

## Factors Affecting Speech Delay in Children Under 5 Years Old at YARSI Hospital and Its Review from an Islamic Perspective

Muhammad Farabi Izka\*, Elsyé Souvriyanti, Tuty Herawaty, Fazlurrahman Anshar

Universitas YARSI, Indonesia

Email: muhammad.fizka@gmail.com, elsyé.souvriyanti@yarsi.ac.id,

herawatytuty@gmail.com, fazlurrahman791@gmail.com

---

### Keywords:

Speech delay; early childhood;  
internal factors; external factors;  
parenting style.

---

### ABSTRACT

Speech delay is one of the most common developmental issues in early childhood, affecting 5-10% of preschool children in Indonesia with an increasing trend annually. This study aims to identify internal and external factors influencing speech delay in children under 5 years old at YARSI Hospital. Using a quantitative observational analytic approach with a cross-sectional design, data were collected from 102 children diagnosed with speech delay through total sampling over a 6-month period. Results showed that speech delay was more prevalent in boys (69.6%) and children aged 49-59 months (31.4%). Internal factors identified include genetic and family history (29.4%), intelligence level, physical disability (15.7%), and prematurity (6.9%). External factors include parental education, parenting style with permissive pattern being dominant (44.1%), socioeconomic status with most families in low to medium categories (46.1% and 44.1%), gadget use, parental employment, and foreign language exposure (29.4%). This study concludes that speech delay is a multifactorial condition influenced by the interaction between internal biological factors and external environmental factors. From an Islamic perspective, children are an amanah from Allah SWT, and speech delay should be addressed through comprehensive efforts involving medical, educational, social, and spiritual approaches with patience and consistent stimulation.

---

## INTRODUCTION

Children are the hope of the future and are the most precious part of every parent's life. Parents want their child's growth and development to proceed well. The growth and development period of children is a crucial phase in their lives (Savitri et al., 2024). Growth is related to quantitative changes, which are characterized by an increase in the number of body cells as well as an increase in the size and weight of all parts of the body. Meanwhile, development is related to qualitative changes, including the improvement of an individual's ability to function through the processes of growth, maturation, and learning (Suhadi & Istanti, 2020).

Language serves as a means of communication that helps individuals connect and interact with others (Saragi et al., 2023). Language expression can occur through speech (Hscientific et al., 2024). Language has a very important role in human life because it functions as a tool to convey individual thoughts, feelings, and expressions when interacting with the surrounding environment (Zulkarnaini et al., 2023). Language used by humans is divided into two categories, namely expressive and receptive language. Expressive language refers to language conveyed through speech or writing, while receptive language refers to language that is received and understood by an individual (Maharani & Abidin, 2022).

The process of language development in children at an early age occurs systematically as they grow older (Saragi et al., 2023). In learning to speak, early childhood development occurs through interaction with their surroundings (Hscientific et al., 2024). Language development in early childhood provides an important foundation for children's growth at the elementary school level (Zulkarnaini et al., 2023). A child is considered capable of speaking when they can produce various sounds using their mouth, either through articulation or words, to communicate. Each child's speaking ability varies, but this ability can be compared to that of children of the same age in general (Aurelia et al., 2022).

Speech delay, also known as speech delay, is one of the problems frequently encountered in early childhood (Saragi et al., 2023). A child is considered to have speech delay if their speech ability is below the standard level of children of the same age, which can be observed from the accuracy of word usage (Hscientific et al., 2024). The prevalence of speech delay among preschool children in Indonesia ranges from 5% to 10%. The number of cases of speech delay in children tends to increase every year (Budiasih et al., 2024). Problems in speech development often impact children, especially in the academic domain. Speech delay can make it difficult for children to learn spelling and reading, even though reading is a basic skill that needs to be mastered before entering school (Zulkarnaini et al., 2023).

In general, there are several signs indicating that a child may have speech delay and require further evaluation. For example, if at the age of 1–1.5 months a child cannot smile, or at the age of 3 months has not produced sounds. In addition, if at the age of 18 months the child is not yet able to pronounce 4–5 words, or at the age of 2 years cannot say their own name, then these behaviors need to be examined to identify potential problems in language development (Budiasih et al., 2024). Furthermore, children who experience speech delay often also face difficulties in social aspects (Zulkarnaini et al., 2023). Generally, children with speech delays have difficulty maintaining eye contact during communication, which results in challenges in sustaining attention during interactions. In terms of movement, they tend to rely more on symbolic cues instead of verbal communication, such as waving when attempting to speak (Savitri et al., 2024).

