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## Special Needs Teachers' Attitude and Practices with Dyslexic Children

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### Abstract

The problem of dyslexia in general, has been a long running issue for both students and teachers. Special needs education started to be taken seriously in Malaysia during the 1990s, but many factors have not been thoroughly addressed. This paper aims to find out teachers' current practices and attitudes when dealing with dyslexic children in today's special needs education landscape. The four teachers chosen for this study are the ones who have extensive experience in physical class teaching of special needs children. This qualitative study used questionnaires with 30 self-constructed questions and semi-structured interviews which were conducted via Zoom that were recorded and transcribed using Happy Scribe. The findings reveal that some factors found necessary in the education of dyslexic children were multi-sensory experiences, repetition, regularity of routine work, and a particular focus on giving them time to process and comprehend information. The availability of resources and the freedom to operate and design individualized educational plans also worked as a bonus for the teachers. Some suggestions to enhance the learning experience of the dyslexic child are also included.

**Keywords:** Dyslexia, Special Needs Education, Teaching Practices

### Introduction

#### Overview of the Special Needs Education in Malaysia

Inclusion is one of the most important factors in the development of any education system if it is to cater for children with special needs. Malaysia's education structure has not always been inclusive; however, this improved significantly in the 1990s as the UN agenda progressed in the country. Malaysia introduced the concept of inclusive education in the Education Act 1997. This was part of an effort to find ways for inclusion of children with special needs into the regular education system.

However, the policies and methods outlined by Malaysian authorities are often not put into practice. This is one of the reasons why this study aims to find out whether the practices

and attitudes of teachers with special educational needs are in line with the guidelines of the government's education laws. The narrow interpretations of the concepts of special educational needs and inclusive education have hindered the development of full and all-inclusive inclusion.

### ***Dyslexia - Understanding the Paradox***

Dyslexia is used as a general word for the collection of disorders that affect the average ability of a person to read, understand, or interpret words, letters, and other symbols. It is a problem of decoding language. However, dyslexia is not known to negatively affect a person's general intelligence. Typically, dyslexia is characterised by information processing, phonological processing, working memory, quick naming and automation of basic skills. Difficulties can manifest in the areas of visual, sequential and auditory memory processing speed, short-term and working memory, motor coordination, time management, laterality, and direction (Udoba, n.d). These difficulties affect the learning process in reading, literacy, and sometimes numeracy. It is imperative to the child's success that teachers understand the complexities of dyslexia, and knowledge of addressing dyslexic children in helping them to succeed.

### **Problem Statement**

This study aims to explore special needs teachers' (SNTs) knowledge, competency, skills, and practices regarding students learning difficulties, with reference to dyslexia. It also aims to provide an understanding of teachers' attitudes and the strategies that they use in teaching dyslexic children. The study is distinctive to SNTs who had undergone specific related professional courses, which included the opportunity for critical reflection on their teaching and classroom practices.

### **Research Objectives**

This case study will probe into the problems of dyslexic children in the classroom and how teacher practices affect them. The overarching purpose of this study is to analyse such practices of special needs teachers which directly impact dyslexic children.

The research objectives of this study are:

1. To explore special needs teachers' understanding of dyslexia.
2. To examine special needs teachers' teaching strategies, techniques, and methods and evaluate whether they are effective in dealing with dyslexic children or not.

### **Research Questions**

1. What is the perception of the special needs teachers about dyslexia?
2. What teaching methods, strategies, and assessments were used by those special needs teachers with dyslexic children? Were those methods and strategies effective and successful?

### **Significance and Limitations of this Study**

This study will contribute to the existing data on the practices and perceptions of special needs education teachers who are involved with dyslexic children. The scope for the case studies is limited as the teachers interviewed are from the same region. The findings were discussed in relation to the literature reviewed and this will serve as a connecting bridge to the theories and practices on a larger global scale.

## Literature Review

### *What is Dyslexia*

What exactly is Dyslexia? It is defined as a difficulty in one's learning to decode and spell different letters and words (Snowling et al., 2020). Dyslexia is classified as a kind of "neurodevelopment disorder." Such disorders can be inherited, display symptoms that persist for an entire lifetime, and are generally visible from an early onset in childhood and it is clearly spotted even in pre-school children.

