CHAPTER III
RESEARCH METHODOLOGY

This chapter discusses aspects related to the research methodology, including research design, participants, research setting, research focus, data collection techniques, data analysis, data validity testing, and ethical issues.

3.1 Research Design

This study employs a qualitative approach with a phenomenological research design. The purpose of this phenomenological design is to explore and understand the experiences and perceptions of teachers regarding their awareness of dyslexia and the challenges they faced in identifying it among elementary students in Malaysia. This approach aims to uncover the essence of teachers' lived experiences by delving into how they perceived and managed dyslexia within their educational settings.

Applying Creswell's framework, the study involved conducting in-depth, semi-structured interviews with teachers to gather detailed and descriptive data about their experiences. This method allowed teachers to share their insights on understanding dyslexia, the obstacles they encountered in recognizing it, and how these factors influenced their support for students.

The data collected from these interviews was carefully analyzed to identify common themes and patterns. This process included coding the data to uncover recurring issues and synthesizing these themes to provide a comprehensive understanding of the teachers' experiences. To ensure the accuracy and credibility of the findings, validation techniques, such as having participants review and confirm the findings, were employed.

The results were presented through detailed narratives and thematic summaries that reflected the richness and complexity of teachers' experiences. This provided valuable insights into how teachers' awareness of dyslexia and the barriers they faced impacted their ability to identify and facilitate dyslexic students effectively.

3.2 Participants

The participants were selected based on their teaching levels—upper and lower elementary—and their diverse experiences in different educational settings, including national, international schools and home-schooling environments. This approach ensured that the study captured a broad range of perspectives on teaching in Malaysia. To maintain confidentiality, pseudonyms were used for all participants.

3.2.1 Ms. Vania

Ms. Vania is a 33-year-old teacher with eight years of experience in education. She currently serves as a Grade 6 class teacher and Science educator for Grades 4 to 6. Ms. Vania teaches Science across all levels (both national and Cambridge) and Biology at the national and IGCSE levels in a school in Petaling Jaya. She holds a Bachelor's degree in Biotechnology and a Master's in Education with a focus on Leadership and Management. In addition to her current role, Ms. Vania has experience teaching in a home-schooling environment, which adds a unique perspective to her approach to education. Her diverse experience across different educational settings made her an ideal participant for the study.

3.2.2 Ms. Natasha

Ms. Natasha, a 27-year-old English teacher, brings four years of teaching experience to the study. She currently teaches at an International School in Petaling Jaya, where she has been working for a month. Before joining the current school international, she taught English in various schools in Kuala Lumpur, Malaysia. Ms. Natasha holds a Bachelor's degree in Education, majoring in English. As a newer educator working primarily with younger students, her experiences in lower elementary levels were crucial in providing insights into the challenges and opportunities in teaching English to younger learners.

3.2.3 Ms. Rita

Ms. Rita is a 32-year-old English teacher with eight years of teaching experience. She is currently teaching at the upper primary level at an international school in Kuala Lumpur. Before transitioning to teaching, she earned a BSc (Hons) in Chemical Engineering. Recognizing the importance of language education in Malaysia, where

English is taught as a second language, Ms. Rita completed a TESOL course to enhance her teaching skills. Her focus on upper elementary students and her experience in an international school setting offered valuable insights into the strategies and challenges of teaching English in a multilingual context.

3.3 Focus of the Research

The focus of the research was to investigate teachers' awareness of dyslexia and the barriers they encounter when identifying it among elementary students in Malaysia. Specifically, the study aimed to understand how teachers perceive dyslexia, the challenges they face in recognizing it within their classroom settings, and how these factors influence their ability to support students effectively.

The research sought to explore the extent of teachers' understanding of dyslexia, including their knowledge of its symptoms, causes, and impacts on student learning. It examined how well teachers are informed about dyslexia and whether their awareness affects their ability to identify and address the needs of dyslexic students.

Additionally, the study focused on identifying the obstacles teachers face when trying to recognize dyslexia among elementary students. These barriers could include a lack of training, insufficient resources, misconceptions about dyslexia, or challenges related to the school environment and policies.

