

## Profile of Language Problems in Early Children at The Khalimul Khasan Foundation

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### ABSTRACT

**Background:** Language is a variable that plays an important role in children's academic achievement. Children with language problems will have greater challenges in their academic achievement. Therefore, it is important to conduct language tests when children enter Early Childhood Education (PAUD). However, language proficiency tests in PAUD environments are still very rare in Indonesia. This study aims to provide an overview of children's language ability profiles in the PAUD environment.

**Method:** The research method used is descriptive quantitative with data collection techniques through language instruments/tests.

**Result:** The results of the study show that 11.32% of early childhood children at the Khalimul Khasan Foundation experience language problems, consisting of 7.55% of children indicated to have language disorders and 3.77% indicated to have language delays.

**Conclusion:** Language problems in PAUD contribute to a significant number, so it is necessary to refer children with language problems to speech therapists so that they can receive appropriate intervention. Therefore, language assessment in preschool age is very important to identify language problems as early as possible. The earlier the intervention, the more effective the treatment will be.

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### INTRODUCTION

Language is an element that plays an important role in growth and development. The causes of language problems are very complex, with biological, cognitive, and environmental factors each contributing to the risk of language problems (Setiawan, 2024). Children with language problems can be affected in their social, emotional, and behavioral abilities. Children with language disorders exhibit higher levels of problematic behavior compared to children in general (Curtis et al., 2018). According to Kapa and Plante, children with language problems show deficits in several components of executive function (Kapa & Plante, 2015). In general, language problems consist of delays and disorders. Children aged 18 and 24 months with language delay show higher socio-emotional and behavioral problems than children who do not experience language delay (Thurm et al. 2018). The forms of problems that arise include externalizing behavior, internalizing behavior, dysregulation, and maladaptive behavior.

Externalizing behavior refers to behavior in which a person expresses their emotional conflict outwardly. Some examples of externalizing behavior are kicking, hitting, screaming, and the like.

Internalizing behavior refers to behavior in which a person directs their emotional conflict inward. Some examples of internalizing behavior are anxiety, fear, withdrawal, and the like.

Dysregulation refers to a person's inability to control or regulate themselves according to the situation. Some examples of dysregulation behavior are being easily angered or explosive, difficulty calming down, excessive emotional reactions to small or unusual things, and the like.

Maladaptive behavior refers to behavior in which a person has difficulty adjusting to their environment. Some examples of maladaptive behavior are children closing themselves off from others, avoiding responsibility, manipulative behavior, and the like.

Data collected from 515 schools showed that 5.7% were at risk of specific learning disorders. Early symptoms of specific learning disorders include delays in motor, social, and language development in preschool age (Bozathi et al. 2024). Language skills have a significant relationship with academic achievement (Norbury et al. 2016). Children with developmental language disorders (DLD) show difficulties in academic achievement compared to their peers. The academic abilities affected include reading, writing, spelling, and narrative skills (Ziegenfusz et al. 2022).

It is very important to assess children's language abilities before they enter early childhood education (PAUD). This assessment aims to predict socio-emotional, behavioral, and academic achievement problems. This is important considering that children's daily lives in PAUD are closely related to social and academic/pre-academic activities. Children who are identified as having below-average language skills may be recommended to receive speech therapy services to help them face social and academic/pre-academic challenges.

Language ability tests can provide information on whether a child's language ability is within the normal range, low, or very low. In the Verbal Vocabulary Test, children in the low category tend to be identified as having language delays, while children in the very low category tend to be identified as having language disorders.

The language problems experienced by children can be measured through vocabulary. Based on the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5 TR), one of the indicators that a child has a language disorder is a deficit in vocabulary (APA, 2022). McAllister and Milner explain that vocabulary is a predictor of children with language problems or Speech, Language, and Communication Needs/SLCN (McAllister and Milner, 2013). A study in 2021 also explains that vocabulary is an observable variable for predicting language development (Sansanvini et al. 2021). This means that the more vocabulary a child has, the lower the risk of language problems.

This study was conducted to provide an overview of language ability profiles and to explain the types of language problems experienced in the Khalimul Khasan Foundation's early childhood education environment. The Khalimul Khasan Foundation's early childhood education program routinely conducts language assessments of its students.

