

Investigating Perspectives and Experiences of Teachers with Dyslexic Children Aged 6-8 Years

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Abstract. This study aims to explore the perspective and experienced teachers of children with Dyslexia with 6 until 8 years old. This study uses a qualitative method. Dyslexia children find it difficult to manifest themselves for accuracy and decoding efficiency. In addition, children with dyslexia are also more sensitive to the effect of words, letters on decoding. Two main themes focus on answer the research are: Teachers feel a responsibility to meet all the needs of students, including children with disabilities and dyslexia identified. Secondly, the master explains the obstacles that interfere with efforts to support dyslexic students including limited information and confusing procedural policies. As well, limited budgets for dyslexic children should be provided with special teacher assistants. With a review of this research, is expected to provide information and insight into the state of dyslexia research especially for children of the elementary school.

Keywords: dyslexia, perspective, children.

1 Introduction

Dyslexia affects around 10% of children worldwide. This manifests as a severe deficit in reading, spelling, and does not depend on the intelligence of a child in general and educational opportunities[1]. A family history of dyslexia increases risk; 35 to 60% of babies born to dyslexic parents (mother or father) also experience dyslexia in childhood[2]–[4]. Dyslexia is not a disease that certainly has or does not have someone. Conversely, dyslexia is the ability to read that occurs on a continuum[5]. However, even though only a few children are at risk for dyslexia families develop deficit readings, there is evidence that all babies at risk for dyslexia c families can share the underlying hearing deficit [6]. In this case, it appears that epigenetic and environmental factors or their interactions can influence whether dyslexia is manifested in certain individuals[7].

1.1 Dyslexia children

Dyslexia children. According to the child's developmental stage[8], many psychological modeling occurs when students observe their daily peer behavior. Furthermore, social interactions with peers who are equally able to foster cognitive restructuring and encourage cognitive growth[9]. In other cases also the learning environment provides social interaction that is located, which is considered to have a significant effect on learning and motivation[10].

In a study[11], efforts were made to improve the diagnosis of dyslexia with a multivariate predictive model based on cognitive deficits rather than on reading and spelling deficits. Using various exploratory analyzes, the researchers found that eight variables from four cognitive categories (metaphonology, morphological, visuoattentional, and audition knowledge) classified 94% of children from elementary school correctly.

The most common sign of dyslexia is difficulty with the introduction of receiving an accurate or fluent word, and many researchers accept the theory that dyslexia results from a phonological deficit process[12], [13]. The environment and instruction interact with inherent trends and play an important role in reading progress[14], [15].

Similarly, no action or procedure has been approved to identify dyslexia. Practices and instruments used in the diagnosis of dyslexia vary and many actions have limited validity and reliability[16], [17]. Regarding instruction, researchers from various perspectives agreed that there was no best method for teaching reading, including for students identified as dyslexia[13], [18].

2 Method

Research respondents were classroom teachers in elementary schools. The purpose of this study is to describe the aspirations of the teacher and to bring the understanding, perspective, and experience of dyslexic students. The research subjects were teachers at the South Jakarta Elementary School. The steps taken are developing protocol interviews, conducting interviews, copying audio recordings, and then the analysis phase.

The semi-structured interview protocol is designed to provide insight into beliefs, perspectives, educator's understanding of basic dyslexia literacy, teacher's personal experience and professional feelings towards dyslexic children, their perceptions of dyslexic knowledge and beliefs, identification and procedure interventions for dyslexic students in their school. Before conducting the study, the first test in the field was related to protocols and procedures for Dyslexia intervention in school. Respondents for this study included 32 educators with 10 to 15 years of teaching experience in elementary schools (age range of teachers less than 50 years), 2 Special Educators (Education Specialists and Linguistics experts), 1 dyslexic educator (educators trained to provide interventions for identified students as dyslexia).

All interviews were recorded and immediately transcribed. After being transcribed, researchers write general impressions and detailed notes about anything informative that is not captured in audio recordings, including the context of interviews and participants in nonverbal languages (for example, facial movements or expressions). The research data set can be accessed in osf.io Open Science Framework.

