



# SYMPTOMS AND TREATMENT OF LEARNING DIFFICULTIES (DYSLEXIA): A CASE STUDY

Ahmad Y. Saputra 🔟 🖂 | Zulfadli Hamdi 💷 | Ade S. Hadi 💷 | Deny Susanty 🗐 Muhammad U. Ali 🗐

<sup>1</sup><sup>1</sup><sup>2</sup>/<sub>4</sub>Faculty of Education, Hamzanwadi University, Indonesia; <sup>3</sup>Faculty of Social Sciences, Law and Political Sciences, Yogyakarta State University, Indonesia, <sup>5</sup>Faculty of Human Development, Sultan Idris Education University, Malaysia

Received: 17 January 2025 • Accepted: 5 February 2025 • Published: 28 March 2025

#### Abstract

Dyslexia which is a loss of reading and writing ability not in the form of a physical disability but brings to the brain which functions as a processor and processor of information. If the situation is left unchecked, it will affect the level of reading and writing skills of a person. Therefore, in this paper, the author formulates the problem "How are the symptoms and causes and ways to cure dyslexia?" Next in the discussion, the author outlines the symptoms of dyslexia, namely, stuttering and slow speech, difficulty choosing the right words to convey the spoken meaning, spelling mistakes that are done continuously, reading word by word slowly and intonation up and down, songang letters, similar words and numbers, difficulty in writing. The underlying causes of dyslexia are phonological problems i.e. systematic relationships between letters and sounds, word recall problems, systematic organization problems, short-term memory problems, and problems understanding syntax (grammar). Among the many causes, the main factor is the brain. Alternative cures for dyslexia, among others, children are stimulated in the brain part with some reading learning. By means of various methods of learning to spell, and teaching by sound with different signs. By providing multiple and regular help dyslexic children will achieve progress.

Keywords: Dyslexia, Reading and Writing, Symptoms, Causes, Treatment.

How to cite: Saputra, A. Y., Hamdi, Z., Hadi, A. S., Susanty, D., & Ali, M. U. (2025). Symptoms and treatment of learning difficulties (dyslexia): A case study. *International Journal of Education and Economic Sciences (IJEES)*1(1), 1-8

#### **INTRODUCTION**

Dyslexia is a type of difficulty learning in children in the form of disabilities reading, a symptom that is not caused by the ability to see, hear, intelligence, or language skills, but rather a disruption in current brain processes receive information processing (Safitri et al., 2022). Dyslexia is one of the most common forms of specialized learning difficulties among the other two forms of specialized learning difficulties, namely dysgraphia and dyscalculia. dyslexia are of Greek origin which literally means language difficulty. Dyslexia (like dyscalculia and dysgraphia) occurs in individuals who have normal intelligence potential, most of whom have intelligence levels well above average. That is why dyslexia is called a specific learning difficulty, because the learning difficulties it faces only apply in one or specific academic areas, including the areas of reading, writing, and calculating. Dyslexia learning difficulties are reading difficulties caused by brain disorders that impact a child's language abilities (Faizin, 2020).

Often dyslexia refer to a situation where the learning problem that arises in these individuals is difficult to explain because it is 'at odds' with the potential intelligence that they have. Most people commonly understand dyslexia as a condition where children have difficulty learning to read, are lazy to write, if you write many letters are missing, difficult to count, and so on, but the truth is dyslexia is not that simple.

The Malaysian Ministry of Education has reported based on a 2001 report that as many as 290,000 school students out of 4.9 million students are likely to have the characteristics of Specific Learning Problems (SPLD); Dyslexia. (KPM 2000). Four percent of the world population is significant to have dyslexia symptoms (Ghani, Mohamad, 2013). Children with special needs including dyslexic children also need an excellent and effective education to ensure they can continue to lead meaningful lives. Special education has been given more attention since the re-dubbing of the 1961 Education Act to the 1996 Education Act, has provided specific clauses relating to Special education. The implementation of Basic Compulsory Education in the Lower Ranks 2003 through the Education (Compulsory Education) Order 2002 which provides opportunities for all eligible Malaysians up to the age of 6 years to receive education in institutions provided by the government through the Malaysian Ministry of Education. This education system provides opportunities to all citizens within the eligibility age range to receive education for free.