Speech delay is influenced by various factors, including internal factors such as biological and psychological aspects, as well as external factors originating from the environment both within and outside the family (Budiasih et al., 2024). Several factors can contribute to speech delay, one of which is the lack of stimulation provided by parents or family members (Ulfa et al., 2024). There are two major categories of factors affecting speech delay in early childhood. Internal factors include cognition, perception, and prematurity. Meanwhile, external factors include parenting style, parental knowledge, socioeconomic status, and the social environment (H. et al., 2024). Speech delay in early childhood is influenced by a range of factors divided into these two categories. Internal factors include genetics, physical disabilities, neurological dysfunction, prematurity, and gender. External factors include birth order, physical disability, parental education, economic status, family functioning, and bilingual exposure (Zulkarnaini et al., 2023).

The novelty of this research is fivefold. First, it provides a comprehensive mapping of internal factors (genetics/family history 29.4%, intelligence level, physical disability 15.7%, prematurity 6.9%, male gender 69.6%) and external factors (parental education, parenting style with permissive dominance at 44.1%, socioeconomic status low–medium at 90.2%, gadget use,

parental employment, foreign language exposure 29.4%) within a single study. Second, it focuses specifically on the YARSI Hospital population, providing institution-specific data. Third, it integrates an Islamic perspective on child development, viewing children as amanah (trust) from Allah SWT who are born in a state of fitrah. Fourth, it acknowledges the multifactorial interaction between biological and environmental factors. Fifth, it identifies permissive parenting as the dominant style (44.1%) associated with speech delay, with permissive and authoritarian styles together comprising 81.4% of cases, while authoritative parenting (the most supportive for language development) represents only 18.6%.

Based on the background described above, this study focuses on formulating problems related to the factors affecting the incidence of speech delay in children at YARSI Hospital. This study seeks to examine how internal and external factors influence speech delay, as well as how Islamic perspectives interpret these contributing factors. In line with this, the general objective of the study is to identify factors that play a role in the occurrence of speech delay, while the specific objective is to analyze the influence of internal and external factors in greater depth. The results of this study are expected to benefit researchers by enhancing knowledge, institutions by expanding insights related to managing speech delay, and the community—especially parents—by increasing understanding of the factors that contribute to and help prevent speech delay in children.

## **METHOD**

This research was a quantitative study with an analytical observational approach. The purpose of this study was to determine the relationship between internal and external factors and the incidence of speech delay in children at YARSI Hospital. The research design used was cross-sectional, in which data collection of both independent and dependent variables from the research subjects was carried out simultaneously at a single point in time without any follow-up.

The target population in this study was all children diagnosed with speech delay who had visited the Children's Polyclinic of YARSI Hospital during the 6-month research period. Patients who met the inclusion criteria were included as the research sample. A sample was defined as a subset of the population that met the inclusion and exclusion criteria. Sampling in this study used a total sampling technique over the 6-month research period. Samples were taken from those who met the following criteria:

### **Inclusion Criteria:**

- a) Children aged 0–5 years who had been diagnosed with speech delay at YARSI Hospital.
- b) Children with complete questionnaire data.
- c) Parents/guardians who were willing to participate as respondents and had signed informed consent.

### **Exclusion Criteria:**

- a) Children over 5 years old who had been diagnosed with speech delay at YARSI Hospital.
- b) Children with incomplete questionnaire data.
- c) Parents/guardians who were not willing to participate as respondents or did not sign informed consent.

The sampling method used a total sampling technique, defined as selecting the population based on predetermined inclusion and exclusion criteria without randomization over the 6-month research period. The population referred to pediatric patients diagnosed with speech delay who had visited the YARSI Hospital Children's Polyclinic and were willing to participate as respondents.

### Univariate Analysis

Univariate analysis was used to describe the characteristics of the respondents and the distribution of each variable using frequency, percentage, mean, and standard deviation.