One functional definition is this: "Dyslexia is manifest by variable difficulty with different forms of language, often including, in addition to problems reading, a conspicuous problem with acquiring proficiency in writing and spelling" (Lyon, 1995).

### *Teachers General Perception on Dyslexia*

The paper by Gwernan-Jones & Burden (2010) deals with the general perception among teachers that students who have dyslexia are just lazy. This is enforced by the fact that teachers are usually not able to diagnose dyslexia on their own and thus conclude that the child is at fault. The authors also found that most of the teachers felt that there was an urgent and profound need for teachers to have some basic knowledge about specific learning disabilities such as dyslexia.

### *Teacher's Attitudes Towards Inclusion*

Hastings & Oakford (2003) aim to find out the success of inclusion programs for children with special needs. They measured teachers' attitude towards including special needs children in the schools. The researchers concluded that the teachers were more negative in their attitudes towards including students who showed emotional and behavioural problems than towards the children with intellectual disabilities. Teachers are positive when it comes to the inclusion of dyslexic children in their classes.

### *Methods and Practical Approaches to Dyslexia and Special Needs*

The book "Including students with special needs: A practical guide for classroom teachers" discusses how special needs students can be incorporated into the mainstream school system (Friend & Bursuck, 2002). It provides valuable insights into the diagnosis of such a child. The book offers methods of knowing whether the child suffers from learning disability or not. The book suggests that once the child has been suspected of having learning disability, he or she can be referred to the diagnosis board in the school. There are some techniques for decision-making and monitoring special education services and how the referral, assessment, eligibility, planning, and placement processes work. It also introduces a set of techniques designed to improve the classroom environment for students who have dyslexia.

Magnan et al (2004) attempted to find out whether computer training, which is designed to increase phonemic awareness, has a curing effect on the reading skills of children with dyslexia. The authors conducted research where they investigated the usefulness of such audio-visual training. The research found that there was a significant advantage to the experimental group after the audio-visual training. The results of this study highlight the importance of phonological components of dyslexia as the students' training led them to connect print and phonology together.

## Theoretical Framework and Concepts

### *Jean Piaget Cognitive Development Theory*

Jean Piaget presented his theory of cognitive development, and he divided the child's cognitive development into four distinct stages. Each stage of the child's cognitive development has its own characteristics, and when one of these stages ends, the child has reached a newer stage of cognitive development. The focus of Piaget's theory is also to understand what exactly the nature of intelligence is. Piaget's theory includes four stages of cognitive development: beginning with the sensorimotor stage: 0 to 2 years; Preoperational stage: 2 to 7 years; Concrete-operational stage: 7 to 11 years; Formal-operational stage: 12 years and older (Tilstone et al., 2004).

Piaget believed that the child plays an active role in the development of his or her cognitive abilities. This is particularly important because children with dyslexia do not undergo the same type of cognitive development, as their ability to participate in activities that actively contribute to information intake does not function at the same level as the average child without dyslexia or another disability. By interacting and learning with their natural environment, these children learn new ways to navigate the world, including all kinds of actions, whether physical, emotional, or intellectual (Blake & Pope, 2008).

Piaget's four different stages of cognitive development help in understanding at what stage dyslexia and other similar learning disabilities can be more easily detectable. A child starts to display the problems related to dyslexia at the age of 7 or above because that is when he or she reaches the point of understanding language and other symbolic modes of communication (Satz et al., 1971). The usage and comprehension of letters are more significant in this stage, and if the child has dyslexia, this stage would indeed show that to the child's parents or teachers. Another indication of dyslexia can be the child's disinterest in academic or scholastic activities, which occurs due to their inability to engage in such activities in a productive manner.

