# THE RELATIONSHIP BETWEEN THE TYPE OF PARENT'S WORK TOWARDS THE OCCURRENCE OF SPEECH DELAY AT THE GRAHAHUSADA GRESIK HOSPITAL

# Retna Gumilang<sup>1\*</sup>, Noer Farakhin<sup>2</sup>, Dwi Kartika Maharani<sup>3</sup>

<sup>1</sup>Faculty of Medicine, Universitas Nahdlatu Ulama <sup>2</sup>Field Epidemiology Training Program (FETP), Universitas Airlangga <sup>3</sup>RS Grha Husada Gresik

Email Korespondensi: retna.gumilang@unusa.ac.id

Disubmit: 11 Januari 2024 Diterima: 07 Juni 2024 Doi:

Juni 2024 Diterbitkan: 01 Juli 2024

#### **ABSTRACT**

The child's ability to communicate begins with the social reactions that the child shows by responding to the presence of others. This study aims to determine which parental role variables are associated with the incidence of speech delay in children with special needs at Grahahusada Gresik Hospital. Analytical observational research with cross sectional approach. The population in the study was all children with special needs who were examined at the children's poly with complaints of delays in work. The variables studied in the study are: individual characteristics of children, Child Age Group, Caregivers and incidence of speech delay. Techniques in sampling with total sampling techniques and analyzed using the Chi Square test. It is known that the children in the study were dominated by male gender 71.8% with the age group of toddlers 83.3% and most of the children were cared for by their own biological mothers as much as 62.8%. known the results of the Chi Square test p-Value variable gender of children 0.073, age category of children 0.004, and Caregivers 0.108. Child age category is associated with the incidence of speech delay in children with special needs at Grahahusada Gresik Hospital.

**Keywords:** Speech Delay, Children with Special Needs, Parents

## **INTRODUCTION**

Paragraf pengantar umum The relationship between the role of parents in parenting and incidence of speech delay in children with special needs is a topic of great importance. Studies have shown that parental involvement responsivity play a crucial role in the development of communication and language skills in children with developmental delays (1). Parental involvement has also been found to significantly influence the achievement and motivation of children with special needs (2). Early intervention and support from speech-language pathologists can help meet the emotional needs of both parents and children (3). It is clear that working with parents and families is an important feature of interventions for children with delayed language development (4). Parents and guardians have a unique understanding of their physical, social, developmental, and family history. making involvement critical in the success of their child's education and development (5).

Early stimulation of children is obtained from parents: Parents play an important role in providing early stimulation, including language and communication development. parents do not provide adequate stimulation, the child is at risk of speech delav Parenting: (6). Inappropriate parenting for early childhood can affect the child's speech delay. (7). Factors such as lack of attention, lack interaction, or lack of language use in daily interactions can affect a child's language and communication development (8). Other factors: Although parenting plays important role in the incidence of speech delay in children, other factors such as health environmental issues can also affect child's language and communication development. To prevent speech delay in children, parents need to provide adequate stimulation and proper parenting for their children. Parents can also consult a doctor or speech therapist if they have difficulty in developing their child's language communication.

The prevalence of speech delay in children in Indonesia varies depending on the study. According to the Ikatan Dokter Anak Indonesia (IDAI), there are 5-8% of preschool children who experience speech delay. It is clear that speech delay is a concern for parents and healthcare providers. Seeking early intervention can help improve outcomes for children with speech delay. Parents and caregivers should be aware of the signs of speech delay and seek support if they have concerns about their child's language development. The Indonesian Pediatric Association (IDAI) of East Java in 2014 examined 2,634 children from the age of 0-72 months. From the results of the examination for the language development sector, it was found that there were deviations in language development 394 children (15.0%)(9). Children's delay in language skills can be affected by several things such as parents' economic level, environment, parents' education, parenting, nutritional status, and parental knowledge. Parental knowledge plays an important role in the development of language children. Before the child enters the wider social environment, play and schooling, the family environment should be a fun arena for the child's development(10).