- a) Speech delay
- b) Internal factor variables
- c) External factor variables

### Bivariate Analysis

Bivariate analysis was conducted to test the relationship between independent variables and speech delay using the Chi-square test. If the data did not meet the assumptions of the Chi-square test, Fisher's Exact Test was used. In this study, bivariate analysis was also used to identify which factors had the most influence on the incidence of speech delay.

## RESULT AND DISCUSSION

### Respondent Characteristics

#### A. Distribution of *Speech Delay Events*

**Table 1.** Distribution of Occurrence Characteristics *Speech Delay*

Variable	Category	Frequency (n)	Percentage (%)
<b>Gender</b>	Male	71	69,6
	Women	31	30,4
	<b>Total</b>	<b>102</b>	<b>100</b>
<b>Child's Age</b>	0-12 months	0	0
	13-24 months	22	21,6
	25-36 months	30	29,4
	37-48 months	18	17,6
	49-59 months	32	31,4
	<b>Total</b>	<b>102</b>	<b>100</b>

Based on the table above, the characteristics of children with the incidence of speech delay are dominated by the male gender, which is as many as 71 children (69.6%), while girls amount to 31 children (30.4%). This shows that the incidence of speech delay is more common in boys than girls.

Based on age group, the incidence of speech delay was most common in children aged 49-59 months, namely 32 children (31.4%), followed by 30 children aged 25-36 months (29.4%), 22 children aged 13-24 months (21.6%), and 18 children aged 37-48 months (17.6%). No instances of speech delay were found in the age group of 0-12 months. These findings suggest that the incidence of speech delay is more often identified in late preschool age.

## B. Internal Factor Distribution

**Table 2.** Distribution of Internal Factors in Children with Speech Delay

Variable	Category	Frequency (n)	Percentage (%)
<b>Genetics and Family History</b>	Ya	30	29,4
	No	72	70,6
	<b>Total</b>	<b>102</b>	<b>100</b>
<b>Intelligence</b>	Less	15	14,7
	Enough	26	25,5
	Good	61	59,8
	<b>Total</b>	<b>102</b>	<b>100</b>
<b>Physical Disability</b>	Ya	16	15,7
	No	86	84,3
	<b>Total</b>	<b>102</b>	<b>100</b>
<b>Prematurity</b>	Ya	7	6,9
	No	95	93,1
	<b>Total</b>	<b>102</b>	<b>100</b>

Based on the table above, most children with speech delay do not have a genetic or family history related to speech disorders, namely 72 children (70.6%), while 30 children (29.4%) have such a history.

Based on the level of intelligence, most children were in the good category as many as 61 children (59.8%), followed by the sufficient category as many as 26 children (25.5%) and less as many as 15 children (14.7%). This shows that speech delay does not only occur in children with low intelligence.

In the physical disability variable, most respondents did not have a physical disability (84.3%), while 15.7% had a physical disability that has the potential to affect speech development.

Based on birth history, most children were not born prematurely (93.1%), while 6.9% had a history of prematurity. Although the number is small, prematurity still needs to be considered as a risk factor for speech delay.

## C. Distribution of External Factors

**Table 3.** Distribution of External Factors in Children with *Speech Delay*

Variable	Category	Frequency (n)	Percentage (%)
<b>Father's Education</b>	No School	2	2
	SD	1	1
	SMP	10	9,8
	SMA	64	62,7
	College	25	24,5
	<b>Total</b>	<b>102</b>	<b>100</b>
<b>Mother's Education</b>	SD	3	2,9
	SMP	9	8,8
	SMA	56	54,9
	College	34	33,3
	<b>Total</b>	<b>102</b>	<b>100</b>

