

## **HANDLING DYSLEXIA THROUGH READING LEARNING METHODS IN MADRASAH ENVIRONMENTS**

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### **Abstract**

*This research focuses on treating Dyslexia through reading learning methods in a madrasah environment. This research aims to identify and develop effective learning methods for dyslexic students, as well as evaluate the impact of these approaches in the context of madrasah education. This research uses a qualitative approach with case studies. Data was collected through observation, in-depth interviews with teachers and students, and documentation studies at research locations in Madrasas. The research results show that teachers' understanding of Dyslexia is still limited. However, multisensory approaches and the use of technology in learning have proven effective in improving the reading abilities of dyslexic students. In addition, collaboration between madrasas and parents plays an important role in supporting students' academic progress and self-confidence. Implementing comprehensive and collaborative learning methods can provide significant results in improving the quality of inclusive education in madrasas. The implications of this research emphasize the importance of training for teachers to increase their understanding of Dyslexia, as well as the adoption of multisensory and technological approaches to learning. Parental support and active involvement are also very necessary to ensure continued progress for dyslexic students. The results of this research can provide practical guidance for madrasas in developing more inclusive and effective learning strategies.*

**Keywords:** *Dyslexia; Learning Methods; Madrasah.*

### **Abstrak**

*Penelitian ini berfokus pada pengobatan Disleksia melalui metode pembelajaran membaca di lingkungan madrasah. Penelitian ini bertujuan untuk mengidentifikasi dan mengembangkan metode pembelajaran yang efektif bagi siswa disleksia, serta mengevaluasi dampak dari pendekatan tersebut dalam konteks pendidikan madrasah. Penelitian ini menggunakan pendekatan kualitatif dengan studi kasus. Data dikumpulkan melalui observasi, wawancara mendalam dengan guru dan siswa, dan studi dokumentasi di lokasi penelitian di Madrasah. Hasil penelitian menunjukkan bahwa pemahaman guru tentang Disleksia masih terbatas. Namun, pendekatan multisensori dan penggunaan teknologi dalam pembelajaran terbukti efektif dalam meningkatkan kemampuan membaca siswa disleksia. Selain itu, kolaborasi antara*

*madrasah dan orang tua berperan penting dalam mendukung kemajuan akademik dan kepercayaan diri siswa. Menerapkan metode pembelajaran yang komprehensif dan kolaboratif dapat memberikan hasil yang signifikan dalam meningkatkan kualitas pendidikan inklusif di madrasah. Implikasi dari penelitian ini menekankan pentingnya pelatihan bagi guru untuk meningkatkan pemahaman mereka tentang Disleksia, serta adopsi pendekatan multisensori dan teknologi untuk pembelajaran. Dukungan orang tua dan keterlibatan aktif juga sangat diperlukan untuk memastikan kemajuan berkelanjutan bagi siswa disleksia. Hasil penelitian ini dapat memberikan panduan praktis bagi madrasah dalam mengembangkan strategi pembelajaran yang lebih inklusif dan efektif.*

**Kata Kunci:** *Disleksia; Metode Pembelajaran; Madrasah.*

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## A. Introduction

Dyslexia is a neurological disorder that affects a person's ability to read, spell and understand words (Gharaibeh & Dukmak, 2021; Oliveira & Thomson, 2021; Putri et al., 2024). In the madrasa environment, where Al-Qur'an-based education and Arabic language learning are very important, the problem of Dyslexia can be a serious obstacle to students' ability to acquire the required knowledge and skills (Hayati & Muthia, 2024; Oktamarina et al., 2022). Understanding how Dyslexia affects learning in madrasas is crucial for increasing the effectiveness of curriculum and learning methods (Li et al., 2022; Palser et al., 2022). Handling Dyslexia through reading learning methods in the madrasah environment shows the importance of collaboration between teachers, parents and the school community (Falah et al., 2023; Eroğlu et al., 2021; Lee et al., 2022; Richtsmeier et al., 2023). In a social context, this coordinated support helps reduce the stigma that is often attached to children with learning difficulties. When children feel supported by all parties, their self-confidence and motivation to learn increases (Lubis et al., 2022). In addition, implementing appropriate learning methods for children with Dyslexia creates an inclusive learning environment (Supena & Dewi, 2020; Yılmaz & Melekoğlu, 2023; Connelly et al., 2023). It recognizes that each child has unique needs and promotes equality of educational opportunity.

