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Enhancing Teacher Competence: A Qualitative Exploration of Preschool Teachers' Knowledge and Skills in Supporting Children with Special Educational Needs

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ABSTRACT

Preschool teachers play an important role in identifying and supporting children with special educational needs (SEN) within inclusive preschool classrooms. As inclusive education continues to expand in Malaysia, preschool teachers are expected to address diverse learning needs while providing appropriate educational support. However, many teachers continue to experience challenges related to limited specialized training, classroom management, and access to professional support. This study aimed to explore preschool teachers' knowledge, practical skills, challenges, and professional development needs in supporting children with special educational needs within preschool settings. A qualitative exploratory design was employed using purposive sampling. Semi-structured interviews were conducted with eight government preschool teachers who had direct experience in supporting children with SEN. The interview data were analyzed using Braun and Clarke's thematic analysis framework. Four themes emerged from the analysis: knowledge and understanding of children with SEN, practical skills in supporting children with SEN, challenges in supporting children with SEN, and professional development and support needs. The findings showed that teachers possessed foundational knowledge and practical classroom skills; however, these competencies were developed mainly through teaching experience rather than formal specialized training. Participants also highlighted the need for continuous professional development, stronger institutional support, and greater collaboration among education professionals. The findings provide useful insights for policymakers, school administrators, and teacher educators in strengthening teacher preparation and improving inclusive preschool education.

1. Introduction

Inclusive and equitable education has become a global priority under the United Nations Sustainable Development Goals (SDGs), particularly Sustainable Development Goal 4 (SDG 4), which

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aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Central to this agenda is the principle of “Leave No One Behind” (LNOB), which emphasizes the inclusion of vulnerable and marginalized populations, including children with disabilities and special educational needs. The global commitment to inclusive education highlights the importance of providing equal educational opportunities and ensuring that all children can participate meaningfully in learning regardless of their developmental, physical, social, or cognitive differences [21].

Children with special educational needs (SEN) often experience challenges in areas such as communication, learning, behaviour, social interaction, and adaptive functioning, which may affect their participation in educational settings. According to the World Health Organization (WHO), more than one billion people worldwide live with some form of disability, including a significant number of children who require additional educational and developmental support [22]. Early identification and intervention are therefore essential, as they can significantly improve developmental outcomes and reduce the long-term impact of developmental delays. Previous studies have highlighted the importance of providing timely intervention and support services for children with developmental delays and disabilities, particularly during the early childhood years when developmental growth is most rapid [1,5].

In Malaysia, the commitment to providing inclusive and equitable education is reflected in various national policies and educational reforms. The Education Act 1996 (Act 550) recognizes preschool education as an integral component of the national education system and highlights the importance of providing educational opportunities for all children. This commitment was further strengthened through the Malaysia Education Blueprint (MEB) 2013–2025, which emphasizes equal access to quality education and increased participation of children with special educational needs in educational settings. More recently, the Malaysia Education Blueprint 2026–2035 continues to reinforce the principles of educational equity, inclusive and learner-centred education, reflecting the nation’s aspiration to ensure that all children, regardless of their abilities and backgrounds, have access to meaningful learning opportunities. These policy initiatives demonstrate Malaysia’s ongoing efforts to strengthen inclusive education practices and support diverse learners from the early years of education.

Preschool teachers play a crucial role in supporting the learning and development of children with special educational needs within inclusive classroom environments. As front-line educators, they are often among the first professionals to identify developmental concerns, monitor children’s progress, and implement appropriate learning strategies to support diverse educational needs. To perform these responsibilities effectively, teachers require adequate knowledge of the characteristics, developmental needs, and learning profiles of children with special educational needs. In addition, they need practical skills in adapting instructional approaches, managing classroom behaviour, facilitating social interaction, and creating inclusive learning environments that promote meaningful participation for all children [8,24]. Therefore, teachers’ knowledge and skills are recognized as essential components in enhancing teacher competence and ensuring the successful implementation of inclusive education practices in preschool settings.

Despite the growing emphasis on inclusive education, several studies have reported that preschool teachers continue to face difficulties in supporting children with special educational needs within preschool classrooms. Previous research indicates that teachers’ knowledge and preparedness for inclusive practices vary considerably, particularly in identifying developmental characteristics and implementing appropriate educational support strategies [13,16]. Furthermore, many teachers report limited exposure to special training and professional development related to special educational needs, which may affect their confidence and effectiveness in supporting diverse

learners [19]. Existing literature has also highlighted challenges related to classroom management, instructional adaptation, and the implementation of inclusive practices in early childhood settings [2].

Although previous studies have contributed to a better understanding of inclusive education and teacher readiness, most have examined teachers' knowledge, attitudes, or preparedness as separate aspects, particularly through quantitative approaches. Consequently, there is limited qualitative evidence on how preschool teachers develop and apply their knowledge and practical skills while supporting children with special educational needs in preschool classrooms. In addition, preschool teachers' professional development and support needs remain insufficiently explored, particularly within the Malaysian preschool context. This research gap highlights the need for a more comprehensive understanding of preschool teachers' experiences in supporting children with special educational needs. Accordingly, this study seeks to address this gap by providing qualitative evidence on preschool teachers' knowledge, practical skills, challenges, and professional development needs in supporting children with special educational needs within the Malaysian preschool context.

