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Original Research

Kinds Of Language Problems Of Kindergarten Children In Surakarta

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ABSTRACT

Background: Language and communication skills are essential skills that preschoolers must have. This ability is a precursor to further literacy skills which will later be useful in the academic process of children, so it is necessary to trace the language and communication skills of preschool children.

Methods: This research is a survey research by distributing questionnaires to respondents. The questionnaire contains the profile of language and communication skills through parent reports. The analysis used is using descriptive statistics.

Results: This study provides an overview of language and communication skills in depth. The language component consists of receptive language skills, expressive language skills, and initial literacy skills. Meanwhile, communication skills consist of attention and listening, the ability to follow simple commands, the ability to ask questions, and the ability to speak. About 20% of preschoolers have language skills below their peers.

Conclusion: Data found on language skills of children under their peers. Further research is needed to prove broader data about preschool language skills.

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INTRODUCTION

As known, language disorder is different from speech disorder. This study at least initiates the following research on the attempt to obtain accurate data on the prevalence of language disorder in primary school students. Illustratively, the prevalence of language disorder in children has been traced in many studies. King et al. (2005) found that 10% of 513 3-year old children develop language disorder. Another study successfully found that language disorder is developed by 18.7% of 1113 children being the sample of research (Okalidou & Kampanaros, 2001). Chevrie-Muller, *et al.* (2005) found that language disorder in 3.5-year old children occurs in boys more than in girls. They also found that language disorder occurs more in children with the family's low education background. The research is conducted by McLeod & Harrison (2009). Their research tried to explore information on the 4-5 year old children who develop language



disorder in Australia, with 4983 children being the sample. The research was conducted using parents report and teacher reports. From the result of data collection, it can be seen 13% of 4-5 year old children have language ability score below the average. Another study conducted by Lindsay & Strand (2016), McLeod & McKinnon (2007) mentioned that at least 7% of school-age population develops persistent language learning difficulty with unknown cause.

The author's rationale of targeting kindergarten children is that it is the period when the children's language ability develops rapidly. In this period, the processes of acquiring and constructing language, from both phonological and pragmatic aspect, occur very massively because the children become more active in socialization and interaction with their peer. Harrison & McLeod (2010) stated that in the beginning of childhood, language development process runs fairly rapidly and thereby needs improvement. On the other hand, late intervention will lead to some problems arising related to language problem, such as social, psychical and learning problems. Furthermore, Durkin, Mok, & Conti-Ramsden (2015) concluded that it is unsurprising that children with language disorder starting to study at school will have bigger risk in their future academic achievement.

Essentially, kindergarten period is a critical phase to a child in order to identify language problem likely occurring and the need for immediate intervention.

MATERIALS AND METHOD

This study belongs to a quantitative research. Research design employed here was descriptive quantitative with instantaneous measurement. The population of research consisted of students in four kindergartens located in Banjarsari Sub District of Surakarta City. The sample of research was taken using *Cluster Random Sampling* method. In the first stage, the author determined the sample size. Sample size of research expectedly consisted of 200 students. The statistics we used was statistic descriptive type because the data was descriptive. Follow-up data analysis was adjusted with the need resulting from data collection including both bivariate and multivariate analyses.

RESULTS

Assessment of child language ability is conducted using parent reporting. Questionnaire consists of two parts. The first part contains language and literacy development, the second one contains communication skill of preschool age children.

The second part consists of three ability groups: receptive language ability, expressive language ability, and early literacy. Receptive language ability contains four (4) yes/no questions. Expressive language ability contains nine (9) questions, and early literacy contains seven (7) questions. The result of data collection is elaborated below.

Components	mean	SD	95% Confident Intervals		total r	р
			Lower	Upper		
Receptive language development	3.34	1.08	3.15	3.52	0.636	≤ 0.001
Expressive language	6.57	2.52	6.14	7.00	0.931	≤ 0.001

Table 1. Language & Literacy Development Abilities



development						
Early literacy development	4.50	2.23	4.11	4.88	0.889	\leq 0.001
1) Significance is viewed	based on	the relati	ionship b	etween la	anguage o	component and

total score of language development.

Second part consists of four ability groups: attentive and listening ability, ability of doing instruction, questioning ability, and speaking ability. Attentive and listening ability contains five (5) questions, ability of doing instruction contains five (5) questions, questioning ability contains four (4) questions, and speaking ability contains four (4) questions. The result of data collection is elaborated below.

