



## MULTISENSORY METHODS AS TEACHERS' EFFORTS IN DEALING WITH DYSLEXIC CHILDREN IN ELEMENTARY SCHOOL: LITERATURE REVIEW

**Yuris Ahmadi Utomo Putri**

Airlangga University

Email: [yuris.ahmadi.utomo-2022@psikologi.unair.ac.id](mailto:yuris.ahmadi.utomo-2022@psikologi.unair.ac.id)

**Wiwin Hendriani**

Airlangga University

Email: [wiwin.hendriani@psikologi.unair.ac.id](mailto:wiwin.hendriani@psikologi.unair.ac.id)

### Abstract

*Dyslexic children of primary school age feel unable to keep up with learning, because they have different ways to learn. Teachers in school need to strategize a method for dyslexic children can follow the lesson well. This study aims to determine the efforts of teachers in dealing the dyslexic children with multisensory methods in elementary school. The research method used is integrative literature review with a five-stage framework, namely problem identification, literature search, data evaluation, data analysis, and presentation of findings. The electronic databases used are Sinta, ResearchGate, Google Scholar, Garuda, and Rama Repository, producing amount 38,649 articles over the past 10 years. Using search keywords, 7 journals were identified as meeting the inclusion criteria using the CASP (Critical Appraisal Skill Program) instrument. The result of this literature review is that multisensory methods are proven to improve the reading ability and learning quality of dyslexic children. Children experience an improvement in their ability to recognize words accurately although not significantly. Teachers need to provide remedial to overcome the difficulties and learning barriers they experience at school, and discuss with parents in order to children get a balanced teaching method between home and school.*

**Keywords:** *Dyslexia, Multisensory, Elementary School*

### Abstrak

*Anak disleksia usia sekolah dasar merasa tidak mampu mengikuti pembelajaran, karena mereka memiliki cara yang berbeda dalam belajar. Para guru di sekolah perlu merencanakan strategi sebuah metode agar anak disleksia dapat mengikuti pelajaran dengan baik. Penelitian ini bertujuan untuk mengetahui upaya guru dalam menangani anak disleksia dengan metode multisensori di sekolah dasar. Metode penelitian yang digunakan adalah integratif literatur review dengan lima tahap kerangka kerja, yaitu identifikasi masalah, penelusuran literatur, evaluasi data, analisis data, dan penyajian temuan. Database elektronik yang digunakan adalah Sinta, ResearchGate, Google Scholar, Garuda, dan Rama Repository, menghasilkan artikel sebanyak 38.649 selama 10 tahun terakhir. Menggunakan kata kunci pencarian didapatkan 7 jurnal diidentifikasi memenuhi kriteria inklusi dengan menggunakan instrumen CASP (Critical Appraisal Skill Program). Hasil dari tinjauan literatur review ini adalah metode multisensori terbukti dapat meningkatkan kemampuan membaca dan kualitas belajar anak disleksia. Anak mengalami peningkatan mengenai kemampuannya dalam mengenal kata secara akurat walaupun tidak signifikan. Para guru perlu memberikan remedial untuk mengatasi kesulitan dan hambatan belajar yang mereka alami di sekolah, dan berdiskusi dengan orang tua agar anak mendapatkan metode pengajaran yang seimbang antara di rumah dan di sekolah.*

**Kata kunci:** *Disleksia, Multisensori, Sekolah Dasar*



## INTRODUCTION

Teachers are no longer rigid figures who only teach knowledge. Teachers are all persons who are authorized and responsible for the education of students, both individually and classically, both at school and outside school (Mazidah Ali et al., 2020). A teacher is someone or a figure who always stands in front of the class as a role model for the students, and now teachers are required as motivators or facilitators in learning instead of as teachers (Mazidah Ali et al., 2020). Not everyone can do it easily, only some people have the authority and professionals who are able to become teachers. So more than that, teachers are expected to be able to help every student who has learning difficulties and in carrying out learning needs to make efforts to give special attention or guidance in order to overcome the difficulties possessed by students (Syahputri, 2019).

Each student is a different individual, as well as the reading ability of each child will also be different. Students who do not experience problems with reading will resume their normal lives in school. However, students who even in their first year still have problems with reading will have difficulty in going about their day at school (Syahputri, 2019). Reading difficulties experienced by students will also have an impact on difficulties in terms of writing. In elementary school, both low and high grades are often encountered children with reading difficulties. This reading difficulty results in students' inability in various subjects resulting in low student grades (Yurniwati, 2018). Mistakes in reading which eventually makes a mistake in understanding the problem and ends with the wrong answer, this condition is often referred to as dyslexia (Dirgayunita et al., 2022).