## LITERATURE OVERVIEW

Studies conducted in northern China have identified several factors as independent risk factors for DSD, including older maternal age at childbirth, introverted personality, low average parental education level, low monthly family income, infrequent parent-child These factors interaction (11). indicate that the environment in which a child grows up, as well as the type of work of the parents, can influence the development language length. For example, low levels of parental education and low family income may mean that parents have less time or resources to engage in child development activities that are important for development. Other studies have found that parents have a education and low relationships. Have a good history, multilingual environments and ambiguous stimuli are genetic and environmental factors in speech and language development (12). The same NCBI study also suggests that early childhood development programs and early learning opportunities improve children's performance later in school. Coordination between preschool and primary promotes smooth transitions and promotes systematic and sequential strategies to promote early learning (13). Parents can find and participate in early childhood development programs and opportunities for their children by reading and studying research and assessments. Access to research and review reports on early childhood development is also useful. For example, Department for International Development's literature review on early childhood development and cognitive development in developing countries shows the effectiveness of various interventions and programs (14). Countries such as Peru and Uruguay have established early family education programs support children under 3 who are at risk of developmental delays. The program provides information and support to parents to help them understand and improve their child's development (15). The purpose of this study was to determine whether there are variables related to the role of parents in parenting that are related to the incidence of speech delay in children with special needs at Grahahusada Gresik Hospital. so research question is the obtained, namely what variables of the role of parents in parenting are related to the incidence of speech delay in children with special needs at Grahahusada Gresik Hospital?.

sectional shortage. The population in the study was all children with special needs who were examined at the children's poly with complaints of delays in work. There restrictions on inclusion exclusion criteria, inclusion criteria are respondents who fill out a complete identification form. And the exclusion criteria are respondents who do not continue treatment until the last stage. The variables studied in the study are; individual characteristics of children. Child Age Group. Caregivers and incidence of speech delay. Techniques in sampling with total sampling techniques analyzed using the Chi Square test.

#### **RESULTS**

The results of the study on the relationship between the role of parents in parenting on the incidence of speech delay in children with special needs in the ABK clinic of Grahahusada Gresik Hospital in 78 respondents were as follows:

#### a. Overview

The general description of the respondents was in the form of self-characteristics of the participants such as the gender of the child, the age group of the child, the Caregivers, the incident of *speech delay*.

Here is an overview of the respondents:

#### **METHODS**

The study was conducted analytical observational with cross

Table 1. Respondents' Gender Distribution

Child Gender	N	%
Man	56	71.8
Woman	22	28.2
Total	78	100.0

(Source: Primary Data, 2022)

Based on Table 1, it can be seen that respondents in the study were

dominated by the male sex 71.8%.

Table 2. Child Age Group Distribution

Children's Age Group	N	%
Toddlerhood	65	83.3
Childhood	13	16.7
Total	78	100.0

(Source: Primary Data, 2022)

Based on Table 2, it can be seen that respondents in this study were

dominated by the toddler age group of 83.3%.

Table 3. Distribution of Caregivers

Babysitter	N	%
Birth Mother	49	62.8
Grandmother	18	23.1
Sitter/Bebysitter	6	7.7
Aunt	4	5.1
Neighbor	1	1.3
Total	78	100.0

(Source: Primary Data, 2022)

Based on Table 6, it can be seen that most of the children are fostered by their own biological mothers as much as 62.8% and for children who are taken care of by

their grandmothers as much as 18%. For others the caregivers are spread between, *bebysitter*, sisters and neighbors.

Table 4. Speech Delay Event Distribution

Speech Delay	N	%
Yes	51	65.4
Not	27	34.6
Total	78	100.0

(Source: Primary Data, 2022)

Based on Table 7, it can be seen that of the 78 respondents

studied, 65.4% were diagnosed with speech delay.

# b. Special Overview

Table 4. The Relationship Between Children's Gender and the Incidence of Speech Delay

		Speech Delay Events		Total	n Valua
		Yes	Yes Not		p-Value
Condor	L	40	16	56	
Gender	Р	11	11	22	0.073
Total		51	27	78	_

(Source: Primary Data, 2022)

Based on Table 8, it can be seen that the results of the Chi Square test show a *p-Value* of 0.073 which weighs > from *alpha*, so it can

be concluded that there is no relationship between gender and the Speech Delay event.

Table 5. The Relationship Between Children's Age Categories and the Incidence of Speech Delay

		•	Speech Delay Events		p-Value
		Yes	Not	_	-
Age	Toddlerhood	47	18	65	
Categories	Childhood	4	9	13	0.004
	Total	51	27	78	

(Source: Primary Data, 2022)

Based on Table 9, it can be seen that the Chi Square test results show a *p-Value* of 0.004 which weighs < from *alpha*, so it can be

concluded that there is a relationship between the age category of children and the incidence of Speech Delay.

Table 6. The Relationship Between the Caregivers and Speech Delay Events

	_	Speech Delay		Total	p-Value	
	_	Yes	Not	Total	p-value	
	Birth Mother	28	21	49	_	
Car	Grandmother	13	5	18	_	
egiv	Caregivers	6	0	6	0.108	
ers	Aunt	3	1	4	0.106	
·	Neighbor	1	0	1	_	
	Total	51	27	78		

(Source: Primary Data, 2022)

Based on Table 10, it can be seen that the Chi Square test results show a *p-Value* of 0.108 which weighs > from *alpha*, so it can be concluded that there is no

relationship between the caregiver and the Speech Delay event.

