



Teaching Strategies Used to Deal with Dyslexic Students' Learning Difficulties

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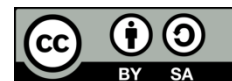
ABSTRAK

Disleksia adalah gangguan belajar perkembangan saraf hereditas yang ditemukan muncul pada sekitar 10% populasi, yang ditandai dengan kesulitan dalam membaca. Oleh karena itu, perlu disikapi dengan baik dengan menerapkan strategi pengajaran yang tepat yang dapat membantu siswa disleksia untuk belajar di lingkungan pendidikan inklusif. Namun demikian, penelitian yang menyediakan literatur yang berkaitan dengan hal tersebut masih sangat terbatas. Oleh karena itu, penelitian ini merupakan penelitian konseptual yang bertujuan untuk menganalisis strategi pengajaran yang digunakan untuk mengatasi kesulitan belajar yang dialami siswa disleksia dan memberikan gambaran terkait karakteristik siswa disleksia beserta kesulitan belajarnya. Penelitian ini merupakan jenis tinjauan pustaka melalui penelitian kepustakaan. Hasilnya ditemukan bahwa ada empat strategi pengajaran yang dapat digunakan guru untuk mengatasi kesulitan belajar siswa disleksia, yaitu analisis tugas, instruksi fonik eksplisit, instruksi multisensori, dan ketergantungan lapangan. pendekatan. Strategi disesuaikan dengan karakteristik dan kesulitan belajar yang dihadapi oleh siswa disleksia yang meliputi kesadaran fonologis rendah, memori kerja lambat, kesulitan penamaan cepat, kecepatan pemrosesan lambat, dan pengembangan otomatis keterampilan rendah. Strategi tersebut menekankan pada penyediaan instruksi yang jelas dan langsung dengan berbagai alat bantu dan bantuan dari para guru. Penggunaan beberapa akomodasi juga diperlukan untuk membantu siswa disleksia mengembangkan keterampilan membaca dan mengatasi kesulitan belajar mereka.

ABSTRACT

Dyslexia is a hereditary, neurodevelopmental learning disorder found to appear in around 10% of the population, characterized by difficulty in reading. Therefore, it needs to be addressed properly by implementing appropriate teaching strategies that can help dyslexic students to learn in the inclusive education setting. However, there is still limited study that provides literature related to the matter. Therefore, this study was a conceptual research aimed to analysing teaching strategies used to deal with the learning difficulties encountered by dyslexic students and provide descriptions related to the dyslexic students' characteristics along with their learning difficulties. This study is a kind of literature review through library research. The result found that there are four teaching strategies that teachers can use to deal with dyslexic students' learning difficulties, which are task analysis, explicit phonics instruction, multisensory instruction, and field-dependent approaches. The strategies are adjusted to the characteristics and learning difficulties faced by dyslexic students that include low phonological awareness, slow working memory, rapid naming difficulty, slow processing speed, and low skills automatic development. The strategies emphasise on providing clear, direct instruction with multiple aids and assistance from the teachers. The use of several accommodations are also needed in order to help the dyslexic students to develop their reading skill and deal with their learning difficulties.

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1. INTRODUCTION

As a language that is spoken widely, English has been known as an international language used in many interactions across the globe. This leads to the need of learning English, as having English mastery is considered equals to greater chances in career and society (Ha, 2021; Harmer, 2001; Nishanthi, 2018). There are four basic skills that need to be mastered in learning English. They are listening, reading, speaking, and writing, which are all important in supporting students' English mastery. However, studies suggest that reading is a fundamental skill that can assist students in mastering the other skills (Elleman & Oslund, 2019; Hermida, 2011; Ismail et al., 2017). It is because students can gather lots of information through reading, which can help them make greater progress and development in their learning. In the same sense previous study also suggest that reading can help students to have vast general knowledge that can be beneficial in the 21st century (Ningsih et al., 2019). In

