

THE RELATIONSHIP BETWEEN MOTHER'S KNOWLEDGE AND ATTITUDES ABOUT EARLY STIMULATION AND LANGUAGE DEVELOPMENT IN CHILDREN AGED 1-3 YEARS

Lamapaha FMP*, Saptanto A and Ratnaningrum K

Faculty of Medicine, Muhammadiyah University, Semarang, Indonesia

*franclin.putra@gmail.com

Abstract: The age of toddlers is 1-3 years, and this period is very decisive for children to get optimal growth and development. Language ability is an important aspect that shows the overall development of children. Language disorder is a problem that is often found in children. The impact of these disorders can be detrimental to the child's development in the future. This study aims to analyze whether there is a relationship between knowledge and attitudes of mothers about early stimulation and language development in children aged 1-3 years at PAUD Nurul Huda, Grobogan Regency. This research is an analytic observational type with a cross sectional approach. The total sampling method was applied to obtain a sample of 30 respondents. Data were obtained from filling out questionnaires through interviews with mothers of students aged 1-3 years at PAUD Nurul Huda, and examination of language development using denver II. The chi-square test was used to analyze the data. The study's results showed a significant relationship between mother's knowledge and children's language development ($p=0.037$) and a significant relationship between mother's attitude and children's language development ($p=0.031$). There is a significant relationship between mother's knowledge and attitudes and the language development of children aged 1-3 years at PAUD Nurul Huda. In conclusion, the higher the level of mother's knowledge and attitude, the better the child's language development.

Keywords: language development, knowledge, attitude

Introduction

Children's language development is very important during their first three years. Toddler age is the age of 1-3 years, and this period is very decisive for children to obtain optimal growth and development (Maduratna, E. S., 2019). One important aspect of child development at this age is language skills. Language skills can be used to develop cognitive, language, and motor skills in early childhood (Ariyanti, T., 2016). Language disorder is a problem that is often found in children (Tomblin JB et al., 2017). Disorders or delays in language skills can have a negative impact on aspects of the child's life in the future (Mok PLH et al., 2018).

*Corresponding Author's Email: franclin.putra@gmail.com



The World Health Organization (WHO) reported that language development disorders in the United States are around 12% to 16%, in Asia 24%, and in Indonesia around 13% to 18% (Rahayu Y et al., 2022). In 2018, WHO reported that Indonesia had the highest prevalence of growth and development disorders in children under five years of age in Southeast Asia. The prevalence reached 28.7%, making Indonesia ranked third among countries with the highest prevalence in the world (Handayani et al., 2022).

In 2016, the Ministry of Health reported that 4-5% of children aged 1-3 years suffered from language disorders (Khoiriah et al., 2019). Based on data from the 2017 Grobogan District Health Profile, 3.4% of the 72,600 toddlers in Grobogan District experienced developmental disorders in the form of language and speech disorders (Grobogan District Health Office, 2017). Children must be prepared for maximum growth and development. The mother is a very important figure for child development. The behavior of parents, especially mothers, about what they know, think and do to promote child development is critical to the success of child development (Hasanah et al., 2019).

An indicator that someone has good knowledge can be seen from their level of education. Based on data from the Central Bureau of Statistics, the education level in Grobogan district, by gender, is better for men than for women. This can be seen from the fact that more women did not complete primary school than men and a smaller percentage of the female population completed primary school to a higher level (Statistics Center of Grobogan Regency, 2021). Factors such as bilingualism and genetics can influence children's language development, they have the potential to influence research results and can be important considerations in understanding children's language development as a whole (Jannah & Putro, 2021).

In relation to the things that have been stated previously, this study aims to analyze the relationship between maternal knowledge and attitudes about early stimulation of language development in children aged 1-3 years at PAUD Nurul Huda, Grobogan Regency.

Materials and Methods

This study used analytic observational method with cross sectional approach. The research location was PAUD Nurul Huda in Grobogan Regency. This research was conducted on January 28-29, 2023. This research covers the field of child health science. The population in this study were mothers and students of PAUD Nurul Huda in Grobogan Regency who met the criteria and were selected with a total sampling technique of 30 respondents.