Dyslexia is one of the problems in the problem of specific learning disorders. Individuals with dyslexia have a normal IQ, even above normal, but reading skills one or a half level below their IQ. Dyslexia is thought to be an effect caused due to disturbances in the association of memory (memory) and central processing called primary reading difficulties (Syamira et al., 2021). To be able to read automatically children must go through normal education and intelligence without sensory disorders. Usually, this difficulty is only detected after the child enters the school world for some time. Basically, dyslexia is a learning disorder, in which a person has difficulty reading, writing or spelling and does not affect and is influenced by a person's intelligence level, and because it is complex, learning to read is also considered difficult for children who have dyslexia (Yurniwati, 2018).

There are many varieties of learning disorders that exist in the community, but in general they are divided into three groups, namely learning difficulties in reading (dyslexia learning), learning difficulties in writing (dysgraphia learning), and difficulties in counting (dyscalculia learning). These three types of learning difficulties occur due to several factors, both internal and external children, which can hinder the achievement of academic performance in accordance with expectations (Widya et al., 2021). As mentioned earlier that in this discussion is related to reading difficulties or dyslexia. People with dyslexia have different ways of learning. If other people learn something with language symbols, then dyslexic children learn by experiencing or imagining images like their original shapes, because dyslexia have a different brain structure from people in general (Widya et al., 2021). Dyslexia is not a disease so there is no way to treat it, but they just happen to have a different way of learning than most people. In fact, dyslexic children are



gifted children, because in general dyslexia sufferers have high intelligence due to differences in brain hemispheres in humans generally (Dirgayunita et al., 2022).

Symptoms that can be easily known about this disorder are that children do not recognize letter symbols. Letters and words are figures that have a specific sound, and with various sounds together will form a meaning (Wulandari & Kusnadi, 2023). In reading lessons, there should be an awareness of the sounds in speech that are manifestations of the symbols of the letters spoken and be able to listen well to how a word sounds. If the difference in the shape of the letters and the position of the letters can be seen well, then the disorder results in difficulties such as spelling, less able to code reading learning, especially the meaning of language, minimal in terms of awareness of the intonation of letters and words (Wulandari & Kusnadi, 2023). Then, it is not only limited to their inability to arrange or read sentences in reverse order but also in various sequences, such as, right and left, from top to bottom, as well as difficulty in receiving directions that should be continued to brain memory. People with dyslexia need their own different ways in children in general, especially in terms of learning to read. So, it requires a deeper understanding for dyslexic children (Rahmawati et al., 2022).

In the learning process, appropriate media is needed in order to achieve the desired target. Media is anything that can be used to convey a message from sender to receiver so that it can stimulate one's interest, attention, feelings, and thoughts (Novitasari et al., 2022). Learning media are all tools and materials that can be used for educational purposes, such as books, newspapers, magazines, radio, television, and so on. So, children with special needs and non-special needs need media in the teaching and learning process. Especially for dyslexic children, media is needed as

an intermediary or messenger (Novitasari et al., 2022). Training children's sensory by directly holding objects that will be learned by children helps the memory of dyslexic children. In addition, it can also improve children's reading skills.

The right learning method for dyslexic learners is a method that can function all the senses, namely the multisensory method. With the multisensory method, students will be given learning by utilizing visual memory (vision), auditory (hearing), kinesthetic (movement), and tactile (touch) memory skills. Multisensory methods can generate new desires and interests, generate motivation, stimulate learning activities, and even bring psychological influences on students which ultimately increase students' concentration to learn and understand lessons (Van Atteveltdt et al., 2014). With a multisensory environment, it will provide new things for students. The multisensory method, also known as the phonic-visual-auditory-kinesthetic system method, was developed by Gillingham and Stillman (Gearheart 1976). Multisensory means to function all sensory senses (sense of sight) in obtaining impressions through touch, visual, feeling, kinesthetic, and auditory (Van Atteveltdt et al., 2014).

In the facts of the field, multisensory methods are rarely used to improve reading skills in dyslexic learners, on the grounds that multisensory methods are considered difficult to do, it is related to the limited means of multisensory methods. Then from some findings, it was found that multisensory methods can be used and useful to improve the reading ability of dyslexic students (Budiani & Marhaeni, 2018). Data collection in the form of research results related to teacher efforts in dealing with dyslexic children with multisensory methods in elementary schools which were then extracted, with research questions on how multisensory methods are useful for dealing with

dyslexic children in elementary schools based on the year of publication, level of study, journal index and material in the articles analyzed and how the results of research related to the research. In this study, the main objective is to describe the handling of dyslexic children with multisensory methods reviewed based on the year of publication of the article, level of study, class or semester, research location, journal index and material used and summarize the results of related research in an inclusive manner.