Thus, madrasas play an important role in providing equitable education and supporting the social and academic development of all students. This research explores reading learning methods that can help dyslexic students in madrasah environments. By integrating developmental psychology and special education theories, this research aims to provide an effective approach to improving the reading skills of dyslexic students in madrasas. The main problem faced is that the current learning methods cannot fully consider the needs of dyslexic students in madrasas. Lack of understanding and lack of application of appropriate methods can

hinder the academic and social development of dyslexic students in the context of madrasah education.

Previous studies show that an individualized approach to learning is a challenge faced by teachers in Islamic schools in identifying and handling students with Dyslexia (Utami, 2020). There is a need for special training for teachers to be able to recognize the signs of Dyslexia and apply effective learning methods (Thwala et al., 2020). A multisensory approach in helping students with Dyslexia improve their reading skills. The results showed a significant increase in students' text comprehension and learning motivation (Putri et al., 2024). The use of assistive technology and the integration of multisensory methods can be effective in helping dyslexic students overcome reading and spelling challenges (Primasari & Supena, 2021). The multisensory method is able to help improve the learning outcomes of students with the characteristics of Dyslexia and solutions or treatments that teachers and parents can carry out by providing remedial measures to overcome the difficulties and learning obstacles experienced by students with special needs with various types of Dyslexia (Supena & Dewi, 2020).

The use of interactive learning applications can help dyslexic students in madrasas. Interactive features such as images, sound, and hands-on activities have been proven to increase student engagement and understanding (Rizkia Puspitasari, 2022). Special training for teachers in madrasas is needed to handle students with Dyslexia, and this training is important to improve the quality of inclusive education (Yasmita et al., 2022). The project-based learning approach in increasing student engagement and academic achievement in madrasas can significantly increase motivation and understanding of concepts (Rianda & Sayekti, 2023; Solissa et al., 2024). Educational technology in madrasas has an impact on the quality of learning; this shows that technology can help increase student interaction and participation (Karisma & Nadziroh, 2023).

Although there has been significant research on Dyslexia and learning, there is still a lack of literature that specifically explores reading teaching methods suitable for the madrasa environment. This gap indicates the need for more in-depth and focused research to develop strategies that can be implemented effectively in madrasas.

The novelty of this research lies in the reading learning method, which takes into account the cultural context and madrasah curriculum. This research also focuses on developing a learning model that is not only academically effective but also sensitive to the special needs of dyslexic students in the context of Islamic education.

Research objectives: How can dyslexic students be optimized through reading methods at MIN 2 Banyuwangi? How can we identify, develop, and evaluate the effectiveness of reading learning methods that can be applied in madrasas to improve the reading skills of dyslexic students? By addressing this main problem, this research can make a significant contribution to improving the quality of inclusive education in madrasas. This research is designed to fill existing knowledge

gaps in the literature, develop innovative learning strategies and make a meaningful contribution to inclusive educational practices in madrasas.

### **B. Research Method**

This research method will use a qualitative approach with a case study design to explore how reading learning methods in the madrasa environment can deal with Dyslexia. This research will be carried out at Madrasah Ibtida'iyah Negeri 3 Banyuwangi, involving students diagnosed with Dyslexia, teachers and the student's parents. Data will be collected through observation, in-depth interviews and document analysis. Observations will be carried out during the process of learning to read in class to see firsthand how learning methods are applied and how students with Dyslexia respond to these methods (Rachel et al., 2024).

In-depth interviews will be conducted with teachers who teach students with Dyslexia to gain an in-depth understanding of the strategies and techniques they use, the challenges they face, and the effectiveness of the learning methods applied (Maghfiroh & Liansari, 2024). Interviews will also be conducted with parents to find out the support they provide at home and their perceptions of their child's progress. Document analysis will include a review of lesson plans, student progress notes, and learning materials used in class (Heryanti et al., 2023). Data analysis techniques include recording, coding, categorization, and identifying thematic patterns from interview and observation data. Analysis is carried out systematically to identify general patterns, individual differences, and practical implications of research findings.