3 Results and Discussion

3.1 Teacher's responsibility

Teacher's responsibility. A strong sense of responsibility expressed by respondents to provide appropriate and supportive instruction tailored to the strengths and needs of their students. Respondents bear the responsibility carried out by teachers who have stated in the "1945 Constitution" namely the nation's intellectual life.

Rita (third-grade teacher responds): "The things that must be done when experiencing a dyslexic child are not to scold him but can be one way whether it sits in front of a child or takes extra time like playing while learning to introduce it, or giving verbal instructions than written ". [19]

Rumiati (second-grade teacher responds): "Much of it is the teacher's responsibility to give appropriate instructions to students with dyslexia, including those identified as dyslexia". In addition to assessing and responding to their students' academic needs, many teachers articulate their efforts to find out their students outside and to overcome problems of beliefs that might accompany dyslexic students. Tuti (as a second-grade teacher) explained, we also have to make sure they have to be confident (call someone with dyslexia). I don't want that person to think that the child is a bad reader. Some teachers said they met with parents to try to answer questions and reduce concerns about the label dyslexia.

3.2 Searching for information

Searching for information. As proof of commitment to pursue the learning process, many respondents took responsibility for learning about dyslexia outside of the information provided. As Rahmanto revealed, teachers build their perspectives on dyslexia from various sources and experiences, including teacher professional development, information from popular media, independent research, teaching experience, work colleagues.

Twenty respondents said they had read articles, or books on dyslexia, six respondents in one school formed a group for workshops that studied dyslexia. Eleven respondents said that they sought advice and information from other specialists and colleagues, and three respondents said they volunteered to participate in training is available, paid well for training and childcare if needed. The desire to know more about dyslexia is influenced by Ana, a teacher, and volunteer for children with dyslexia and the special needs designated by the school to oversee the process of identifying dyslexia. Many respondents indicated a lack of information and clarity about policies and procedures as one of the many obstacles to supporting their students identified as dyslexia.

3.3 Obstacles

Obstacles. Although respondents were committed to providing support to identified dyslexic students, most respondents said limited policies, procedures, and information were provided about dyslexia. They expressed concern over the lack of information and limited information regarding the identification and intervention of dyslexia. Some respondents are consistent with the meaning of dyslexia by researchers. For example, almost all respondents mentioned decoding, phonemic/phonological awareness, and fluency as a characteristic.

Yuni (Special Companion Teacher in the School) revealed the strategies she used with students identified as dyslexia, with a Multisensory Method that utilizes visual abilities or visual abilities, hearing or hearing students, kinesthetic or motion awareness.

Helmiah (first-grade teacher) explained that he had 3 students who were identified as dyslexia. The strategy he uses for some of these students is to write uppercase letters on paper. This is done to allow the connection between hearing, vision.

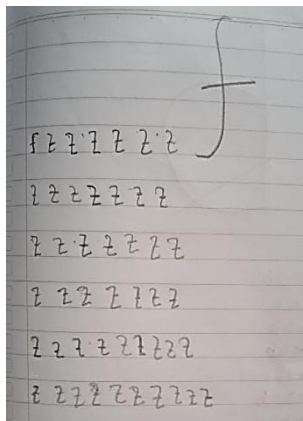


Fig 1. Results of students who experience dissection in writing "f".

For the first writing, the student has written correctly the letter "f". Then why is it wrong to write it? Based on the results of the student's letter "f", it can be seen that students still have difficulty writing the letter "f" like the letter "z". Even though the teacher has provided a stimulus that writes the letter "f" like a fishing pole. Responding to budget challenges stemming from unfunded state mandates. There must be special policies and funds for students with special needs so that they can provide support services to students who experience them. Respondents were unsure about their ability to work and had to teach 1 teacher for 25 to 30 students with students identified as dyslexia should need a special assistant teacher.

Difficulties in decoding and fluid often occur together with mastery of words, spelling, and problems in the brain and can cause challenges with understanding, written expression, vocabulary development, and motivation. This result is fully commensurate with the difficulty of sublexical decoding found for children with dyslexia[4],[20], [21]. They are also in line with the results of neurocognitive studies that show serious problems with prolonged activation of dorsal brain circuits that are associated with the application of persistent sublexical strategies during reading across primary school grades for dyslexic children[22].