Inclusion criteria for mothers: mothers who take care of their own children, mothers with elementary to junior high school education, and family income \leq Rp. 1,890,000. Child inclusion criteria: age 1-3 years, healthy during the study, and not suffering from diseases or disabilities such as down syndrome, cerebral palsy, autism, mute, or deaf. While the exclusion criteria for children and mothers: children who are sick or have organic disorders or congenital defects, have genetic disorders, and have a previous history of severe illness such as a history of LBW and LBW, mothers who are not cooperative during testing.

Data were obtained through questionnaire completion and direct examination of respondents using Denver II. Denver II is a significant revision of the Denver Developmental Screening Test (DDST)

which is a child development screening tool. This tool is used to detect developmental deviations in children aged 0-6 years, while the questionnaire was used to assess the level of knowledge and attitudes of mothers. The collected data were analyzed using the Chi-Square test.

Results

Table 1: Characteristics of Respondents

Sample characteristics and research variables	f (%)
Mother's job	
Housewife	21 (70,0)
Odd	1 (3,3)
Farmers	5 (16,7)
Merchant	3 (10,0)
Family Income	
≤ Rp 1.890.000	15 (50,0)
> Rp. 1.890.000	15 (50,0)
Mother Knowledge	
Good	11 (36,7)
Less	19 (63,3)
Mother's attitude	
Good	25 (83,3)
Less	5 (16,7)
Child Language Development	
Normal	20 (66,7)
Suspect	10 (33,3)

The results of the univariate analysis shown in Table 1 stated that 21 respondents were housewives (70%). Based on income level, 15 respondents earn below Rp. 1,890,000 per month (50.0%) and 15 respondents earn above Rp. 1,890,000 per month (50.0%). The knowledge level of the majority of respondents (63.3%) was classified as insufficient. A total of 25 respondents had good attitudes (83.3%) and 20 respondents had normal language development through DDST examination results (66.7%).

Table 2: He Relationship Between Mother's Knowledge and Attitude with Children's Language Development

Variable	Children's Language Development		Total N (%)	P Value PR (95% CI)
	Normal	Suspect		
Mother Knowledge				
Good	10 (90,9)	1 (9,1)	11 (100)	0,037*
Less	10 (52,6)	9 (47,4)	19 (100)	9,00 (0,95 – 84,90)

Mother's attitude				
Good	19 (76,0)	6 (24,0)	25 (100)	0,031*
Less	1 (20,0)	4 (80)	5 (100)	12,67 (1,18 – 136,28)

*Uji Fisher's Exact

As shown in Table 2, of the 11 mothers with good knowledge, most (90.9%) had normal child language development. Whereas mothers with poor knowledge had children with suspected language development scores of 47.4%. From the results of the analysis obtained that maternal knowledge is significantly associated with child language development $p=0.037$; $PR = 9.00$; $(CI = 0.95 - 84.90)$.

Table 2 also shows that mothers who have a poor attitude towards children's language development have children with a suspect language development score of 80% (4 people). Analysis showed that maternal attitude was significantly associated with child language development $p=0.031$; $PR=12.67$; $(1.18 - 136.28)$.

Discussion

The study results show that maternal knowledge is related to language development in children aged 1-3 years. This is in line with a previous study by Marni (2015) which states that there is a relationship between maternal knowledge and language development of toddler-age children. In addition, these results are in line with the study of Hasanah et al. (2019). The results showed a correlation between mothers' knowledge of language stimulation for children aged 1-3 years and language development.

Internal factors in a person such as experience and beliefs and external factors such as education level, socio-culture, and facilities can influence knowledge. Mothers who have a good theoretical understanding of child development and child language development, will make mothers aware and know about their children's language development (Br Karo, 2015). If a child's language ability is not in line with their age or there are delays or disorders, a mother with good knowledge will immediately realize and rush to ask for help from medical personnel, so that the delay can be handled immediately (Saputra, 2018).

A person's actions (overt behavior) are influenced by knowledge or cognitive aspects. Knowledgeable and skilled mothers can stimulate child development as early as possible continuously, so that as the child's age increases, his language development also increases (Hasanah et al., 2019). Knowledgeable mothers tend to stimulate good language development (Khairani & Voni Berlinda, 2019).

