

Exploring Knowledge and Skills of Special Needs Children among Preschool Teacher in Seremban, Negeri Sembilan

Noor Hizami Samsuddin¹ & Lily Muliana Mustafa^{1*}

¹City University,
46100 Petaling Jaya, Kuala Lumpur, Malaysia

*Corresponding Author: lily.muliana@city.edu.my

To Cite This Article:

Samsudin, N. H., & Mustafa, L. M. (2025). Exploring Knowledge and Skills of Special Needs Children among Preschool Teacher in Seremban, Negeri Sembilan. ICCCM Journal of Social Sciences and Humanities, 4(2), 10–18. <https://doi.org/10.53797/icccmjssh.v4i2.2.2025>

Abstract: This research was conducted to see the level of knowledge and skill faced by KPM preschool teachers in receiving students with special needs or children delay development in KPM preschool classes. Qualitative approaches were conducted, and 5 respondents were selected among KPM preschoolers. The results of the study showed that there were impact factors between the readiness, knowledge, and acceptance of teachers towards children who need special education. The implications of this study are expected so that every teacher can fully accept special education children without any bias to achieve the Malaysian National Objectives. Findings from the interviews showed that support groups are also necessary to help preschool teachers be more prepared in terms of emotions, knowledge and skills in handling special needs students in preschool classes. Preschool teachers also need to be given more exposure and training on modules and pedagogy of special needs students starting as early as when they receive teacher training. This is because the potential of preschool teachers to handle with special needs students is challenging throughout their service.

Keywords: Special Needs Student, Preschool Teacher, Skill, Knowledge

1. Introductions

The Education Act 1996 (Act 550) stipulates Preschool Education within the National Education System. Through this policy statement, the Ministry of Education (KPM) is responsible for providing preschool education to children aged four to six years old. In terms of democratizing education, this policy specifically allows children to access preschool education regardless of their family income, residential area, or ethnic group, including children with special needs. The National Education Policy concerning preschool education to ensures that children in Malaysia aged 4+ to 5+ receive preschool education, whether provided by KPM, government agencies, private entities, or non-governmental organizations. This policy also ensures compliance with the use of the National Preschool Curriculum in all preschool institutions, except for international and expatriate preschools. Preschool education also aims to provide a learning experience for students between the ages of four and six to nurture their potential in all aspects of development, master basic skills and foster a positive attitude in preparation for entering primary school.

Equality in education also involves students with special needs. The commitment includes giving the best education for every student by halving the socio-economic, urban-rural and gender achievement gaps among the student by 2020 (Abu Yazid Abu Bakar 2022). Realizing the importance of the education of special need children, Special Education Preschool was created to provide educational opportunities that are suitable and relevant to the abilities of Special Needs Students so that they can be independent and live a quality life. The growing global emphasis for inclusive education for all students has made significant impacts on the educational policies of many countries, including Malaysia (Erni Marlina, Nor Azah Abdul Aziz, Roznim Mohamad Rasli, Mazlina Che Mustafa & Sopia Md Yassin, 2022). According to the syllabus, in preschool they may develop cognitive development and social skills and reduce behavioural problems often associated with children with special needs. This Preschool also aim to improve physical development, language, and improve speech, psychology and self-management skills. It also creates curiosity, initiative and discipline, practicing Islamic values in daily life for Muslim students and preparing them with the basic skills needed to provide the schooling experience you will go through.