## METHOD

### *Research procedure*

The research was conducted using quantitative descriptive methods. Quantitative descriptive research is research that uses quantitative methods and descriptive analysis techniques (Alfatih, 2021). This means that the data collected is presented in the form of tables, diagrams, graphs, and the like to illustrate the variables being studied. The variable in this study is language ability. Therefore, language ability profiles are presented in the form of diagrams, tables, graphs, and the like to illustrate facts in numerical form.

### *Population and Sample*

The subjects of this study were children enrolled in early childhood education at the Khalimul Khasan Foundation. The sampling technique used was total sampling, whereby all members of the population were included in the sample. There were 53 early childhood education students at the Khalimul Khasan Foundation. Therefore, the sample size for this study was 53. Data collection was conducted from October 2024 to December 2024. Data collection was conducted using a test tool. The research instrument used in this study was valid and reliable. Validity refers to the accuracy and precision of the measurement results (Azwar, 2012), while reliability refers to the consistency of the measurement results, which means how high the accuracy of the measurement is (Azwar, 2012). The test tool or research instrument used was the Receptive Verbal Vocabulary Test (TKV-R). The Receptive Verbal Vocabulary Test (TKV-R) is a test tool used to measure

language ability based on understood vocabulary or receptive vocabulary. The TKV-R consists of 38 items. The items were compiled by considering the correlation coefficient (minimum score of 0.30) and item discrimination index (minimum score of 0.40). The content validity score of the TKV-R is 0.92 and the reliability score of the TKV-R is 0.912. Children who are categorized as having a tendency to experience language problems in the form of delays have scores in the range of -1 to -1.5 standard deviations or are in the low category. Meanwhile, children categorized as having a tendency to experience language problems of a disorder nature are in the score range below -1.5 standard deviations or in the very low category. Children with vocabulary scores below -1.5 standard deviations have the potential to experience problems of a "disorder" nature, referring to Traunner and Nass, who state that children with language disorders have scores less than or equal to -1.5 standard deviations from language examinations (Swaiman et al. 2017).

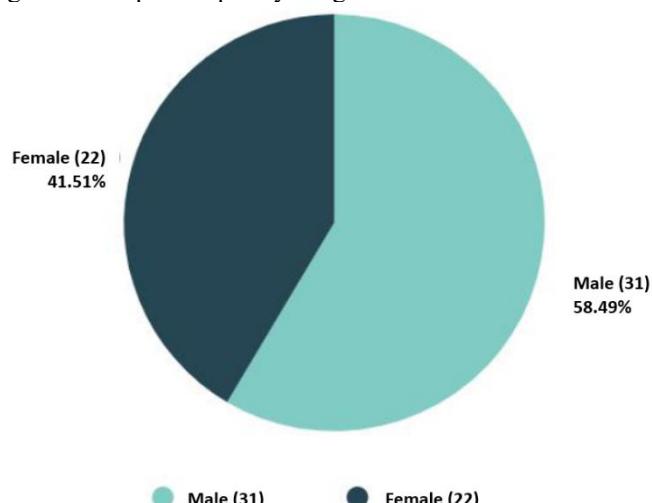
### **Data Analysis**

The data analysis for this study used descriptive analysis techniques. According to Sugiono, descriptive analysis is a method of analyzing data by describing the collected data without drawing general conclusions (Sahir, 2021). The data presentation includes language ability profiles, types of language problems, comparisons of language scores by age, and language scores by gender.

## **RESULTS AND DISCUSSION**

Based on the results of the language assessment using the Receptive Verbal Vocabulary Test (TKV-R) instrument, the results are presented as follows:

Figure 1. Sample Frequency Diagram Based on Gender Children



The study involved 53 children, consisting of 31 boys and 22 girls. The percentage of boys was 58.49% and girls 41.51% (Figure 1).

Table 1. Language Ability Profile

Language Ability	Frequency	Percentage
Very high	2	3.77
High	5	9.43
Average	40	75.47
Low	2	3.77
Very low	4	7.55
Total	53	100

Based on the data above (Table 1), it is explained that of the 53 children evaluated using the TKV-R, 40 children had average language skills (75.47%), 5 children had high language skills (9.43%), 4 children had very low language skills (7.55%), 2 children had very high language skills (3.77%), and 2 children had low language skills (3.77%).