It is hoped that the results of this research will provide insight into best practices in teaching students with Dyslexia in madrasa environments and provide recommendations for educators and policymakers to improve the quality of education for students with special needs. It is also hoped that this research can become the basis for developing teacher training programs that are more effective in dealing with Dyslexia through reading learning methods.

### **C. Results and Discussion**

The discussion of research results shows that the multisensory approach to learning to read for dyslexic students in madrasas is effective in improving their reading abilities. These findings are consistent with Hapsari et al. (2011), who suggested that the integration of teaching methods involving the use of visual, auditory, and kinesthetic can help dyslexic students overcome reading difficulties significantly. Apart from that, the use of technology, such as interactive learning applications, has also been proven to provide additional support (Wijaya et al., 2022). Collaboration with parents also plays an important role in facilitating the continuity of learning at home and in the madrasah (Restu Abdiyantoro et al., 2024). The results of this research confirm that collaboration in supporting dyslexic students in madrasas can strengthen the effectiveness of inclusive and sustainable education.

### Introduction to Dyslexia

The findings of this research indicate that teachers and staff at madrasas do not have adequate knowledge and understanding of Dyslexia. They may not fully understand the characteristics, signs, and ways to treat students with Dyslexia. This can cause difficulties in identifying students with Dyslexia and in providing appropriate support and learning methods to help them overcome learning challenges. This deficiency shows the need for training and increasing knowledge about Dyslexia among teachers and madrasah staff. The results of this research are strengthened by Rahad's statement as the curriculum coordinator who believes that,

*"We often have difficulty distinguishing students who have Dyslexia from those who only have temporary learning difficulties. Without specialist training, it is difficult to accurately identify the signs of Dyslexia, so we need a more structured approach and a better understanding of Dyslexia."*

The informant's statement above shows that teachers in madrasas face several challenges in identifying students with Dyslexia. They often cannot differentiate between dyslexia and learning difficulties. These teachers recognize the need for specialized training to help them identify Dyslexia more accurately. It needs to be underlined that it is important to have a structured and in-depth training program to increase teachers' understanding and ability to handle students with special needs, which can ultimately improve the quality of inclusive education in madrasas. This shows that there is still confusion among educators regarding recognizing the signs and characteristics of Dyslexia. Sumarman confirmed this finding to the Principal, who said that.

*"Many teachers have not received adequate training to recognize and treat Dyslexia, so they struggle to identify and provide appropriate support to students who need it. Special training is needed to improve teachers' abilities to handle dyslexia cases effectively in the madrasa environment."*

The results of this interview emphasize that the lack of adequate training for teachers is the main obstacle in recognizing and treating Dyslexia in madrasas. Teachers have difficulty identifying students with Dyslexia and cannot provide the necessary support appropriately. The absence of specialized training results in a lack of knowledge and skills needed to treat Dyslexia effectively. Therefore, a training program specifically designed to improve teacher capabilities is needed, which will have a positive impact on inclusive education and the quality of learning for students with Dyslexia in madrasas. Interpretation of the results of this interview shows that teachers in madrasas still lack sufficient training in recognizing and treating Dyslexia. As a result, they often have difficulty identifying students with Dyslexia and providing them with appropriate support. This indicates an urgent need to provide special training for teachers. This training aims to increase their understanding of Dyslexia and equip them with effective strategies to support

students with these special needs. With adequate training, teachers will be better prepared to manage dyslexia cases so that inclusive education can be achieved in madrasas. This indicates an urgent need for further training for teachers in madrasas. Apart from that, Angga is a student who experiences Dyslexia,

*"Sometimes I feel confused and embarrassed because I cannot read as fast as my friends. This lag made me less confident in class, and I felt pressured when I had to read in front of other people."*