Dyslexia is the loss of ability to read and write. Loss of ability to read is called alexia and loss of ability to write is called Agrafia (Dardjowidjojo, 2018). Dyslexia is a condition of learning disability in a person caused by difficulties in doing reading and writing activities. This disorder is not a form of physical disability, such as vision problems, but leads to the brain having to process and process information that is read. Parents often assume that children of school age who can no longer read and write are a measure of their disability.

Children who are already in school and are not yet fluent in reading are considered stupid or behind. It may be the case that the child is dyslexic. The ability to read in normal children has appeared since the age of six or more than seven, but dyslexic children are not able to. Even into adulthood they still have both disorders. For example, the word "home" is called "puang". Or the word "shower" becomes "morning". Dyslexia is characterized by reading difficulties in children and adults who should show the ability and motivation to read correctly and fluently. In preschool-aged children, there is a history of language delays or inaudible words (difficulty playing rhyming words, errors in handling similar words, difficulty learning to recognize letters) for example the word "brother" is called "crow" accompanied by a history of a dyslexic family, indicating a significant risk factor for developing dyslexia. Subsequently, school-aged children usually have complaints in the form of lack of ability to carry out reading in school, for example the word "chicken" is read "maya", but parents and teachers often do not realize that the child has reading difficulties.

Dyslexic children will be seen talking past, not learning letters in kindergarten and not learning to read in lower school. Of course, the child will be further behind in terms of studies while teachers and parents wonder more and more why children who have a rather good level of intelligence experience difficulties in reading. Although the child has been taught specially, but the child reads more slowly. He faces reading problems even when it is wrong to recognize similar letters and numbers. In addition, people with dyslexia will experience self-confidence. Through observation of reading difficulties experienced by children,



there is a tendency that the originator of dyslexia is a neurobiological disorder, characterized by difficulty in correctly recognizing words, both in spelling and symbol encoding. None of the reading problems experienced by dyslexic children are related to their level of intelligence. In some cases, even children with dyslexia are much wiser than other normal children.

Dyslexic children have different symptoms from one another. The only thing they have in common is a very low reading ability given their age and intelligence. Every child has a predisposition to dyslexia, and there are also children who are not dyslexia but have experienced reading problems. The issue in this case is what are the symptoms and causes and how to treat dyslexia.

Left-handed dyslexic children can use both hands, for example when writing, but they often read from right to left. Symptoms of dyslexia include Stuttering and slow speech, Difficulty choosing appropriate words to make a point, problems with direction (up - down) and time (before - after, now - last night), persistent misspellings, such as the word "elephant" being called "gallant". call the word "mother" to "yam", the word "pipe" to "papi", read word by word slowly and intonation up and down, reverse similar letters, words and numbers, for example, b with p, u with n, horse with daku, tukul with lupa, 2 - 5, 6 - 9, writing difficulties, for example, writing one's own name "Rosa" becomes Ro5a, writing the word "Adik" becomes 4dik (the letter S is considered equal to the number 5, the letter A is considered equal to the number 4).

# METHODOLOGY

This study employs a qualitative method with a case study approach to understand the symptoms and impact of dyslexia on students with learning difficulties, focusing on a single case: Nisa, a 9-year-old student in a special education class. Data were collected through in-depth interviews with Cekgu Zulaikha, the teacher responsible for Nisa, as well as direct observations and document analysis related to Nisa's learning progress. To strengthen data validity, triangulation was conducted by gathering additional information from parents and medical diagnoses supporting the dyslexia condition. Data analysis followed the model of Miles et al. (1994), which includes data reduction, data presentation, and conclusion drawing to identify patterns and factors influencing Nisa's condition. Through this approach, the study aims to provide a comprehensive understanding of the causes and interventions for dyslexia in a more in-depth manner.