In line with the expansion of inclusive education policies in Malaysia, preschool teachers are increasingly expected to support children with special educational needs (SEN) within preschool classrooms. However, many teachers continue to encounter considerable challenges due to limited specialized training, insufficient institutional support, and increasing classroom demands. Consequently, many teachers rely primarily on their teaching experience rather than formal professional preparation when supporting children with SEN. These issues highlight the need for a deeper understanding of preschool teachers' experiences, practical skills, and professional support needs to strengthen teacher competence and improve inclusive preschool education.

In response to these concerns, this study aims to explore preschool teachers' knowledge, practical skills, challenges, and professional development needs in supporting children with special educational needs (SEN) within preschool settings. Specifically, the study seeks to gain a deeper understanding of how preschool teachers develop and apply their knowledge and practical skills, the challenges they encounter in implementing inclusive practices, and the professional support required to strengthen teacher competence. The findings of this study are expected to provide useful insights for policymakers, school administrators, and teacher educators in strengthening teacher preparation and improving inclusive preschool education practices.

2. Literature Review

This section reviews previous literature related to preschool teachers' competence in supporting children with special educational needs (SEN). The literature is organized around five key areas: the characteristics of children with SEN, preschool teachers' knowledge, practical skills, teacher competence, and the research gap that informs the present study. Collectively, these discussions provide the conceptual foundation for understanding preschool teachers' experiences in supporting children with SEN within inclusive preschool settings.

2.1 Children with Special Educational Needs

Children with special educational needs (SEN) refer to children who require additional educational support due to developmental, cognitive, behavioral, emotional, sensory, or physical difficulties that may affect their learning and participation in educational settings. These children may experience conditions such as autism spectrum disorder (ASD), learning disabilities, speech and language delays, attention deficit hyperactivity disorder (ADHD), intellectual disabilities, or other

developmental challenges [8,9]. The diverse nature of special educational needs requires educational approaches that are responsive to individual learning characteristics and developmental needs.

Early identification and intervention are widely recognized as essential factors in supporting the development of children with special educational needs. Research suggests that timely intervention can improve developmental outcomes, enhance social participation, and facilitate children's successful transition into formal education [1,5]. In preschool settings, teachers play a critical role in observing developmental milestones, identifying potential concerns, and collaborating with families and professionals to provide appropriate support. Consequently, understanding the characteristics and educational needs of children with special educational needs is fundamental for promoting effective inclusive practices in early childhood education.

2.2 Preschool Teachers' Knowledge in Supporting Children with Special Educational Needs

Teacher knowledge is a fundamental component of effective inclusive education. In the context of special educational needs (SEN), teachers are expected to possess adequate knowledge of child development, disability characteristics, learning differences, and appropriate educational interventions. Such knowledge enables teachers to identify developmental concerns, understand individual learning needs, and provide appropriate support for children within inclusive classroom environments. Without sufficient knowledge, teachers may face difficulties in recognizing the early signs of developmental delays and implementing effective instructional strategies to support children's learning and participation.

Previous studies have highlighted the importance of teacher knowledge in enhancing inclusive educational practices. Gómez-Marí *et al.*, [8] reported that teachers' knowledge of autism spectrum disorder and other developmental conditions significantly influences their ability to support children with diverse learning needs. Similarly, Yusof and Ismail [24] found that preschool teachers' readiness to accept and support children with special needs was closely related to their level of knowledge and understanding of inclusive education. However, studies conducted in Malaysia indicate that many preschool teachers continue to demonstrate only moderate levels of knowledge regarding special educational needs, particularly in identifying characteristics, understanding intervention approaches, and addressing diverse learning needs in classrooms [13,16]. These findings suggest the need for continuous professional development to strengthen teachers' knowledge and improve their capacity to support children with special educational needs effectively.

2.3 Preschool Teachers' Skills in Supporting Children with Special Educational Needs

In addition to knowledge, practical teaching skills are essential for supporting children with special educational needs (SEN) in inclusive preschool classrooms. Teacher skills refer to the ability to apply knowledge effectively in real classroom situations, including identifying children's needs, adapting instructional strategies, managing behaviour, facilitating communication, and creating supportive learning environments. These skills enable teachers to respond appropriately to the diverse developmental and educational needs of children and ensure meaningful participation in learning activities.

Research has shown that teachers require a range of specialized skills to effectively support children with special educational needs. These include classroom management skills, communication skills, behaviour management strategies, observational skills, and the ability to modify teaching approaches according to individual learning needs [4]. Furthermore, Allam and Martin [2] reported that teachers frequently encounter challenges in managing behavioral difficulties and addressing

diverse learning needs due to insufficient practical training and limited professional support. Similarly, Kozikoğlu and Albayrak [12] found that teachers often experience difficulties in implementing individualized educational practices despite recognizing their importance for supporting children with special educational needs.