The results of the analysis stated that the mother's attitude was related to the language development of children aged 1-3 years. These results are in line with the study by Amelia et al (2019), that there is a relationship between maternal attitudes about early stimulation and the language development of preschool children aged 3-6 years. This research was conducted in Padang City, specifically at the Padang Pasir Health Center. The results of a similar study were also presented by Setyowati (2010) which stated that there was a correlation between maternal attitudes and children's language

development at the age of 24 to 36 months. This study was conducted in Surabaya City, precisely in South Krembangan Village, Krembangan Subdistrict.

Knowledge, thoughts, beliefs and emotions shape attitudes. Mothers with positive knowledge, emotions, thoughts, and beliefs also show positive tendencies towards their children, including language development (Saputra, 2018). Parents' attitudes affect the way they educate and treat their children. The better the attitude of parents, the better the relationship between parents and children, this helps children's development, including language development according to the age of the child (Pratama, 2020). A person's attitude can be influenced by many things, including knowledge, the influence of others, personal experience, and local culture (Darmawan & Fadjarajani, 2016). Environmental factors, good communication such as talking, singing, and reading picture storybooks, contribute to children's language development (Putra AY et al., 2018).

During the observation, some mother respondents who had less knowledge, but showed positive and good attitudes, their children had normal language development scores. This shows that there is a great influence from mothers on children's language development. There are several things to consider such as, a mother needs to maintain a positive attitude in monitoring language development in children by inviting children to talk and reading storybooks, so that children get stimulation for language development. It is necessary to screen children's language development in accordance with the specified time.

Conclusion

There is a relationship between mother's knowledge and attitude with language development in children aged 1-3 years at PAUD Nurul Huda, Grobogan Regency. From these conclusions, it can be concluded that both the level of knowledge and attitude of mothers have a significant influence on the language development of children aged 1-3 years at PAUD Nurul Huda, Grobogan Regency. Therefore, it is important for mothers to increase their knowledge about child language development and adopt a positive attitude in providing appropriate stimulation to their children. Thus, the necessary steps are to provide education and support to mothers in developing knowledge and attitudes that support optimal child language development.

A limitation of this study is that factors such as bilingualism and genetic factors may influence children's language development, which have not been examined in this study. These factors have the potential to influence the results of the study and could be important considerations in understanding children's language development as a whole. In this study, the focus was more on the influence of mothers' knowledge and attitudes on children's language development.

Acknowledgements

Through this article, the researcher would like to express his gratitude to Muhamadiyah University Semarang and PAUD Nurul Huda, Grobogan Regency, which have given permission to collect data so that this research can be completed.

Declaration of Interest Statement

The authors declare that they have no conflict of interests.

References

- Amelia A, Deswita, Hermalinda. (2019). The Relationship between Mother's Knowledge and Attitudes About Early Stimulation and Language Development in Preschool Children in the Working Area of the Padang Pasir Health Center, Padang City in 2019. Andalas University.
- Ariyanti, T. (2016). The Importance Of Childhood Education For Child Development. *Dynamics of Basic Education Scientific Journal*, 8(1).
- Br Karo M. (2015). The Relationship between Knowledge and Mother's Attitude toward the Language Development of Children Aged 1-3 Years (Toddler) at Nisrina Jati Asih School, Bekasi City, 2013. *Widya Scientific Journal*, 2:68–72.
- Darmawan D, Fadjarajani S. (2016). Relationship Between Knowledge and Attitudes of Environmental Preservation with Tourist Behavior in Maintaining Environmental Cleanliness. *Journal of Geography*, 16(1):37–49.
- Grobogan District Health Office. (2017). *Grobogan District Health Profile 2017*.
- Grobogan Regency Statistics Center. (2021). *Indicators of People's Welfare for 2021*
- Handayani, G. L., Abbasiah, A., & Rohmah, H. (2022). Study of Growth and Development of Toddlers Age 12-59 Months Based on Family Income Perspective and History of Exclusive Breastfeeding. *Silampari Nursing Journal*, 5(2), 772-780.
- Hasanah MN, Rachmawati DA, Efendi E. (2019). Mother's Knowledge About Language Stimulation with Language Development for Children Aged 1-3 Years in Lengkong Village, Mumbulsari District, Jember Regency. *Journal of Agromedicine and Medical Sciences*, 5(3).
- Jannah, M., & Putro, K. Z. (2021). The influence of genetic factors on early childhood development. *Bunayya: Journal of Child Education*, 7(2), 53-63.
- Khairani N, Voni Berlinda. (2019). The relationship between mother's knowledge about stimulation and the development of children aged 4-5 years in PAUD Bina Ana Prasa and PAUD Islam Baiturrahim, Rejang Lebong district. *Journal of Nursing And Public Health*. 39–47.
- Khoiriah AN, Fatmawati F, Gumanti KA. (2019). Differences in Language and Cognitive Development of Preschool Children Between Those Who Participate and Those Who Do Not Participate in Early Childhood Education at TK-IT Insan Permata Malang. *Journal Of Issues In Midwifery*, 3(2):40–7. Available from: <https://joim.ub.ac.id/index.php/joim/article/view/216>
- Maduratna, E. S. (2019). The Effect of Parental Stimulation on Toddler Age Children's Language Development. *NURSING UPDATE: Scientific Journal of Nursing Science* P-ISSN: 2085-5931 e-ISSN: 2623-2871, 10(2), 7-14.
- Marni B. (2015). The Relationship between Knowledge and Mother's Attitude towards the Language Development of Children Aged 1-3 Years (TODDLER) at Nisrina Jati Asih School, Bekasi City, 2013. *WIDYA Scientific Journal*, 3(2):71.
- Mok, P. L., Pickles, A., Durkin, K., & Conti-Ramsden, G. (2018). Longitudinal trajectories of peer relations in children with specific language impairment. *Journal of Child Psychology and Psychiatry*, 55(5), 516-527.