## METHOD

The method used in this study is literature review, which allows the entry of scientific studies with different designs both experimental and non-experimental and data types both quantitative and qualitative and can be aligned with research interests and questions (Whittemore & Knafl, 2005). The author included qualitative and descriptive studies, collected and analyzed primary data (original researchers) using five electronic databases, namely: Sinta, Garuda, Rama Repository, Google Scholar, and ResearchGate. The database search was conducted starting from February 2023 by identifying Indonesian and English articles that can be downloaded in full versions, with a selection of articles between 2014 and 2023. Search is done by collecting terms to facilitate the search for articles.

The keywords used in searching for relevant research articles are "Multisensory Method", "Dyslexia", and "Elementary School" for Indonesian, then "Multisensory" and "Dyslexia" for English articles. The keywords above were chosen based on the initial articles found first. In line with the research focus and inclusion criteria use the following Table 1.1 search keywords.

**Table 1.1 Database and Keywords**

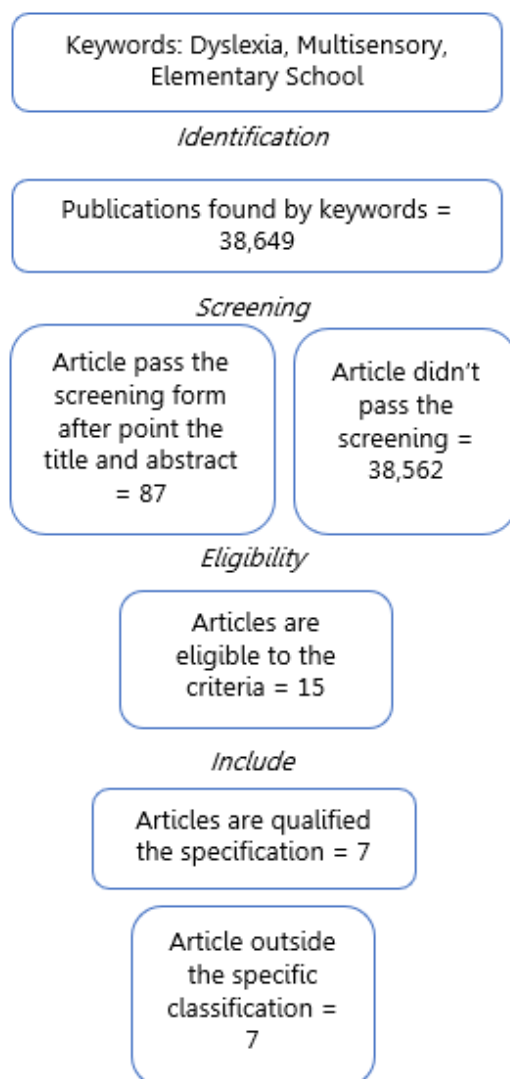
No	Database	Kata Kunci
1	Sinta	Metode Multisensori, Disleksia, Multisensory, Dyslexia
2	ResearchGate	Multisensory, Dyslexia
3	Garuda	Multisensory, Dyslexia, Multisensori, Disleksia, Sekolah Dasar
4	Rama Repository	Multisensory
5	Google Scholar	Metode Multisensori, Disleksia, Multisensory, Dyslexia, Sekolah Dasar

Abstracts from the literature are read to find the purpose of the research conducted as well as the research methods used. To prevent errors and bias in selecting articles, at least each article is screened independently. Further, in the process of analyzing the selected full text remains analyzed independently to monitor and check the consistency in retrieving information from the study. Based on this systematic examination, 518 journals were obtained using several databases, namely Sinta: 76 articles, Garuda: 132 articles, Rama Repository: 17 articles, ResearchGate: 50, and Google Scholar: 243 articles.

Furthermore, identification will be carried out by looking at the purpose of the study, to find out how teachers' efforts to deal with dyslexic children in elementary schools with multisensory methods. Literature that uses qualitative and descriptive research methods is included in this paper. The literature is used as introductory material and can be

used as discussion material in this paper. Titles and abstracts were assessed focusing on multisensory methods for dyslexic children in elementary schools as many as 87 articles. A total of 87 articles identified full text, until the screening results left seven articles that met the inclusion criteria, the flow followed in determining the article sample. Look at the chart 1.1.

**Chart 1.1. *Flow of Articles Screening***



A total of seven journals will then be included in this paper using a critical appraisal tool or CASP (Critical Appraisal Skill Program) designed by Bowling (2002), which is used to assess the quality of the articles to be reviewed in this review. There are 9 categories of assessment which include, namely clarity of objectives, study design, research methods, sample selection, ethical considerations, reporting results, explanation of results, presentation of research limitations and discussion of implications; with 3 assessment categories namely Yes, Poor, and Unreported.