addition, reading is categorized as a receptive or passive skill, it requires the readers to be active, as they need to make logical connection between the ideas and the information they read, which strongly links to the process of thinking in the target language. This makes reading a vital skill for students, especially in the context of English as a Foreign Language (EFL) learning (Ismail et al., 2017; Kaya, 2015). Despite being fundamental, studies indicate that students often have difficulties to develop their reading skill. Studies by previous study found that students' reading difficulties come as the results of failure in deriving meaning from text, lack of vocabulary, low reading interest, difficult sentence structure, and failure in understanding the context of the phrase in text (Lestari et al., 2017; Nurjanah, 2018; Prihatini, 2020). Developing reading skill even becomes more challenging for students with learning difficulties, especially those with dyslexia (Awada & Plana, 2018; Dambayana et al., 2021). According to previous study dyslexia is a common learning disability that is experienced by children who have severe difficulties in learning to recognize words and decode or read text aloud, which make them read relatively slow (Hulme & Snowling, 2016). It is said to be a common learning disability suggests that around 10% of the population has a certain level of dyslexia. In addition, dyslexia is a learning difficulty that makes children hard to decode and spell as the results of neurodevelopmental disorder that is heritable and lasts for lifelong (Hulme & Snowling, 2016; Protopapas, 2019; Snowling et al., 2020). These difficulties in word recognition, poor spelling, and decomposition skills have become the characteristics of dyslexic students.

Besides the role of the government, the teachers also play a major role in the success of inclusive education since they are the ones who facilitate and promote learning to the students (Ackah-Jnr, 2020; Awada & Plana, 2018; Kauffman, 2021). Therefore, teachers are expected to have the knowledge, skills, and expertise to create inclusive learning environments that can assist dyslexic students through the use of effective and appropriate teaching strategies (Gregory, 2021; Knight, 2018). Several studies have been conducted to investigate the implementation of certain, appropriate strategies to teach EFL dyslexic students. Previous study found that teachers used multisensory teaching strategies which assisted dyslexic students to write letters or numbers by involving at least two of their senses (Menbet, 2018). It was conducted by involving students in the learning activities with the use of colored sands, sticks, and clay. The results demonstrated that the students showed progress in learning, indicating that the strategies were effective as they had positive benefits for the students.

A literature review was conducted by previous study explored teaching strategies that could be used to teach dyslexic students in the context of EFL learning (Sudek & Encinas, 2019). The results indicated that the strategies that were available to use included multisensory and task-based learning. The implementation, however, were suggested to be complemented with accommodations for the students, which related to the use of personal instructions, spatial arrangements, visual strategies and accommodations, kinesthetic strategies and accommodations, and technological tools. Another literature study found that effective teaching strategies that could be used to teach dyslexic students need to involve students' senses through reading and spelling training, visual technique, auditory technique, and tactile technique, which were all covered in multisensory teaching strategy (Supriatna & Ediyanto, 2021).

In implementing the strategies, teachers also need to pay attention to the steps in conducting the learning process. Teachers need to go through preparation, implementation, and evaluation stages, in which the implementation stage included the use of lecture method, audio-lingual method, skimming method, and the picture cooperative method (Friantary et al., 2020; Rosita et al., 2020). On the other hand, developed web-based learning media to improve dyslexic students' reading comprehension. Digital media like the one that was developed could help dyslexic students in having better comprehension of words and sentences in a paragraph. However, previous study did not specify the kinds of teaching strategies that could be used (Friantary et al., 2020). Considering the importance of the assisting dyslexic students in learning and providing literature regarding the strategies that other teachers can follow, this study aimed to analyses the teaching strategies that can be used by analysing the results of several studies. This study is important as it can add more literature towards the study of dyslexia, particularly in inclusive education setting. Furthermore, it was important to be conducted in order to help teachers gather information they need. Besides, this study also summarized the characteristics of dyslexic students and the learning difficulties that they have. It offered novelty since it provided list of teaching strategies that teachers can use to teach dyslexic students and deal with their learning difficulties, with more strategies compared to the previous studies.

2. METHOD

This research is a library research. Literature study is all the efforts made by the author to collect information relevant to the topic or problem that will be or is being written (Lichtman, 2013). This research conducted by searching information relating to teaching strategies used to deal with dyslexic students' learning difficulties. This information can be obtained from scientific books, research reports, scientific essays, theses and dissertations, regulations, regulations, yearbooks, encyclopedias, and other written

sources both printed and electronic (Nimehchisalem & Bhatti, 2019). Data collection is done by using documentation techniques, namely by reading, reviewing, studying, and noting the essence of the literature. This writing is descriptive in nature and describes systematically.