Furthermore, the research aimed to understand how teachers' awareness and the barriers they encounter influence their strategies for supporting dyslexic students. This included examining how teachers modify their teaching methods, provide accommodations, or seek additional support to help dyslexic students succeed.

By concentrating on these aspects, the research aimed to provide a comprehensive view of the current state of dyslexia identification and support in Malaysian schools. The findings were intended to highlight areas for improvement and inform strategies to enhance teachers' ability to recognize and support students with dyslexia.

3.4 Data Collection Procedure

Data collection (Creswell, 2018) for this study involved conducting in-depth interviews with elementary teachers who served as the informants. The primary goal of these interviews was to gather detailed insights into teachers' awareness of dyslexia and the barriers they face in identifying it among their students.

The interviews were conducted face-to-face, either at the school during free periods or breaks, based on agreements with the informants. This approach was chosen to minimize disruption to the teachers' regular teaching activities and ensure a comfortable environment for the interviews. The interviews took place in a setting that was convenient for the teachers, allowing them to discuss their experiences without interference from their teaching schedules.

During the interviews, the researcher used a prepared interview guide to facilitate the conversation. This guide was designed to ensure that the questions remained focused on the research objectives and covered all necessary aspects of the study. The guide included a series of predetermined questions related to the teachers' understanding of dyslexia, the challenges they encounter, and their strategies for supporting dyslexic students. The questions were formulated to elicit comprehensive and reflective responses from the informants, providing a deep understanding of their experiences.

To collect and manage the data, the researcher utilized various tools. Mobile phones and laptops were used to record the interviews, ensuring accurate and reliable data capture. These recordings were essential for thorough analysis, allowing the researcher to review and transcribe the interviews with precision. In addition to electronic recordings, written notes were taken during the interviews to capture immediate observations and contextual details that might not be fully reflected in the recordings.

The interview guide included the following research questions, though they were subject to further development as the study progressed.

By employing these methods, the study aimed to gather rich, descriptive data from the teachers, which would be analyzed to gain insights into their awareness of dyslexia and the barriers they face in identifying it. This approach was intended to provide a

comprehensive view of the current practices and challenges related to dyslexia identification in Malaysian schools.

Tabel 3. 1
Interview Guide

Research Questions	Interview Questions
1. How do elementary teachers identify the signs and symptoms of dyslexia in their students?	1. Do you know what dyslexia is?
	2. How familiar are you with the signs and symptoms of dyslexia?
	3. Have you received any formal training or professional development specifically focused on dyslexia? If yes, please describe the training.
2. What are the difficulties and challenges in identifying and facilitating dyslexic students in Malaysian elementary schools?	1. What specific challenges do you face in recognizing dyslexia among your students?
	2. Can you provide examples of situations where you suspected a student might have dyslexia but were unsure?
	3. What assessment tools and resources are currently available to you for identifying dyslexia?
	4. How do these limitations affect your ability to identify dyslexia accurately?
	5. How do time constraints within the school day affect your ability to identify and support students with dyslexia?
	6. How does the size of your class impact your ability to recognize and address dyslexia?
3. What coping strategies do teachers employ to assist dyslexic students in their learning process?	1. What strategies have you implemented to overcome the barriers to identifying dyslexia in your classroom?

Research Questions	Interview Questions
	2. Can you share any successful methods or interventions that have worked for you in supporting dyslexic students?
	3. What kind of support do you receive from your school administration and colleagues in addressing dyslexia?

These participants were selected to reflect a broad spectrum of experiences across different teaching levels and educational environments, contributing to a deeper understanding of the barriers and facilitators in teaching within the Malaysian educational landscape.

Observations on Ms. Vania

On the evening of May 31st, 2024, Ms. Vania, a dedicated teacher, arrived at a cozy cafe near the researcher's place. Dressed in a vibrant kurti (Indian outfit), she exuded a blend of grace and exhaustion, having just wrapped up a full day of teaching and tutoring. Despite her busy schedule, she had made time for this interview, which was scheduled to start at 7 PM. She had plans to visit the temple afterward, a moment of peace she clearly deserved.