**Tabel 1.2 Quality Appraisal of Studies Review (CASP)**

Author	Objectives clearly explained	Clarity of study design	Appropriate research methods	Adequate description (samples, inclusions, criteria)	Ethical considerations presented	Clarity of report results	Suitability of results to literature and questions	Presentation of research limitations	Discussion of appropriate implications
Ika Firma Ningsih Dian Primasari & Asep Supena (2021)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Indah Ratna Dewi (2021)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Akbar Malik Adi Nugraha	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ade Wijaya & Yuli Mulyawati & Nur Hikmah (2022)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sri Utami Soraya Dewi (2015)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Andi Chaerunnisa Rahma	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Khusna Yulinda Udhiyanasari (2019)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes





## RESULT AND DISCUSSION

**Table 2.1 Mapping of Literature Review Results**

Author, Year	Title of Research	Sample of Research	Research Design	The Result
Ika Firma Ningsih Dian Primasari & Asep Supena (2021)	Improving the Reading Skills of Dyslexic Students with Multisensory Methods in Elementary School	The sample of this study was one teacher, and two dyslexic students at Lazuardi Inclusion Elementary School	The research used is a qualitative approach with a descriptive method	The result of this study is many various kinds of treatments that can be done to overcome learning difficulties in dyslexic children, one of which is the use of media as a learning aid used using multisensory methods. By multisensory method, students learn by utilizing visual memory (vision), auditory (hearing), kinesthetic (movement), and tactile (touch) memory abilities. Then, multisensory methods can help improve the reading ability of students with dyslexic characteristics in elementary school. Learning procedures with multisensory methods by functioning all types of sensory, which involve tactile, visual, auditory and pronunciation functions.
Indah Ratna Dewi (2021)	Multisensory Methods for Dyslexic Students in Primary School	The study sample was dyslexic students at Marunda Elementary School 2 North Jakarta	The research used is a qualitative approach with a descriptive method	The results of this study are the acquisition of three main findings, namely multisensory methods can help improve the learning outcomes of students with dyslexic characteristics, regarding the condition of findings in the field, especially at Marunda elementary school 2, solutions or treatments that can be done by teachers and parents by providing remedial to overcome the difficulties and learning obstacles experienced by dyslexic students.
Ade Wijaya, Yuli Mulyawati & Nur Hikmah (2022)	Application of Multisensory Method with the Help of Letter Blocks in Improving the Reading Ability of Dyslexic Students in Inclusive Elementary Schools	The study sample was third grade dyslexic students at Bantar Jati Elementary School 9 Bogor City	The research used is qualitative with a case study approach	The results of this study show that the application of multisensory methods can be effective if there are learning media that can help in learning. The medium used is letter blocks. Or in other words, the application of multisensory methods with the help of letter blocks can improve the reading ability of dyslexic students in elementary school.
Khusna Yulinda Udhiyanasari (2019)	Efforts to Overcome Early Reading Difficulties in Children with Second Grade Reading Difficulties at Manahan Elementary School in Surakarta	The study sample was dyslexia from second grade of students of Manahan Elementary School in Surakarta	This research uses a qualitative approach with a type of case study research	The results showed that: 1) The implementation of the teaching and learning process in second grade of Manahan Elementary School Surakarta has gone well. Factors causing reading difficulties (dyslexia) in students include intelligence factors, a very dense lesson curriculum, very high expectations of teachers and parents and lack of attention and cooperation from the family to the child's learning process; 2) Efforts to overcome reading difficulties (dyslexia) in second grade of Manahan Elementary School in Surakarta, namely, by providing additional tutoring outside class hours and the use of various varied methods; 3) Obstacles to overcome reading difficulties (dyslexia) in second grade of Manahan Elementary School Surakarta are busy activities owned by parents which result in no time to accompany children in learning so that students have low learning motivation, especially reading, and lack of school ability to monitor students one by one.