In preschool settings, effective instructional adaptation and positive teacher-child interactions are particularly important because young children learn through active engagement, social interaction, and play-based experiences. Teachers who possess strong practical skills are better equipped to provide inclusive learning opportunities, promote positive social participation, and support children's overall development. Therefore, strengthening teachers' practical skills is an important aspect of enhancing teacher competence and improving the quality of inclusive preschool education.

2.4 Teacher Competence in Inclusive Education

Teacher competence is widely recognized as a key factor in the successful implementation of inclusive education. Competence extends beyond possessing theoretical knowledge and encompasses the ability to apply knowledge, skills, attitudes, and professional judgement effectively in educational practice. In the context of inclusive preschool education, competent teachers are expected to understand the diverse needs of children with special educational needs (SEN) and provide appropriate educational support that promotes participation, learning, and overall development.

Previous studies have highlighted that teacher competence is closely associated with teachers' knowledge and practical skills in supporting children with special educational needs. Byrd and Alexander [4] emphasized that teachers require both special knowledge and practical competencies to address the diverse learning needs of children in inclusive settings. Similarly, Ueda *et al.*, [20] reported that teachers who received appropriate training and professional support demonstrated greater confidence and effectiveness in implementing inclusive practices. Competent teachers are better equipped to identify developmental concerns, adapt instructional strategies, collaborate with families and professionals, and create inclusive learning environments that support all children.

Despite the growing emphasis on inclusive education, developing teacher competence remains a significant challenge in many educational contexts. Limited professional development opportunities, insufficient specialized training, and a lack of ongoing support may hinder teachers' ability to effectively support children with special educational needs [19]. Therefore, strengthening teachers' knowledge and practical skills is essential for enhancing teacher competence and ensuring the successful implementation of inclusive education in preschool settings.

Drawing upon the existing literature, this study views teacher competence as a holistic combination of preschool teachers' knowledge, practical skills, professional experiences, and continuous learning in supporting children with special educational needs. Rather than examining these elements as separate variables, the study seeks to explore how they interact within teachers' everyday classroom practices and shape their confidence in providing inclusive education. Understanding these experiences may provide valuable insights for strengthening professional support, teacher preparation, and inclusive preschool education practices.

2.5 Research Gap

The existing literature has contributed significantly to understanding inclusive education and the role of teachers in supporting children with special educational needs (SEN). Previous studies have

examined teachers' knowledge, attitudes, readiness, and challenges related to inclusive education [13,19,24]. Other studies have highlighted the importance of specialized knowledge and practical skills in supporting children with developmental disabilities and diverse learning needs [4,8]. Despite these contributions, much of the existing research has focused on measuring teachers' levels of knowledge, attitudes, and preparedness using quantitative approaches.

Furthermore, limited attention has been given to exploring how preschool teachers develop, apply, and experience their knowledge and skills when supporting children with special educational needs in preschool classrooms. The voices and lived experiences of preschool teachers remain underrepresented in the literature, particularly within the context of inclusive preschool education. Given that preschool teachers are often among the first professionals to identify developmental concerns and provide educational support, a deeper understanding of their experiences is essential. Therefore, this study seeks to address this gap by exploring preschool teachers' knowledge, practical skills, challenges, and professional development needs in supporting children with special educational needs within preschool settings. By examining teachers' lived experiences and perspectives, the study aims to provide a more comprehensive understanding of teacher competence and generate meaningful insights that may strengthen professional support and inclusive preschool education practices. This study therefore contributes to the existing body of knowledge by providing qualitative evidence on preschool teachers' lived experiences in supporting children with SEN within Malaysian preschool settings.

3. Methodology

3.1 Research Design

This study adopted a qualitative exploratory design to gain an in-depth understanding of preschool teachers' knowledge and skills in supporting children with special educational needs (SEN). A qualitative exploratory approach was considered appropriate because it enables researchers to explore participants' experiences, perspectives, and interpretations of a phenomenon within its natural context [6]. This research design was particularly suitable for addressing the study objectives, which sought to explore how preschool teachers understand and apply their knowledge and skills when supporting children with SEN.

The study was grounded in the interpretative paradigm, which assumes that individuals construct meaning based on their experiences and interactions within specific social contexts. This paradigm was considered appropriate because the study aimed to understand how preschool teachers perceive, develop, and apply their knowledge and skills through their lived experiences of supporting children with special educational needs.

An exploratory design was particularly suitable because limited qualitative evidence is available regarding how preschool teachers develop and apply their knowledge and practical skills while supporting children with SEN in preschool settings. By adopting this approach, the study enabled a deeper exploration of teachers' experiences, perceptions, and professional practices, thereby providing valuable insights into the factors that influence their competence in supporting children with special educational needs.

3.2 Participants and Sampling

Participants were selected using purposive sampling, a technique commonly employed in qualitative research to identify individuals who possess relevant knowledge and experience related to the phenomenon under investigation. The participants comprised government preschool teachers

currently teaching in preschool classrooms. To ensure the collection of rich and meaningful data, participants were required to meet specific inclusion criteria, including having at least ten years of teaching experience and direct experience in supporting children with special educational needs (SEN) within preschool settings. These criteria ensured that the participants possessed substantial professional experience and were able to provide valuable insights into the knowledge, skills, and challenges associated with supporting children with SEN.