Table 2. Types of Language Problems

Types of Language Problems	Frequency	Percentage
Typical language development	47	88.68
Language delay	2	3.77

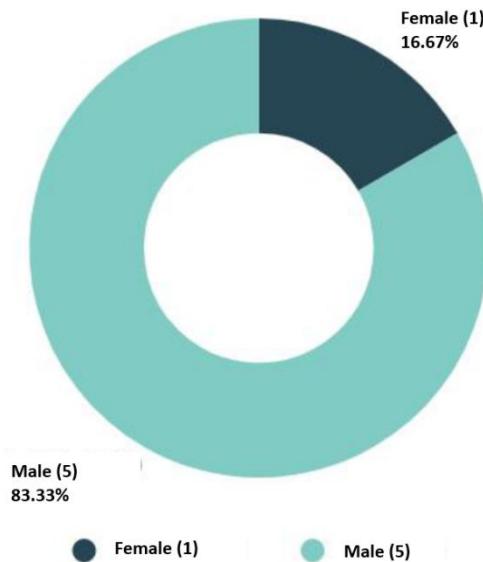
Language disorder	4	7.55
Total	53	100

Based on the table above (Table 2), there were 47 children with typical language development, 2 children with language delay, and 4 children with language disorder. The percentage of children with typical language development was 88.68%. 3.77% of children with language delay, while 7.55% of children had language disorder.

The data from Table 2 shows that 11.32% of children experienced language problems. The language problems experienced by children consisted of 3.77% of children identified as having language delay and 7.55% of children identified as having language disorder. Meanwhile, 88.68% of children were not identified as having language problems, based on receptive vocabulary.

Other studies on language problems in preschool age have shown varying results. A study involving 410 children showed that the prevalence of developmental language delay was 35.9% (Al-Qahtani et al. 2025). Meanwhile, in studies of children with developmental language disorders, the prevalence was 3.36%-3.70% (Nudel et al. 2023).

Figure 2. Diagram of Language Problems Based on Gender



Based on the figure above (Figure 2), the data shows that of the group of children experiencing language problems, 16.67% were girls, and 83.33% were boys. The number of girls experiencing language problems was 1 child, with the type of language problem being language delay. Meanwhile, the number of boys experiencing language problems was 5 children, consisting of 1 child with language delay and 4 with language disorders.

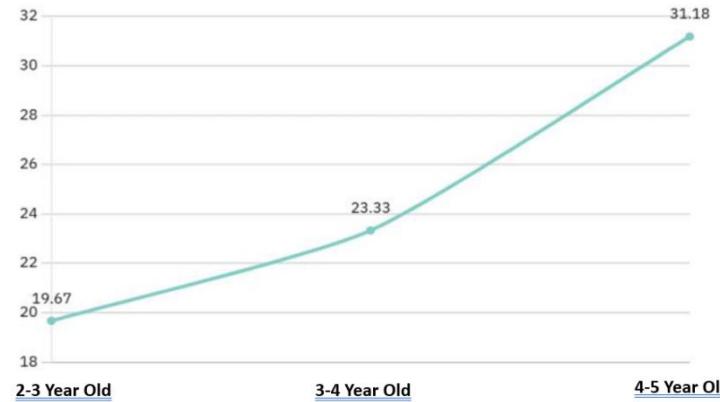
Another study explains the percentage of speech and language delays by gender: 68.5% occurred in boys and 31.5% occurred in girls (Hoque, Akhter & Mannan, 2021). The number of children with language problems was higher in boys than in girls.

Tabel 3. Skor Typical Language Development

Age	Mean	Mean (Male)	Mean (Female)
2-3 Tahun	19.67	14	22.5
3-4 Tahun	23.33	23.8	23
4-5 Tahun	31.18	31.25	31.08

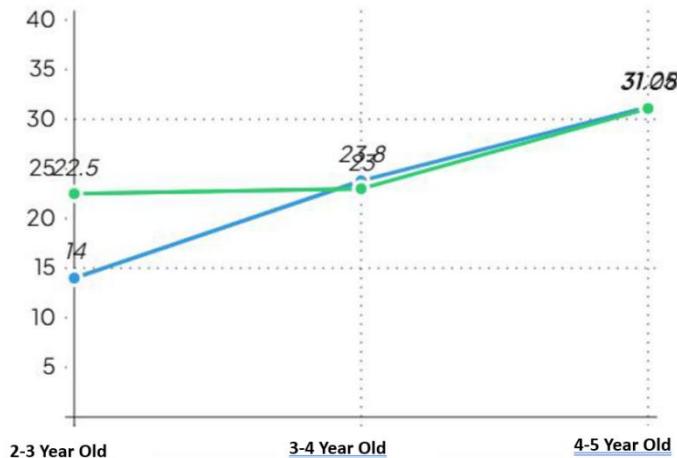
Based on the data from the table above (Table 3), it shows that the language scores of children with typical development vary based on age and gender. For children aged 2-3 years, the average language ability score is 14 for boys and 22.5 for girls. For children aged 3-4 years, the average language ability score is 23.8 for boys and 23 for girls. For children aged 4-5 years, the average language ability score is 31.25 for boys and 31.08 for girls. Meanwhile, the average scores for both groups are 19.67 for children aged 2-3 years, 23.33 for children aged 3-4 years, and 31.18 for children aged 4-5 years. The differences in average scores between genders based on age group are visualized in graph 4 (see Figure 4).