3. RESULT AND DISCUSSION

Result

The result and discussion of the study covers description related to the characteristics of students with dyslexia, dyslexic students' learning difficulties, and the teaching strategies used to deal with dyslexic students' learning difficulties.

Characteristics of Students with Dyslexia

Identification towards the learning difficulties that students have is important to be conducted, especially in the early age of the students' education. This early identification also applies to dyslexia. It is because as suggested early identification of students' learning difficulties can mitigate children from having many future problems in learning (Roitsch & Watson, 2019; Sudek & Encinas, 2019). Academically, the problems include inability to follow the instructions and achieve the learning objectives, since dyslexic students have problems with reading skill. In psychological aspect dyslexic students perceive themselves with negative perceptions as they are unable to read, which affects their self-esteem and creates anxiety. Moreover previous study also emphasizes that reading has an essential effects on students' learning outcomes, difficulties in reading will lead students to low educational attainment and poor employment prospects, which will have negative effects on their adult well-being (Hulme & Snowling, 2016).

Defining dyslexia as the problem of information processing that affects the literacy development is a helpful starting point for identification. Some previous studies define dyslexia as a neurobiological, developmental, language-based learning disability that is hereditary and affects students' ability to learn to read, which is strongly related to their accuracy, fluency, and spelling skills (Elliot et al., 2007; Manilla & de Braga, 2017; Roitsch & Watson, 2019). Through the definition, other study explain that dyslexic students have difficulties to connect spoken language with the written one due to their deficits in the language phonological components (Roitsch & Watson, 2019). This difficulty affects their reading comprehension and vocabulary development, as well as their written composition production as they also have spelling difficulty (Denton et al., 2006; Kim et al., 2012; Roitsch & Watson, 2019).

To help identify dyslexia, it is necessary to address the characteristics that usually belong to it. Dyslexic students are characterized with their persistent difficulty to have correct and fluent word recognition skills despite having functioning receptive sense, average intelligence, and access to adequate education. Similarly, previous study also mention that dyslexic students have common difficulties in recognizing printed words and sounding them out, which make them read relatively slow (Hulme & Snowling, 2016; Sutton & Shields, 2016). As pre-schoolers, children with dyslexia are often reported to have language delays and difficulties in learning (Elliot et al., 2007; Hulme & Snowling, 2016). The difficulty in word recognition when reading out loud is also addressed by, who suggest that dyslexic students often demonstrate slow speed of remembering how to say words. In addition, dyslexia can appear in any languages, particularly one with complex alphabetic symbols and sounds relation, such as English (Elliot et al., 2007; Haarbauer-krupa, 2010).

Previous study mention additional core characteristics that indicate the possibility of dyslexia, which include (1) poor recalling of prior learning in reading and spelling, (2) difficulty with handwriting, sequencing, and coordination, (3) inconsistent day-today performance, (4) poor performance in timed task, (5) strong mathematical skills but poor number memorization, (6) slow in processing information, and (7) effort and output unexpected inverse correlation (Sutton & Shields, 2016). Other broad characteristics of dyslexic students that may be visible to be identified. The characteristics are slow processing information skill, organizational problem, ineffective short- and long-term memory utilization, word recognition problem, coordination difficulty, and automatic reading of words difficulty (Elliot et al., 2007; Sutton & Shields, 2016). Despite these learning difficulties, however, dyslexic students are also reported to have strengths in other areas that do not require strong literacy skills, such as creative thinking, analysis, problem solving, comprehension, and conceptual abilities.

Dyslexic Students' Learning Difficulties

As the aforementioned characteristics, dyslexia often comes with problems in linguistic coding, sub-lexical awareness and skills, visual coding, metalinguistic processes, and working memory. Taking the characteristics of dyslexic students into account, there are some learning difficulties that can be addressed. Previous study suggest that the difficulties faced by the students may vary throughout their age development, whereas young children are usually reported to have difficulty in sounds and letters association, while the older

ones have challenges with reading fluency, spelling, and written expression (Elliot et al., 2007; Roitsch & Watson, 2019). Further, even though intervention is taken to deal with the learning difficulties, studies indicate that dyslexia is heritable and lasts for lifelong, meaning that it persists into adulthood (Hulme & Snowling, 2016; Snowling et al., 2020).