Variable	Category	Frequency (n)	Percentage (%)
<b>Parenting</b>	Authoritarian	38	37,3
	Authoritative	19	18,6
	Permissive	45	44,1
	<b>Total</b>	<b>102</b>	<b>100</b>
<b>Socio-Economic</b>	Low	47	46,1
	Medium	45	44,1
	High	10	9,8
	<b>Total</b>	<b>102</b>	<b>100</b>
<b>Use of Gadgets</b>	Low	42	41,2
	Medium	26	25,5
	High	34	33,3
	<b>Total</b>	<b>102</b>	<b>100</b>
<b>Father's Work</b>	Full-Time	81	79,4
	Part-Time	15	14,7
	Not Working	6	5,9
	<b>Total</b>	<b>102</b>	<b>100</b>
<b>Mother's Work</b>	Full-Time	30	29,4
	Part-Time	13	12,7
	Not Working	59	57,8
	<b>Total</b>	<b>102</b>	<b>100</b>
<b>Foreign Language Exposure</b>	Yes	30	29,4
	No	72	70,6
	<b>Total</b>	<b>102</b>	<b>100</b>

Based on the table above, most fathers and mothers of children with speech delay have the last level of education in high school, at 62.7% and 54.9%, respectively. Some mothers also have a college education (33.3%).

Based on parenting, the majority of parents apply permissive parenting (44.1%), followed by authoritarian (37.3%) and authoritative (18.6%) parenting.

In terms of socioeconomic status, most respondents were in the low (46.1%) and medium (44.1%) categories, while only 9.8% were in the high category.

In the variable of gadget use, the distribution of respondents was relatively even, with the low category at 41.2%, medium at 25.5%, and the high category at 33.3%.

The majority of fathers work full-time (79.4%), while more than half of mothers are not working (57.8%). In addition, most children are not exposed to foreign languages (70.6%), while 29.4% of children are exposed to foreign languages in their daily lives.

#### **A. Characteristics of Speech Delay Occurrence**

Based on table 5, the results of the study show that the incidence of speech delay is more common in boys than girls. The proportion of boys is 69.6%, while girls are 30.4%. These findings are in line with various previous studies that stated that boys have a higher risk of speech delay than girls (Aurelia et al., 2022; Savitri et al., 2024; Susantri & Irwanto, 2024).

Biologically, gender differences affect children's language development. Girls generally have faster maturation of brain function, especially in the left hemisphere which plays a role in language skills. In addition, verbal development in girls tends to be more rapid than in boys, so boys are more prone to speech delays (Rupert et al., 2023; Soetjningsih et al., 2024). This

reinforces the study's findings that gender is an important characteristic in the occurrence of speech delay.

Based on age distribution, the incidence of speech delay was most common in the age group of 49–59 months, followed by the age group of 25–36 months and 13–24 months, and not found at the age of 0–12 months. These findings show that speech delay is generally identified in toddler to preschool age. At that age, children should have reached various milestones in language development, such as being able to compose simple sentences, increase vocabulary, and understand verbal instructions (Friantary, 2020; Wahidah & Latipah, 2021).

Maddeppungeng and Soedjatmiko (2007) explained that speech delays usually begin to be evident after the age of two, when the child's expressive language skills do not correspond to the expected stages of development. This explains why the incidence of speech delay in this study is more common at older ages, especially before preschool age.

In addition, delays in early detection are also factors that contribute to the high incidence of speech delay in older age groups. Parents' lack of understanding of the stages of children's language development often leads to delays in screening or seeking professional help. As a result, speech delay is only identified when children have difficulty communicating and socializing with their surroundings (Hartanto, 2018; Suhadi & Istanti, 2020).

The findings of this study are also in line with the research results of Aurelia et al. (2022) and Ulfa et al. (2024) who stated that speech delay is often only realized when children enter preschool age, because the demands on communication skills are increasing, both in the family and educational environments. This condition shows the importance of the role of parents and health workers in monitoring children's language development from an early age.

Overall, the characteristics of speech delay incidence in this study show that boys and preschool-age children are the group that experiences the most speech delay. These findings confirm the importance of early detection and intervention of children's language development, especially in at-risk groups, so that speech delays do not continue and have an impact on children's social, emotional, and academic development later in life (Rahmah et al., 2023; Zhao et al., 2022).

## **B. The Relationship of Internal Factors to the Occurrence of Speech Delay**

The results showed that most children with speech delay had no genetic or family history, but there were 29.4% of children who had such a history. These findings are in line with research by Aurelia et al. (2022) and Savitri et al. (2024) which states that genetic factors play a role as a risk factor for speech delay, although they are not always the main cause. A family history of speech disorders can increase a child's susceptibility to speech delay due to hereditary factors that affect the development of the nervous system and language skills.