A total of eight preschool teachers participated in this study. In qualitative exploratory research, the emphasis is placed on obtaining rich and meaningful information rather than achieving a large sample size. The selected participants were considered appropriate because their extensive professional experience and direct involvement in supporting children with SEN enabled the researcher to obtain in-depth insights into teachers' knowledge, skills, and the challenges encountered when supporting children with special educational needs.

3.3 Research Setting

This study was conducted in the Seremban District, Negeri Sembilan, Malaysia, involving government preschool teachers under the Ministry of Education Malaysia. The Seremban District was selected because it provided an appropriate educational context for exploring preschool teachers' knowledge and skills in supporting children with special educational needs (SEN). The selected setting enabled the researcher to gain in-depth insights into teachers' experiences and professional practices within the context of government preschool education.

The interviews were conducted at locations agreed upon by the participants to ensure their convenience and comfort. Depending on the participants' preferences and availability, the interview sessions were held either at their respective schools or at their residences. Conducting the interviews in familiar and comfortable environments encouraged participants to share their experiences openly, thereby facilitating the collection of rich and meaningful qualitative data.

3.4 Data Collection

Data were collected through semi-structured individual interviews with preschool teachers who met the established selection criteria. The interviews were conducted either face-to-face or online, depending on the participants' availability and preferences. Each interview session lasted approximately 30 to 60 minutes, allowing participants sufficient time to share their experiences and perspectives in depth.

Prior to the interviews, participants were informed about the purpose of the study, the voluntary nature of their participation, and their right to withdraw from the study at any stage without any negative consequences. Informed consent was obtained from all participants before the interviews commenced. With the participants' permission, all interview sessions were audio-recorded to ensure the accuracy and completeness of the data collected. The recorded interviews were subsequently transcribed verbatim to facilitate the data analysis process.

3.5 Research Instrument

The primary instrument used in this study was a semi-structured interview protocol. A semi-structured interview was selected because it allows participants to describe their experiences, perspectives, and practices in their own words while providing the researcher with the flexibility to explore issues relevant to the research objectives in greater depth. The interview protocol consisted

of open-ended questions designed to explore preschool teachers' knowledge, skills, experiences, and challenges in supporting children with special educational needs (SEN). The interview questions were developed based on the research objectives and informed by the relevant literature related to preschool teachers' competence in supporting children with special educational needs.

Prior to the main data collection, the interview protocol was reviewed by two experts to establish its content validity. The expert panel comprised a university lecturer in early childhood education and a senior government preschool teacher who served as a preschool teacher trainer appointed by the District Education Office and had more than ten years of professional experience. The review was conducted to evaluate the clarity, relevance, and appropriateness of the interview questions and to ensure their alignment with the research objectives.

A pilot interview was subsequently conducted with a government preschool teacher who met the study's inclusion criteria but was not involved in the main study. The pilot interview was undertaken to assess the clarity, sequence, and suitability of the interview questions, as well as the overall interview process. Minor revisions were made based on the feedback obtained before the final interview protocol was used for the main data collection.

3.6 Data Analysis

The interview data were analyzed using inductive thematic analysis following Braun and Clarke's (2020) six-phase framework. This method was selected because it provides a systematic and flexible approach for identifying, analyzing, and interpreting patterns of meaning across qualitative data. An inductive approach was adopted to allow themes to emerge directly from the participants' experiences and perspectives rather than being predetermined by existing theories or assumptions.

The analysis began with familiarization with the interview transcripts through repeated reading to gain an overall understanding of the data. Initial codes were then generated to identify meaningful features relevant to the research objectives. The coded data were subsequently examined to identify potential themes, which were reviewed and refined to ensure that they accurately represented the participants' responses. The themes were then defined and named before the findings were organized into a coherent narrative.

Throughout the analysis, the researcher moved alliteratively between the interview transcripts, codes, and emerging themes to ensure that the interpretations remained grounded in the data. This iterative process enabled the researcher to identify meaningful patterns related to preschool teachers' knowledge, skills, experiences, and challenges in supporting children with special educational needs (SEN).

3.7 Trustworthiness

The trustworthiness of this study was established based on the criteria proposed by Lincoln and Guba (1985), namely credibility, transferability, dependability, and confirm ability. These criteria were adopted to enhance the rigor and quality of the qualitative research process.

Credibility was enhanced through the use of a semi-structured interview protocol that underwent expert review prior to the main data collection. A pilot interview was also conducted to improve the clarity and suitability of the interview questions before they were used in the main study. During data collection, all interviews were audio-recorded with the participants' consent and transcribed verbatim to ensure that the data accurately reflected the participants' responses.

Transferability was supported by providing a clear description of the research setting, participants, and data collection procedures, enabling readers to determine the applicability of the

findings to other educational contexts. Dependability was enhanced by applying consistent procedures throughout the research process, including participant selection, interview procedures, verbatim transcription, and thematic analysis. Confirmability was achieved by ensuring that the interpretations and findings were grounded in the participants' accounts and supported by the interview data throughout the analytical process.

