

# Overview of the Mastery of Reading Skills among Dyslexic Children

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## Abstract

Children with dyslexia often face challenges in mastering basic reading skills, including recognizing letters, associating sounds with symbols, reading sentences, and understanding texts as a whole. These difficulties not only affect their academic performance but also their self-confidence. This article explores the key challenges faced by children with dyslexia in the process of learning to read, including issues related to phonology, working memory, and reading automation. Additionally, the article emphasizes the importance of assessing reading proficiency level as a foundation for designing appropriate interventions. Proposed interventions include phonics-based approaches, multisensory techniques, and the use of interactive educational technology to enhance literacy acquisition. This paper aims to provide guidance to educators, parents, and policymakers in effectively supporting the learning needs of children with dyslexia.

**Keywords:** Mastery of Reading Skills, Dyslexia, Children

## Introduction

Reading skills is a cognitive activity that is needed for effective functioning in the school as well as gaining information. Reading skills are the capabilities which allow students or pupils to comprehend and relate with written language (Smith et al., 2021; Pondang et al., 2025). There are numerous mechanisms students must master which could lead to independent understanding the proposed message being communicated in the written content. One of the mechanisms is the is phonemic awareness which is has to do with identifying and manipulating spoken words in language (Whalon et al. 2009; Ansas, et al., 2023). Second, it is the comprehension of letter sound correspondence in spelling as well as reading.

Furthermore, reading skills depends on two capabilities which related to each other i.e. word reading and language comprehension (Smith et al., 2021; Pondang et al., 2025). This comprehension has a complex process that is relied on four language skills such as pragmatics, syntax, language skills, semantics and phonology. The important skills needed for effective reading skills are the capability to (Davis, 1944; Lesgold & Welch-Rose, 2012; Daniels et al., 2014; Ansas, et al., 2023). They include visualize the text, recognize the attention problems

and confusion, understand the meaning of the word, drawn inference from the passage, identify the main thought of a passage, ask question in the text among other. In fact, some of these skills are important for students. Calderón and Minaya-Rowe (2013) pointed that reading skills can contain these following such as problem-solving; summarizing; self-questioning; sequencing; relating background knowledge; and inferencing.

In another development, reading skills is germane to students for intellectual growth and knowledge acquisition (Ivanova & Ivanov, 2021; Pratiwi, et al., 2022). Indeed, being an effective reading makes students or pupils to be skilfully to communicate. Chandra (2021) submitted the some of the benefits to be derive for being a good reader. They are: it improves vocabulary and usage, increase memory power, it gives creativity, its pave ways to achieved goals, makes students to be smarter and dynamic, it is strengthened someone brain, reduce metal stress among other. It is expedient for teachers to inculcate the reading skills in the mind of children. Reading skills is not just occur in one day but with the teachers guide and supervision, reding abilities occur (Snowling & Hulme, 2021; Pratiwi, et al., 2022; Ansas, et al., 2023). Teachers of dyslexic children should strive more strategies and uses of innovative teaching to teach these students in the classroom. Therefore, reading skills is regarded as important tools for academic success.

## **Literature Review**

### *Conceptualizing Dyslexic Children*

The concept of dyslexia has been a topical issue among the researchers in the field with different explanation and suggestion. The International Dyslexia Association (IDA) expressed that dyslexia is a learning disability that has to do with neurobiological issue. Thus, Dyslexia is a disorder in learning involving difficulty in reading due to problem in the identification of speech sound and learning (Stein, 2018; Knight, 2018). Also, Dyslexia children could refer to children with neurodevelopmental disorder which affect children capability to spell, write and read despite having motivation and knowledge (Handler, 2016; Andresen & Monsrud, 2022). This is type of children often called reading disability and it is result of inability of the brain to process language. These children facing a lot of learning difficulty in the classroom which affect the writing ability, reading and pronunciation (Andresen & Monsrud, 2022).