However, the majority of children in this study had no genetic history, suggesting that speech delay can also occur due to other factors outside of heredity. This is in line with the opinions of Saputra and Kuntarto (2020) and Ulfa et al. (2024) who stated that speech delay is multifactorial and influenced by the interaction between internal and external factors.

Based on intelligence level, most children are in the good category (59.8%), followed by the fair (25.5%) and poor (14.7%) categories. These findings show that speech delay does not only occur in children with low intelligence, but can also be experienced by children with normal to good intelligence. This is in line with the research of Maharani and Abidin (2022)

and Rohimah and Diana (2022) who stated that speech delays can occur even if children's cognitive abilities are within normal limits.

Soetjningsih et al. (2024) explain that language development is a separate domain that is not always in line with cognitive development in general. Children with good intelligence can experience speech delay if there are obstacles in the speech system, language processing, or lack of appropriate stimulation. Therefore, the results of this study confirm that speech delay cannot be concluded based solely on the level of children's intelligence.

In the physical disability variable, most children do not have physical disabilities, but there are 15.7% of children who have physical disabilities. Certain physical disabilities, especially those related to the speech, hearing, or neuromuscular system, can hinder a child's ability to produce sounds and words. This is in line with the opinion of Rupert et al. (2023) and Muslimat et al. (2020) who state that physical disorders can contribute to speech delay if not treated appropriately.

Although the proportion of children with physical disabilities is relatively small, this condition still needs special attention because it can aggravate speech delays and requires multidisciplinary interventions, including speech therapy and regular growth and development monitoring (Rahmah et al., 2023).

Based on birth history, most children are not born prematurely, while 6.9% of children have a history of prematurity. Prematurity is one of the risk factors for developmental delays, including language development, because the child's organs and nervous system have not developed optimally at birth. This is in line with the results of research by Budiasih et al. (2024) and Zulkarnaini et al. (2023) which stated that children born prematurely have a higher risk of developing developmental disorders, including speech delay.

However, the low proportion of children with a history of prematurity in this study shows that speech delay is not only influenced by birth factors, but also by other factors that occur during the child's growth and development. This reaffirms that speech delay is a complex and multifactorial condition (Hscientific et al., 2024; Saragi et al., 2023).

Overall, the results of this study show that internal factors such as genetic history, intelligence level, physical disability, and prematurity contribute to the incidence of speech delay, although it does not always appear predominantly in every case. Therefore, the assessment and handling of speech delay needs to be carried out comprehensively by considering various internal factors that can affect children's language development.

### **C. The Relationship of External Factors to the Occurrence of Speech Delay**

The results of the study showed that the majority of fathers and mothers of children with speech delay had the last level of high school education, followed by college education. Parental education plays a role in shaping knowledge, attitudes, and skills in parenting, including understanding the stages of language development and the importance of verbal stimulation from an early age. Parents with higher levels of education generally have wider access to information related to children's growth and development (Aurelia et al., 2022; Savitri et al., 2024).

However, the findings of this study show that speech delay still occurs even though parents have a secondary to high level of education. This is in line with the research of Maharani and Abidin (2022) and Rohimah and Diana (2022) who stated that formal education of parents is not always directly proportional to the quality of language stimulation given to

children. The factors of parental involvement and the quality of daily interaction actually determine the development of children's language more than the level of education alone.

Based on parenting, the majority of parents apply permissive parenting, followed by authoritarian and authoritative parenting. Permissive parenting is characterized by low control and demands on children, so children tend to lack consistent direction, structure, and communication stimulation. This condition can cause children to be less trained in actively using language in daily life.

These findings are in line with the research of Darmagita and Susanto (2022) and Rivero et al. (2023) who stated that unbalanced parenting can hinder children's language development. Authoritarian parenting, which was also found to be quite high in this study, has the potential to limit two-way communication because the interaction is more one-way. In contrast, authoritative parenting that emphasizes warmth, responsiveness, and clear boundaries was found to be more supportive of children's language development, but the proportion was relatively smaller in this study.

