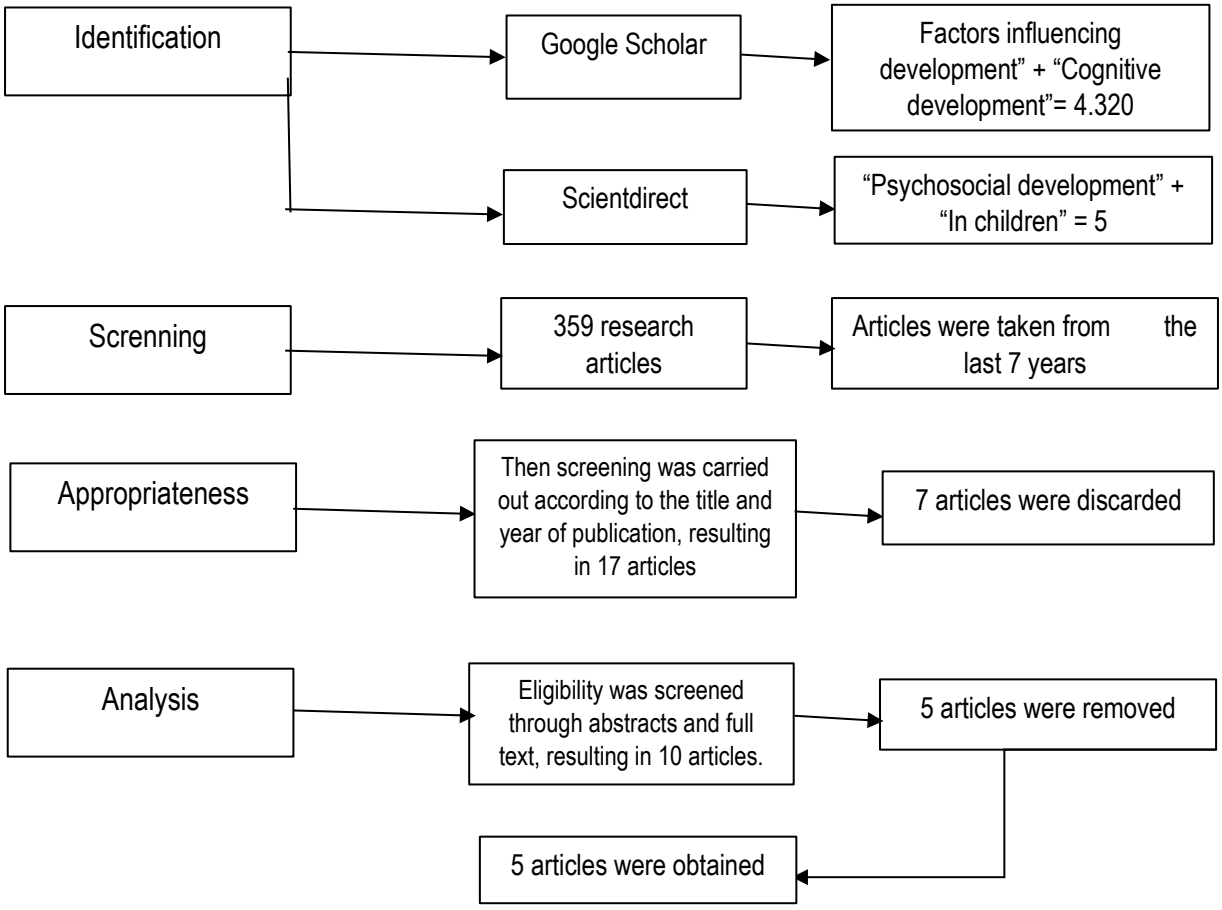

Figure. 1 Flowchart Literature Review

RESULT

Table 1. Summary of Literature Review Research Results

Author, Year	Title	Research Purposes	Research Methods	Research Result	Conclusion
Barreto, F. B., de Miguel, M. S., Ibarluzea, J., Andiarena, A., & Arranz, E. (2017)	Family context and cognitive development in early childhood: A longitudinal study.	This study explores the influence of the quality of the family context and sociodemographic factors on cognitive development in a population-based cohort of 295 children and their families.	Descriptive analysis	The study population comprised 295 children and their families, assessed when the children were 2 and 4 years of age. Of the children, 51% were girls, 48.5% were the first-born child, and 71.5% were exposed to a bilingual Basque/Spanish environment at home. As regards parents' characteristics, 52% of mothers and 29.3% of fathers had a university education, while 38.7% of mothers and 59.7% of fathers were classified as low social class	In an initial qualitative assessment of the results obtained by the families in our sample regarding quality of the family context, it should be highlighted that the distributions of the scores obtained indicates that the instrument used is able to capture variability among families. It is also able to identify those that provide high-quality contexts, as well as those that do not provide a context good enough to promote the full psychological development of their children.
Zauche, L. H., Thul, T. A., Mahoney, A. E. D., & Stapel-Wax, J. L. (2016).	Influence of language nutrition on children's language and cognitive development: An integrated review. Early Childhood Research Quarterly	Early childhood is a critical period for language and cognitive development. Evidence suggests that children need "language nutrition", or language-rich interactions with caregivers, for optimal language and cognitive development.	An integrated review	The samples included in this review varied greatly in terms of the children's current developmental status, socioeconomic background, and languages spoken in the home. Eight studies (7.8%) included samples of very preterm infants, four study samples (3.9%)	Given the dramatic impact that early language environment has on the developing child, those individuals who care for young children can be powerful agents of change. Families and early childhood caregivers need to be a key target for

Author, Year	Title	Research Purposes	Research Methods	Research Result	Conclusion
				consisted of children with permanent hearing loss, and nine studies (8.8%) included samples of children with language delays.	information, education, and skill building. Family engagement is integral to the success of all young children