Many dyslexics suffer from low self-motivation because of the difficulties associated with their learning disabilities[5], [23]–[26]. The use of strategies can improve perception to be self-efficacious. The fact that the relationship between dyslexic status and word recall diminishes after controlling for general verbal abilities is in line with some theories of dyslexic deficits, which regard them as the result of phonological behavior along with broader oral language abilities[27], [28]. Research result [29], [30]shows that conscious people use denial of memory in their attempts to remember things. Therefore, it is possible for someone to be able to train this memory process to increase its use in everyday situations.

4 Conclusion

The teacher has the primary responsibility for teaching all students, including those identified as dyslexia. This study provides insight into teacher understanding, experience, and perspectives on dyslexia. Respondents, especially in primary school teachers, want to know more and do more for their students. However, they pointed out due to a lack of information and clarity about the identification of dyslexia and intervention policies and procedures in schools and in addition to lack of communication and participation of parents. Respondents expect special attention from the Government to respond to challenges in the form of budgets originating from the state's mandate to facilitate children diagnosed as children with special needs to achieve the goals of education for all.

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References

- [1] M. J. Snowling and C. Hulme, “Annual Research Review: The nature and classification of reading disorders - a commentary on proposals for DSM-5,” *J. Child Psychol. Psychiatry*,

- vol. 53, no. 5, pp. 593–607, May 2012.
- [2] A. Gallagher, U. Frith, and M. J. Snowling, “Precursors of Literacy Delay among Children at Genetic Risk of Dyslexia,” *J. Child Psychol. Psychiatry*, vol. 41, no. 2, pp. 203–213, Feb. 2000.
 - [3] T. G. Heikki Lyytinen, Mikko Aro, Kenneth Eklund, Jane Erskine, U. Marja-Leena Laakso, Paavo H. T. Leppänen, Paula Lyytinen, Anna-Maija Poikkeus, and R. and M. Torppa, “The Development of Children at Familial Risk for Dyslexia: Birth to Early School Age,” *Springer*, vol. 54, no. 2, pp. 184–220, 2004.
 - [4] A and B. van der Leij, A., Van Bergen, E., van Zuijen, T., De Jong, P., Maurits, N., & Maassen, “Precursors of developmental dyslexia: an overview of the longitudinal Dutch dyslexia programme study,” *Dyslexia*, vol. 19, no. 4, pp. 191–213, 2013.
 - [5] F. R. Vellutino, J. M. Fletcher, M. J. Snowling, and D. M. Scanlon, “Specific reading disability (dyslexia): what have we learned in the past four decades?,” *J. Child Psychol. Psychiatry*, vol. 45, no. 1, pp. 2–40, Jan. 2004.
 - [6] P. H. T. Leppänen *et al.*, “Newborn brain event-related potentials revealing atypical processing of sound frequency and the subsequent association with later literacy skills in children with familial dyslexia,” *Cortex*, vol. 46, no. 10, pp. 1362–1376, Nov. 2010.
 - [7] B. PENNINGTON, “From single to multiple deficit models of developmental disorders,” *Cognition*, vol. 101, no. 2, pp. 385–413, Sep. 2006.
 - [8] A. Bandura, W. H. Freeman, and R. Lightsey, “Self-Efficacy: The Exercise of Control,” *J. Cogn. Psychother.*, vol. 13, no. 2, pp. 158–166, Jan. 1999.
 - [9] J. Y. H.G. Furth, “Reflections on Piaget’s sociological studies,” *Elsevier Sci.*, vol. 18, pp. 121–133, 2000.
 - [10] L. S. Vygotsky, *Development of Higher Psychological Processes*. Harvard University Press, 1980.
 - [11] N. T. Guylaine Le Jan, Régine Le Bouquin-Jeannès, Nathalie Costet and G. F. and J.-E. G. Pascal Scalart, Dominique Pichancourt, “Multivariate predictive model for dyslexia diagnosis,” *Springer*, vol. 61, no. 1, pp. 1–20, 2011.
 - [12] L. Bradley and P. E. Bryant, “Categorizing sounds and learning to read—a causal connection,” *Nature*, vol. 301, no. 5899, pp. 419–421, Feb. 1983.
 - [13] E. Ferrer, B. A. Shaywitz, J. M. Holahan, K. E. Marchione, R. Michaels, and S. E. Shaywitz, “Achievement Gap in Reading Is Present as Early as First Grade and Persists through Adolescence,” *J. Pediatr.*, vol. 167, no. 5, p. 1121–1125.e2, Nov. 2015.
 - [14] C. A. Myers *et al.*, “White Matter Morphometric Changes Uniquely Predict Children’s Reading Acquisition,” *Psychol. Sci.*, vol. 25, no. 10, pp. 1870–1883, Oct. 2014.
 - [15] A. G. K. Hugh W. Catts, *The Connections Between Language and Reading Disabilities*. Psychology Press, 2005.
 - [16] J. G. and E. L. G. Elliott, *The dyslexia debate*. Cambridge University Press, 2014.
 - [17] Beth Harry and Janette Klingner, “Discarding the Deficit Model,” *Educ. Leadersh.*, vol. 64, no. 5, pp. 16–21, 2007.
 - [18] S. E. S. Emilio Ferrer, Bennett A. Shaywitz, John M. Holahan, Karen Marchione, “Uncoupling of Reading and IQ Over Time Empirical Evidence for a Definition of Dyslexia,” *Psychol. Sci.*, vol. 21, no. 1, pp. 93–101, 2009.
 - [19] Y. E. Y. Siregar, “Result of Research Investigating Perspective and Teacher Experience