This statement highlights the emotional impact of Dyslexia on students and the importance of psychological support in their learning, indicating that students with Dyslexia often feel confused and embarrassed by their inability to read as quickly as their peers. This lag not only affects their academic performance but also negatively impacts their self-confidence. These students feel stressed and anxious when they have to read in front of others, which can hinder their active participation in class and worsen their overall learning experience. This highlights the importance of emotional support and adapted learning methods to help dyslexic students overcome these challenges and increase their self-confidence. Analysis of these findings shows that knowledge and understanding of Dyslexia in the madrasa environment still need to be improved. Implementing comprehensive training for teachers can help identify students with Dyslexia and provide them with appropriate support.

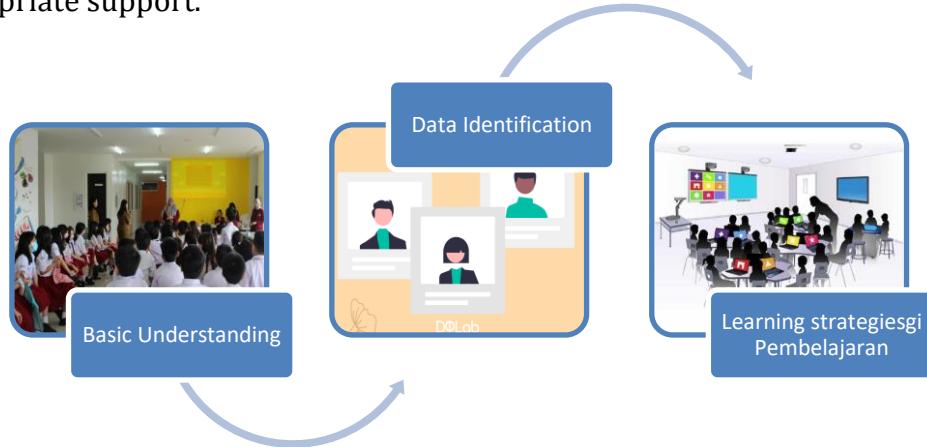


Figure 1. Introduction to dyslexia

Figure 1 shows the level of teacher knowledge about Dyslexia before and after the training that has been implemented, with results showing a significant increase after the training was implemented. Judging from the findings above, it can theoretically be concluded that Dyslexia is a neurological disorder that affects a person's ability to read, spell and understand words, which often emphasizes text-based learning, especially texts in Arabic (Putri et al., 2024; Daan et al., 2021). The challenges students with dyslexia face can be significant. Dyslexia is not an indicator of low intelligence, but on the contrary, many people with Dyslexia have average or

above-average intelligence (Hasanah et al., 2022; Iza Syahroni et al., 2021). Signs of Dyslexia include difficulty in reading fluently, spelling and understanding written text despite significant learning efforts. Students with Dyslexia may also experience problems in writing and copying texts (Rahmawati et al., 2022; Habsy et al., 2023). This includes comprehensive training for teachers, the use of diverse learning methods such as multisensory approaches, and close collaboration with parents (Maghfiroh & Liansari, 2024). With better understanding and the right support, students with Dyslexia can more easily overcome their challenges and reach their full potential (Utami, 2020; Sinurat et al., 2023). Overall, better recognition and understanding of Dyslexia in madrasa settings can pave the way for more inclusive and effective education, which not only supports students with Dyslexia but also improves the quality of learning for all students.

### **Multisensory Approach**

The multisensory approach has been proven effective in helping dyslexic students in madrasas. This statement is in accordance with the expression of Sriawah as an Islamic Religious Education teacher who applies this method, stating that

*"By using various visual, auditory and kinesthetic aids, students can more easily understand the material being taught. For example, when we use pictures and videos to explain concepts, students seem more interested and understand more quickly. In addition, the use of aids such as word cards and physical props helps students who have different learning styles so that they can more easily remember the information being taught. This multisensory approach also makes learning more interactive and fun for students."*