Martínez–Sande, P. A., Pacheco, K. C., Martínez–González, M. B., & Chajin, L. H. (2022).	Cognitive development of children in vulnerable contexts: the role of psychosocial intervention.	The study aimed to determine if intervention processes in vulnerable communities might favor the children's development.	Descriptive analysis	No relationship was found between the type of intervention received by the communities and their infants' global cognitive development. However, the children of the community intervened by multiple agents and services showed significant differences related to a better performance in dimensions such as language, rhythm, memory, and attention.	It is necessary to ensure nutrition and guarantee quality education, early stimulation, spaces of relationship with peers, and a community aware of their co-responsibility in childcare to improve children's cognitive development.
Ekholuenetale, M., Barrow, A., Ekholuenetale, C. E., & Tudeme, G. (2020).	Impact of stunting on early childhood cognitive development in Benin: evidence from Demographic and Health Survey.	It is of interest to achieve healthy growth and optimal cognitive development in early childhood	A cross-sectional study	About two thirds (64.3%) of under-five children attained optimal cognition. Stunted children had 7% reduction in optimal cognitive development, compared with not stunted children (RR = 0.93; 95%CI 0.83, 0.98). Among the covariates, geographical region was significantly associated with	Due to the adverse impact of stunting on optimal cognitive development, we suggest that government and stakeholders in child welfare should ensure that development programmes combine health and nutrition services with early learning and rely on

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				optimal cognitive development. In addition, children of Islamic, traditional/other religion, and no religion had significant reduction in optimal cognitive development, compared with children of Christianity belief. Children from mothers who had secondary and tertiary education, listened to radio, and watched television had an increase in optimal cognitive development, compared with children from uneducated mothers. Furthermore, children from mothers who are employed had an 8% increase in optimal cognitive development	families as partners to have children's cognitive development effectively. Early childhood cognitive development programmes should be implemented through families and caregivers, with special focus on disadvantaged children as a poverty reduction strategy, and ensure that all children are adequately nourished.
Mangin, K. S., Horwood, L. J., & Woodward, L. J. (2017).	Cognitive development trajectories of very preterm and typically developing children	Cognitive impairment is common among children born very preterm (VPT), yet little is known about how this risk changes over time.	Descriptive analysis	To examine this issue, a regional cohort of 110 VPT (≤ 32 weeks gestation) and 113 full-term (FT) born children was prospectively assessed at ages 4, 6, 9, and 12 years using the Wechsler Preschool and Primary Scale	Despite some intraindividual variability, cognitive functioning of typically developing and high-risk VPT children was stable and influenced by early neurological development and family rearing context.

Author, Year	Title	Research Purposes	Research Methods	Research Result	Conclusion
				of Intelligence–Revised and then Wechsler Intelligence Scale for Children, 4th ed. At all ages, VPT children obtained lower scores than their FT born peers ($p < .001$). Growth curve modeling revealed stable cognitive trajectories across both groups.	