The symptoms displayed by the dyslexia children are delay in speech development, inability to pronounce long word and spelling, spoken problem, unable to remember words, little interest in learning, skills organization and writing difficulties (Marzocchi, et al., 2009). The academic performance of dyslexic children in the schools needs a lot of consideration from both from teachers as well as parents. Teachers in the schools must have adequate and requisite knowledge about these children (Kundi & Alharbi, 2022). This is because, there are characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction.

### *Government Effort on Dyslexic Children*

In recent decades, the countless efforts of Malaysian Ministry of Education to enhance literacy skills among children have yielded positive results. The implementation of the National Preschool Curriculum Standard (KSPK) and the National Primary School Curriculum

Standard (KSSR), which emphasise literacy-based learning from the early years of schooling, have demonstrated the country's commitment to early childhood education. Programs such as the Literacy and Numeracy Screening (LINUS), have become key pillars in assisting pupils who face difficulties in reading and writing, especially in the early stages of primary education (Ministry of Education Malaysia, 2015).

Despite the encouraging improvements, dyslexic children face significant challenges in mastering literacy skills. This specific learning disorder requires inclusive and tailored approach to ensure they are not left behind in the education system. It is crucial to understand the mastery level of reading skill among dyslexic children and explore effective interventions to assist them. This issue is common among dyslexic children (Samsudin & Alias, 2021). Dyslexic children's reading ability is low and varies greatly depending on the individual (Walda et al., 2021). The low reading ability among individuals often represents challenges that require solutions.

Subramaniam and Kunasegran (2022) found that dyslexic children have weak literacy levels in reading Malay language. They show weaknesses in grapheme-phoneme knowledge and syllable segmentation, which are important components of reading skills. Additionally, a study by Ramasamy, R. (2008) indicated that there are dyslexia issues among remedial students in primary schools, affecting their academic performance which led them to face significant challenges in reading and comprehending texts. These problems not only affect their reading ability but also have an overall impact on their academic achievement.

With this awareness, this paper highlights the level of reading and letter recognition skills among dyslexic children, focusing primarily on determining suitable and effective learning methods to assist dyslexic children in reading skills. Additionally, this paper emphasizes the importance of assessing reading proficiency levels as a basis for designing appropriate interventions. The proposed interventions according to the past research include phonics-based approaches, multisensory techniques, and the use of interactive educational technology to enhance literacy acquisition. At the same time, this paper will provide guidance to educators, parents, and policymakers in effectively supporting the learning needs of dyslexic children.

#### *Mastery of Reading Skills Among Dyslexic Children*

Dyslexia is a specific learning disorder that significantly affects an individual's ability to master reading skills. The International Dyslexia Association (2002) defines dyslexia as a neurological disorder characterized by difficulties in word recognition, spelling, and phonological processing. These difficulties often occur without any other cognitive weaknesses and can lead to problems in reading comprehension and vocabulary development. Recent studies showed that dyslexic children face various challenges in reading, including difficulties in identifying letter sounds and matching graphemes with phonemes (Subramaniam & Kunasegran, 2022), weaknesses in recognizing and remembering letter shapes and complex syllable patterns (Hussin et al., 2022), and a tendency to make repeated reading errors such as letter omission, insertion, substitution, and reversal while reading (Subramaniam et al., 2022).

Several key theories had explained the reading difficulties among dyslexic children which is the phonological deficit hypothesis as proposed by Snowling (2000). He states that dyslexia stems from a deficit in phonological processing, resulting in difficulties in word recognition and fluent reading. Meanwhile, the dual route model of reading by Coltheart et al. (2001) explains two reading pathways: the phonological route (sound to word) and the lexical route (direct word recognition). Dyslexic children tend to have weaknesses in the phonological route, causing them struggling with pronouncing new words. Moreover, Levinson's theory (1994) links dyslexia to neurobiological disorders that cause problems in visual-motor coordination, which also affects reading ability.