This informant's statement emphasizes the importance of a multisensory approach in accommodating the various learning styles of dyslexic students. The application of a multisensory approach to learning has proven effective in helping students understand the material. The use of visual, auditory and kinesthetic aids has been proven to increase students' interest and understanding of the material being taught. Teachers note that when they use pictures and videos to explain concepts, students show greater interest and understand the material more quickly. Tools such as word cards and physical aids also provide significant benefits for students with various learning styles, allowing them to remember their learning better. This multisensory approach not only improves academic understanding but also makes the learning process more interactive and fun, which ultimately can increase student motivation and engagement in the classroom. These findings underscore the importance of diversifying teaching methods to accommodate students' varying learning needs, especially those with learning difficulties such as Dyslexia. Then, it is also in line with Ratu's expression, as a student who experiences Dyslexia, who believes that,

*"When I can see, hear and feel the letters, I remember them more easily. Using props such as touchable letters helps me understand the shapes and sounds of letters better. This allows me to not only see the letters but also feel and hear them, so the learning process becomes more fun and less boring."*

Judging from the results of the interview above show that the integration of various senses in learning helps students internalize information. Multisensory approaches are very effective in helping students with Dyslexia. The student stated that the combination of seeing, hearing, and feeling the letters made it easier for him to remember the information. The use of props, such as letters that can be touched, helps students understand the shapes and sounds of letters better. This approach not only allows students to recognize letters visually but also allows them to feel and hear them, which strengthens the learning process. Apart from improving understanding and memory, this method also makes the learning process more fun and less boring for students. This emphasizes the importance of using varied and interactive learning methods to accommodate the learning needs of students with Dyslexia so that they can learn more effectively and stay motivated. The opinion of Yahya Sudarsono also strengthens this, an Islamic Religion teacher, who added that,

*"This approach makes learning more interesting and less boring for students. With various activities such as seeing pictures, hearing explanations, and feeling the shape of letters, students feel more involved. This multisensory approach also helps them understand and remember the material better, making learning more fun and effective."*

This shows that multisensory methods also increase student motivation and involvement in the learning process. A multisensory approach to learning is very effective in increasing student engagement and understanding. By combining various activities such as looking at pictures, hearing explanations, and feeling the shape of letters, students feel more involved in the learning process. This method not only makes learning more interesting and less boring but also helps students understand and remember the material better. This interactive and diverse approach can create a more enjoyable and effective learning environment, thereby increasing student motivation and learning outcomes, especially for those who have learning difficulties such as Dyslexia, as in Figure 2.

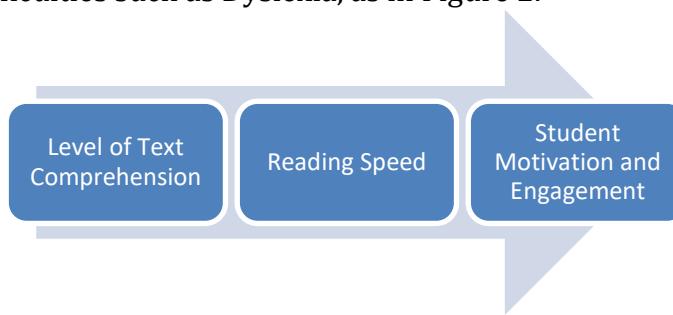


Figure 2. Improving The Reading Ability Of Students With Dyslexia Through Multisensory Learning Methods

Figure 2 shows three important aspects of improving the reading skills of students with Dyslexia through multisensory learning methods in the madrasa environment. These aspects are illustrated in the form of a flow diagram that shows the relationship between aspects. The following is an explanation of each aspect contained in the picture: Level of Text Comprehension shows the importance of increasing the level of text comprehension for students with Dyslexia. This improvement shows the effectiveness of multisensory methods in helping dyslexic students understand texts better. The reading speed shown in the picture above is the student's reading speed. This improvement confirms that multisensory learning methods can help students read faster and more efficiently. Student Motivation and Involvement is the motivation and involvement of students in the learning process. This increase shows that multisensory learning methods not only help in the technical aspects of reading but also increase student interest and participation in learning. Overall, this image illustrates the positive impact of multisensory learning methods in improving the reading skills of students with Dyslexia in madrasas, including text comprehension, reading speed, as well as student motivation and involvement in the learning process.