Based on the purpose of writing, there are 5 studies related to factors that influence cognitive development in early childhood. From the 5 journals, the results obtained mostly stated that there were several factors, namely psychosocial, nutritional, environmental and genetic.

DISCUSSION

Cognitive development in early childhood is influenced by various factors, including (Barreto et al., 2017; Zauchea et al., 2016):

1. Stimulative environment: Children who grow up in an environment rich in stimulation, such as educational toys, books, and good social interaction, tend to experience better cognitive development.
2. Interaction with adults: Positive relationships with adults, especially parents and caregivers, can influence a child's cognitive development by providing adequate encouragement, support and learning experiences.
3. Proper nutrition: Balanced and adequate nutritional intake plays an important role in a child's brain development. Malnutrition can affect brain function and cognitive development.
4. Genetic factors: Children inherit genetic factors that can influence their cognitive development. However, experience and environment also play a role in how these genes are expressed.

5. Prenatal stimulation: The environment in the womb can also influence a child's cognitive development. For example, exposure to stress or toxic substances can negatively impact fetal brain development.
6. Genetics: Genetic factors also play a role in determining a child's intelligence and cognitive development.
7. Emotional factors: Children's emotional well-being also impacts their cognitive development. Stress, anxiety, and depression can interfere with a child's ability to learn and process information effectively.

In combination, these factors form an environment that influences early childhood cognitive development. It is important for parents and caregivers to pay attention to all of these factors to ensure that children receive optimal support in their cognitive development. To provide optimal support for the cognitive development of children aged 4-5 years, you can consider the following things (Ekholuenetale et al., 2020; Mangin & Woodward, 2016):

1. Environmental stimulation: Make sure children have access to a variety of cognitively stimulating toys and activities, such as puzzles, memory games, story books, and construction toys. Provide opportunities for them to experiment and explore their environment.
2. Social interactions: Children at this age learn a lot through interactions with other people. Encourage them to play with their peers and participate in group activities, such as role-playing games or collaborative projects.
3. Experience-based learning: Children learn by doing. Give them opportunities to do activities that are practical and relevant to everyday life, such as cooking, gardening, or doing simple experiments.
4. Talking and listening: Invite children to talk about their experiences, ask about their feelings and opinions, and give them your full attention when they tell stories. This helps strengthen language skills and understanding of concepts.
5. Encourage asking questions: Teach children to ask questions and seek answers to their questions. This helps them build curiosity and problem-solving skills.
6. Playing in nature: Provide opportunities for children to explore nature and learn about the environment directly. Playing outdoors also improves creativity, concentration and fine motor skills.
7. Limit screen time: Too much exposure to screens (TV, tablet, or smartphone) can interfere with a child's cognitive development. Limit screen time and choose content that is educational and age-appropriate.

By providing comprehensive and varied support in the cognitive development of children aged 4-5 years, we can help them grow and develop optimally. At the age of 4-5 years, children experience significant psychosocial development. Some psychosocial aspects that may appear in children this age include (Morais et al., 2021):

1. Independence: Children begin to show a desire to do things independently, such as dressing, eating, and cleaning themselves. They may also be more willing to explore their environment without the help of adults.
2. Social roles: Children begin to understand their social roles in relationships with other people, whether in the family, peers, or other social environments. They learn about cooperation, sharing, and responsibility.
3. Social skills: The ability to communicate and interact with other people develops rapidly at this age. Children learn to understand other people's feelings, control emotions, and resolve conflicts in productive ways.
4. Emotional independence: Children begin to develop the ability to identify and express their emotions more clearly. They learn to manage emotions such as excitement, frustration, anxiety, and disappointment.
5. Identity development: At this age, children begin to understand better who they are and how they are different from others. They may begin to identify themselves based on gender, ethnicity, religion, and personal interests.
6. Empathy: Although still in its infancy, children begin to gain an understanding of other people's feelings and react empathetically to them. They may begin to show concern and concern for peers who are struggling.
7. Self-concept: Children begin to form an understanding of their own strengths, weaknesses, and interests. They may begin to develop confidence in their own abilities, as well as becoming more aware of their wants and needs.

At the age of 4-5 years, interactions with adults and peers play an important role in shaping a child's psychosocial development. Supporting children in their exploration of identity and emotions, as well as providing positive social role models, will help them grow into psychosocially healthy individuals.