## **DISCUSSION**

The results showed a relationship between the age category of children and the incidence of speech delay in Children Special Needs with at Grahahusada Gresik Hospital with a p-value of 0.004 < from alpha. It is known that the age category of children is mostly toddlerhood 83.3%. Mental readiness to speak depends on the maturity of the brain, in particular the association parts of the brain. Usually such readiness develops between the ages of 12 and 18 months and in speech development is seen as "when teachable"(Hurlock (1978: 185)). The age of 2.5 years to 5 years is the most peak and rapid age in language development compared to toddlers (7). Language skills considered children are for benchmark the normal development of children (8). The child's ability to acquire vocabulary is very important in supporting the development overall of language. Vocabulary is the constituent part of syntax which then takes the form of conversation. This conversation encourages the child to develop the ability to retell personal stories and fictional stories but in the form of narratives (9). In this case, the child's process in language involves several stages, namely coding, sending information deciphering the and intended information (10).

The child at the age of 4 months will establish a new word reference in his memory. Then, the vocabulary will be positively related to his speech at the age of 30 months (11). This happens because of the influence of parental parenting and the environment that supports children's speech development. A child's speech development normally begins through the stages of a combination of cooing, babbling,

babbling, first word and combining words 12) (13)(21)(20)(19)(18)(18)(18)(17). A child who does not pass that stage needs to be suspected of having speech delays or even other serious problems. Significantly, children are said to have speech delays, if the child's speech is below normal for children his age such as making many mistakes in language, adding or removing consonants. In addition, at the age of 4-6 years children who experience speech delays are seen when the ability to read decreases, unable to spell their own creations. poor verbal and spelling skills of children, children's inability to know the meaning contained in writing, behavioral problems, and children have difficulty in communicating so as to affect other developments such as social development, emotional, psychological cognitive, and academic child (12)(14)(15)(22)(21)(20)(19)(19)(19)(18) In addition. early childhood experiences speech delays if the child experiences speech confusion at the language learning stage (16). Children's speech ambiguity consists of four forms, namely, 1) Lipsing, that is, when speaking there is a change of letters; 2) Slurring, that is, vagueness in speech; 3) Stuttering, that is, stuttering and hesitation when speaking; 4) Cluttering, i.e. When speaking is very fast and

#### CONCLUSIONS

Child age category associated with the incidence of speech delay in children with special Grahahusada at Hospital. Based on the finding that children's age category is associated with the incidence of speech delay, important to develop is intervention programs tailored to the needs of children in various age

difficult to understand the point

ranges. This program can actively involve parents and facilitate good verbal interaction between parents and children.

# DISCLOSURES Conflict of Interest

We declare that there is no conflict of interest in the publication of this manuscript.

## **Author Contribution**

Retna Gumilang is involved in planning and data retrieval in the field as well as overseeing the work assisting in interpreting the results and working on the manuscript. Noer Farakhin processes data, performs analysis, compiles manuscripts and designs figures, calculations andstatistical analysis. All the authors discussed the results and commented on the script.

# Acknowledgments

We would like to express our sincere gratitude to RS Grahahusada Gresik for their valuable contribution to this research.

## **REFERENCES**

- Bariroh S.( 2018). The Influence of Parents' Involvement on Children with Special Needs' Motivation and Learning Achievement. Int Educ Stud.;11(4):96.
- Black MM, Walker SP, Fernald LCH, Andersen CT, DiGirolamo AM, Lu C, et al. (2017). Advancing Early Childhood Development: from Science to Scale 1: Early childhood development coming of science age: through the life course. (London, Lancet England) [Internet]. Jan 1 [cited 2024 Apr 15];389(10064):77. Available from: /pmc/articles/PMC5884058/

- Berk LE.(2012). Development through the lifespan: dari prenatal sampai masa remaja, transisi menjelang dewasa.