### **Use of Technology**

The use of technology in Dyslexia learning in madrasas also shows positive results. In accordance with the words of a natural science teacher who believes that

*"Interactive reading learning applications really help students in improving their reading skills. Through a variety of features involving images, sounds, and live interactions, students not only increase their reading speed but also deepen their understanding of the subject matter. This approach encourages active participation and makes learning more interesting for students."*

This statement shows that technology can be an effective tool in learning. The results of this interview illustrate that interactive reading learning applications provide great benefits for students in improving their reading skills. By using features such as images, sound, and live interactions, students not only increase their reading speed but also deepen their understanding of the subject matter. This approach not only invites active participation but also makes learning more interesting for students by providing a more challenging and enjoyable learning experience. In accordance with the words of Kenya as a class IV student who believes that

*"I prefer studying using a tablet because it is more fun, and I can study alone at home. With a tablet, I can access various educational applications that are interactive and interesting. Learning to use this technology makes me more enthusiastic and motivated and allows me to learn anytime and anywhere."*

The statement from the informant shows that the use of tablets in learning has a significant positive impact on students. Students feel happier and more

motivated when learning to use this technology. Tablets allow students to study independently at home, with access to a variety of interactive and engaging educational applications. This not only increases enthusiasm for learning but also provides flexibility, allowing students to study anytime and anywhere. Thus, the use of technology in education can increase the effectiveness of learning and provide a more personalized and enjoyable learning experience for students. This indicates that technology also provides flexibility for students to study independently outside the classroom. In accordance with the words of Setiawan, a technology teacher who said that

*"With technology, we can provide learning materials that can be tailored to the individual needs of each student. Technology makes it possible to create interactive teaching materials that can be accessed by students anytime and anywhere, providing flexibility in learning. So it makes it easier for teachers to identify and meet students' special needs so that the learning process becomes more effective and enjoyable for all parties."*

From the informants' words, it can be concluded that technology enables more personalized and adaptive learning. The results of this interview show that technology has an important role in personalizing learning. Technology makes it possible to provide materials that can be tailored to individual student needs, creating interactive teaching materials that can be accessed anytime and anywhere, thus providing flexibility in learning. This makes it easier for teachers to identify and meet students' specific needs, making the learning process more effective and enjoyable for all parties involved. Technology allows teachers to pay special attention to each student, improve learning outcomes, and make students more involved and motivated in the educational process.

The use of technology in education has brought significant changes in the way of teaching and learning, especially for students with special needs such as Dyslexia (Setiawan, 2024; Mustaqim Hasan et al., 2022). In the madrasa environment, technology is used to overcome the challenges faced by students with Dyslexia in learning to read (Utami, 2020). Technology makes it possible to provide learning materials that can be tailored to the individual needs of each student. With educational applications and software, materials can be specifically designed to meet the learning needs of dyslexic students (Gandes et al., 2020; Arifin & Widystono, 2020). Interactive apps and software provide a more engaging and effective learning experience for students with Dyslexia. The integration of technology in reading learning methods in madrasas offers innovative solutions to the challenges faced by dyslexic students, creating better learning opportunities and more positive educational outcomes (Irwan Suryadi, 2023; Yasa & Numertayasa, 2023). These findings show that the integration of technology in the learning of dyslexic students can increase the effectiveness and efficiency of the learning process. Technology provides tools that can be tailored to individual needs, allowing for more personalized and interactive learning. Table 3 shows the increase in

reading ability and student satisfaction levels after implementing technology in learning.

### **Collaboration with Parents**

Collaboration with parents can also be a factor in supporting the continued education of dyslexic students in madrasas. This explanation is in line with the expression of Karsono as a public relations representative who believes that.