CONCLUSIONS

The conclusion regarding the factors that influence cognitive development in early childhood (4-5 years), such as psychosocial and nutrition, is that these two factors play an important role in shaping children’s cognitive abilities. Psychosocial factors, such as social interaction, emotional support, and

cognitive stimulation from the surrounding environment, can help enrich children's learning experiences and influence their brain development. Meanwhile, adequate and balanced nutrition is also needed to support brain growth and optimal cognitive function in children. The two are interconnected and important to pay attention to in providing care and a supportive environment for early childhood cognitive development.

Suggestions for readers, parents, and educators/teachers regarding factors that influence cognitive development in early childhood (4-5 years) such as psychosocial and nutrition are: Emotional Closeness: Give the child a consistent feeling of security and affection. Positive interactions and emotional support provided by parents and caregivers are very important for children's cognitive development. Environmental Stimulation: Create an environment rich in learning experiences. Provide toys, books, games and activities that stimulate children's minds. This helps enrich their learning experience and develop their cognitive abilities. Social Interaction: Encourage children to interact with peers and adults. Social interactions help children learn to recognize differences, communicate, and understand other people's perspectives, all of which support their cognitive development. Balanced Nutrition: Make sure children get balanced and nutritious food. Proper nutrition, especially during the growth period, is very important to support children's brain and cognitive development. By paying attention to and supporting these factors, we can help ensure optimal cognitive development in early childhood

Conflict of Interest

The authors declare that they have no conflict of interest.

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REFERENCES

Bally, J. M., Burles, M., Smith, N. R., Holtslander, L., Mpofu, C., Viden, H. H., & Zimmer, M. (2020). Exploring opportunities for holistic family care of parental caregivers of children with life-threatening or life-limiting illnesses. *Qualitative Social Work*, *20*(5), 1356–1373. https://doi.org/10.1177/1473325020967739

Barreto, F. B., Manuel Sánchez de Miguela, J. I., Andiarena, A., & Arranza, E. (2017). Family context and cognitive development in early childhood : A longitudinal study. *Intelligence*, *65*(September), 11–22. https://doi.org/10.1016/j.intell.2017.09.006

Beckmann, J., Lang, C., Randt, R., Gresse, A., Long, K. Z., Ludyga, S., Müller, I., Nqweniso, S., Pühse, U., Utzinger, J., Walter, C., & Gerber, M. (2021). Prevalence of Stunting and Relationship between

Stunting and Associated Risk Factors with Academic Achievement and Cognitive Function : A Cross-Sectional Study with South African Primary School Children. *International Journal of Environmental Research and Public Health Article*, *18*(8), 4218.

Bjorklund, D. F. (2022). Children' s thinking: Cognitive development and individual differences. *Sage Publications*.

Catherine, M. (2018). *Role of community based nutrition education in combating stunting among under-five children in Livingstone*. Mulungushi University.

Ekholuenetale, M., Barrow, A., Ekholuenetale, C. E., & Tudeme, G. (2020). Impact of stunting on early childhood cognitive development in Benin : evidence from Demographic and Health Survey. *Egyptian Pediatric Association Gazette*, *68*(31), 1–11.

Handryastuti, S., Pusponegoro, H. D., Nurdadi, S., Chandra, A., Pramita, F. A., Soebadi, A., Widjaja, I. R., & Rafli, A. (2022). Comparison of Cognitive Function in Children with Stunting and Children with Undernutrition with Normal Stature. *Journal of Nutrition and Metabolism*, *2022*.

Lorenz, S., Ulrich, S. M., Sann, A., & Liel, C. (2020). Self-Reported Psychosocial Stress in Parents With Small Children: Results from the Kinder in Deutschland—KiD 0–3 Study. *Deutsches Ärzteblatt International*, *117*(42), 709. https://doi.org/10.3238/arztebl.2020.0709

Mangin, K. S., & Woodward, L. J. (2016). *Cognitive Development Trajectories of Very Preterm and Typically Developing Children*. *00*(0), 1–17. https://doi.org/10.1111/cdev.12585

Maulidiana, A. R., & Sutjiati, E. (2021). *Low intake of essential amino acids and other risk factors of stunting among under-five children in Malang City, East Java, Indonesia*. *10*, 220–226.

Morais, R. L. de S., Magalhaes, L. de C., Nobre, J. N. P., Pinto, P. F. A., Neves, K. da R., & Carvalho, A. M. (2021). Quality of the home, daycare and neighborhood environment and the cognitive development of economically disadvantaged children in early childhood: A mediation analysis. *Infant Behavior and Development*, *64*, 101619.