Laber 2. Communication Development Admines

Components	mea n	SD	95% Confident Intervals		total r	р
			Lower	Upper		
Listening & attentive ability	4.65	0.76	4.52	4.78	0.571	≤ 0.001
Doing instruction ability	4.76	0.65	4.65	4.87	0.526	≤ 0.001
Questioning ability	3.65	0.78	3.52	3.79	0.679	≤ 0.001
Speaking ability	3.03	1.17	2.83	3.23	0.878	≤ 0.001

2) Significance is viewed from the relationship between component and total score of communication development

Child language ability is determined based on standard deviation score of -1. The proportion of children with poor ability is explained in the table below.

Components	mean	SD	%inadequate	%adequat e
Receptive language development	3.34	1.08	20.3	79.7
Expressive language development	6.57	2.52	21.8	78.2
Early literacy development	4.50	2.23	18.8	81.2
Total Language Ability	14.41	5.08	17.3	82.7
Attentive & listening ability	4.65	0.76	7.5	92.5
Doing instruction ability	4.76	0.65	15.8	84.2
Questioning ability	3.65	0.78	22.6	77.4
Speaking ability	3.03	1.17	31.6	68.4
Total communication	16.09	2.54	19.5	80.5
Total language & communications	30.50	6.91	15	85

Table 3.	Distribution	of Children	Language	Abilities
Lable 5.	Distribution	or children	Dungunge	rionneo

The table shows that few kindergarten children have inadequate language value or score. About 15 (fifteen) percents of preschool-age children have difficulty in communication aspect.



DISCUSSION

Receptive and expressive languages are essential component of child language aspect. Language processing with input and output models is represented in a comprehensive process. Receptive and expressive language abilities are used to be an instrument of measuring child's language ability validly. These abilities are also indicator to find out language ability in cross-sectional research (Tervo, 2007). This study finds about 20% of children with poor language ability. This figure is smaller than what has been found by Tervo (2007), that 54% of children have receptive and expressive language problems. The proportion of 20% answers the question in the previous study. The previous study did not revealed the proportion of kindergarten children with poor language ability (Pratomo et al., 2018).

Another component revealed in this study is early literacy. Early literacy is an important ability in children's initial stage of knowing literacy. Literacy consisting of reading, writing, and spelling the essence of written language application (Shipley & McAfee, 2021).

This ability should begin to be studied and mastered by preschool age children. A study has ever revealed the relationship between parents' role and early literacy (Pratomo & Muryanti, 2020). The study did not reveal the number of children with retarded early literacy skill development. Early literacy skill provides accurate prediction on the further literacy achievement (Utchell et al., 2016). This study revealed that 18% of preschool age children have poor early literacy compared with their peers do.

Attention and listening are good indicators of communication process. Attention and listening are the combination of cognitive function and listening mechanism integrated into one unity. Attentive and listening abilities are language component becoming the prerequisite in communication. The relationship between attention, listening, and language ability is confirmed by Berninger et al. (2017). They found a significant correlation between cognitive component and language. Their finding confirms that the data of research gives a concrete representation about the correlation between attention, listening, and language. This study informs that 7.5% of preschool age children have poor attention and listening level compared with their peer do.

The ability of doing instruction is a detailed aspect of child's cognition processing. This ability can represent how strong the child is in understanding the detailed part of phonological, morphological, syntactic, semantic, and pragmatic aspects. This ability is an indicator appropriate to be the instrument of measuring child's language ability. Language complexity is a factor affecting the child's ability of completing the instruction. In addition to being done informally, the measurement of ability of doing instruction is often used as a valid and reliable standardized measurement instrument (Flax et al., 2009). The result of analysis shows that the ability of doing simple instruction is varying. About 15% of preschool age children have ability of doing instruction below their age.

Questioning ability is an expressing process requiring the mastery of all language aspects. This ability represents that the child capable of posing question has an ability of integrating all language aspects mastered to be used functionally. Questioning ability is an indicator appropriate to measure pragmatic ability. The student who is capable of posing question corresponding to the existing context of communication is one of excellent pragmatic characteristics. A study showed that indicator of pragmatic function maturity is a measuring instrument that can be used to see language development and to



identify language disorder (Morgan et al., 2019). The study found that more than 20% of children have difficulty in posing a question. This finding is the starting point to see the language ability of preschool age children to be studied more in-depth. Another study has been conducted on pragmatic aspect with varying approaches. The author saw that pragmatic function is the essential objective of language mastery (Geurts & Embrechts, 2010). Speaking ability is an indicator most visible in the measurement of children language ability. Verbalization ability represents how strong the language mastery is comprehensively. This ability is an indicator of children language examination(Flax et al., 2009; Pratomo et al., 2018; Richter et al., 2002; Tervo, 2007). The mastery of oral language ability has strong correlation with reading ability. Child with good oral language mastery has higher opportunity of having better reading ability (Beron & Farkas, 2004; Roth et al., 2002). Data showed that 31% of preschool children have difficulty in speaking process. This study attracts substantial attention, viewed from percentage ratio. It means that nearly a third of preschool children develop speaking difficulty. This phenomenon is putatively an iceberg phenomenon requiring authentication with study on broader population.