# **RESULT AND DISCUSSION**

# Simpton and the Impact of Dyslexia on the Development of Students with Learning Difficulties in Education

Some of the symptoms of this Dyslexia include Stuttering and slow speech, difficulty choosing appropriate words to convey the intended meaning he mentions Trouble in determining direction (up - down) and time (before - after, now - last night), persistent misspellings such as the word "elephant" called "man". the word "mother" is called "caladium", the word "pipe" becomes "papa", read word by word slowly and intonate up and down, reverse similar letters, words and numbers, for example b with p, u with n, the word horse with daku, tukul with lupa, 2 - 5, 6 - 9, difficulty in writing, for example, writing her own name "Rosa" becomes Ro5a, writing the word "Adik" becomes 4dik (the letter S is considered the same as the number 5, the letter A is considered the same as the number 4). This is in line with what



is said (Fatmawati & Tahyudin, 2024) Dyslexics generally show characteristics such as difficulty learning the shape and sound of letters, combining letters into words, reading, digesting verbal instructions, unclear and reversed articulation. Children with dyslexia symptoms are often seen as children with low intelligence. Even dyslexics often get bad treatment from their friends.

There are many causes of dyslexia experienced by students with learning difficulties, various factors that cause dyslexia to occur in students with learning difficulties, namely, Educational factors, methods used in teaching reading, especially the "whole word" method which teaches words as a combination rather than teaching words as a sound form of something written. example, If children are at the level of not being able to distinguish similar letters such as b and d, then the method of teaching that needs to be done is to learn letters one by one. For example, focus on teaching this time on the letter b. Write the letter b in large size then ask the child to call it while his hand follows the flow of the letter b or make a certain code with the hand. The child is trained continuously until he can master it, after which start moving to the letter d. Some causes of dyslexia can be identified, such as the first from the biological aspect where the one included in reading difficulties caused by biological factors, namely a family history of dyslexia, problematic pregnancies, and quite relevant health problems. Second, cognitive, namely the pattern of language articulation and phonological awareness in the individual concerned. Third, behavior where behavioral factors that can be used as factors causing dyslexia are problems in social relationships, stress which is the impact of learning difficulties, and motor disorders (Haifa et al., 2020).

Thus, it can be concluded that Nisa experiences dyslexia symptoms such as slow speech, difficulty choosing appropriate words, not recognizing alphabets, not recognizing vocabulary. The causes of dyslexia are influenced by several factors as well, namely the existence of educational factors, psychological factors, biological factors, maturity factors which become benchmarks as a cause of these students falling into the category of students with learning difficulties or dyslexia. Nisa's speech delay is in line with what is said (Susanti & Ngatmini, 2024)that the symptoms of dyslexia in general experienced by children include: the development of the child's speech ability is slower than children of the same age, difficulty in remembering and learning the names and sounds of the alphabet,

# How to Treat A Dyslexic Child with Learning Difficulties in Special Education

This method assumes that dyslexic children have a lack of activity in the right side of the brain called the cerebellum, which contains only 50 percent of the brain's nerves. With this method, children are stimulated in that part of the brain, with some learning. Training can be given to dyslexic children, by devoting time to teaching them to read. However, this training should not be forced if the child is in an unhealthy state that is exposed to negative emotions. Training is carried out in a graded manner i.e., having a positive attitude and rewarding when children can read correctly. Then, teach the child to read and help him to appreciate the meaning of each word from his mouth. In this exercise, storybooks can be used and start reading vigorously first to attract children's interest.

Some of the approaches that can be taken to cure are as follows, educational approach and phonics lessons. If parents and teachers begin to suspect that a child has dyslexia, they should immediately meet with a psychologist or a special teaching clinic/school (special education) to get information on how to control the things that need to be done to help children improve their reading development. Dyslexic children are



not necessarily unable to read and write. If they receive proper and intensive treatment, dyslexic children will be able to read just like other normal children. Multidimensional method. With the integrated method, children will be taught to spell not only based on what they hear and then recite it, but also using visual (vision) and tactile (touch) memory capabilities. This method is done to allow the connection between hearing, sight, and touch to make it easier for the brain to work on remembering letters.