Mulyanti, S., Dewi, Y. L. R., & Pamungkasari, E. P. (2023). Effectiveness of Nutrition and Psychosocial Stimulation. *Proceedings of the International Conference on Nursing and Health Sciences*, *4*(1), 9–18.

Philip, J., & Cherian, V. (2020). Factors affecting the Psychological Well-being of Health Care Workers During an epidemic : a Thematic Review. *Indian Journal of Psychological Medicine*, *42*(4), 323–333. https://doi.org/10.1177/0253717620934095

Sahlberg, P., & Doyle, W. (2019). *Let the children play: How more play will save our schools and help children thrive.* Oxford University Press.

Saleh, A., Syahrul, S., Hadju, V., Andriani, I., & Restika, I. (2021). Role of Maternal in Preventing Stunting : a Systematic Review. *Gaceta Sanitaria*, *35*, S576–S582. https://doi.org/10.1016/j.gaceta.2021.10.087

Saracho, O. N. (2023). Theories of child development and their impact on early childhood education and care. *Early Childhood Education Journal*, *51*(1), 15–30.

Setyowati, E., Musfiroh, M., Arief, I., Samsuddin, & Sari, A. L. (2022). Exclusive Breastfeeding as an Effort to Prevent Stunting in Toddlers. *NeuroQuantology*, *20*(5). https://doi.org/10.14704/nq.2022.20.5.NQ22664

Shan, W., Zhang, Y., Zhao, J., Zhang, Y., Cheung, E. F. C., Chan, R. C. K., & Jiang, F. (2019). Association

between Maltreatment, Positive Parent-Child Interaction, and Psychosocial Well-Being in Young Children. *The Journal of Pediatrics*, *213*, 180–186. https://doi.org/10.1016/j.jpeds.2019.06.050

Urke, H. B., Contreras, M., & Matanda, D. J. (2018). The Influence of Maternal and Household Resources , and Parental Psychosocial Child Stimulation on Early Childhood Development : A Cross-Sectional Study of Children 36 – 59 Months in Honduras. *International Journal of Environmental Research and Public Health*, *15*(5), 926. https://doi.org/10.3390/ijerph15050926

Utami, R. A., Setiawan, A., & Fitriyani, P. (2019). Identifying causal risk factors for stunting in children under five years of age in South Jakarta, Indonesia. *Enfermería Clínica*, *29*, 606–611. https://doi.org/10.1016/j.enfcli.2019.04.093

Veitch, J., Flowers, E., Ball, K., Deforche, B., & Timperio, A. (2020). Exploring Children ' s Views on Important Park Features : A Qualitative Study Using Walk-Along Interviews. *International Journal of Environmental Research and Public Health*, *17*(3), 1–14.

Widya Masitah, & Pasaribu, I. D. (2021). The influence of parenting style of early childhood cognitive development in Tanjung Medan Utara Village. *Proceeding International Seminar Of Islamic Studies . Vol. 3. No. 1.*

World Health Organization. (2020). *Improving early childhood development: WHO guideline.* World Health Organization.

Wulandary, W., & Sudiarti, T. (2021). Nutrition Intake and Stunting of Under-Five Children in Bogor West Java , Indonesia. *J Food Sci Nutr*, *7*(104), 2. https://doi.org/10.24966/FSN-1076/100104

Xiong, X., Deng, L., & Li, H. (2020). Children and Youth Services Review Is winning at the start important : Early childhood family cognitive stimulation and child development. *Children and Youth Services Review*, *118*(May), 105431. https://doi.org/10.1016/j.childyouth.2020.105431

Zauchea, L. H., Thula, T. A., Mahoneya, A. E., & Stapel-Wax, J. L. (2016). Influence of language nutrition on children's language and cognitive development : An integrated review. *Early Childhood Research Quarterly*, *36*, 318–333. https://doi.org/10.1016/j.ecresq.2016.01.015

Zhao, J., Zhang, Y., Jiang, F., Ip, P., Ka, F., Ho, W., Zhang, Y., & Huang, H. (2018). Excessive Screen Time and Psychosocial Well-Being: The Mediating Role of Body Mass Index, Sleep Duration, and Parent-Child Interaction. *The Journal of Pediatrics*, *202*, 1–7. https://doi.org/10.1016/j.jpeds.2018.06.029