Previous study state some of the learning difficulties that dyslexic students face in their learning process (Elliot et al., 2007). The learning difficulties include slow processing information, organizational and coordination skill, ineffective short- and long-term memory, phonological skills problem, and visual reading and also automatic reading of words problems. These difficulties are in line with the characteristics of dyslexic students. As previously mentioned, the difficulties are varied based on the development of the students (Roitsch & Watson, 2019). Pre-schoolers are reported to have difficulties in speaking, making association between letters and the sounds, differentiating numbers and colours, sight word identification, fine motor skills, and poor handwriting. Then, the older students are reported to have difficulties in decoding and reading comprehension, learning foreign languages, organizing language, memorizing, spelling, persistent reading, and poor writing and calculating skills.

Therefore, based on the characteristics of dyslexic students and the lists of learning difficulties suggested by previous study. They are as difficulty with phonological awareness, difficulty in processing information at speed, difficulty in organizational skill, difficulty in coordination, difficulty in utilizing short- and long-term memory effectively, difficulty in visual reading and automatic reading of words, difficulty in metacognitive strategies utilization, difficulty in decoding unfamiliar words, difficulty in reading aloud, difficulty with learning to spell and reading fluency, difficulty with written composition, and difficulty with reading comprehension (Elliot et al., 2007; Roitsch & Watson, 2019).

Teaching Strategies to Deal with Dyslexic Students' Learning Difficulties

Even though studies have identified dyslexia as a hereditary disorder that lasts for lifelong, interventions still need to be conducted in order to help the students cope with their learning difficulties (Hulme & Snowling, 2016; Roitsch & Watson, 2019; Snowling et al., 2020). Interventions should be conducted as early as possible, which is ideally starting from the preschool year through oral language skills encouragement, which is then continued with phoneme awareness in the early school years in order to provide a strong foundation for the later literacy development. Further, besides assisting students in their academic development, the interventions are also meant to help maintain students' psychological aspect, since studies indicate that dyslexic students often have low self-esteem, low motivation, and high anxiety due to their negative perception about their reading ability (Denton et al., 2006; Sudek & Encinas, 2019).

The interventions can be conducted through providing appropriate and effective teaching strategies that can accommodate dyslexic students' needs. As stated previously, apart from the difficulties that dyslexic students have, they also show superior abilities in other learning fields. Dyslexic students demonstrate strengths in creative thinking, problem solving, reasoning, comprehending, conceptual abilities, and other fields that do not require strong literacy skills. Therefore, regular teaching strategies and method might not work effectively on them, as they need appropriate teaching strategies that are adjusted to their needs. Failure in recognizing their special needs can lead to students having a sense of failure in themselves that can persists into adulthood (Budiarti & Sugito, 2018; Sutton & Shields, 2016). Moreover, previous study also suggest that appropriate teaching strategies with a model that is developed to include fundamental skills that are important for reading comprehension should be able to respond to the dyslexic students' symptoms and thus help them to become relatively normal readers (Hulme & Snowling, 2016).

In line with the statement, previous study also emphasizes the need to have early intervention that is adjusted to the students needs' by focusing on their strengths, which is taught using an explicit, direct multisensory methodology (Sutton & Shields, 2016). The strategies also need to cover the six elements of reading that include oral language, phonics, phonological awareness, vocabulary, fluency, and comprehension. Similar studies provide several strategies that are empirically proven, which can be used to teach dyslexic students and cope with their learning difficulties (Awada & Plana, 2018; Sutton & Shields, 2016; Witzel & Mize, 2018). This current study review four strategies that are empirically proven, which are task analysis, explicit phonics instruction, multisensory instruction, and field-dependent approaches.

Task Analysis

Task analysis strategy breaks a task into small, sequential steps that can better help dyslexic students to follow the instruction. The sequential steps include (1) before reading activity, (2) during reading activity, and (3) after reading activity. As dyslexic students are struggling with reading comprehension and phonological awareness and processing skills in general, the strategy is adjusted to accommodate their difficulties. The before reading activity can be done by previewing the text. In this step, students are directed to do prediction, previewing, and anticipation related to what the text is about. It aims to train the students to make guesses when

reading a text so that they look forward and have a background about what they are going to discuss, which can help them to have a better comprehension later on .