Author, Year	Title of Research	Sample of Research	Research Design	The Result
Andi Chaerunnisa Rahman (2019)	The Effect of Multisensory Approach in Improving Reading Skills in Fourth Grade Dyslexic Children of Kalukuang Elementary School 3 Makassar	The sample of this study was fourth grade dyslexic children of kalukuang elementary school 3 makassar	This study used a single subject experimental method (Single Subject Research) with design A (Baseline 1) --- B (Intervention) --- A (Baseline 2)	The results of the research found are: (1) a multisensory approach in its application is carried out by tracing the letters written by the teacher on the board with colored cards and children mention the words written by the teacher and children learn words by writing them and children can recognize new words by paying attention to the similarity of words that have been learned; (2) the ability to read words in the subject (RAC) improved significantly with the intervention given, this was based on the score obtained by the child; (3) The application of a multisensory approach has an influence on improving students' reading skills, this is based on the reading ability score obtained by children, so that the multisensory approach can be effectively used in reading learning in dyslexic students in terms of improving reading skills.
Akbar Malik Adi Nugraha (2016)	The Use of Multisensory Methods to Help Reading Difficulties in Children with Dyslexia in Bandung City	The sample of this study was three children with dyslexia and one multisensory method teacher in Bandung.	The research used is descriptive qualitative	The results of the research obtained are the use of multisensory methods applied through various stages with three usage strategies, namely program continuity, systemic learning, and strategic learning approaches. The use of multisensory methods has been shown to have a significant impact on the reading ability and cognitive abilities of children with dyslexia with prerequisites given when the child is a maximum of eight years old.
Sri Utami Soraya Dewi (2019)	The effect of multisensory methods in improving early reading skills in early elementary school children	The sample of this study was three first grade elementary school students who showed less reading achievement than their peers.	The research used is descriptive	A child's initial reading ability is measured by asking the child to read a discourse taken from a first-grade elementary school textbook that has been declared eligible as a textbook by the National Education Standards Board (BSNP). The results of the data description showed that there was an increase in children's ability to recognize words accurately although not significantly. Although not too high an increase, this can be a positive result.

## Dyslexic Children in Elementary School

In Primasari's research (2021) about this dyslexic children have a different way of learning than most children. Dyslexia is classified as a disease that cannot be cured but can be detected and treated early. Characteristics of dyslexia can occur in pre-school and elementary school age (Primasari & Supena, 2021). In accordance with previous research such as (Supena & Dewi, 2020) taken, dyslexia sufferers who will be discussed are elementary school age with characteristics that can be seen clearly, namely difficult to understand and read the writing he reads, difficult to spell and often confused between letters and

numbers, difficult to remember the alphabet or learn tables, slow in writing, difficult to concentrate, difficult to distinguish between right and left or sequence in a week, Low self-confidence, still difficulty in dressing (Supena & Dewi, 2020).

Dyslexia is usually known when the child reaches the age of seven years or when the child enters elementary school which is characterized by decreased learning achievement (Windasari et al., 2022). Even if a child shows similarities in the traits mentioned, it is most likely that the child has dyslexia. However, still the one who has the right to diagnose that the





child really has dyslexia is a psychologist (Binti et al., 2021). Then parents should immediately bring it to be consulted by the authorities.

People with dyslexia physically look like healthy people in general. Usually, a person gets diagnosed with dyslexia when they are unable to compose or read sentences in reverse order, from top to bottom, from left to right, and they have difficulty in accepting and continuing it to the brain's memory (Widya et al., 2021). Because basically this disorder occurs because of a disrupted brain process when processing the information it receives, and is not caused by the inability of vision, hearing, intelligence, or skills in language (Dirgayunita et al., 2022). The child is late in speaking or he is able to understand instructions according to age but he has a slightly limited vocabulary. In addition, children are also difficult to understand in answering questions in descriptive form even though the answers seem easy if answered in oral form (S. P. Utami & Irawati, 2017).

In particular, children who have difficulty reading and writing are caused by phenological problems, which are where the systematic relationship between letters and sounds is misaligned. Some studies such as those put forward by (Wijaya et al., 2022) that dyslexia pass into psychological disorders as a result of parental disciplinary actions, lack of cooperation of teachers and parents, frequent school changes and other causes. Then it can be caused by deviations in certain parts of the brain that experience developmental differences with children in general does not mean it is a record or mental disorder, but dyslexic children only differ in the function of parts of the brain and how to learn. Every dyslexic child is unique in that each of them has its own individual characteristics (Syahroni et al., 2021). Although they are weak in writing and reading, they still have advantages.

The advantage is that in terms of listening, they prefer to hear from someone who reads to them because in this type of listening ability there is no need for interaction with letters (Yulinda Udhiyanasari, 2019).

### **Teachers' Efforts in Dealing with Dyslexic Children**

According to Wijaya's research (2022), learning for children with dyslexia requires appropriate teaching techniques and methodologies in order to attract them in order to interact and communicate well with teachers during the learning process. Handling dyslexic students can be started from the homeroom teacher as a representative of the parents of students at school (Wijaya et al., 2022). In the research mentioned by (Mazidah et al., 2020), the homeroom teacher can record teacher complaints in each subject. This means, teachers play an important role because they only depend on the teacher's ability to behave and master a lesson (Syahputri, 2019). Every teacher needs to design more creative teaching and learning rules such as increasing practice and teaching using video, music, or audio-visual applications such as physical therapy. Such creativity can help teachers make the teaching and learning process take place in a climate that is fun, cheerful and effective to children (Adinanda Siswoyo et al., 2022; Yurniwati, 2018).