The concept of inclusive education has gained prominence with the increasing recognition of children's rights, especially those with disabilities, to have equal access to educational opportunities. As outlined by UNESCO's "Education for All (EFA)" initiative, education is a fundamental right for all individuals, including girls, children with special needs, and those from minority groups, with the goal that by 2015, all children would receive free, compulsory, and quality education. However, challenges persist, particularly in preschool education. Many preschool teachers face difficulties due to a lack of knowledge about special needs students, which negatively impacts their teaching effectiveness. Additionally, teachers' skills in managing children with special needs directly influence the students' learning outcomes and emotional well-being. A lack of specialized training further compounds this issue, as many preschool educators are not equipped to support these students effectively. Furthermore, discrepancies between the standard preschool curriculum and one tailored for special needs children can hinder their overall development. These challenges highlight the need for improved teacher education, professional development, and curriculum adjustments to better support children with special needs in early education settings. From the Ministry of Educational portal, we can see the increasing of school, class, teacher and assistant from 2020 until 2024 which shows that the ministry also takes this special education seriously.

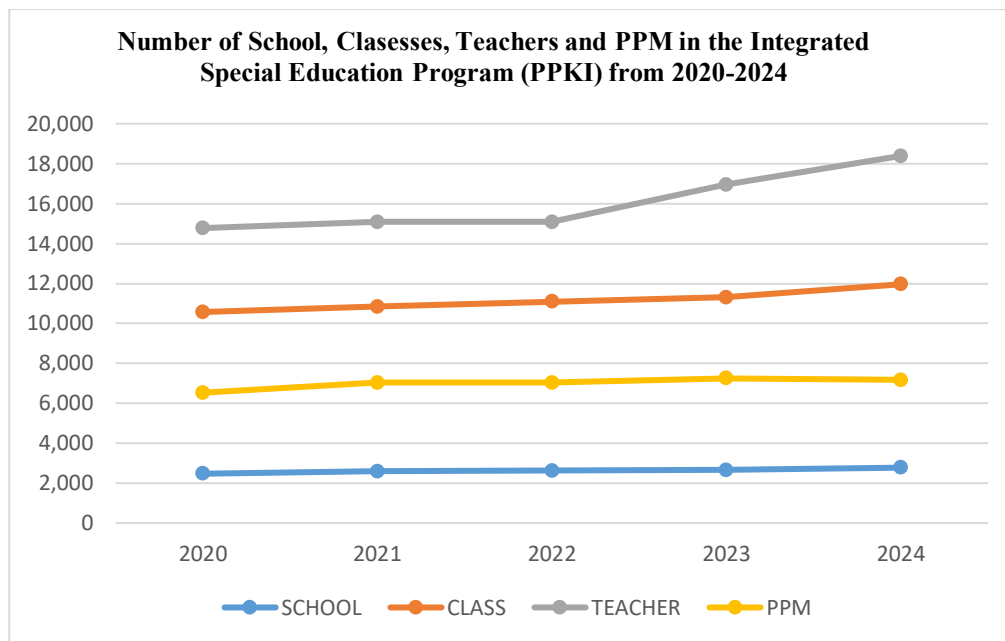


Figure 1. The Increasing of School, Classes, teacher and PPM

Table 1. Data of numbers of School, Classes, Teachers and PPM from 2020-2024

ITEM	2020	2021	2022	2023	2024
SCHOOL	2,472	2,586	2,632	2,661	2,774
CLASS	10570	10,834	11,095	11,310	11,959
TEACHER	14,774	15,079	15,079	16,952	18,389
PPM	6,529	7,036	7,036	7,243	7,163

The study emphasizes the importance of enhancing teachers' knowledge, skills, and training in special needs education to foster inclusive classrooms. It identifies several research gaps, such as a lack of awareness and early identification of special needs, insufficient classroom management strategies for children with behavioural issues, and the need for continuous professional development to enhance teachers' competencies. The research aims to address key questions, including the relationship between teachers' knowledge and successful teaching outcomes, the classroom management strategies employed by teachers for children with special needs, and the impact of ongoing training on teachers' ability to effectively support special needs students.