4. Findings

This section presents the findings derived from semi-structured interviews conducted with eight government preschool teachers. All participants had direct experience in supporting children with special educational needs (SEN) and possessed between 12 and 29 years of teaching experience. Although only three participants had received formal training in special education, all had practical experience in supporting children with SEN in preschool classrooms.

The thematic analysis generated four main themes: (1) Knowledge and Understanding of Children with SEN, (2) Practical Skills in Supporting Children with SEN, (3) Challenges in Supporting Children with SEN, and (4) Professional Development and Support Needs. The themes and their corresponding sub-themes are presented in Table 1.

Table 1

Summary of themes and sub-themes identified through thematic analysis

Theme	Sub-themes
Knowledge and Understanding of Children with SEN	Recognition of Common Characteristics and Categories of SEN; Understanding of Diverse Educational Support Needs
Practical Skills in Supporting Children with SEN	Differentiated Instruction; Adaptive Pedagogical Practices
Challenges in Supporting Children with SEN	Limited Professional Training; Classroom Management Difficulties; Safety Concerns; Balancing Diverse Learning Needs
Professional Development and Support Needs	Continuous Professional Development; Professional Collaboration; Institutional Support

Table 1 summarises the four main themes and their corresponding sub-themes identified through the thematic analysis. These themes represent preschool teachers' knowledge, practical skills, challenges, and professional development needs in supporting children with special educational needs (SEN). The findings for each theme are presented in the following sections.

4.1 Knowledge and Understanding of Children with Special Educational Needs

Analysis of the interview data indicated that preschool teachers generally demonstrated a foundational understanding of children with special educational needs (SEN). Participants were able to recognise common categories and characteristics of SEN based on their classroom experiences and interactions with children. The analysis further revealed two sub-themes: (1) Recognition of Common Characteristics and Categories of SEN and (2) Understanding of Diverse Educational Support Needs.

4.1.1 Recognition of common characteristics and categories of SEN

Most participants recognised children with SEN by referring to observable behavioural, cognitive, learning, and physical characteristics commonly encountered in preschool classrooms. Autism Spectrum Disorder (ASD), Attention Deficit Hyperactivity Disorder (ADHD), learning difficulties,

developmental delays, and physical disabilities were frequently identified as the most common conditions. One participant explained, "Autism and ADHD are the most common conditions that we encounter in preschool classrooms" (P3). Another participant noted that children with SEN may present with physical disabilities as well as cognitive and behavioural difficulties (P4). These responses suggest that participants were generally able to recognise the common characteristics and categories of SEN through their professional teaching experiences rather than through formal special education training.

4.1.2 Understanding of diverse educational support needs

Beyond recognising SEN characteristics, several participants demonstrated an awareness that children with SEN require different levels of educational support. One participant explained that children may experience varying degrees of physical disabilities or learning difficulties, while another highlighted that some children are able to participate successfully in preschool classrooms with appropriate support, whereas others require more specialised educational services (P7; P8). These findings indicate that participants understood that children with SEN have diverse learning needs and that educational support should be adapted according to each child's individual abilities and developmental needs.

Overall, the findings suggest that preschool teachers possessed a foundational understanding of children with SEN and were generally able to recognise both common SEN characteristics and the diverse educational support needs of these children. However, participants' knowledge appeared to be developed primarily through professional experience and classroom practice, highlighting the importance of continuous professional development to further strengthen teachers' knowledge and competence in supporting children with SEN.

4.2 Practical Skills in Supporting Children with Special Educational Needs

Analysis of the interview data demonstrated that preschool teachers employed a range of practical skills to support children with special educational needs (SEN) in their classrooms. Although most participants acknowledged having limited formal training in special education, they described adapting their teaching approaches according to children's individual learning needs and classroom situations. Two sub-themes emerged from the data: (1) Differentiated Instruction and (2) Adaptive Pedagogical Practices.

4.2.1 Differentiated instruction

Participants consistently emphasised the importance of modifying teaching approaches according to the individual abilities and learning needs of children with SEN. Several teachers reported providing individualised instruction, repeated learning activities, visual supports, and targeted interventions to facilitate children's engagement and learning. One participant explained that children with SEN required repeated instruction and greater use of visual materials rather than text-based activities (P5). Another participant highlighted that different instructional approaches should be implemented according to each child's level of ability and learning needs (P8). Similarly, P2 reported conducting individual teaching sessions for children who required additional support, while P3 explained that children with SEN followed individual educational plans that required different instructional approaches from those used with other preschool children. These responses indicate

that participants recognised the importance of differentiated instruction in addressing the diverse learning needs of children with SEN.