- Pratama R. (2020). The Relationship between Mother's Knowledge and Attitudes and the Growth and Development of Children Aged 0-6 Years. *Indonesian Journal of Child Development*, 5(1).
- Putra AY, Yudiemawati A, Maemunah N. (2018). The Effect of Stimulation by Parents on Language Development in Toddler Age Children at PAUD Asparaga Malang. *Indonesian Journal of Health Development*, 3(1).
- Rahayu Y, Apipudin A, Hotimatul D. (2022). Mother's Knowledge About Stimulation With The Development of Children's Language Toddler Age. *Journal of Health*, 7(2):24.
- Saputra A. (2018). Early Childhood Education. *Scientific Journal of Islamic Religious Education Study Program*. p.192–209.
- Setyowati EB. (2010). Relationship Between Mother's Knowledge, Attitudes and Behavior with Language Development in Children Aged 24-36 Months (Study in Krembangan Selatan Village, Krembangan District, Surabaya). *Airlangga University Library*.
- Tomblin JB, Zhang X, Buckwalter P, Catts H. (2017). The Association of Reading Disability, Behavioural Disorders and Language Impairment among Second-Grade Children. *Journal of child psychology and psychiatry*, 4(1).

Appendix

1. Ethical Clearance



**KOMISI ETIK PENELITIAN KESEHATAN
FAKULTAS KEDOKTERAN
UNIVERSITAS MUHAMMADIYAH SEMARANG**

**KETERANGAN KELAIKAN ETIK
(ETHICAL CLEARANCE)
No.: 005 / EC / KEPK-FK / UNIMUS / 2023**

Komisi Etik Penelitian Kesehatan Fakultas Kedokteran Universitas Muhammadiyah Semarang setelah membaca dan menelaah usulan penelitian dengan judul:

Hubungan Pengetahuan dan Sikap Ibu tentang Stimulasi Dini terhadap Perkembangan Bahasa pada Anak Usia 1-3 Tahun di Paud Nurul Huda Kabupaten Grobogan

Nama Peneliti Utama : Fracilin Manggala Putra Lamapaha
Tanggal Disetujui : 17 Januari 2023
Tanggal Terbit : 18 Januari 2023
Berlaku sampai : 17 Januari 2024
Lokasi Penelitian : Paud Nurul Huda Kabupaten Grobogan

Dengan ini menyatakan bahwa usulan penelitian tersebut diatas telah memenuhi persyaratan etik penelitian. Oleh karena itu Komisi Etik memberikan rekomendasi dan persetujuan untuk dilaksanakan dengan memperhatikan prinsip-prinsip etik.

Semarang, 19 Januari 2023
Komisi Etik Penelitian Kesehatan
FK Unimus
Ketua,

dr. Muhammad Sudlat Sp. OG(K), MM