Overall, 15% of preschool students are found to have lower language ability than their peers do. This fact indicates that almost one out of five children have communication difficulty. Many studies on the prevalence of language disorder have been published (McLeod & McKinnon, 2007; Oyono et al., 2018; Pinborough-Zimmerman et al., 2007). Prevalence study is used to be the foundation in drawing a conclusion appropriate to preschool children.

Correlational studies on the factors affecting language development have been published widely (Bingham et al., 2017; Pratomo et al., 2016; Pratomo & Muryanti, 2020; Weigel et al., 2007). Language is a component developing based on contextual variable. No factor affects language development most dominantly. Nevertheless, social and economic status contributes significantly to the children language development. This variable has evidently significant correlation to language development in preschool children (McAvinue, 2018; Pratomo et al., 2016).

CONCLUSION

This research describes language and communication abilities in-depth. Language component consists of receptive language ability, expressive language ability, and early literacy. Meanwhile, communication ability consists of attention and listening, ability of doing simple instruction, questioning ability, and speaking ability. About 20% of preschool age children have language ability lower than their peer do.

The recommendation given is to expand the research area in order to broaden the generalization area and studies should be conducted with testing approach to see language and communication ability dynamically and authentically.

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REFERENCES

Berninger, V., Abbott, R., Cook, C. R., & Nagy, W. (2017). Relationships of Attention and Executive Functions to Oral Language, Reading, and Writing Skills and



Systems in Middle Childhood and Early Adolescence. *Journal of Learning Disabilities*, 50(4), 434–449. https://doi.org/10.1177/0022219415617167

- Beron, K. J., & Farkas, G. (2004). Oral language and reading success: A structural equation modeling approach. *Structural Equation Modeling*, 11(1), 110–131. https://doi.org/10.1207/S15328007SEM1101_8
- Bingham, G. E., Jeon, H. J., Kwon, K. A., & Lim, C. (2017). Parenting styles and home literacy opportunities: Associations with children's oral language skills. *Infant* and Child Development, 26(5), 1–18. https://doi.org/10.1002/icd.2020
- Chevrie-Muller, C., Watier, L., Arabia, J., Arabia, C., & Dellatolas, G. (2005). Teachers'screening for language and behavior difficulties in 2059 children aged 3.5 years. *Revue d Epidemiologie et de Sante Publique*, 53, 645–657.
- Durkin, K., Mok, P.L.H., & Conti-Ramsden G. (2015). Core subjects at the end of primary school: Identifying and explaining relative strengths of children with specific language impairment (SLI): Relative strengths of children with SLI. *International Journal of Language & Communication Disorders*, 50, 226–240.
- Flax, J. F., Realpe-Bonilla, T., Roesler, C., Choudhury, N., & Benasich, A. (2009). Using early standardized language measures to predict later language and early reading outcomes in children at high risk for language-learning impairments. *Journal of Learning Disabilities*, 42(1), 61–75. https://doi.org/10.1177/0022219408326215
- Geurts, H., & Embrechts, M. (2010). Pragmatics in pre-schoolers with language impairments. *International Journal of Language and Communication Disorders*, 45(4), 436–447. https://doi.org/10.3109/13682820903165685
- Harrison, LJ. & McLeod, S. (2010). Risk and protective factors associated with speech and language impairment in a nationally representative sample of 4- to 5-year-old children. *Journal of Speech, Language, and Hearing Research.* 53, pp 508–529.
- King, TM., Rosenberg, LA., Fuddy, L., McFarlane, E., Sia, C., & Duggan, AK. (2005). Prevalence and early identification of language delays among at-risk three year olds. *Journal of Developmental and Behavioral Pediatrics*. 26 (4), pp.293-303.
- Lindsay, G. & Strand, S. (2016). Children with language impairment: Prevalence, associated difficulties, and ethnic disproportionality in an English population. *Frontiers in Education*, 1 10.3389/feduc.2016.00002
- McAvinue, L. P. (2018). Oral language and socioeconomic status: the Irish context. *Irish Educational Studies*, 37(4), 475–503. https://doi.org/10.1080/03323315.2018.1521732
- McLeod, S., & McKinnon, D. H. (2007). Prevalence of communication disorders compared with other learning needs in 14 500 primary and secondary school



students. International Journal of Language and Communication Disorders, 42(SUPPL. 1), 37–59. https://doi.org/10.1080/13682820601173262