The best treatment for word recognition is direct teaching that includes a multisensory approach. This type of treatment consists of teaching by sound with various signs, usually separately and, when possible, as part of a reading program. Indirect teaching of word recognition is also very helpful. This teaching usually consists of exercises to improve pronunciation or reading comprehension. Children are taught how to process sounds by combining sounds into words, by separating words into parts, and by recognizing the location of sounds in words. This multisensory approach is in line with what is said (Shidqi & Budi, 2023)that multisensory learning is an effective approach to help children with special needs improve their reading skills. A multisensory approach is a teaching technique that involves various children's senses such as sight, hearing, movement and touch. Involving all the senses in teaching and learning can increase children's mastery of skills (Mei Chiew & Abu Bakar, 2022).

Indirect treatments, other than speech recognition, may be used but are not recommended. Indirect treatments may include wearing colored chalk that makes words and letters easier to read, eye movement exercises, or perceptual vision exercises. The benefits of indirect treatments are unproven and can lead to unrealistic expectations and hinder the necessary teaching. It can be concluded that Cekgu Zulaikha used various therapeutic methods to treat her student, Nisa who was experiencing learning problems that resulted in her not knowing letters. However, since being served by Cekgu Zulaikha in a way that has been arranged from the first step to the last step, Nisa's sister has experienced a slight change and ability in learning to recognize alphabets. Sound recognition is very important for dyslexic children, a method of learning to read that uses sound recognition (phonemes) of letters and how they form words, which consists of phonic split letter techniques, phonic word lists, phonic labels and objects and phonic sentences Rachel et al., 2024).

By paying attention to the symptoms of dyslexia experienced by children, namely reading, and writing disorders such as not being able to distinguish between the number 5 and the letter S, the number 4, and the letter A, reversing words, being stubborn. Ability After reading it, based on these symptoms, the stem can be found. There is a tendency that the causes of dyslexia are phonological problems i.e., systematic relationship between letters and sounds, problems remembering words, systematic organization problems, short-term memory problems, and problems understanding syntax (grammar), this is in line with what Rahmawati (2022) stated that dyslexia is related to behavior, reading, spelling, handwriting, writing techniques and the overall understanding of punctuation marks by students with symptoms of dyslexia has problems reading, writing and spelling abilities.

Among the many causes, the main factor is the brain. Cure solutions for dyslexic children include stimulating the child in that part of the brain with some reading learning. With various methods of learning to spell, and teaching by sound with various signs. By teaching signs or pictures to Dylexsia children,

this can develop brain performance, this is in line with what Lidia et al (2022) said that you can use learning media in the form of pictures to help makes it easier to introduce letters, distinguish letters until the end Dyslexic children are able to read and write fluently so that it is stimulating development of children with dyslexia by supporting what they do the child is doing, provoking the child to tell what is being done, for example, if you are making a triangle or square shape, take the time to refreshing to children, helping children to observe what they see, for example in games, teaching children to understand symbols as well play puzzles together.

Children who are dyslexic should be tested by a trained education or psychology expert. Using various tests, the examiner will be able to identify the types of errors that children often make. Then, the examiner can diagnose the problem. Meanwhile, if the child is indeed dyslexic, suggestions for treatment can be put forward, such as tutorials, speech therapy, or suggestions regarding placing the child in a special class. A psychologist's examination is very important to find out the child's condition, this is in line with what Putri (2023) stated that with a psychologist's examination it can be known whether the child has dyslexia. Apart from that, examining dyslexic children is useful as a follow-up step, this is in line with what Wijaya (2020) stated that the patient had undergone an examination function of vision, hearing with specialist doctors according to their field and intelligence quotient (IQ) test, ie Wechsler Intelligence Scale for Children (WISC) by psychologists with the above results average. The patient was diagnosed with a learning disorder specific to the domain of the disorder reading ability (dyslexia) and undergo evaluation using the method "Response to Intervention" (RTI).