As the cafe buzzed with the sounds of clinking cups and hushed conversations, Ms. Vania settled into her seat, a hint of nervousness in her eyes. The topic of the interview was dyslexia—a subject she wasn't entirely familiar with. The researcher, sensing her apprehension, began with a warm introduction, easing into the conversation.

Ms. Vania's journey as an educator began eight years ago. With a Bachelor's degree in Biotechnology and a Master's in Education focusing on Leadership and Management, she brought a wealth of knowledge to her classroom. She taught Science across all levels, both national and Cambridge, and Biology at the national and IGCSE levels. Her passion for teaching was evident, as she spoke of her students and the joy she found in making complex scientific concepts accessible to young minds.

However, when the conversation shifted to dyslexia, Ms. Vania's nervousness resurfaced. She admitted that while she had heard of the condition, her understanding was limited. This honesty was a testament to her character—willing to acknowledge gaps in

her knowledge and eager to learn more. The researcher gently guided the discussion, exploring Ms. Vania's experiences and observations related to students who might struggle with dyslexia.

Over the next thirty minutes, Ms. Vania shared her insights. She spoke of the challenges teachers face in identifying dyslexia, particularly in environments where awareness and resources are lacking. The interview concluded at 7:30 PM, and Ms. Vania prepared to leave for the temple, her mind likely swirling with new thoughts and questions about dyslexia. Her participation in this research underscored the crucial role teachers play in the lives of their students. Despite her initial nerves, she provided valuable perspectives that would contribute significantly to the understanding of teacher awareness and the barriers to identifying and facilitating support for dyslexic students

Observations on Ms. Natasha

On the afternoon of June 24th, 2024, I had the pleasure of interviewing Ms. Natasha, an English teacher with four years of experience, in one of the empty classrooms of an International School in Petaling Jaya, Selangor. It was 1:30 PM, just after school hours, and Ms. Natasha, looking fresh in her hijab, greeted me warmly with a beautiful smile, despite having just finished teaching for the day. As a Malay who speaks English fluently, she exuded a sense of calm and readiness for our discussion.

Ms. Natasha's educational journey began with a Bachelor's degree in Education, majoring in English. She has been teaching at an International School for a month, and the rest of her four-year teaching career was spent instructing English in various schools in Kuala Lumpur, Malaysia. Her passion for teaching and dedication to her students were evident throughout our conversation.

We began the interview almost immediately, delving into the topic of dyslexia. Over the next 30 minutes, Ms. Natasha shared her experiences and observations. She spoke candidly about her limited knowledge of dyslexia, despite suspecting that two of her current students exhibited symptoms of the condition. Her honesty and willingness to learn were evident as she described the challenges she faced in identifying and supporting these students.

The interview concluded at 2:00 PM, as Ms. Natasha had a staff meeting to attend. Her insights into the symptoms of dyslexia and the difficulties she encountered in addressing them highlighted the need for greater awareness and education on this topic among teachers.

Observations on Ms. Rita

On the afternoon of July 18th, 2024, I had the pleasure of meeting Ms. Rita, a tall and humble English teacher, in the school library of an International School in Petaling Jaya, Selangor. It was 2:00 PM, just after school hours, and we had 30 minutes to discuss her experiences before she had another commitment.

Ms. Rita, with eight years of teaching experience, greeted me warmly and immediately began to share her unique and heart-warming story about one of her students who is mildly dyslexic. When asked if she had heard about dyslexia and when she first learned about it, she instantly replied, "Through you," pointing to me, the researcher. What followed was a heartfelt recounting of her journey.

She described the struggles she faced not knowing what dyslexia was, having to resort to Google and other online resources to gather information. With little awareness and no formal training on the subject, she did her best to understand and support her student. Her dedication led to a profound bond between her and the student, changing the dynamics of their teacher-student relationship.