### *Lev Vygotsky's Socio-Cultural Theory*

According to Vygotsky, learning is a social process: the result of interactions between individuals who share a cultural milieu, leading to an increase in knowledge, skills and understanding (Tilstone et al., 2004). According to his theory, a child who is placed in an environment that is separate from the environment reserved for "normal" students has more difficulty in learning reading and writing because he or she is enclosed in his or her own bubble of methods without contact with the outside world, which could enhance his or her development.

Another essential concept of Vygotsky is the zone of proximal development (ZPD). Vygotsky defined it as "the distance between the actual developmental level determined by independent problem solving and the potential developmental level determined by problem solving under adult guidance or in collaboration with more capable peers" (Powell & Kalina, 2009). This leads to the idea that if a student is in the zone of proximal development for a particular task, providing them with the right help will give them a boost that will enable them to complete the task (Shabani et al., 2010). Special education teachers need to know that children with special needs need more opportunities to interact with adults and peers, otherwise they are likely to have a deficit in 'cultural development' or other more serious problems.



## **Research Methodology**

### *Research Design*

The data was collected personally using questionnaires administered via in-person interviews. The four teachers chosen through convenient sampling are the ones who have extensive experience in physical class teaching of special needs children. The study used interview questionnaires with 30 self-constructed questions (please refer to Appendix), and the semi-structured interviews were conducted via Zoom. The interviews were recorded and transcribed using Happy Scribe.

The semi-structured nature of the interviews encouraged participants to expand on answers already given and allowed examination of other related ideas (Zainal, 2007). Interviewees narratives about special needs education were analysed and documented. This study has no major limitations as most of the intended research questions were answered without any hindrance or obstructions.

## **Research Instrument**

The qualitative research study was conducted by using semi-structured interviews with participants. Those interested in participating must first complete a questionnaire asking for general information about themselves as well as their employment details. Next, teachers are interviewed to gather in-depth information, evidence and data. By utilizing an in-depth interview, the researcher obtained sufficient data regarding the teacher's perception, the factors influencing the teaching methods, and factors that promote a special education system for dyslexic pupils.

## **Data Collection**

Online approaches, such as virtual methods are used to collect data. Online data collection is conducted using Zoom and phone calls. Participants are selected and are given codes instead of using their names. The information received is recorded, coded, and collected manually. The data and participants' codes are given manually.

## **Interview Questions**

The interview questions are prepared using appropriate measures and steps were carried out to gather data and information about the research problem. In the interview, 30 questions were asked: 6 were concerned with personal information, 12 dealt with teaching experiences, and the final 12 deal with the research questions. Quotes from the interviewees' responses are structured grammatically to achieve a readable flow.

## **Results and Findings**

### *Introduction*

The case study is aimed to find out the teachers' understanding and current practices, including factors leading to the success and constraints in teaching dyslexic children.

## **Research Analysis**

The research analysis is based on thematic analysis. The researcher identified major themes based on the data and information collected, thus generating results towards understanding how teaching methods play a crucial role in the education of dyslexic pupils. Further, the researcher has investigated how different teaching methods used could attain the values,

etiquette, attitudes, and communication practices, along with their impact on educational practices for pupils with dyslexia.

*Demographics and Profiles of Participants*

Four teachers working in the special education system are the participants of this study. The table below shows their demographic details and profile.

4.4 Results and Findings

Table 1

*Demographic Details and Profile*

Teacher	Code	Current Role	Current Teaching Age Years	Education	Special Needs Professional Courses	Total Teaching Exp Years	Teaching Special Needs Years	Type of school
1	ASD-1	SEN Teacher and Coordinator	4–12	Certified Play Therapist and SEN Adv. Dip	Attended a 18 months SEN Course	12	6	Private International School
2	ADF-2	Principle/Founder of Shelter Home	6-17	Bachelors in Business and Certified Counselor	Perusing Learning Disorder course	12	12	Shelter Home For Boys and Girls licensed by Welfare Dept And Remedial after School Care Centre
3	AWE-3	Coordinator and Teacher	6-14	Bachelors in Early Childhood	Completed a 2year program in SEN Course	10	6	Dyslexia Centre NGO Also does after school coaching for Dyslexic children
4.	SDF-4	Special Needs Teacher – English	13-19	Bachelors in Special Education	Completed a 1-year program in SEN	6	6	Government School for Special Education

Accordingly, the findings in this case study are based on the two research questions presented using extracts from the interview subscribed using *Happy Scribe*, diagrams, and tables arranged according to the study's objectives.