4.2.2 Adaptive pedagogical practices

Participants also described adapting their pedagogical practices to create learning environments that were more responsive to children with SEN. Various child-centred teaching strategies, including play-based learning, learning through play, digital game-based learning, and classroom interventions, were frequently mentioned as effective approaches for promoting children's participation and engagement. One participant explained that these pedagogical approaches benefited both typically developing children and children with SEN because they promoted active participation in classroom learning (P4). Other participants further emphasised that preschool teachers should possess strong pedagogical knowledge, classroom management skills, and socio-emotional competencies to effectively support children with SEN (P7; P8). These findings suggest that effective support for children with SEN requires teachers to integrate flexible pedagogical practices with appropriate classroom management and socio-emotional skills to accommodate diverse learning needs.

Overall, the findings indicate that preschool teachers demonstrated practical skills in supporting children with SEN by adapting instructional strategies and pedagogical practices according to children's individual learning needs. However, participants also recognised that strengthening these skills through continuous professional development would further enhance their ability to provide effective and inclusive learning experiences for children with SEN.

4.3 Challenges in Supporting Children with Special Educational Needs

Analysis of the interview data indicated that preschool teachers encountered various challenges when supporting children with special educational needs (SEN) in preschool classrooms. Although participants demonstrated commitment to providing appropriate support, they acknowledged that several factors limited their ability to meet the diverse needs of children with SEN effectively. Four sub-themes emerged from the analysis: (1) Limited Professional Training, (2) Classroom Management Difficulties, (3) Safety Concerns, and (4) Balancing Diverse Learning Needs.

4.3.1 Limited professional training

Most participants reported that they had not received formal training in special education and felt that this limited their confidence and competence in supporting children with SEN. Several participants explained that they were willing to attend professional training because they believed additional knowledge and practical skills were necessary to support children with diverse learning needs. One participant stated that teachers required specific knowledge and skills to manage children with SEN effectively (P6), while another explained that teachers should receive appropriate training before being expected to support children with SEN in preschool classrooms (P5). These responses suggest that limited professional training remains one of the main challenges experienced by preschool teachers when supporting children with SEN.

4.3.2 Classroom management difficulties

Participants also described classroom management as one of the most challenging aspects of teaching children with SEN. Several teachers explained that children with behavioural difficulties

often required continuous attention, making it difficult to manage the entire class and deliver lessons effectively. One participant shared that managing children with challenging behaviours disrupted classroom teaching and learning activities (P1), while another reported that limited knowledge and skills affected the delivery of classroom instruction (P7). These findings indicate that classroom management remains a significant challenge, particularly when teachers are required to support children with diverse learning needs within the same classroom.

4.3.3 Safety concerns

Another challenge highlighted by participants was ensuring the safety and well-being of all children in the classroom. Several participants expressed concerns about the possibility of children with SEN hurting themselves or unintentionally affecting the safety of other children. One participant explained that safety was a major concern when supporting children with SEN because teachers were responsible for ensuring the well-being of every child in the classroom (P5). Another participant was concerned about unexpected situations that could arise while managing children with challenging behaviours (P3). These responses suggest that safety considerations influenced teachers' confidence in supporting children with SEN in preschool classrooms.

4.3.4 Balancing diverse learning needs

Participants further explained that balancing the learning needs of children with SEN and typically developing children was a continuous challenge. They reported that providing additional attention to children with SEN sometimes reduced the time available to support other children. One participant explained that both children with SEN and typically developing children should receive appropriate learning opportunities without compromising the quality of instruction (P8). Another participant expressed concern that children with SEN might not receive the educational support they required if teachers were responsible for meeting the needs of the entire class simultaneously (P2). These findings suggest that balancing diverse learning needs remains a major challenge for preschool teachers in inclusive preschool classrooms.

Overall, the findings indicate that preschool teachers faced several interconnected challenges when supporting children with SEN, particularly in relation to professional training, classroom management, safety, and balancing the learning needs of all children. These challenges highlight the importance of providing appropriate support and professional development to strengthen teachers' competence in inclusive preschool education.

4.4 Professional Development and Support Needs

Analysis of the interview data indicated that preschool teachers recognised the importance of continuous professional development and institutional support in strengthening their competence to support children with special educational needs (SEN). Although participants demonstrated commitment to providing appropriate learning experiences, they consistently emphasised that additional training and professional support were essential to enhance their knowledge, skills, and confidence. Three sub-themes emerged from the analysis: (1) Continuous Professional Development, (2) Professional Collaboration, and (3) Institutional Support.

4.4.1 Continuous professional development

Most participants expressed their willingness to participate in professional development programmes related to special education. They believed that continuous training would improve their knowledge and practical skills in supporting children with SEN. One participant stated that all preschool teachers should receive training because children with SEN are increasingly enrolled in preschool classrooms (P8). Similarly, another participant explained that such training would provide teachers with the necessary knowledge and skills to manage children with SEN more effectively (P3). These responses indicate that continuous professional development was viewed as an essential component of improving teacher competence rather than as an optional professional activity.

4.4.2 Professional collaboration

Participants also highlighted the importance of collaborating with colleagues who possessed expertise in special education. Many teachers described seeking advice and guidance from special education teachers, remedial teachers, and experienced colleagues when supporting children with SEN. One participant explained that the special education teacher served as the main source of professional guidance within the school (P3), while another participant shared that collaboration with colleagues helped reduce anxiety and increased confidence when supporting children with SEN (P7). These findings suggest that professional collaboration plays an important role in assisting preschool teachers to respond more effectively to the diverse needs of children with SEN.