Figure 3. Graph of Language Scores Based on Age



Based on the graph above (Figure 3), the average language score for children aged 2-3 years is 19.67. In the 3-4 age group, the average language score for children is 23.33. Meanwhile, in the 4-5 age group, the average language score for children is 31.18. The graph shows that the older the age group, the higher the average language proficiency score. This is in line with studies on vocabulary, which explain that as children get older, the number of words they master will also increase (Verhoef et al. 2023).

Figure 4. Language Score Graph Based on Age and Gender



Based on the graph above (Figure 4), there is a difference in the average language ability scores between boys and girls. The difference in the average score in the 2-3 year age group is 8.5, with the average score being higher for girls than for boys. In the 3-4 year age group, there is a difference in the average score of 0.8, with the average score being higher for boys than for girls. In the 4-5 year age group, there is a difference in the average score of 0.17, with the average score being higher for boys than for girls.

Studies show that by the age of 2, girl's language ability scores are higher than boy's (Gayraud, Lanoë, & De Agostini, 2025). Meanwhile, other studies have shown inconsistent results between gender and language ability (Marjanović-Umek & Fekonja-Peklaj, 2017).

## CONCLUSION

Based on the language assessment conducted, the data shows that 11.32% of children at the Khalimul Khasan Foundation Early Childhood Education Center have language problems. 7.55% of the language problems experienced are language disorders, and 3.77% experience language delay. Based on age group, the older the age group, the higher the average score. The biggest difference in scores between males and females was found in the 2-3 year old age group, with females having a higher average score than males. Research on a larger scale is needed to test the consistency of the findings in this study.

Language problems in early childhood education contribute to a significant number of cases, so it is necessary to refer children with language problems to speech therapists so they can receive appropriate intervention. Therefore, language assessment in preschool age is very important to identify language problems as early as possible. The earlier the intervention, the more effective the treatment will be.

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**REFERENCES**

Alfatih, A. (2016). Panduan Praktis Penelitian Deskriptif Kuantitatif. Unsri Press.

Al-Qahtani, S. M., Shiba, H. A. A., Ahmed, H. A. A., Shati, A. A., Alshmrani, L. S., Alqahtani, R. M., Almater, R. S., Alqahtani, R., Alshehri, R. M. A., Alshehri, Y. A. S., Saddah, L. A. M., & Ghazy, R. M. (2025). Prevalence and risk factors of developmental language delay in a sample of children aged <6 years old in the Aseer region, Saudi Arabia: A community-based study. *Medicine*, 104(30), e43459. <https://doi.org/10.1097/MD.00000000000043459>

APA. (2024). Diagnostic and statistical manual of mental disorders : DSM-5-TR. American Psychiatric Association Publishing.

Azwar, S. (2012a). Penyusunan Skala Psikologi (II). Pustaka Pelajar.

Azwar, S. (2012b). Reliabilitas dan Validitas (IV). Pustaka Pelajar.

Bozatlı, L., Aykutlu, H. C., Sivrikaya Giray, A., Ataş, T., Özkan, Ç., Güneydaş Yıldırım, B., & Görker, I. (2024). Children at Risk of Specific Learning Disorder: A Study on Prevalence and Risk Factors. *Children*, 11(7), 759. <https://doi.org/10.3390/children11070759>

Curtis, P. R., Frey, J. R., Watson, C. D., Hampton, L. H., & Roberts, M. Y. (2018). Language Disorders and Problem Behaviors: A Metaanalysis. *Pediatrics*, 142(2). <https://doi.org/10.1542/peds.2017-3551>

Gayraud, F., Lanoë, J.-L., & de Agostini, M. (2025). Factors influencing language performance in boys and girls at age 2 in the French ELFE birth cohort. *Brain Research*, 1847, 149305. <https://doi.org/10.1016/j.brainres.2024.149305>