Two themes are identified from the data collected

**Theme 1** - the teacher's perception and knowledge of dyslexic pupils' needs.

**Theme 2** - the teaching methods commonly used while teaching dyslexic students.

Research Question 1: What is the understanding of the special needs teachers about dyslexia?

Theme 1 - Teacher's Perception and Knowledge

Special education teachers should know dyslexia's characteristics and its risk factors. There are many misconceptions and misunderstandings about dyslexia, which can lead to ineffective literacy interventions. Most teachers in the present study understand and consider dyslexia as a visual perception problem. Therefore, visual processors are more likely to emphasize spelling and letter formation than phonemic awareness.

*"Dyslexia children have difficulty to decode sounding on letters, identifying letter sounds. They also have issues with writing and reading." (ASD 1)*

*"Dyslexia is more to a Learning Disorder. Where the child is more a visual learner, if you ask me, they have issues with reading and writing. They may sometime have other overlapping syndrome such as ADD, ADHA, AUTISM." (AWE 3)*

The teachers believe that identifying dyslexic children based on phonemic awareness is the best method. Research also suggests that phonemic awareness plays a crucial role. Later reading difficulties are often the result of difficulties with phonemic awareness. Phonological awareness and dyslexia are inextricably linked. The teacher's ability to promote phonemic awareness is one of the strongest predictors of future reading success.

Teacher's Compassion with Positive Actions

Dyslexia impacts children's mental and emotional wellbeing; therefore, compassion is vital when working with dyslexic children. The role of the teacher is not only to educate; teachers also need to understand how to motivate the child to recognize his worth regardless of which method of teaching they choose. The teachers' values underpinning the standards of teaching and care, respecting the uniqueness, individuality and specific needs of pupils are of utmost importance.

*"So personally, because I have worked with this age group, I begin to realise how important the time I have with them, how much time I get to be with them. That also plays a big upper hand compared to a homeroom teacher." (ASD-1)*

*"Importance needs to be given to differentiation in teaching; this means how the curriculum is presented, teaching approaches, delivery of the lessons. However, a teacher's expectations influence the child's learning outcome."(AWE-3).*

Positive actions such as (i) teaching skills specific to the learner; (ii) incorporating teaching and learning standards; (iii) developing intrinsic encouragement; (v) decreasing classroom disruptions, strengthens core educational programs.



Research Question 2: What teaching methods, strategies, and assessments were used by those special needs teachers with dyslexic children?

### Theme 2 – Teaching Methods, Strategies, and Assessments

It is important to establish a conducive classroom for all students. It involves planning, strategies, and intentional teaching to ensure that they meet the unique needs of each student. Teachers use various techniques and approaches for dyslexic learners to ensure they receive adequate time and resources to learn effectively.

*“For example, children who are having difficulty to decode sounding on letters, identifying letter sounds. So there are certain strategies we use in class which is active learning assessment.” (ASD-1)*

*“I use the term over-learning as it is necessary for children with dyslexia. Short-and long-term memory difficulties experienced by “...children with dyslexia mean that there needs to be significant, continuous reinforcement and repetition” (AWE-3)*

### **Methods - Multisensory Learning (MSL)**

Students who struggle with reading and mathematics are often advised to use multiple representations when learning new material. Explicit instruction with task analysis and auditory, visual, and tactile components are incorporated in MSL programs to enhance engagement and facilitate memory of different aspects of literacy, from letter identification to phonological memory. MSL utilises all available senses simultaneously. This can be summed up in the phrase 'hear it, say it, see it and write it. These methods have been used for many years and have been further refined by Hornsby in structured phonic programs which incorporate multisensory techniques (Falzon et al., 2011).