4.4.3 Institutional support

In addition to professional collaboration, participants emphasised the importance of support from the school and relevant educational agencies. Several participants explained that school administrators, special education teams, and appropriate educational resources contributed to improving teachers' ability to support children with SEN. One participant described receiving valuable support from the school management and special education personnel when identifying and assisting children with SEN (P2). Another participant explained that access to special education teachers within the school provided opportunities to obtain appropriate guidance and intervention strategies for children with SEN (P8). These findings demonstrate that institutional support strengthens teachers' confidence and facilitates more effective support for children with SEN in preschool classrooms.

Overall, the findings suggest that strengthening preschool teachers' competence requires continuous professional development, effective professional collaboration, and adequate institutional support. Participants consistently viewed these elements as important in enhancing their ability to provide appropriate educational support for children with SEN in preschool classrooms.

5. Discussion

5.1 Knowledge and Understanding of Children with Special Educational Needs

The findings of this study indicate that preschool teachers generally possess a foundational understanding of children with special educational needs (SEN). Most participants were able to recognise common SEN categories, including Autism Spectrum Disorder (ASD), Attention Deficit Hyperactivity Disorder (ADHD), developmental delays, learning disabilities, and physical disabilities.

However, the findings also revealed that teachers' understanding was largely developed through classroom experience rather than formal professional training in special education

This finding is consistent with previous studies conducted in Malaysia, which reported that preschool teachers generally possess basic knowledge of SEN but continue to require additional professional preparation to strengthen their understanding of children's diverse educational needs. For example, Lee and Mohamed [13] found that although preschool teachers demonstrated awareness of inclusive education, their understanding of SEN characteristics and appropriate educational support remained limited. Similarly, Rosli and Alias [17] reported that teachers were generally able to recognise the characteristics of children with SEN but often lacked specialised knowledge related to assessment and educational intervention.

The present finding also supports the study by Yahya and Mohamed [23], which highlighted that preschool teachers were generally familiar with common developmental conditions such as Autism Spectrum Disorder (ASD) but required continuous professional learning to strengthen their knowledge and confidence. Likewise, Nur Haziqah [16] emphasised that although teachers possessed foundational knowledge of SEN, continuous professional development remained essential to improve their understanding of diverse learning needs and appropriate support strategies.

The consistency between the present findings and previous studies suggests that preschool teachers continue to develop much of their knowledge through direct classroom experience. While practical experience contributes to teachers' understanding of children's needs, experience alone may not be sufficient to address the increasing complexity of inclusive preschool education. Therefore, structured professional development programmes remain essential to strengthen teachers' theoretical knowledge and practical competence, enabling them to provide more effective educational support for children with SEN.

5.2 Practical Skills in Supporting Children with Special Educational Needs

The findings of this study indicate that preschool teachers demonstrated practical skills in supporting children with special educational needs (SEN) by adapting their instructional strategies and pedagogical practices according to children's individual learning needs. Although most participants had not received formal training in special education, they described using differentiated instruction, visual supports, repeated guidance, play-based learning, and digital learning activities to facilitate children's participation and learning. These findings suggest that teachers continuously adapt their teaching practices to provide meaningful learning experiences for children with SEN.

This finding is consistent with Byrd and Alexander [4], who reported that effective support for children with SEN requires teachers to possess practical instructional skills, including the ability to modify teaching approaches, adapt learning materials, and provide individualised support. Similarly, Ueda *et al.*, [20] found that teachers who implemented inclusive instructional strategies were better able to promote children's participation and learning outcomes within early childhood education settings.

The present findings also support Lundqvist [14], who emphasised that successful preschool inclusion depends largely on teachers' ability to adapt classroom activities and create learning environments that encourage participation among all children. The teaching strategies described by participants in this study reflect important elements of inclusive pedagogy, where instructional approaches are adjusted to accommodate children's diverse learning needs while promoting active engagement in classroom activities.

Similarly, Saari *et al.*, [19] highlighted that flexibility in teaching approaches is essential when supporting children with SEN in Malaysian early childhood settings. The authors argued that teachers

should be able to modify instructional methods according to children's developmental levels, learning needs, and individual abilities. The consistency between the present findings and previous studies suggests that flexible and child-centred teaching practices are fundamental to achieving effective inclusive preschool education.

Although participants demonstrated practical competence in supporting children with SEN, much of this competence appeared to have developed through classroom experience rather than systematic professional preparation. This finding indicates that practical teaching experience alone may not be sufficient to meet the increasingly diverse needs of children with SEN. Therefore, continuous professional development focusing on inclusive pedagogical practices should be strengthened to further enhance preschool teachers' instructional competence and confidence in supporting children with SEN.