Ms. Rita shared that this boy, who struggled with writing in the first two terms of her class, managed to excel in his exams by the third term. It was an overwhelming experience for her to see the positive outcomes of her efforts and the coping strategies she implemented, despite the lack of school support and limited resources. Her story is a testament to the power of dedication, empathy, and the willingness to learn and adapt for the sake of her students.

Ms. Rita's experience highlights the challenges and rewards of supporting dyslexic students. Her story underscores the importance of teacher awareness and the need for proper resources and training to effectively identify and facilitate students with dyslexia. Through her candid reflections, Ms. Rita contributes to the broader understanding of the barriers and facilitators in identifying and supporting dyslexic students.

3.5   Data Analysis

The researcher selected Interpretative Phenomenological Analysis (IPA) for this study to explore teachers' awareness of dyslexia and the barriers they face in identifying it among elementary students in Malaysia. IPA is a qualitative research method that aims to understand how individuals make sense of their personal and social experiences. It focuses on the subjective experiences of participants, uncovering how they interpret and give meaning to their experiences. This approach was deemed most suitable because it allows for an in-depth exploration of how teachers perceive and navigate their experiences with dyslexia in their educational environments.

3.5.1   Interview Transcripts

The data analysis began with immersion in the collected data. The researcher engaged in repeated readings of the interview transcripts, noting initial impressions and insights. For example, the researcher carefully reviewed the transcripts of teachers discussing their awareness of dyslexia and the challenges they faced in its identification. This process involved detailed note-taking to gain a comprehensive understanding of the content and identify preliminary themes related to teachers' perceptions and experiences.

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Tabel 3. 2

Example of the Interview Transcript

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Milan: I think the first question you know will be, when was the first time you heard about dyslexia?
Rita: Working here, working with Sathya, and then I also have another kid, and then, it's always, I've never, in a million years, thought that he was a dyslexia kid, until you told me.
Milan: Oh, okay.
Rita: I couldn't, you know, get it. So, I tried my best to be easy on him, because I used to get really mad when he messes up his spelling. So, I used to be really, I get really frustrated. And then I realised, oh, so, partly, maybe it's my fault as well, I was like, you know, pestering him, oh, this, this, this, Sathya this, Sathya that, Sathya. So, when I actually know, and then only, I, like, toned down a bit.

3.5.2 Initial Coding

Following familiarization, the researcher systematically reviewed the interview transcripts to highlight significant statements, phrases, or sections relevant to the research questions. This systematic coding process involved marking key aspects of the participants' experiences, such as specific challenges encountered in recognizing dyslexia and their understanding of its characteristics. The researcher generated a key word to encapsulate the core focus of the analysis and developed 3 to 4 initial codes during this first step of data processing. These initial codes were derived directly from the data and reflected the critical issues raised by teachers, ensuring a thorough examination of their perspectives and experiences related to dyslexia. (Miles, Huberman, & Saldaña, 2014; Creswell, 2013).

Tabel 3. 3 Example of Highlighted Interview Transcript

Milan: Okay, so have you heard about dyslexia?
Natasha: Yes, but it's just very general.
Milan: Okay, in your opinion, what is dyslexia?
Natasha: In my understanding, I think dyslexia means the students or the children have difficulty in recognizing letters and also writing letters the correct way.
Milan: Okay, so are you familiar with the signs and symptoms of dyslexia?
Natasha: I think I'm familiar with the most common one, which is like they write the letters the other way around or they write the whole word the other way around. They spell it from the back to the start. Mirror image.

3.5.3 Developing Themes

The next step was to group similar codes into broader themes. For instance, codes related to challenges in identifying dyslexia were organized into themes such as "Barriers to Identification of Dyslexia ," "Understanding Dyslexia," and "Coping Strategies". This thematic organization involved identifying patterns and connections between the initial codes, creating coherent categories that captured the essence of the participants' experiences (Braun & Clarke, 2006). By grouping the codes into these broader themes, the researcher was able to develop a structured framework for understanding the barriers teachers face in identifying dyslexia.