Hoque, F., Akhter, S., & Mannan, M. (2021). Risk factors identification of speech and language delay in children in a tertiary level hospital: A pilot study. *World Journal of Advanced Research and Reviews*, 11(1), 103–112. <https://doi.org/10.30574/wjarr.2021.11.1.0323>

Kapa, L. L., & Plante, E. (2015). Executive Function in SLI: Recent Advances and Future Directions. *Current Developmental Disorders Reports*, 2(3), 245–252. <https://doi.org/10.1007/s40474-015-0050-x>

Marjanovič-Umek, L., & Fekonja-Peklaj, U. (2017). Gender Differences in Children's Language: A Meta-Analysis of Slovenian Studies. *Center for Educational Policy Studies Journal*, 7(2), 97–111. <https://doi.org/10.26529/cepsj.171>

McAllister, Jan. (2013). Introductory Linguistics for Speech and Language Therapy Practice. John Wiley & Sons, Ltd.

Norbury, C. F., Gooch, D., Baird, G., Charman, T., Simonoff, E., & Pickles, A. (2016). Younger children experience lower levels of language competence and academic progress in the first year of school: evidence from a population study. *Journal of Child Psychology and Psychiatry*, 57(1), 65–73. <https://doi.org/10.1111/jcpp.12431>

Nudel, R., Christensen, R. V., Kalnak, N., Schwinn, M., Banasik, K., Dinh, K. M., Erikstrup, C., Pedersen, O. B., Burgdorf, K. S., Ullum, H., Ostrowski, S. R., Hansen, T. F., & Werge, T. (2023). Developmental language disorder – a comprehensive study of more than 46,000 individuals. *Psychiatry Research*, 323, 115171. <https://doi.org/10.1016/j.psychres.2023.115171>

Sahir, S. H. (2021). Metodologi Penelitian. KBM Indonesia.

Sansavini, A., Favilla, M. E., Guasti, M. T., Marini, A., Millepiedi, S., di Martino, M. V., Vecchi, S., Battajon, N., Bertolo, L., Capirci, O., Carretti, B., Colatei, M. P., Frioni, C., Marotta, L., Massa, S., Michelazzo, L., Pecini, C., Piazzalunga, S., Pieretti, M., Lorusso, M. L. (2021). Developmental Language Disorder: Early Predictors, Age for the Diagnosis, and Diagnostic Tools. A Scoping Review. *Brain Sciences*, 11(5), 654. <https://doi.org/10.3390/brainsci11050654>

Setiawan, A. P. (2024). Bahasa Perkembangan: Konseptual, Metode, Prinsip Intervensi, dan Kognitif. Nasmedia.

Swaiman, K. F., Ashwal, Stephen., Ferriero, D. M., Schor, N. Felice., Finkel, R. S., Gropman, A. L., Pearl,

P. L. ., & Shevell, Michael. (2018). *Swaiman's pediatric neurology : principles and practice*. Elsevier.

Thurm, A., Manwaring, S. S., Cardozo Jimenez, C., Swineford, L., Farmer, C., Gallo, R., & Maeda, M. (2018). Social-emotional and Behavioral Problems in Toddlers with Language Delay. *Infant Mental Health Journal*, 39(5), 569–580. <https://doi.org/10.1002/imhj.21735>

Verhoef, E., Allegrini, A. G., Jansen, P. R., Lange, K., Wang, C. A., Morgan, A. T., Ahluwalia, T. S., Symeonides, C., Andreassen, O. A., Bartels, M., Boomsma, D., Dale, P. S., Ehli, E., Fernandez-Orth, D., Guxens, M., Hakulinen, C., Harris, K. M., Haworth, S., de Hoyos, L., ... st. Pourcain, B. (2024). Genome-Wide Analyses of Vocabulary Size in Infancy and Toddlerhood: Associations With Attention-Deficit/Hyperactivity Disorder, Literacy, and Cognition-Related Traits. *Biological Psychiatry*, 95(9), 859–869. <https://doi.org/10.1016/j.biopsych.2023.11.025>

Ziegenfuss, S., Paynter, J., Flückiger, B., & Westerveld, M. F. (2022). A systematic review of the academic achievement of primary and secondary school-aged students with developmental language disorder. *Autism & Developmental Language Impairments*, 7. <https://doi.org/10.1177/23969415221099397>