Engaging learning is also related to the use of appropriate and engaging teaching aids to achieve an enjoyable learning process. In learning a language, an example of an approach that can be used is language appreciation (Faizin, 2020). Learning sessions full of interesting activities and teacher creativity can make the learning process more active and more fully focused on students. Therefore, in this case, teachers need to strive to learn their emotional intelligence through



harmonious relationships, pay more attention, and understand their students well (Novitasari et al., 2022). This coincides with the teacher's duty as a guide and is an agent of change to students in school.

Increasing learning motivation and mentoring children while studying at school is very important. This can be done by reading a story or fairy tale, then telling all the benefits and advantages that can be obtained by reading and writing (Syamira et al., 2021). Thus, children will be motivated and encouraged to be able to read and write on their own. In addition, it is necessary to increase the self-confidence of the child. The condition of dyslexic children that results in difficulty writing and reading makes some of them experience depression and loss of self-confidence due to difficulty following lessons at school and sometimes also ostracized by their friends (Kurnia et al., 2018). By restoring and increasing children's self-confidence will make them have a higher enthusiasm for learning to overcome the learning difficulties they experience (Wulandari & Kusnadi, 2023). Then, never blame the child for the condition he is experiencing and need high patience because it will make the child more depressed.

### **The Use of Multisensory as a Learning Method**

In Dewi's research (2015), the learning process of children who have learning difficulties requires several strategies to adjust to the child's condition. Reading difficulties are part of learning difficulties in the academic achievement problem group (S. Utami & Dewi, 2019). Research by (Yulinda Udhiyanasari, 2019) states that teachers can use multisensory methods to help dyslexic students in the learning process. The multisensory method is an exercise that functions all the sensory that children still have to recognize and learn

something (Chmielewski et al., 2018). This method can involve students actively and interactively, but still requires motivation from teachers and parents (Theresia & Recard, 2021). The treatment is carried out using a multisensory method, namely stringing letters into syllables and words, then visual stimulation is given by writing words on the board, and auditory stimulation by how students pronounce the sound of the word (Rismanto, 2020). Tactile stimulation is done by using embossed alphabet letters made of colorful toy candles so that students can feel the letters to stimulate their tactile (Chaerunnisa Rahman & HJ. St Kasmawati, 2019).

There are two kinds of teaching methods that use multisensory, namely those developed by Fernald and Gillingham (S. Utami & Dewi, 2019). The Fernald method is carried out by training students to read as a whole, which is a word chosen from stories made by students themselves. This method includes four stages as follows: 1) students choose the material or words they will learn, while the teacher writes the word in large letters, then students trace the word with their fingers; 2) learners learn by looking at the words the teacher writes, pronouncing them, and transcribing them; 3) the teacher no longer writes words, because students learn to read from the words that have been written; 4) Students are able to recognize new words by comparing them with the words they have learned (Hidayati et al., 2021).

While Gillingham's method is very structured and oriented towards the relationship between sounds and letters. Each letter is taught multisensory, for example letter cards with different colors, for example black for consonants and white for vowels, and each card contains one letter in forming keywords along with images. The Gillingham method is carried out with the following steps: 1) letter cards



are shown to learners. The teacher pronounces the name of the letter, while the learners repeat it many times. If the learner has mastered, the teacher mentions the sound, and the learner repeats it; 2) without showing the letter card, the teacher utters the sound while asking the learners what letter produces a particular sound; 3) Slowly, the teacher writes down the letters and explains the letters. The learner traces the letter with his finger, copies it and writes it in the air, and copies it without seeing an example, then the teacher instructs the learner to write down the letter that produces a certain sound; 4) After mastering several letters, learners can begin to be taught to string letters into words (Supena & Dewi, 2020).

The teacher said that with this multisensory method, children become faster to grasp and can read compared to other methods that have been applied because children feel more active by functioning some of their senses (Malik & Nugraha, 2016; Syamilah et al., 2017). Children also look more enthusiastic when learning to read with the media in the form of letter cards that have been made by teachers and parents at home (Ika et al., 2018). Then, when asked about the effectiveness of this multisensory method, the teacher explained that this method is reliable because it has been seen to be successful in helping children from those who do not know letters at all, to be able to memorize even though sometimes they are still wrong. Even today, children are already in the reading stage by being spelled for words that are light and not too long (Supriatna & Ediyanto, 2021). But at least, children's development is increasingly visible since the class teacher and parents apply the same method. Class teachers and parents basically need to work together in finding a method or way that will be applied to children in teaching them reading, both at school and at home. The methods taught must be aligned so

that children can learn well the methods taught (Rismanto, 2020)

## CONCLUSION

The application of a multisensory approach has an influence on improving reading skills in dyslexic children. The ability to read must be directly proportional to cognitive ability, so that children are not only fluent in reading technically but have optimal cognitive abilities. In schools, there are many diagnostic steps teachers can take to take alternatives to overcome learning difficulties, such as analyzing diagnosis results, and determining specific strategies and skill areas that need improvement. Through the right learning services, dyslexic children can develop their potential optimally.