Then, during reading activity is conducted by identifying unfamiliar words along with their meaning and the most important idea. Identification of unfamiliar words is conducted in order to deal with dyslexic students' difficulty in decoding unfamiliar words. Then, identification of the most important idea, which refers to the main idea, is a vital strategy in order for the students to have a better comprehension of the text being read (Awada & Plana, 2018; Manset-Williamson & Nelson, 2005). In the process, previous study suggest that teachers should make use of authentic text in order to help students associate the academic study with the real-world experience, which makes the students find the learning process more relatable as an internal experience (Awada & Plana, 2018).

Finally, the after reading activity can be filled by reviewing what the students have learned. The review can be done through discussion or rereading the text for better comprehension. Previous study suggest that in this strategy, students need to practice the steps one or two at a time, rather than all at once, since it allows students to succeed more with less error (Awada & Plana, 2018). Moreover, reviewing process in the after reading activity is needed in order to repeat the process to build fluency and make the students get used to the process. In addition, this repetition of the process is also done as a way to cope with the dyslexic students' difficulty in utilizing short- and long-term memory effectively. Further, according to, this extensive practice is meant to develop automaticity that can lead to fluency (Sutton & Shields, 2016; Witzel & Mize, 2018).

Explicit Phonics Instruction

Since dyslexic students have difficulty in processing information at speed and organizing information, teachers need to conduct the phonics instruction in a systematic, direct, and explicit so that students can comprehend the essential phonological skills. Providing explicit, direct phonics instruction is essential, especially for early years of school in order to enable students to develop letter-sound correspondence, segmenting, and phoneme blending, (Awada & Plana, 2018; Roitsch & Watson, 2019). Then, for the older students, the explicit phonics instruction can put more emphasize on the development of students' vocabulary, reading comprehension, and reading fluency, through passage decoding. This reading needs to be conducted or repeated several times for at least four times in order to develop fluency (Keeseey, 2020; Sutton & Shields, 2016).

The use of explicit phonics instruction is based on the fact that dyslexic students have difficulties in recognizing and processing words, spelling, and decoding as the results of their language phonological component deficit (Catts et al., 2017; Dickie et al., 2013; Siok & Tan, 2022). Therefore, an explicit, systematic, and intensive instruction is needed in order to help student build their phonemic awareness, which is beneficial for their reading and writing abilities improvement. In order for it to be effective, it is suggests that the explicit, systematic instruction needs to put emphasis on grapheme-phoneme correspondences before introducing students to the meanings of the words in written texts. In line with the statement, also adds that common orthographic patterns and meanings can only be introduced once the students master the sound-symbol relationship, which refers to phoneme-grapheme relationship. This involves the process of matching the phonemes, which are the speech sounds, with the forms of the letters, which are the graphemes (Larsen et al., 2020; Law et al., 2018; Treiman, 2018).

Multisensory Instruction

As mentioned previously, dyslexic students, particularly the younger ones, have difficulty in making letter-sound correspondence (Colson, 2014; Roitsch & Watson, 2019). Therefore, multisensory instruction can be used as a teaching strategy to help the students build the connection between the letter form and the sound it makes. It is because multisensory strategy combines visual, auditory, and kinesthetic approaches at once (Krishnan et al., 2016; Sutton & Shields, 2016; Witzel & Mize, 2018), which can prompt dyslexic students' memory and creative side. In line with the statement that explains the use of visual, auditory, kinesthetic approaches in multisensory instruction as a way to improve students' reading comprehension, since teachers can model the process of making visual and auditory images of the word or passage of a text, so that students can create images that can represent the information (Awada & Plana, 2018). This helps the students to deal with their difficulties in processing information and visual reading and automatic reading of words.

The use of multisensory instruction was also suggested in the previous studies. First study suggests that the use of multisensory instruction can assist dyslexic students to write letters or numbers since it involves at least two of their senses (Menbet, 2018). In the implementation, teachers can guide students to write letters and numbers on colored sands or build them through the use of sticks and clay. This way, dyslexic students can learn more effectively since they can remember the letters and numbers better. Similarly, other studies also suggest the use of multisensory instruction for teaching dyslexic students (Supriatna & Ediyanto, 2021). It is because multisensory instruction engage dyslexic students better in the learning process, as they learn through reading and spelling training, visual technique, auditory technique, and tactile technique (Sudek & Encinas, 2019;

Supriatna & Ediyanto, 2021). In the implementation of multisensory instruction, teachers also need to provide some accommodation that can facilitate the students to learn even more effectively. The accommodations include the use of personal instructions, spatial arrangements, visual strategies and accommodations, kinesthetic strategies and accommodations, and technological tools. In addition, it suggest that young dyslexic students need to learn several things in order to develop their reading skills. They are phonological awareness, phonemic awareness, alphabetic principle, orthographic awareness, and comprehension monitoring strategy. Previous study state that four of the things are addressed in multisensory instruction, and the comprehension monitoring strategy is also covered in order to get a balance reading program (Elliot et al., 2007). Therefore, multisensory instruction can be seen as a promising strategy to use in teaching dyslexic students and deal with their learning difficulties.