Judging from the socioeconomic status, most of the respondents are in the low to medium category. Socioeconomic status affects the availability of resources that support children's development, such as reading books, educational toys, a conducive learning environment, as well as access to health services and stimulation of growth and development. Economic limitations can limit children's opportunities to obtain optimal language stimulation (Suhadi & Istanti, 2020; Ulfa et al., 2024).

The results of this study are in line with the research of Saragi et al. (2023) and Suhadi and Istanti (2020) which stated that low socioeconomic conditions can increase the risk of speech delay in children, especially if it takes place for a long period of time without adequate intervention.

The results of the study show that the use of gadgets in children is quite varied, with a relatively large proportion of high use. Excessive use of gadgets can reduce the frequency of direct interaction between children and parents, so that children become passive listeners and less involved in two-way communication. This condition can hinder the development of children's vocabulary, speaking skills, and social skills.

These findings are in line with the results of a systematic review by Bal et al. (2024) which stated that high screen time duration is related to delays in children's language development and executive function. In addition, Gaol et al. (2025) emphasize that direct interaction between parents and children has a much greater role in preventing speech delays than exposure to digital media.

Based on parental occupation, the majority of fathers work full-time, while most mothers do not work. Fathers who work full-time tend to have limited interaction time with children, while mothers who are not working are expected to have more time to accompany children. However, the presence of mothers at home does not always guarantee optimal language stimulation if the interaction carried out is of poor quality or the child is more often diverted to the use of gadgets.

This is in line with research by Gaol et al. (2025) and Rivero et al. (2023) which states that the quality of parent-child interaction has more influence on language development than the quantity of time together.

The results of the study show that some children are exposed to foreign languages in their daily lives. Bilingual exposure in early childhood can provide long-term benefits when given consistently and balanced. However, if the mother tongue has not developed optimally, exposure to foreign languages can cause linguistic confusion and slow down children's ability to express language (Friantary, 2020; Wahidah & Latipah, 2021).

These findings are in line with research by Hilmiah et al. (2024) and Zulkarnaini et al. (2023) who stated that exposure to foreign languages without adequate stimulation of the mother tongue can be one of the risk factors for speech delay in early childhood.

Overall, the results of this study show that external factors such as parental education, parenting, socioeconomic status, gadget use, parental work, and exposure to foreign languages interact with each other in influencing the incidence of speech delay in children. These factors do not stand alone, but form a child's developmental environment that can support or inhibit speech and language skills.

Therefore, efforts to prevent and handle speech delay need to involve the active role of parents and the family environment in creating responsive interactions, consistent language stimulation, supervision of gadget use, and monitoring of children's language development from an early age (Rahmah et al., 2023; Zhao et al., 2022).

### **Research Limitations**

This study has several limitations that need to be considered in the interpretation of the results.

1. The research design used is cross-sectional, so the relationship between internal and external factors and the occurrence of speech delay cannot be interpreted as a cause-and-effect relationship, but only describes the condition at a certain time.
2. All respondents in this study were children with speech delay, so the dependent variables were homogeneous. This condition makes inferential bivariate analysis, such as the Chi-Square test or Fisher's Exact Test, statistically impossible. Therefore, the analysis of the relationship between variables is carried out in a descriptive-comparative manner.
3. Internal and external factor data was obtained through questionnaires filled out by parents or guardians of children, allowing for recalled bias and response bias. Differences in respondents' understanding of interpreting questions can also affect the accuracy of the data obtained.
4. This study did not quantitatively measure the severity of speech delay or language development scores, so the variation in the degree of speech delay in respondents could not be further analyzed.
5. This research was conducted in one health care facility, so the results of the study could not be generalized widely to the child population in different regions or health care settings. Nevertheless, this study still provides a comprehensive overview of the internal and external factors found in children with speech delay and can be the basis for future research with a wider design and scope.

### **CONCLUSION**

Speech delay in children is influenced by a combination of internal and external factors, where internal factors include genetics, family history, intelligence level, physical disabilities, premature birth history, and gender, while external factors encompass parental education

levels, parenting styles, socioeconomic status, gadget use, parental occupation, and exposure to foreign languages, with permissive parenting, medium-to-high gadget usage, and insufficient verbal stimulation found to be particularly prevalent among respondents. From an Islamic perspective, children are viewed as a trust from Allah SWT who are born in a state of fitrah, and speech delay is approached as a developmental condition requiring patience, effort, and a comprehensive response spanning medical, educational, social, and spiritual dimensions. For future research, it is recommended that studies explore the relative weight and interaction between internal and external factors through larger and more diverse samples, as well as investigate the effectiveness of intervention programs that integrate Islamic values with evidence-based therapeutic approaches in supporting children with speech delay and their families.