Also, the role of media is very important in learning considering that media can be useful to help convey information from learners to teaching subjects effectively. The next hope is that children can be given motivation to understand and remember the subject matter that has been taught, and teaching reading to dyslexic children using innovative learning methods such as this multi-sensory method more easily. In addition, teachers should understand well the selection of teaching materials to be taught to dyslexic children, because the suitability of teaching needs and student problems is very important.

## BIBLIOGRAPHY

- Adinanda Siswoyo, A., Setiawan, A., & Nabilah, K. (2022). Penerapan Pendekatan Multisensory Dalam Penggunaan Media Abadus Sebagai Upaya Peningkatan Proses Belajar Baca Siswa Kelas 2 SDN 2 Priyoso. 2(2).
- Binti, S., Pendidikan, S. F., Binti, A., & Pendidikan, A. F. (2021). Pengetahuan Terhadap Disleksia dalam Kalangan

- Ibu Bapa di sebuah Sekolah Rendah (Primary School Parents Knowledge on Dyslexia). In *JQSS-Journal of Quran Sunnah Education and Special Needs* (Vol. 5).
- Budiani, L., & Marhaeni, A. (2018). Kesulitan Membaca Kata Anak Disleksia Usia 7-12 Tahun Di Sekolah SDN 1 Sangsit Kecamatan Sawan Kabupaten Buleleng Bali. *2*(2).
- Chaerunnisa rahman, A., & Hj St Kasmawati, D. (2019). Pengaruh Pendekatan Multisensori Dalam Meningkatkan Kemampuan Membaca Pada Anak Disleksia Kelas IV SD Negeri Kalukuang III Makassar.
- Chmielewski, W. X., Tiedt, A., Bluschke, A., Dippel, G., Roessner, V., & Beste, C. (2018). Effects of multisensory stimuli on inhibitory control in adolescent ADHD: It is the content of information that matters. *NeuroImage: Clinical, 19*, 527–537.  
<https://doi.org/10.1016/j.nicl.2018.05.019>
- Dirgayunita, A., Dheasari, A. E., Rangga, A., & Hanafi, B. (2022). Identifikasi Kesulitan Belajar "Disleksia. In *Anak Usia Dini* (Vol. 36).
- Faizin, I. (2020). Strategi Guru Dalam Penanganan Kesulitan Belajar Disleksia (Vol. 7, Issue 1).
- Hidayati, H., Barja Sanjaya, M., Satria Pangestu, A., & Anjaini Sundawa, A. (2021). Ledy: A Multisensory Approach in Mobile Application for Dyslexic Children. In *Communication & Information Technology) Journal* (Vol. 15, Issue 1).
- Ika, N., Rakhmawati, S., Hasibuan, R., & Reza, M. (2018). Indonesian Journal of Early Childhood Education Studies Using Multisensory on the Ability to Recognize Letter Sounds and Forms of Children. In *IJECES* (Vol. 7, Issue 2).  
<http://journal.unnes.ac.id/sju/index.php/ijeces>
- Kurnia, N,. (2018). Efektivitas Pemanfaatan Multimedia Pembelajaran Berbantuan Ispring Dalam Meningkatkan Motivasi Dan Hasil Belajar Pada Mata Pelajaran Bahasa Arab (Vol. 3, Issue 1).
- Malik, A., & Nugraha, A. (2016). Penggunaan Metode Multisensori Untuk Membantu Kesulitan Membaca Pada Anak Penyandang Disleksia di Kota Bandung.
- Mazidah (2020). Tahap Kesiapan Guru Sekolah Aliran Perdana Melaksanakan Pengajaran dan Pembelajaran.
- Novitasari, K., Retno Utami, N., Handoko, H., & Suminar, A. (2022). The Effectiveness of STEAM-Based Multisensory Model Implementation Training for Strengthening Teachers' Competence.  
<https://doi.org/10.21831/jppm.v9i1.51853>
- Primasari, I. F. N. D., & Supena, A. (2021). Meningkatkan Kemampuan Membaca Siswa Disleksia Dengan Metode Multisensori Di Sekolah Dasar. *Jurnal Basicedu, 5*(4), 1799–1808.  
<https://doi.org/10.31004/basicedu.v5i4.1055>
- Rahmawati, L. E., Purnomo, E., Hadi, D. A., Wulandari, M. D., & Purnanto, A. W. (2022). Studi Eksplorasi Bentuk-Bentuk Gejala Disleksia pada Anak. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 6*(5), 4003–4013.  
<https://doi.org/10.31004/obsesi.v6i5.2495>
- Rismanto, A. (2020). Kemampuan Membaca dan Menulis Siswa Disleksia Melalui Metode Simultaneous Multisensory Teaching. *Journal of Language Learning and Research*.  
<https://doi.org/10.22236/jollar.v3i2.7401>
- Supena, A., & Dewi, I. R. (2020). Metode Multisensori untuk Siswa Disleksia di Sekolah Dasar. *Jurnal Basicedu, 5*(1), 110–120.  
<https://doi.org/10.31004/basicedu.v5i1.623>