*"When parents are actively involved in the learning process, student progress becomes more significant, and the level of parent participation in student learning has an impact on student academic and social progress."*

The results of interviews with informants highlight the important role of parents in supporting their children's education. Informants stated that parents' active involvement in their children's learning process can have a significant positive impact on students' academic and social progress. When parents are actively involved, they not only improve their children's academic achievement but also help in the development of their social skills. This involvement can take various forms, from helping with homework and participating in school activities to communicating regularly with teachers. This shows that students whose parents are actively involved tend to have higher grades, lower absenteeism, and better involvement in school activities. In addition, parental involvement can increase students' learning motivation, reduce behavioural problems, and increase their self-confidence. Therefore, schools need to encourage parents' participation in their children's education through various programs and activities that support this involvement. Therefore, partnerships between schools and parents are essential to create a supportive and effective learning environment for students. Then it is also in line with the expression of Santoso as the student's guardian who believes that,

*"With guidance from teachers, students at home can provide appropriate support to ensure our children learn with the right methods according to the curriculum implemented at school."*

Interpretation of the interviews suggests that with help and guidance from teachers, they can provide effective support to their children at home. This support is very important to ensure that children's learning conforms to the methods and curriculum that have been established at school, thus facilitating optimal learning progress for them. This collaboration between teachers and parents shows that good synergy can provide more structured and consistent guidance for students, both at school and at home. Apart from that, effective communication between teachers and parents can contribute to their child's learning development, as well as knowing which students need special attention. This allows parents to provide support that is more targeted and tailored to their child's individual needs. Then, parents who are actively involved in their children's learning process tend to

increase children's motivation and self-confidence. This is also in line with the expression of Karina as a class VI student who believes that,

*"I feel more confident when my mother accompanies me in the learning process at home. "My mother's presence makes me more motivated and confident in facing difficult lessons; I can also strengthen my relationship with my mother."*

The interpretation of the interview is that the mother's presence and involvement in the learning process at home has a significant positive impact on the child. Children feel more confident because they receive direct help and support from their mothers. This support not only increases children's motivation to face difficult subject matter but also gives them confidence that they are able to overcome it. In addition, maternal involvement in learning also strengthens the emotional relationship between mother and child, creating a closer bond and mutual support. Parental support, especially for mothers, has been proven to have a positive impact on students' motivation and self-confidence. Children who receive active support from parents tend to be more enthusiastic about learning and show better results at school. Therefore, parental participation in the home education process is highly recommended to achieve optimal results in children's academic and emotional development.

From these findings, it can be concluded that close collaboration between madrasas and parents is very important in supporting the successful learning of dyslexic students. By involving parents in the learning process, students get more holistic and sustainable support (Hilal et al., 2024; Misnawati, 2024). Collaboration with parents in dealing with Dyslexia in madrasas is very important. Parents need to be actively involved in reading learning programs specifically designed for children with Dyslexia (E. Rahmawati, 2024; Putri et al., 2024). They can provide emotional support and follow suggestions from teachers so that children are more helped in their learning process (Najmudin et al., 2023; Qushwa, 2024).

Additionally, regular communication between teachers and parents ensures that children's progress is well monitored. Parents can carry out additional exercises at home based on the teacher's direction (Karina Cahyani et al., 2024; Baharun, 2024). With good cooperation, children with Dyslexia can make significant progress in their reading skills at the madrasah.

#### **D. Conclusion**

The conclusion from the discussion above shows that the use of technology in the learning process in madrasas can provide significant benefits, especially for students with Dyslexia. Technology makes it possible to provide learning materials that can be tailored to individual needs, which makes them more interactive and engaging for students. The use of visual, auditory and kinesthetic aids in multisensory methods helps dyslexic students understand and remember material better and increases their involvement and motivation in learning. Apart from that,

interactive learning applications have also proven effective in improving students' reading skills with attractive and flexible features.

Apart from technology, the active involvement of parents in the learning process at home also has a significant positive impact. The presence and support of parents, especially mothers, help increase students' self-confidence and motivation, as well as strengthen the emotional relationship between children and parents. This support not only helps children overcome difficult subject matter but also improves their overall academic performance. Overall, these findings emphasize the importance of technology integration and parental involvement in creating an effective and supportive learning environment for students, especially in madrasas. Thus, collaboration between technology, teachers and parents is very important to achieve optimal and inclusive educational outcomes.

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