Field-Dependent Approaches

Field-dependent approaches is implemented as a way to help students develop the skill that is expected and deal with the difficulties they encounter. This strategy is conducted by providing progressive scaffolding during the process of learning, which will then result in students' learning independence (Sutton & Shields, 2016; Witzel & Mize, 2018). In order to conduct this strategy, teachers need to do task analysis and provide modelling on how the task is done. Teachers can start by modelling how the task is completed and guide students to do it in return. Then, another modelling can be given, and students can repeat it again. This is done as a repetition as suggest that this extensive practice can be used to develop automaticity that can lead to fluency. After several repetitions, teachers can gradually pull themselves from assisting the students and let them do it on their own in order to develop independence. Moreover, according to previous study this strategy can also assist students to reduce errors and build their long-term memory, which deals with one of their learning difficulty (Witzel & Mize, 2018).

Besides these strategies, several accommodations that can support the learning process for dyslexic students in an inclusive education setting also need. The first accommodation is related to giving dyslexic students extra time. This can be done in terms of homework and test (Sudek & Encinas, 2019). Dyslexic students can be given assessment or worksheet first and then collected last to add more minutes for them to think, as they have slower processing speed. In an inclusive education setting found that students who are not dyslexic are not affected negatively and dyslexic students are helped with better test scores, meaning that it can be implemented well. Further, the extra time can also be given in the form of "thinking time" whereas dyslexic students are not expected to give quick responses and are rather given frequent pauses for processing and rethinking.

Besides the strategies and accommodations, the assessment for dyslexic students also need to be adjusted according to their needs. Previous study mention that Assessment Federal law encourages the use of Multi-Tiered System of Supports (MTSS) in order to accurately identify the needs of students with special learning disabilities through several levels of assessment and interventions (Gersten et al., 2014). It is done in order to make sure that students are assessed for specific needs and interventions. There are several aspects that are assessed for dyslexic students according to MTSS, based on the fact that it is associated with deficit in in the language phonological components. The assessment aspects are phonological awareness, phonological and language-base memory, letter identification, receptive vocabulary, decoding of familiar and unfamiliar words, reading aloud fluency, spelling ability, and writing composition ability. In addition, considering the findings also becomes important to note that teachers also need to design and perform teaching procedures to implement the strategies. It is because they need to go through preparation, implementation, and evaluation stages. In the implementation stage, teachers need to include the use of lecture method, audio-lingual method, skimming method, and the picture cooperative method, which can be inserted in the implementation of the teaching strategies (Friantary et al., 2020; Witzel & Mize, 2018).

Discussion

Dyslexia is different from low intellectual abilities since students with normal or above-average intelligence can also suffer from dyslexia. Besides characterized with difficulties in recognizing, spelling, and decoding printed words, BDA (2014a) also state that dyslexia can also leads to difficulties in working memory, rapid naming, processing speed, and skills automatic development (Snowling et al., 2020; Van Witteloostuijn et al., 2019; Witruk & Wilcke, 2016). However, apart from the difficulties that dyslexic students have, they also show superior abilities in other learning fields. Previous study state that dyslexic students demonstrate strengths in creative thinking, problem solving, reasoning, comprehending, conceptual abilities, and other fields that do not require strong literacy skills (Sutton & Shields, 2016). Therefore, regular teaching strategies and method might not work effectively on them, as they need appropriate teaching strategies that are adjusted to their needs.