## REFERENCES

- Aurelia, T., Rahminawati, N., & Inten, D. N. (2022). Analisis Faktor Internal dan Faktor Eksternal yang Mempengaruhi Keterlambatan Bicara (Speech Delay) Anak Usia 5,9 Tahun. *Bandung Conference Series: Early Childhood Teacher Education*, 2(2), 69–78. <https://doi.org/10.29313/bcsecte.v2i2.3504>
- Bal, M., Kara Aydemir, A. G., Tepetaş Cengiz, G. Ş., & Altındağ, A. (2024). Examining the relationship between language development, executive function, and screen time: A systematic review. *PLoS ONE*, 19(12), 1–27. <https://doi.org/10.1371/journal.pone.0314540>
- Budiasih, N., Karlinda, & Yulda, A. (2024). Analisis Faktor Resiko Kejadian Speech Delay Pada Anak Dua Tahun. <https://ejournal.ummuba.ac.id/index.php/SENABISTEKES/article/view/2221>
- Darmagita, S. F., & Susanto, H. (2022). Adaptasi Alat Ukur Parental Authority Questionnaire Revised (PAQ-R) untuk Orang Tua Dengan Anak Usia 2-18 Tahun. *Psikostudia: Jurnal Psikologi*, 11(4), 561–574. <https://doi.org/10.30872/psikostudia.v11i4>
- Eddy Saputra, Nur Ali, Fery Rahmawan, Achmad Muhajir, & Ahmad Mujib. (2023). Development of Marriage Learning model in Islam through Project Based Learning in Higher Education. *Jurnal Iqra': Kajian Ilmu Pendidikan*, 8(2), 281–299. <https://doi.org/10.25217/ji.v8i2.3706>
- Friantary, H. (2020). Perkembangan Bahasa Pada Anak Usia Dini. *ZURIAH: Jurnal Pendidikan Anak Usia Dini*, 1(2), 127–136. <https://doi.org/10.29240/zuriah.v1i2.2010>
- Gaol, R. E. G. L., Fajar, N. A., & Rahmiwati, A. (2025). Parent-Child Interactions in Preventing Childhood Language and Speech Delays: A Systematic Review. *Jurnal Promosi Kesehatan Indonesia*, 20(3), 185–191. <https://doi.org/10.14710/jpki.20.3.185-191>
- Hartanto, W. S. (2018). Deteksi Keterlambatan Bicara dan Bahasa pada Anak.
- Hilmiah, I., Yuliati, N., & Suhartiningsih. (2024). Faktor Penyebab Keterlambatan Bicara Pada Anak Usia 5-6 Tahun. *Abata: Jurnal Pendidikan Islam Anak Usia Dini*, 4(1), 54–66. <https://doi.org/10.32665/abata.v4i1.2796>
- Indrayani, T., Kurniati, E., & Romlah, S. (2024). Efektivitas Stimulasi Pijat 8 Speech Delay Untuk Mengatasi Keterlambatan Bicara Pada Anak Usia 3 Tahun. <https://doi.org/https://doi.org/10.37287/jlh.v5i1.4176>
- Maharani, B. A., & Abidin, Z. (2022). Studi Eksploratif Tentang Faktor-Faktor Penyebab Keterlambatan Bicara Anak Usia Pra Sekolah (Vol. 4, Issue 1). <http://journal.uml.ac.id/TIT>