The research objectives are to evaluate preschool teachers' understanding of various special needs, identify the behavioural management strategies used by teachers, and assess the availability of guidance and training programs for teachers working with special needs students. The significance of the study lies in its potential to provide valuable insights for future researchers and address the need for more research on preschool education for children with special needs. It will assess whether training programs are enhancing teachers' abilities to support these children effectively. The study also emphasizes the importance of early intervention, which can improve outcomes for children with special needs, and evaluates how well preschool teachers are prepared for such roles. Ultimately, the research aims to bridge existing

knowledge gaps, improve teacher training, and enhance classroom practices, leading to better educational outcomes for children with special needs. This research also follow this framework

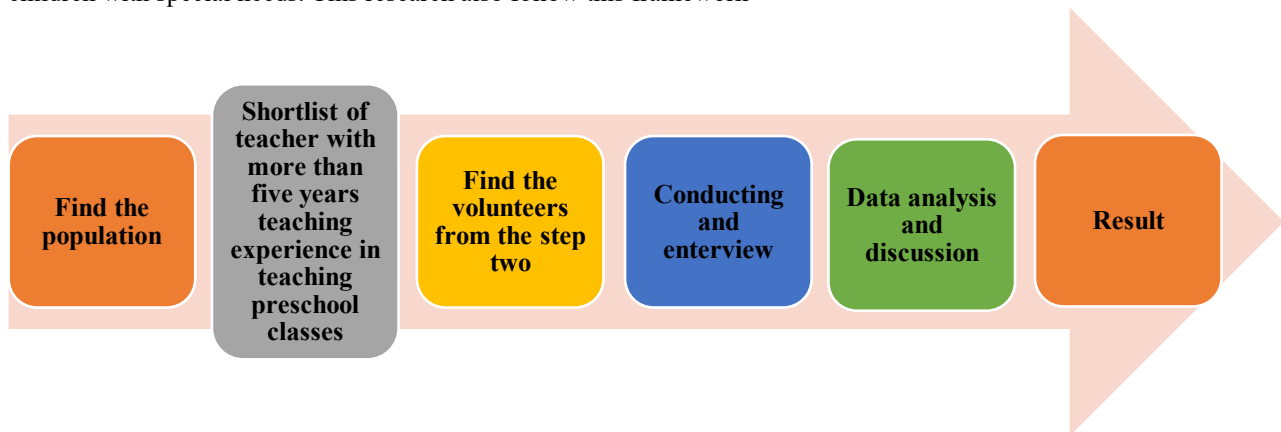


Figure 2. Conceptual Frameworks

2. Literature review

This literature review examined literature between preschool teacher knowledge and skill about special needs pupil. This study also analyses is there any program, training or guideline provided to Preschool Teacher in increasing their knowledge and skill in handling delay developmental survey and special needs pupil. Education in Malaysia is a continuous effort towards developing potential individual holistically and integrated to create a balanced and harmonious individual in intellectual, social, emotional and physical aspects (Nurul Izzah & Hazhari, 2020). Therefore, parallel with the intention of this national education philosophy, the Malaysian Ministry of Education (KPM) emphasizing the concept of education for all. The concept of education for all this is also given emphasis as early as preschool. Therefore, teachers' knowledge about special needs pupils (MBPK) this is one of the important aspects in helping these students receive education high quality since preschool.

The World Health Organization estimates that around one billion individuals experience it several types of disability problems and from that amount is estimated as much 93 to 150 million are children (Ruwaidda & Aliza, 2020). Findings that obtained this indicates that there are many children around the world who are detected have privileges. A string of this situation, the Malaysian Ministry of Education has designed to provide educational opportunities for children in need this special education since preschool. Accordingly, teacher's preschool is one of the groups responsible for helping to further promote the development of students with special educational needs (SEN) at the preschool level. The success of teachers helping MBPK also depends on preschool teachers' knowledge of MBPK.