with Dyslexia Children Ages 6-8 Years.” .

- [20] S. Gibbs and J. Elliott, “The differential effects of labelling: how do ‘dyslexia’ and ‘reading difficulties’ affect teachers’ beliefs,” *Eur. J. Spec. Needs Educ.*, vol. 30, no. 3, pp. 323–337, Jul. 2015.
- [21] A. R. Zimmerman, B. J., & Moylan, *Self-regulation: Where metacognition and motivation intersect.*, Handbook o. Routledge, 2009.
- [22] P. Pugh, K. R., Landi, N., Preston, J. L., Mencl, W. E., Austin, A. C., Sibley, D., ... & Molfese, “The relationship between phonological and auditory processing and brain organization in beginning readers,” *Brain Lang.*, vol. 125, no. 2, pp. 173–183, 2013.
- [23] D. Montgomery, *Teaching gifted children with special educational needs: supporting dual and multiple exceptionality.* Routledge, 2015.
- [24] Y. Gabay, S. G. Shamay-Tsoory, and L. Goldfarb, “Cognitive and emotional empathy in typical and impaired readers and its relationship to reading competence,” *J. Clin. Exp. Neuropsychol.*, vol. 38, no. 10, pp. 1131–1143, Nov. 2016.
- [25] R. Tam, H. E., & Hawkins, “Self-concept and depression levels of students with dyslexia in Singapore,” in *ATINER CONFERENCE PAPER SERIES*, 2012.
- [26] S. E. Shaywitz, R. Morris, and B. A. Shaywitz, “The Education of Dyslexic Children from Childhood to Young Adulthood,” *Annu. Rev. Psychol.*, vol. 59, no. 1, pp. 451–475, Jan. 2008.
- [27] J. E. Le Jan, G., Le Bouquin-Jeannès, R., Costet, N., Trolès, N., Scalart, P., Pichancourt, D., ... & Gombert, “Multivariate predictive model for dyslexia diagnosis. Annals of dyslexia,” *Ann. Dyslexia*, vol. 61, no. 1, pp. 1–20, 2011.
- [28] A. van der Leij, E. van Bergen, T. van Zuijen, P. de Jong, N. Maurits, and B. Maassen, “Precursors of Developmental Dyslexia: An Overview of the Longitudinal Dutch Dyslexia Programme Study,” *Dyslexia*, vol. 19, no. 4, pp. 191–213, Nov. 2013.
- [29] R. Joseph, No Title *Neuropsychiatry, neuropsychology, and clinical neuroscience: Emotion, evolution, cognition, language, memory, brain damage, and abnormal behavior.* American Psychological Association., 1996.
- [30] S. Squire, L. R., & Zola-Morgan, “Memory: brain systems and behavior. Trends in neurosciences,” *Elsevier*, vol. 11, no. 4, p. 170–175., 1988.