- McLeod, S., & Harrison, LJ. (2009). Epidemiology of speech and language impairment in a nationally representative sample of 4- to 5-year old children. *Journal of Speech, Language, and Hearing Research.* 52 (5), pp.1213–1229.
- Morgan, L., Marshall, J., Harding, S., Powell, G., Wren, Y., Coad, J., & Roulstone, S. (2019). 'It depends': Characterizing speech and language therapy for preschool children with developmental speech and language disorders. *International Journal of Language and Communication Disorders*, 54(6), 954–970. https://doi.org/10.1111/1460-6984.12498
- Okalidou, A., & Kampanaros, M. (2001). Teacher perceptions of communication impairment at screening stage in preschool children living in Patras, Greece. *International Journal of Language and Communication Disorders*, 36, 489-502.
- Oyono, L. T., Pascoe, M., & Singh, S. (2018). The prevalence of speech and language disorders in french-speaking preschool children from yaoundé (Cameroon). *Journal of Speech, Language, and Hearing Research*, 61(5), 1238–1250. https://doi.org/10.1044/2018_JSLHR-L-16-0400
- Pinborough-Zimmerman, J., Satterfield, R., Miller, J., Bilder, D., Hossain, S., & McMahon, W. (2007). Communication disorders: Prevalence and comorbid intellectual disability, autism, and emotional/behavioral disorders. *American Journal of Speech-Language Pathology*, 16(4), 359–367. https://doi.org/10.1044/1058-0360(2007/039)
- Pratomo, H. T. A., Adriani, R. B., & Akhyar, M. (2016). Association Between Parental Education, Occupation, Income, Language Activity, and Language Proficiency in Children. *Indonesian Journal of Medicine*, 01(03), 152–159. https://doi.org/10.26911/theijmed.2016.01.03.02
- Pratomo, H. T. A., & Muryanti. (2020). Peran Orang Tua Dalam Perkembangan Ketrampilan Awal Literasi Anak. *Jurnal Terpadu Ilmu Kesehatan*, 9(2), 192–200. https://doi.org/https://doi.org/10.37341/interest.v9i2.251
- Pratomo, H. T. A., Siswanto, A., & Purnaningrum, W. D. (2018). Skrining Kemampuan Bahasa Anak Pra Sekolah : A Pilot Project. *Jurnal Keterapian Fisik*, *3*(1), 25–34. https://doi.org/10.37341/jkf.v3i1.105
- Richter, B., Eißele, S., Laszig, R., & Löhle, E. (2002). Receptive and expressive language skills of 106 children with a minimum of 2 years' experience in hearing with a cochlear implant. *International Journal of Pediatric Otorhinolaryngology*, 64(2), 111–125. https://doi.org/10.1016/S0165-5876(02)00037-X



- Roth, F. P., Speece, D. L., & Cooper, D. H. (2002). A longitudinal analysis of the connection between oral language and early reading. *Journal of Educational Research*, 95(5), 259–272. https://doi.org/10.1080/00220670209596600
- Shipley, K. G., & McAfee, J. G. (2021). Assessment in speech-language pathology: a resource manual (Sixth edit). Plural Publishing, Inc.
- Tervo, R. C. (2007). Language Proficiency, Development, and Behavioral Difficulties in Toddlers. *Clinical Pediatrics*, 46(6), 530–539. https://doi.org/10.1177/0009922806299154
- Utchell, L. A., Schmitt, A. J., McCallum, E., McGoey, K. E., & Piselli, K. (2016). Ability of Early Literacy Measures to Predict Future State Assessment Performance. *Journal of Psychoeducational Assessment*, 34(6), 511–523. https://doi.org/10.1177/0734282915621221
- Weigel, D. J., Lowman, J. L., & Martin, S. S. (2007). Language development in the years before school: A comparison of developmental assets in home and child care settings. *Early Child Development and Care*, 177(6–7), 719–734. https://doi.org/10.1080/03004430701379173