5.3 Challenges in Supporting Children with Special Educational Needs

The findings of this study indicate that preschool teachers experienced several challenges when supporting children with special educational needs (SEN) in preschool classrooms. The main challenges identified included limited professional training, classroom management difficulties, safety concerns, and balancing the learning needs of children with SEN alongside those of typically developing children. These findings suggest that supporting children with SEN requires teachers to possess not only appropriate knowledge and instructional skills but also sufficient professional support to respond effectively to children's diverse educational needs.

This finding is consistent with Allam and Martin [2], who reported that teachers often encounter difficulties in supporting children with SEN due to inadequate professional preparation and limited knowledge of specialised instructional strategies. Similarly, Saari *et al.*, [19] found that Malaysian preschool teachers frequently experienced challenges related to insufficient professional training, limited resources, and inadequate support systems when working with children with SEN. These findings demonstrate that the challenges identified in the present study are not unique but continue to be experienced across different educational settings.

Another important challenge identified in this study was classroom management. Participants explained that children with behavioural difficulties often required continuous attention, making it difficult to manage classroom activities while maintaining meaningful learning opportunities for all children. This finding supports Kozikoğlu and Albayrak [12], who found that teachers frequently experience difficulties in addressing diverse behavioural and learning needs simultaneously. Likewise, Rashid and Wong [18] reported that managing children with learning and behavioural difficulties remains one of the most demanding aspects of inclusive classroom practice, particularly when specialised support is limited.

The findings also revealed that teachers were concerned about children's safety and their ability to balance the learning needs of children with SEN and typically developing children within the same classroom. The consistency between the present findings and previous studies suggests that these challenges are closely related to teachers' level of professional preparation and the availability of appropriate educational support. When teachers lack sufficient training and support, maintaining a safe and inclusive learning environment while meeting the diverse needs of all children becomes increasingly challenging.

Overall, the findings indicate that the challenges experienced by preschool teachers extend beyond individual teaching practices and are closely associated with broader professional and institutional factors. These findings highlight the importance of strengthening professional

preparation, continuous support, and school-based resources to enhance teachers' competence and confidence in supporting children with SEN in preschool classrooms.

5.4 Professional Development and Support Needs

The findings of this study indicate that preschool teachers strongly recognised the importance of continuous professional development and institutional support in strengthening their competence to support children with special educational needs (SEN). Although participants demonstrated commitment and willingness to support children with SEN, they consistently emphasised that additional professional learning opportunities, collaboration, and institutional support were necessary to enhance their knowledge, skills, and confidence. These findings suggest that teacher competence develops through a combination of professional experience and continuous learning opportunities.

This finding is consistent with Yusof and Ismail [24], who reported that preschool teachers generally demonstrate positive attitudes towards inclusive education but require continuous professional development to strengthen their competence in supporting children with SEN. Similarly, Khoo Abdullah [11] emphasised that specialised knowledge and early intervention competencies are essential for teachers working with children who have diverse developmental and learning needs.

The present findings also support Byrd and Alexander [4], who argued that continuous professional development plays an important role in improving teachers' confidence and effectiveness in implementing inclusive educational practices. Professional learning opportunities enable teachers to strengthen their instructional competence, classroom management skills, assessment practices, and behaviour management strategies when supporting children with SEN. The consistency between the present findings and previous studies suggests that continuous professional development should be regarded as an ongoing process rather than a one-time professional activity.

Another important finding of this study is the value of professional collaboration and institutional support. Participants emphasised that guidance from special education teachers, remedial teachers, school administrators, and relevant educational agencies enhanced their confidence and supported more effective decision-making when working with children with SEN. This finding is consistent with Ueda *et al.*, [20], who reported that collaborative professional support contributes significantly to teachers' professional growth and their capacity to implement inclusive educational practices successfully.

Overall, the findings indicate that strengthening preschool teachers' competence requires more than individual commitment and teaching experience. A comprehensive support system that integrates continuous professional development, professional collaboration, and institutional support is essential to ensure that preschool teachers are well prepared to provide high-quality educational support for children with SEN and to strengthen the implementation of inclusive preschool education.

6. Conclusion

This study explored preschool teachers' knowledge, practical skills, experiences, and challenges in supporting children with special educational needs (SEN) in preschool classrooms. The findings indicate that preschool teachers generally possess a foundational understanding of SEN and demonstrate practical efforts to support children with diverse learning needs. However, their

knowledge and practical skills have largely been developed through professional experience rather than formal professional training.

The study also identified several challenges experienced by preschool teachers, including limited professional training, classroom management difficulties, safety concerns, and balancing the diverse learning needs of children with SEN alongside those of typically developing children. Despite these challenges, participants demonstrated a strong commitment to supporting children with SEN and expressed their willingness to participate in continuous professional development to strengthen their knowledge, skills, and confidence.

The findings suggest that strengthening preschool teachers' competence requires continuous professional development, professional collaboration, and appropriate institutional support. These elements are essential to enhance teachers' preparedness and their ability to provide meaningful and equitable learning opportunities for children with SEN. As preschool teachers are often the first educators to identify developmental concerns and provide early educational support, strengthening their professional competence will contribute to improving inclusive preschool education and promoting positive learning outcomes for all children.

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