Empirical studies on reading challenges of dyslexic children in Malaysia show findings consistent with these theories. For example, Subramaniam and Kunasegran (2022) found that dyslexic students have difficulty in syllable recognition, particularly in the relationship between graphemes and phonemes. They also tend to make errors such as letter substitution and syllable omission while reading. Similarly, Abdan Nasir and Subramaniam (2024) showed that dyslexic students face significant difficulties in spelling words with complex syllable structures like CVCC, especially those containing digraph or diphthong elements. In addition to local studies, international studies also show similar findings. A meta-analysis by Ziegler and Goswami (2022) found that dyslexic children from various languages experience significant phonological processing deficits, affecting their reading efficiency. Furthermore, Snowling et al. (2021) reported that phonology-focused interventions can significantly improve reading abilities among dyslexic students.

Various intervention strategies have been developed to help dyslexic pupils overcome reading difficulties. One of the main approaches is the phonics approach, which emphasizes the relationship between letters and sounds to help students better understand reading patterns. Hussin et al. (2022) showed that the application of early literacy components such as phoneme introduction and syllable segmentation training can improve the reading efficiency of preschool children at risk of dyslexia. Additionally, multisensory approaches like the Orton-Gillingham approach combine visual, auditory, kinesthetic, and tactile elements in reading instruction. Pupils who underwent structured reading training using this approach showed significant improvement in word recognition and reading comprehension (Dewan Bahasa, 2021). In recent updates on technology-based approaches, Snowling et al. (2021) found that the use of digital reading applications and artificial intelligence software can help increase motivation and reading comprehension among dyslexic pupils.

A comparison of these three approaches shows that the phonics approach is more effective in the early stages of literacy, while the multisensory approach is more suitable for students with complex reading difficulties. The technology-based approach can serve as an additional tool to reinforce reading skills. Although previous studies have proven the effectiveness of various intervention strategies, there are still some research gaps that need to be explored. Among them is the lack of longitudinal studies to assess the long-term effects of the interventions used. Additionally, most studies conducted are based on English or other languages with different morphological structures. Therefore, further research is needed to understand how the syllable structure in the Malay language affects reading difficulties among dyslexic children. Furthermore, there is a need to explore the effectiveness of

technology in reading interventions, particularly in the context of learning for children with special needs.

The main challenges in mastering reading skills for dyslexic children stem from weaknesses in phonological processing, syllable recognition, and complex word structures (Subramaniam & Kunasegran, 2022; Abdan Nasir & Subramaniam, 2024; Ziegler & Goswami, 2022). Interventions such as phonics approaches, multisensory techniques, and technology have proven effective in helping dyslexic students. However, further research is needed to determine the most suitable strategies according to language and cultural contexts. Therefore, the implementation of systematic, structured, and evidence-based teaching strategies is crucial in helping dyslexic students overcome reading weaknesses.

### Discussion

Mastery of reading skills among dyslexic children requires a specific and focused approach. Effective teaching techniques need to be consistently applied to help them overcome challenges in the reading process. Additionally, support from preschools, especially those offering Integrated Special Education Program, also known as *Program Pendidikan Khas Integrasi* (PPKI), and trained teachers is crucial to ensure positive development. To help dyslexic children read, it is necessary to understand their learning challenges, including difficulties in identifying letters and words, as well as problems in understanding sentence structures. Their reading proficiency is often lower than their age and cognitive development level. Therefore, using reading materials appropriate to the students' abilities can also help them overcome these difficulties.

#### *Effective Teaching Techniques for Dyslexic Children*

The multisensory approach, which involves the use of various senses such as visual, auditory, kinesthetic, and tactile, has proven effective in helping dyslexic children master reading skills. This technique helps students process information better and associate letters and words with their sensory experiences. Repetition is also important to reinforce reading and spelling skills. Exercises involving the repetition of short texts can help students remember and understand words better.

Fujita (2024) study shows that the multisensory approach, which involves the simultaneous engagement of multiple senses, can enhance the reading abilities of dyslexic students. This approach helps activate various sensory pathways, which in turn strengthens encoding, retention, and retrieval of information. Examples of multisensory activities include using magnetic letters to form words, shaping letters with clay, and using colourful flashcards to identify letters and words.