The examiner can recommend specific approaches to training. Since no one method is suitable, the recovery program should be designed as an individual program. The pattern of a child's relationships with family, peers, and relationships with teachers has a lot to do with learning decisions. The teacher's way of determining the success of a dyslexic child's education. This is in line with what Nurfhadillah (2022) said that the teacher's way of doing things handling dyslexic children is by giving children extra hours dyslexia after school, take a special approach to children who dyslexia and provide motivation or praise to dyslexic children who have finished learning to read.

In a conducive environment, children have a better chance of succeeding. By providing varied and constant help, dyslexic children will make progress. Dyslexic children who have been identified early on, receive support from their family and friends, and receive adequate training programs, are expected to make good progress. On the other hand, if the family tends to hand over the learning activities completely to the parents Schools can worsen the dyslexia conditions experienced by students (Elmansyah et al., 2023).

In this section, the discussion covers the implications and recommendations of the study through a discussion of the findings of the independent study. Among the implications discussed are practical implications. Practical implications suggest a framework of action plans or recommendations that need to be implemented by certain parties such as the Bahagian Pendidikan Khasas (CPC) Ministry of Education Malaysia (KPM), Jabatan Pendidikan Khas Malaysia (JPKM), parents who have dyslexia



children, and the dyslexia community itself.

Implications and Suggestions to the Malaysian Ministry of Education (KPM) From a practical perspective, this study also suggests that the Bahagian Pendidikan Khas, Ministry of Education Malaysia should generally provide special training to special education teachers with learning problems who teach children with learning problems (Dyslexia). Implications and suggestions to parents and teachers of special education students, the study of symptoms and methods of treating students with learning problems (dyslexia). The recovery program should be designed as an individual program. The nature of children's relationships with family, peers, and relationships with teachers has a lot to do with learning decisions.

### CONCLUSION

From the above studies, it can be concluded that the best treatment for speech impairment is direct teaching which includes a multisensory approach. Some approaches that can be taken in healing efforts are such as educational approaches and phonics lessons. If parents and teachers begin to suspect that a child has dyslexia, they should immediately meet with a psychologist or special teaching school to get information on how to control the things that need to be done to help children improve their reading development. Dyslexic children are not necessarily unable to read and write. If they receive proper and intensive treatment, dyslexic children will be able to read just like other normal children. They can also have a higher IQ than normal children. Good teaching and method delivery by teachers can have a great impact on children in their reading and counting development.

#### REFERENCES

- Dardjowidjojo, S. (2018). Psycholinguistics: An Introduction to Understanding Human Language. Yayasan Pustaka Obor Indonesia.
- Elmansyah, T., Maulana, R., & Nini, N. (2023). Deskripsi Gangguan Disleksia Pada Siswa Sekolah Dasar Kecamatan Segedong. Jurnal Mahasiswa BK An-Nur: Berbeda, Bermakna, Mulia, 9(1), 260. https://doi.org/10.31602/jmbkan.v9i1.10187
- Eva Rachel, Meisyana Sianipar, & Hidayat, F. (2024). Inovasi Pendidikan: Dampak Metode Pembelajaran terhadap Peningkatan Literasi Anak Disleksia. *Jurnal Bintang Pendidikan Indonesia*, 2(3), 40–58. https://doi.org/10.55606/jubpi.v2i3.3011
- Faizin, I. (2020). Strategi Guru Dalam Penanganan Kesulitan Belajar Disleksia. *Empati-Jurnal Bimbingan Dan Konseling*, 7(1), 1. https://doi.org/10.26877/empati.v7i1.5632
- Fatmawati, K. D., & Tahyudin, I. (2024). Teknologi text to speech menggunakan amazon polly untuk meningkatkan kemampuan membaca pada anak dengan text to speech technology using amazon polly to improve. Jurnal Teknologi Informasi Dan Ilmu Komputer (JTIIK), 11(6), 1351–1360. https://doi.org/10.25126/jtiik.2024117426
- Ghani, Mohamad, A. (2013). Teachers' challenges in educating special children in special classes of three selected primary schools, Kuala Terengganu, Terengganu, Malaysia. *Advances in Natural and Applied Sciences*, 7(3).
- Haifa, N., Mulyadiprana, A., & Respati, R. (2020). Pengenalan Ciri Anak Pengidap Disleksia. *PEDADIDAKTIKA: Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 7(2), 21–32. https://doi.org/10.17509/pedadidaktika.v7i2.25035
- Lidia Oktamarina\*1, Evita Rosalina2, Lucia Septiani Utami3, C. D., & Syah Fitri Kurnia Duati5, Riska Puspa Sari6, M. S. J. (2022). Gangguan Gejala Dislexsia Pada Anak Usia Dini. *Jurnal Multidisipliner Bharasumba*, *1*(2).