- Supriatna, A., & Ediyanto, E. (2021). The Implementation of Multisensory Technique for Children with Dyslexia. *IJDS: Indonesian Journal of Disability Studies*, 8(01), 279–293. <https://doi.org/10.21776/ub.ijds.2021.008.01.17>
- Syahputri, D. (2019). The Effect of Multisensory Teaching Method on The Students' Reading Achievement. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal*, 2(1), 124–131. <https://doi.org/10.33258/birle.v2i1.192>
- Syahroni, I., Rofiqoh, W., & Latipah, D. E. (2021). Ciri-Ciri Disleksia Pada Anak Usia Dini. *Jurnal Buah Hati*, 8(2), 62.
- Syamilah, N., Maliki, B. M., Hanafi, M., Yasin B A Sekolah, M., Parit, K., Darat, K., & Muar, M. (2017). Application of Multisensory in Learning Alphabets Identification Skills for Special Education Students. In *Journal of ICSAR ISSN* (Vol. 1).
- Syamira, N., Nor, M., Baharudin, H., (2021). Masalah Murid Disleksia Dan Gaya Pengajaran Guru Dalam Pembelajaran Bahasa Arab [Problems Of Dyslexia Students And Teachings Style syamiraFor Learning Of Arabic Language]. In *International Journal of Advanced Research in Islamic Studies and Education (ARISE)* (Vol. 1, Issue 2).
- Theresia, N., & Recard, M. (2021). Applying Multisensory Approach To Promote Engagement In Primary English Home-Based Learning. *ELTR Journal*, 5(2), 105–119. <https://doi.org/10.37147/eltr.v5i2.118>
- Utami, S., & Dewi, S. (2019). Pengaruh Metode Multisensori Dalam Meningkatkan Kemampuan Membaca Permulaan Pada Anak Kelas Awal Sekolah Dasar.
- Utami, S. P., & Irawati, L. (2017). Bahasa tulis pada anak dengan gangguan disleksia (kajian psikolinguistik). 1(1), 23–29. <http://ejournal.unipma.ac.id/index.php/linguista>
- Van Atteveldt, N., Murray, M. M., Thut, G., & Schroeder, C. E. (2014). Multisensory integration: Flexible use of general operations. In *Neuron* (Vol. 81, Issue 6, pp. 1240–1253). Cell Press. <https://doi.org/10.1016/j.neuron.2014.02.044>
- Widya, A., (2021). Mengenal Siswa Disleksia Sejak Sekolah Dasar untuk Meningkatkan Motivasi Belajar. 6. <http://ejournal.ihdn.ac.id/index.php/AW>
- Wijaya, A., Mulyawati, Y., & Hikmah, N. (2022). Penerapan Metode Multisensori Berbantuan Balok Huruf dalam Meningkatkan Kemampuan Membaca Siswa Disleksia di Sekolah Dasar Inklusi. 13(2), 2022–2076. <https://doi.org/10.21831/foundasia>
- Windasari, I., Citra Apriliana, A., Guru Sekolah Dasar, P., & Sumedang, A. (2022). Studi Kasus Terhadap Anak Berkesulitan Membaca (Disleksia) Pada Siswa Kelas II SDN Parakanmuncang I Kabupaten Sumedang. In *Jurnal Pendidikan Bahasa dan Sastra Indonesia: Vol. 1* (Issue 1). <https://ejournal.unsap.ac.id/index.php/literat>
- Wulandari, A., & Kusnadi, K. (2023). Pendekatan Konstruktivistik Guru Seni dalam Mengajar untuk Menangani Peserta Didik Disleksia. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 7(1), 42–57. <https://doi.org/10.31004/obsesi.v7i1.2677>
- Yulinda Udhiyanasari, K. (2019). Upaya Penanganan Kesulitan Membaca Permulaan Pada Anak Berkesulitan Membaca Kelas II di SDN Manahan Surakarta (Vol. 3, Issue 1).
- Yurniwati. (2018). Improving Conceptual and Procedural Knowledge of





Prospective Teachers through  
Multisensory Approach: Experience  
from Indonesia. In *Journal of Research  
and Advances in Mathematics  
Education* (Vol. 3, Issue 2).  
[http://journals.ums.ac.id/index.php/jr  
amathedu](http://journals.ums.ac.id/index.php/jramathedu)