According to Hatch (2023), multisensory teaching involves the simultaneous use of visual, auditory, and kinesthetic-tactile pathways to enhance memory and learning of written language. Teachers using this approach help students associate speech sounds (phonemes) with letters or letter patterns through activities such as writing letters while saying the corresponding sounds. Other activities include using hand movements to help memorize definitions or moving word cards to form sentences.

### *Role of Special Education Schools*

Special education schools play a crucial role in providing a suitable learning environment and supporting the development of reading skills among dyslexic children. Support from trained teachers and the use of appropriate teaching techniques are key to their success. Teachers need to play a wise role in managing various beneficial methods so that children can improve their reading mastery in school. According to Loy C. L. (2022), teachers need to make learning and teaching skills interesting, fun, easy for children, and meaningful to them.

Special education schools provide an environment tailored to the needs of students with special educational needs, including those with dyslexia. In Malaysia, special education schools like Al-Ghazali Special Education School offer comprehensive educational programs for children with special needs, including the use of modified teaching modules and appropriate physical facilities. According to Siti Syuhada and Khairul Farhah (2023), special education schools also play an important role in supporting the emotional well-being of dyslexic students through effective reinforcement strategies.

### *Early Intervention and Phonemic Training*

Early intervention through structured reading techniques can improve the reading abilities of dyslexic children. Approaches that emphasize explicit understanding of phonemes and letter-phoneme relationships have proven more effective than traditional methods. Phonemic training, which involves the introduction of phonemes and syllable segmentation exercises, can help preschool children, including those at risk of dyslexia, master reading skills. Training focused on phonology and explicit instruction related to word structure can significantly improve students' reading abilities.

Fakhruddiana et al. (2023) study shows that phonemic-motor training, which combines phonemic exercises with motor activities, can enhance the reading abilities of dyslexic children. This training involves repetition techniques such as identifying letters with the correct phonemes and reading syllables, which help strengthen the relationship between sounds and letters. Additionally, phonological awareness training, which includes activities like identifying rhyming words, separating and blending sounds, has also proven effective in improving the reading abilities of dyslexic children.

### **Conclusion**

This paper concludes that dyslexic children face various challenges in mastering reading skills, including difficulties in identifying letters and words, and understanding sentence structures. However, with appropriate teaching approaches and sufficient support, they can overcome these challenges and improve their reading skills.

Teaching techniques involving multisensory approaches, repeated practice, and visualization have proven effective in helping dyslexic children. Additionally, early intervention through structured reading techniques and phonemic training also plays an important role in improving their reading abilities. Special education schools play a critical role in providing a suitable learning environment and supporting the development of reading skills among dyslexic children. Trained teachers and the use of reading materials tailored to the pupils' abilities are key to their success.



Overall, the implementation of systematic and comprehensive teaching strategies is crucial to help dyslexic students overcome these weaknesses. With continuous support and focused approaches, dyslexic children can reach their full potential in reading skills. Studies show that assessing reading levels is an important step to understand individual learning needs. Early interventions such as phonics programs and the use of educational technology can help improve reading proficiency. For example, interactive applications have proven to increase interest and effectiveness in learning for dyslexic children.

**Recommendations**

1. The government should endeavour to send teachers of in charge of dyslexic children to workshop acquisition of teaching techniques.
2. The government of Malaysia should try as much as possible to provide teaching aids for teachers of dyslexic children so that they will be able to inculcate reading skill in their mind.
3. Teacher with dyslexic children should use Multi-Sensory Teaching that would engage multiple senses such as Use visual aids, auditory input (audiobooks, reading aloud), and tactile activities (manipulatives, flashcards) to help children learn and retain information.
4. The instruction should be condensed by the teacher by breaking of complex task into smaller unit which dyslexic children can manage.
5. The study recommended that there should be home support should be provided with dyslexic children by the parents.
6. The use of assistive technology (AT) should be provided by the government to read aloud in the classroom.
7. Teacher in charge of dyslexic children should try to encourage them to make use of activities they like.

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