Dyslexia hinders students from having phonemic awareness, which can delays their understanding of the relationship between the sound and the printed words that is needed in reading (Al-Shidhani & Arora, 2012; Manilla & de Braga, 2017). Considering the difficulties that dyslexic students have in learning and the effects it has on students' education, it becomes important to assist them with the appropriate teaching strategies. The

government of Indonesia has established several regulations to accommodate the needs of dyslexic students that are considered as students with educational special needs. This accommodation is provided through the implementation of inclusive education. According to previous study inclusive education places students with educational special needs in the same classroom as the ones with regular needs (Awada & Plana, 2018; Hornby, 2021). Inclusive education aims to make sure that dyslexic students have the same opportunities to achieve as their peers. The government regulates this through the Act No. 20/2003 article 32 and Permendiknas No. 70/2009 article 3 in order to provide equal rights to obtain education in regular schools that starts from the early education (Muazza et al., 2018).

As a result of this study base on literature review found that there are some teaching strategies that can be used to address dyslexic students' learning difficulties while also taking the needs of other students into account. Some strategies are task analysis, explicit phonics instruction, multisensory instruction, and field-dependent approaches are among the strategies used (Evans et al., 2021; Flood & Banks, 2021; Stuart & Yates, 2018). Effective and appropriate teaching strategies that are tailored to their specific needs. It is because dyslexic students have slow information processing skills, the emphasis of the strategies is to provide clear, explicit, and direct instruction, as well as aids and assistance to the students through multisensory learning, task analysis, and field-dependent approaches. Furthermore, accommodations are required to support the strategies' implementation. The accommodations included the use of personal instructions, spatial arrangements, visual strategies and accommodations, kinesthetic strategies and accommodations, and technological tools (Gregory, 2021; Manilla & de Braga, 2017; Sudek & Encinas, 2019).

In line with previous study who investigating the teachers' perception towards the implementation of multiple teaching methods and the reading comprehension of dyslexic students (Awada & Plana, 2018). The study, however, did not specify the kinds of strategies that were used. Instead, it demonstrated the kinds teaching methods that were used to assist the dyslexic students to learn, which included graphic organizers, visual displays, mnemonic illustrations, movie maker journaling and movie use, prediction, inference, text structure awareness, main idea identification, summarization, and questioning. The findings indicated that the teachers had positive perception towards the methods and stated that they could benefitted the students. This is supported by the findings of the study who found that the use of effective, appropriate teaching strategies could improve dyslexic students' early reading abilities, especially for texts in Bahasa Indonesia (Awada & Plana, 2018). Therefore, using special strategies is highly recommended to teach dyslexic students. Furthermore, relating to the previous studies conducted in the same topic, it can be seen that the studies were mostly conducted to investigate the kinds of strategies that were used in teaching dyslexic students. However, the strategies provided were still limited, as they mostly covered multisensory and task-based learning strategies (Sudek & Encinas, 2019; Supriatna & Ediyanto, 2021). Moreover, some of the other studies, such as the ones conducted did not specify the kinds of teaching strategies that could be used to teach dyslexic students since they only mentioned the methods that could be used (Awada & Plana, 2018; Friantary et al., 2020; Rosita et al., 2020). The implications of this study provide an overview of the Strategies Used to Deal with Dyslexic Students' Learning Difficulties. This research will provide benefits for educators as a reference in implementing several strategies and accommodations that can help support learning difficulties in dyslexic students. The limitation of this research is that this research is in the type of literature review, so it is limited in analyzing existing scientific works without observing and implementing them in the field. Therefore, it is hoped that future research will be able to deepen and continue this research by testing strategies in the classroom.

4. CONCLUSION

Dyslexic students having difficulties in phonological awareness, working memory, rapid naming, processing speed, and skills automatic development, dyslexic students need to be accommodated with effective and appropriate teaching strategies that are adjusted to their needs. In the inclusive education setting, the strategies also need to consider the other non-dyslexic students who are in the same class as them. Therefore, there are some teaching strategies that can be used to deal with dyslexic students' learning difficulties while still having the other students' needs into consideration. The strategies include task analysis, explicit phonics instruction, multisensory instruction, and field-dependent approaches. The emphasis of the strategies is to provide instruction that is clear, explicit, and direct since dyslexic students have slow information processing skill, as well as provide aids and assistance to the students through multisensory learning, task analysis, and field-dependent approaches. Furthermore, accommodations are also needed in order to support the implementation of the strategies. The accommodations included the use of personal instructions, spatial arrangements, visual strategies and accommodations, kinesthetic strategies and accommodations, and technological tools.

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