*“In general when I'm teaching the students. I prefer to use the multisensory approach. I will integrate all the senses, sight, hearing, and tactile, as we all know that we call it VA, KT, visual, auditory, kinaesthetic, and tactile. Okay. So for me, from the research I made “...before, when you integrate all the senses, it will make it easier for the information to be retained for a long time. Connectively. So that is why I prefer to use multisensory approach strategies”.(SDF-4)*

### *Assessment of Children*

In terms of assessment, SDF-4 said they have two kinds of evaluations. One is the academic assessment of learning subjects, and the other is vocational skills based on the academic subject learned. Teacher ASD-1 believes that if children do not get an assessment in the early years, they move on to the following year, and it keeps getting more difficult as the range of studies expands. The emphasis is on continuous assessments on the children's achievements, assessing the work they have accomplished and their individual skills and strength.

*"Actually, when we design our plan, we have to follow the escape rebates. For example, today, I will teach health and the environment under the theme. Let's say reading skills. So I have to look at the vocational service for this topic. For this topic, which vocational skills do I have to emphasise? (SDF-4)*

*"...there are certain strategies we use in class which is active learning assessment." (ASD-1)*

### **Summary: Questionnaire and Teachers interviews**

The questionnaires and online interviews enabled essential data to be collected to answer the research questions:

1. What is the understanding of the special needs teachers about dyslexia?
2. What teaching methods, strategies, and assessments were used.

The main themes included: background information, knowledge and perceptions of teachers, teaching methods, strategies and assessment.

### **Discussion and Recommendation**

#### *Special Needs Teachers Understanding of Dyslexia.*

All the participants in this study had the highest degree of consensus around the observable characteristics of dyslexia. All the teachers were able to identify reading difficulties they had encountered in their classrooms or shelter homes. They acknowledged that reading difficulties are often due to the gap between what the student sees, what the auditory canal "says," and what the brain perceives. For example, all participants knew that children with dyslexia have poor spelling, process print more slowly than other children, have poor reading fluency, are better at listening than reading comprehension, and have difficulty segmenting words into component sounds and sounding out words.

They also recognized that dyslexia affects students across all academic areas. These findings are promising given that teacher observations may serve as a form of initial screening assessment. They suggest that teachers who frequently encounter struggling readers are attuned and adaptable to many of their difficulties. These findings also show all the behaviours and outcomes teachers had observed were through direct experience with the students. They indicate that the teachers in this study are confident to make evidence-based instructional decisions and indicate that teachers possess sufficient knowledge in these areas.

Dyslexic students are handled appropriately by teachers as per this study. Dyslexics generally have low self-esteem and little self-confidence, according to the (International Dyslexia Association, 2008; Forteza-Forteza et al., 2021). Dyslexic students suffer from anxiety caused by failure, social isolation, and low self-esteem (Acheampong et al., 2019). Teaching dyslexic students is both academically and behaviourally challenging, according to research. It is not unusual for dyslexic students to have difficulties reading, writing, talking, and using other languages. Nevertheless, the study found that teachers showed positive attitudes toward dyslexic students.

#### *Teaching Method, Strategies and Assessments*

Dyslexia is a lifelong condition. From this study, we understand that with the right help, students with dyslexia can learn to read and write well, given the appropriate assessment

and attention. The teachers in this study emphasised that early detection and intervention are the keys to helping students with dyslexia succeed in school and later in life. One of the major obstacle teachers face in the classroom is managing challenging classroom behaviour; however, positively managing these behaviour issues can reduce teachers' and students' stress levels, enabling a safe learning environment.

#### *Multisensory and Structured Teaching*

Most students with dyslexia need the help of a teacher, tutor, or therapist who is specially trained in using a multi-sensorial and structured approach to language. The study showed that these students need to be taught systematically and explicitly, using multiple senses (auditory, visual, tactile) simultaneously and that students with dyslexia need personalized assistance to progress at their own pace. In addition, the teachers stated that dyslexic students often require a lot of structured practice and immediate corrective feedback to assist in automatic word recognition skills. Teachers used different MSL reading programs such as Orton-Gillingham, Slingerland, Wilson Reading, and Explicit Instruction approaches to working with dyslexics. For students with dyslexia, it is advisable to have an outside academic therapist working closely with the teachers in the class (Anis et al., 2018).