Tabel 3. 4
Example of Developing Themes

Highlighted Interview Transcript	Developing Themes
Ms. Rita: ".. *the parents, you don't need to feel, I do not know, maybe embarrassed. I have no idea, denial*"	Barriers to Identification of Dyslexia
Ms. Vania: "*Students' behavior... it won't be normal like how other students are... the first thing I would say their writing, talking and then I will discuss the particular student with other teachers is that really...*"	Understanding Dyslexia
Ms. Natasha: "*the best I can do is just give a more closer approach, like one-to-one approach where I have to dictate exactly what to write*"	Coping strategies

3.5.4 Clustered Themes

In qualitative data analysis, after compiling all the themes from the entire transcript, the next step involves identifying connections and grouping similar themes together. This process helps in understanding the conceptual similarities among the themes, making it easier to cluster them into meaningful groups. Each cluster is then given a descriptive label that encapsulates the essence of the grouped themes. During this stage, some themes may be dropped if they do not fit well with the emerging structure or if they have a weak evidential base. This refinement ensures that only the most relevant and supported themes are included in the final analysis.

Once the themes are grouped and labeled, the documentation process varies depending on the method used. For those using traditional pen and paper, this involves writing comments and themes in the margin, creating a list of major themes and subthemes, and including relevant short extracts from the transcript with line numbers for easy reference.

Tabel 3. 5
Example of Clustered Themes

Developing Themes	Clustered Themes
Limited awareness and Lack of formal training Parental Denial	Barriers to Identification of Dyslexia
Clueless Outlier	Understanding Dyslexia
Motivation and Encouragement Adjusted Expectations Bonding	Coping strategies

3.5.5 Interpreting Themes

Each theme was analyzed in depth to understand its significance in relation to the research questions. The researcher examined how themes like "Lack of Training" and "Resource Constraints" reflected teachers' perceptions and experiences. This analysis aimed to address the research questions about the barriers to identifying dyslexia and how these challenges impact teachers' ability to support dyslexic students effectively. The interpretation involved considering how these themes contributed to answering the research questions and provided insights into the broader context of dyslexia identification in Malaysia (Larkin, Watts, & Clifton, 2006).

Table 3. 6
Example of Interpreting Themes

The participants' awareness on the signs and symptoms of dyslexia play a significant role in their ability to identify and facilitate students with the disorder.

"What I understand about dyslexia, that's pretty much it, just writing stuff mirrored and the other way around, right? Yeah. I think it's a sign of dyslexia. I'm not sure about other symptoms"- Ms. Natasha (Interview, 24th June 2024)

Ms. Natasha's understanding of dyslexia seems to be limited to the more obvious signs, such as mirrored or reversed writing. Her awareness of these symptoms reflects her exposure to common dyslexia characteristics, but she admits uncertainty about other possible signs. This limited perspective highlights a gap in

her knowledge, likely due to a lack of formal training on dyslexia. Without training, she may not be fully aware of the broader range of dyslexia symptoms, which can hinder her ability to identify and support students with diverse manifestations of the disorder.

3.6   Researcher's Reflective Analysis

The researcher engaged in reflective thinking about how personal perspectives and biases might influence the interpretation of the data. Her journey with understanding and addressing dyslexia began six years ago when my son was diagnosed with mild dyslexia. At that time, he was in Grade One, and his teachers frequently complained about his lack of concentration, distractibility, and perceived naughtiness in class. We were advised to take "cuti sekolah" (school leave) to undergo a 3-6 month therapy program at a dyslexia center in Kuala Lumpur.

Fast forward to the present day, my son has just completed Grade Six, yet the challenges remain. Despite explaining his condition to his teachers, many continue to label him as easily distracted and talkative. Their approach often lacks genuine understanding and initiative. They justify their lack of support with statements like, "We treat everyone equally here," and merely offer extra time for tasks, which is insufficient. My primary concern has always been his frustrations and emotional well-being, especially when teachers yell at him.