- Muslimat, A. F., Lukman, & Hadrawi, M. (2020). Faktor dan Dampak Keterlambatan Berbicara (Speech Delay) Terhadap Perilaku Anak Studi Kasus Anak Usia 3-5 Tahun. <https://doi.org/https://doi.org/10.33648/alqiyam.v1i1.122>
- Rahmah, F., Kotrunnada, S. A., Purwati, & Mulyadi, S. (2023). Penanganan Speech Delay Pada Anak Usia Dini Melalui Terapi Wicara. *Jurnal Pendidikan Anak Usia Dini*, 8(1), 99–110. <https://doi.org/https://doi.org/10.32678/assibyan.v8i1.9314>
- Rivero, M., Vilaseca, R., Cantero, M. J., Valls-Vidal, C., & Leiva, D. (2023). Relations between Positive Parenting Behavior during Play and Child Language Development at Early Ages. *Children*, 10(3), 1–16. <https://doi.org/10.3390/children10030505>
- Rohimah, Y., & Diana, R. R. (2022). Analisis Faktor Keterlambatan Berbicara (Speech Delay) Anak Usia 6 Tahun. <https://doi.org/https://doi.org/10.24114/js.v6i4.38276>
- Rupert, J., Hughes, P., & Schoenherr, D. (2023). Speech and Language Delay in Children. *American Family Physician*, 108(2), 181–188.
- Saputra, A., & Kuntarto, E. (2020). Faktor-Faktor Penyebab Keterlambatan Bicara Pada Anak Usia Prasekolah. <https://repository.unja.ac.id/11182/1/ARTIKEL%20ADI%20SAPUTRA.pdf>
- Saragi, D. S., Rahmawati, M., Pitaloka, N. A. S., Permata, S. B. I., Aulia, N., Ulum, F., & Habibah, U. H. (2023). Faktor Keterlambatan Berbicara Pada Anak Usia 4-5 Tahun Pada Masa COVID-19. *Academica: Journal of Multidisciplinary Studies*, 7(1), 93–112. <https://ejournal.uinsaid.ac.id/index.php/academica/article/view/7425/2399>
- Savitri, N. P. S. P., Primatanti, P. A., & Riandra, N. P. I. K. (2024). Faktor Risiko Yang Berhubungan Dengan Terjadinya Speech Delay Pada Anak. *Jurnal Kesehatan Masyarakat*, 8(2), 3304–3317. <https://doi.org/https://doi.org/10.31004/prepotif.v8i2.29188>
- Soetjningsih, Gunardi, H., Salimo, H., Moerhadi, M. B. N., & Ranuh, I. G. N. G. (2024). Tumbuh Kembang Anak Edisi 3 Volume 1 (Soetjningsih, H. Gunardi, H. Salimo, M. B. N. Moerhadi, & I. G. N. G. Ranuh, Eds.; 3rd ed., Vol. 1). EGC.
- Suhadi, & Istanti. (2020). Faktor-Faktor Yang Berhubungan Dengan Tingkat Keterlambatan Bicara Dan Bahasa Pada Anak Usia 2-5 Tahun. <https://doi.org/https://doi.org/10.37287/jppp.v2i2.115>
- Susantri, M., & Irwanto. (2024). Karakteristik Dan Faktor-Faktor Risiko Keterlambatan Bicara Pada Anak Usia 2-5 Tahun Di RS Islam Surabaya A Yani. 128–134.
- Ulfa, S. R., Karlinda, & Fitriyani, Y. (2024). Faktor-faktor yang mempengaruhi kejadian speech delay pada anak balita. Diakses dari <https://ejournal.ummuba.ac.id/index.php/SENABISTEKES/article/view/2222>
- Wahidah, A. F. N., & Latipah, E. (2021). Pentingnya Mengetahui Perkembangan Bahasa Anak Usia Dini Dan Stimulasinya. *JAPRA: Jurnal Pendidikan Raudhatul Athfal*, 4(1), 43–62. <https://doi.org/https://doi.org/10.15575/japra.v4i1.10940>
- Zhao, B., Liu, Y., Liu, J., & Liu, Y. (2022). Early Family Intervention in Children with Language Delay: The Effect of Language Level and Communication Ability. *Evidence-Based Complementary and Alternative Medicine*, 2022. <https://doi.org/10.1155/2022/3549912>
- Zulkarnaini, Chaizuran, M., & Rahmati. (2023). Faktor Yang Mempengaruhi Speech Delay Pada Anak Usia Dini Di PAUD IT Khairul Ummah (Vol. 5, Issue 1). <http://jurnal.sdl.ac.id/index.php/dij/>