Matthew B. Miles, A. M. H. (1994). *Qualitative data analysis: An expanded sourcebook*. SAGE Publications Inc. Mei Chiew, L., & Abu Bakar, K. (2022). Keberkesanan penggunaan Pendekatan Multisensori dalam Meningkatkan



Kemahiran Konsep Nombor Kanak-kanak Prasekolah. Jurnal Pendidkan Bitara Upsi, 15, 53-61. https://doi.org/10.37134/bitara.vol15.sp.6.2022

- Nurfadhillah, S., Adella, A., Asfari, A. I., Anggraeny, D., Sari, N. N., & Ananda, V. (2022). Analisis Model Pelayanan Pendidikan Bagi Anak Disleksia dan Disgrafia di Sekolah Inklusi SDN Meruya Selatan 06 Pagi. *Masaliq*, 2(1), 43–52. https://doi.org/10.58578/masaliq.v2i1.87
- Putri, W., & Arif Kurniawan, M. (2023). Upaya Guru Dalam Menangani Anak Disleksia Di Sd Intis School Yogyakarta. *Al-Mubin; Islamic Scientific Journal*, 6(1), 74–84. https://doi.org/10.51192/almubin.v6i01.490
- Rahmawati, L. E., Purnomo, E., Hadi, D. A., Wulandari, M. D., & Purnanto, A. W. (2022). Studi Eksplorasi Bentuk-Bentuk Gejala Disleksia pada Anak. Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini, 6(5), 4003– 4013. https://doi.org/10.31004/obsesi.v6i5.2495
- Rukin. (2021). Metodologi penelitian kualitatif. Jakad Media Publishing.
- Safitri, F., Ali, F. N., & Latipah, E. (2022). Ketidakmampuan Membaca (Disleksia) dan Dampaknya Terhadap Perkembangan Anak. *WASIS*: Jurnal Ilmiah Pendidikan, 3(1), 37–44. https://doi.org/10.24176/wasis.v3i1.7713
- Shidqi, T. S., & Budi, S. (2023). Penggunaan Metode Multisensori untuk Meningkatkan Kemampuan Membaca Anak Berkebutuhan Khusus: Studi Literatur. *Jurnal Pendidikan Tambusai*, 7, 22076–22079. https://www.jptam.org/index.php/jptam/article/view/10032%0Ahttps://www.jptam.org/index.php/jptam/arti cle/download/10032/8123
- Sugiyono. (2018). Metode penelitian kualitatif. Alfabeta.
- Susanti, A., & Ngatmini, N. (2024). Solusi Terhadap Penderita Disleksia dan Disgrafia. *Multiverse: Open Multidisciplinary Journal*, 3(1), 33–39. https://doi.org/10.57251/multiverse.v3i1.1407
- Wijaya, E. (2020). Identifikasi Dan Intervensi Gangguan Belajar Spesifik Pada Anak. Damianus: Journal of Medicine, 19(1), 70–79. https://doi.org/10.25170/djm.v19i1.1279
- Yusoff, M. (2001). Penyelidikan Kualitatif: Pengalaman kerja lapangan kajian. Universiti of Malaya Press.

(cc)