This personal journey has undeniably shaped my perspective and biases, influencing how I interpret the data collected from my research on teachers' views and experiences with dyslexia. My frustrations with the lack of support and understanding from many teachers highlight my bias towards expecting more proactive and empathetic behavior from educators. This bias can affect my interpretation of the data, potentially leading me to emphasize the shortcomings and challenges faced by dyslexic students and their parents.

However, amidst these challenges, a glimmer of hope emerged in the form of Ms. Rita, one of my son's teachers and a participant in my research. Despite her minimal knowledge about dyslexia, she took the extra mile to support him. She independently researched ways to facilitate his learning and, without realizing it, implemented

Vygotsky's scaffolding method through repetition in her teachings. Additionally, she applied intrinsic motivation theory, fostering a nurturing teacher-student relationship. This approach not only resonated with my son but also helped him excel in the subject she taught.

Ms. Rita's dedication and hard work led to a remarkable improvement in my son's performance and behavior. Her experience highlights a critical insight: teachers who are willing to take the initiative to understand and support students with specific learning difficulties can make a significant difference. This positive experience with Ms. Rita demonstrates my appreciation for teachers who go beyond standard practices, further influencing my analysis by emphasizing the importance of inclusivity and proactive support in educational settings. Additionally, it underscores the need for dyslexia training to equip teachers with the knowledge and tools necessary to support dyslexic students, thereby preventing teachers from feeling frustrated by their inability to help.

By acknowledging these personal experiences and biases, I aim to maintain objectivity in my research. Recognizing both the general lack of support from many teachers and the exceptional efforts of Ms. Rita allows me to balance my view and appreciate the diverse experiences and approaches of different educators. This helps ensure that my analysis remains grounded in the participants' viewpoints, focusing on their actual practices and insights rather than solely my expectations.

In conclusion, my reflective analysis demonstrates the influence of personal perspectives and biases on the interpretation of data regarding dyslexia. By acknowledging these potential influences and striving to maintain objectivity, I aim to ensure that my research accurately reflects the views and experiences of the teachers involved, ultimately contributing to a better understanding of how to support students with dyslexia."

3.7 Validation

To ensure the accuracy and credibility of the findings, the researcher employed validation techniques. This included comparing the identified themes with the raw data to verify accuracy and consistency. Additionally, feedback was sought from peers and member checking was conducted with participants to validate the findings. This process

ensured that the themes and interpretations accurately represented the teachers' experiences and perceptions regarding dyslexia and its identification in Malaysian elementary schools. (Creswell, 2013).

Through this comprehensive analysis using IPA, the researcher aimed to provide a nuanced understanding of teachers' experiences and the challenges they face in identifying dyslexia, contributing valuable insights to the field of education and supporting the development of more effective strategies for addressing dyslexia in Malaysia.

3.8 Ethical Considerations

In qualitative research, ethical considerations are paramount to safeguarding the rights and well-being of participants. For this study, which investigates teachers' awareness of dyslexia and the challenges in identifying it among elementary students in Malaysia, several critical ethical practices were observed:

3.8.1 Informed Consent

Participants were provided with detailed information about the study's objectives, procedures, potential risks, and benefits. They were given a written informed consent, ensuring they understood and agreed to participate in the research.

3.8.2 Confidentiality and Anonymity

To protect participants' privacy, pseudonyms were used instead of their real names. This measure ensured that their personal identities were not disclosed in any reporting or publications, thereby maintaining confidentiality and anonymity.

3.8.3 Voluntary Participation

Participation was entirely voluntary. Teachers were informed of their right to withdraw from the study at any point without facing any negative consequences. This guaranteed that their involvement was based on free and informed choice.

3.8.3 Data Storage and Security

Collected data was securely stored to prevent unauthorized access. Measures such as encryption and password protection were employed to ensure that data remained confidential and protected throughout the study.

3.8.4 Researcher-Participant Relationship

The researcher maintained a professional and respectful relationship with participants, demonstrating empathy and sensitivity towards their experiences and concerns. This approach facilitated an environment of trust, essential for gathering honest and meaningful insights