  1st ed. Yogyakarta: Yogyakarta Pustaka Pelajar 2012;.
- Fauzia W, Meiliawati F, Ramanda P. (2020). Mengenali dan Menangani Speech Delay pada Anak. J al-Shifa.;1(2):102-10.
- Fitriyani F, Sumantri MS, Supena A. (2019). Language development and social emotions in children with speech delay: case study of 9 year olds in elementary school. J Konseling dan Pendidik [Internet]. May 30 [cited 2023 Jan 28];7(1):23-9. Available from: https://jurnal.konselingindon
  - esia.com/index.php/jkp/article/view/306
- Fan S, Zhang Y, Qin J, Song X, Wang M, Ma J. (2021). Family environmental risk factors for developmental speech delay in children in Northern China. Sci Rep [Internet]. Dec 1 [cited2024Apr 15];11(1):3924. Availablefrom:/pmc/articles/PMC7887192/
- Giselle Emilia Navarro-Cruz, Thomas F. Luschei. (2018). International Evidence on Effective Early Childhood Care and Education Programs: A Review of Best Practices. Glob Educ Rev.;5(2):8-27.
- Law J, Levickis P, Rodríguez-Ortiz IR, Matić A, Lyons R, Messarra C, et al. (2019). Working with the parents and families of children with developmental languagedisorders: Aninternati onal perspective. J Commun Disord. Nov 1;82:105922.
- Logsdon A. (2022). The Important Role of Parents in Special Education[Internet]. Verywell. [cited2023May27]. Availablefr

- om:https://www.verywellfa mily.com/parentalimportanc e-special-education-2162701
- McLAUGHLIN MR. (2011). Speech and Language Delay in Children. Am Fam Physician [Internet]. May 15 [cited 2023 Jan 28];83(10):1183-8. Available from:https://www.aafp.org/pubs/afp/issues/2011/0515/p1183.html
- Maher GT, Husodo BT, Kusumawati A.( 2021). Gambaran Perilaku Ibu Dalam Pola Asuh Balita Dengan Gangguan Speech Delay (Studi Kasus Di Ypac Kota Semarang). J Kesehat Masy.;9(2):236-44.
- Manzoor N., Tayyba T., Bhatti Z.I., Rauf M.T., Dawood H.M., Saadia A.( 2019). Relationship of CRP Levels in Pre-Eclamptic and Normotensive with Foetal Birth Weight. Biomedica [Internet]. [cited 2023 Jan 26];35(2):108-108.Available from:https://www.pakmedin et.com/page.php?f=fa&id=4
- Rana S, Lemoine E, Granger J, Karumanchi SA.( 2019). Preeclampsia:Pathophysiolog y,Challenges,andPerspectives . Circ Res [Internet]. Mar 29 [cited2023Jan26];124(7):1094 -112. Available from: https://pubmed.ncbi.nlm.nih .gov/30920918/
- Sylvestre A, Bussières ÈL, Bouchard C.( 2016). Language Problems Among Abused and Neglected Children: A Meta-Analytic Review. Child Maltreat [Internet]. Feb 1 [cited 2023 Jan 28];21(1):47-58. Available from:https://pubmed.ncbi.nlm.nih.gov/26620719/
- Singleton NC, Saks J.( 2015). Co-Speech Gesture Input as a Support for Language Learning in Children With and Without Early Language Delay.

- Perspect Lang Learn Educ [Internet]. Mar [cited 2023 Jan 28];22(2):61-71. Available from:https://pubs.asha.org/doi/abs/10.1044/lle22.2.61
- Sunderajan T, Kanhere S V.( 2019).

  Speech and language delay in children: Prevalence and risk factors. J Fam Med Prim Care [Internet]. [cited 2023 Jan 28];8(5):1642. Available from: /pmc/articles/PMC6559061/
- Sulfiani, Hayatie L, Djalalluddin. (2021). Literature Review: Hubungan Suhu dan Kelembaban Ruangan dengan Keberadaan Jentik Nyamuk Aedes aegypti. Homeostasis [Internet].;4(1):461-72. Availablefrom:https://ppjp.ulm.ac.id/journals/index.php/hms/article/view/4039
- Wijayaningsih L.( 2023). Peran Pola Orang Asuh Tua Dalam Meningkatkan Kemampuan Bicara Anak Speech Delay (Studi Kasus Di Homeschooling Bawen Jawa Tengah). Satya Widya [Internet]. 2019 Feb 14 [Cited May 27];34(2):151-9. AvailableFrom: Https://Www. Researchgate.Net/Publication /331999552\_Peran\_Pola\_Asuh Orang Tua Dalam Meningka tkan\_Kemampuan\_Bicara\_Ana k\_Speech\_Delay\_Studi\_Kasus\_ Di\_Homeschooling\_Bawen\_Ja wa Tengah
- Yuliana, Zahar E.( 2017). Analisis Bentuk-Bentuk Kerancuan Berbicara Pada Anak Usia 3-5 Tahun (Studi Kasus Di Daerah Kecamatan Jambi Timur). Aksara J Ilm Pendidik Bhs dan Sastra Indones [Internet]. Sep [cited 2023 20 Jan 28];1(1):52-62. Available from:http://aksara.unbari.ac .id/index.php/aksara/article /view/8