#### *Teachers' Self-Efficacy*

In all classrooms, the teacher sets the tone for education. Therefore, the success of inclusion is highly dependent on the teacher's general attitude in managing and educating students with disabilities. Teacher's attitude is one of the most important predictors of successful inclusion. In addition, teachers' beliefs about education and effectiveness are related to the teacher's knowledge, ability, and skills to teach students with disabilities. This research has revealed that teacher self-efficacy is positively associated with successful inclusion implementation.

#### **Conclusion and Recommendations**

The study found that teachers' professional experience, attitude, self-efficacy and continuous education are key factors in playing an influential and effective role in facilitating the education of dyslexic students. Another fundamental finding shows that the teachers' method of providing curriculum content to these students is essential, and weaknesses need to be corrected quickly. In this context, schools and learning centres should redesign a flexible and appropriate curriculum for all categories of learners and move away from focusing on an exam-oriented curriculum. In addition, the classroom environment is an integral and relevant resource that directly and indirectly contributes to teachers' effort and performance in promoting dyslexic students' learning success.

Dyslexia does not distinguish between gender, socioeconomic group, or intellectual level, so there are challenges to academic success in a typical classroom environment. Teachers need the knowledge to adapt content, teaching methods, and instructions to meet the appropriate needs of all children with special needs. Specific teaching methods are designed to meet each child's individual developmental needs, allowing students to be evenly grouped by developmental ability rather than age. This distinctive element of special education provides support and guidance methods not on a child's biological age but based on the child's strengths, abilities and interests.

Thus, this study recommends the following potential areas that need to be developed:

1. Enhancing the professional skills and knowledge of schools and school personnel (Odegard et al., 2020).
2. Implementing appropriate support strategies and regular professional development programmes.
3. Providing dyslexic students with the services they need based on the expertise, knowledge and confidence of staff.
4. Considering special needs of students when making plans.
5. Providing extra support to every student should be the goal of special needs schools.

In summary, teachers' primary focus is to support the need of students' development and educational progress. Especially in today's diverse classrooms, teachers must be sensitive to cultural backgrounds, languages, and understanding of different levels of students and need to be actively involved in student growth and knowledge building. Dyslexia does not limit a child's chances of success, so teachers and parents should encourage children with dyslexia to have dreams and aspirations.

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**Appendix**

Interview Questionnaire

<b>Profile</b>			
1	Please state your current employment role.	4	Highest academic level
2	The duration you have been working with the current school/institute	5	Teaching experience; Specific to Special Needs Children
3	Current Teaching Ages	6	Type of school
<b>Understanding Dyslexia</b>			
1	In your opinion, what do you understand about Dyslexia		
2	Are there other learning disabilities besides dyslexia		
3	What are the strengths and weaknesses when it comes to learning for Dyslexic children: Reading/Writing/Calculation/Art		
4	Importance of Parents' involvement		
<b>Teaching Strategies Structure of lesson plan</b>			
1	What strategies have you developed or found useful to support your teaching?		
2	Do you use new innovative methods for better teaching and learning? Henan/OG/Reading program or anything similar?		
3	Are you consulted before the school/administrator finalises the curriculum for the students?		
4	Do you create an Individual Education Plan... or is your plan reviewed by peers?		
5	What resources have you developed or found useful to support your teaching?		
<b>Resources are available and provided in your school.</b>			
1	In your program, any technical support: Using computers, smart devices, or tablets?		
2	Do you buy them yourself, or does the school provide them?		
3	Using teacher aids, tools, equipment, and other such methods		
4	Support from the board and management regarding such tools and resources		
<b>Assessment</b>			
1	Who does the diagnosis assessment?		
2	Do you use a checklist during the diagnosis assessment?		
3	Are there specific tools or methods to assess and grade your students (teacher-developed)?		
<b>Recommendations</b>			
1	What would you recommend to other teachers		
2	What would you say to Policymakers		