People Act Disability (OKU) 2008 which has given confirmation under para 36. (1) titled: Prevention of further disability. Next explained by item 36. (1) (b) early detection of disability and timely intervention to prevent disability and treatment for rehabilitation. Improved policy shows the importance and need of early intervention for children with disabilities to maximize their potential to learn. Effective early intervention programs able to avoid or prevent the problem of disability of disabled individuals from worsening and preventing them from functioning in daily life. Early intervention important because is a process of providing services, education and support to children who are at risk or who have developmental delays physical or mental that will affect development and hinder learning. The main goal of early intervention is to improve cognitive skills, language, social and emotional among children with disabilities including those at risk for have problems in learning. At the age between infancy and entering school, children's growth is generally at the highest level important and fastest especially in motor, sensory, social emotional, cognitive development and physical. To achieve this goal, teacher knowledge planning and using appropriate learning strategies is very important because children with special needs (SEN) has its own way of learning. When the teacher does not use the strategy appropriate, SEN will find it difficult to understand what the teacher wants to convey.

The ability of preschool teachers to work effectively with students with special needs is highly influenced by the country's policies, training systems, cultural attitudes, and resource availability. In developed nations, inclusive education tends to be more systematically supported, and teachers receive more training and resources. However, in many developing countries, there are still significant challenges to overcome, including limited teacher training, inadequate resources, and societal attitudes towards disabilities. Addressing these challenges requires ongoing investment in teacher education, policy development, and resource allocation to ensure that all children, regardless of ability, have access to quality education.

In Malaysia, all students with Special Educational Needs (SED) have the opportunity to receive access to relevant and appropriate education. All students with special needs need to develop their talents and potential through vocational education to produce skilled people towards improving the quality of life. All SED are given the opportunity to follow the Early Intervention Program so that their ability level can be optimized. By providing opportunities for to follow educational programs aimed at increasing the existing potential to produce a semi-skilled group and subsequently become an asset to the country and SED who have the potential to be placed inclusively in mainstream classes as much as possible.

This research use combination of in theory of education that will differentiate the different of Early Childhood Education and Theory of Special Needs and theory in health that show the development level of children from infant until six years old. Theories of this study are Early Childhood Education Theory, Theory of Multiple Intelligences, Theory of Special Needs Education and Theory of Pedagogy. Below is the framework that support supporting preschool teacher in Inclusive Education.



Figure 3. Supporting preschool teacher in inclusive education frameworks

Based on the current studies s show that some Malaysians do not understand the concept of disability (UNICEF Malaysia, 2016) although 77% of the people recognized that disabilities can have congenital and genetic causes or result from accidents or diseases. A significant number of parents believe that a disability is caused by the 'will of God' (10%), the fault of parents (4%), or fate/Karma (2%) [UNICEF Malaysia, 2016]. At the community level, a disability is still subject to deep-rooted taboos. Strong religious and cultural beliefs around disability being linked to past misdemeanours can hamper people's understanding of what causes impairments. Therefore, there is still a strong assumption that having a disability implies a state of abnormality, dependency and a need for specialist provisioning. This essay discusses the Malaysian's parental perceptions about children's disability, related to the cultural values, beliefs, and traditions. Parental perceptions are defined as beliefs about disability, cultural and educational backgrounds (Islam, 2015).

Immediate discipline in this study refer to actions, strategies, or interventions that are implemented right away to correct behaviour or address a problem as it occurs. This approach including observed in educational settings, particularly with children and students, and often involves behaviours that require swift correction to maintain order and structure. The outline of the main topics that a literature review on immediate disciplines might cover classroom management or behavioural interventions, and it refers to the techniques that are applied right away when an issue arises. In the literature, immediate discipline is discussed also related on Behavioural Modifications that include strategies that are used to immediately address and correct undesirable behaviours. Timeliness of responses also importance in order to increase the effectiveness of the intervention. Immediate reinforcement providing immediate rewards for desired behaviours to strengthen and encourage positive actions. For instance, a teacher may give immediate verbal praise for a student's good behaviour or apply a time-out right after an inappropriate action. Cognitive Behavioural Theory (CBT) also use in focusing on the influence of thoughts and feelings on behaviour, with immediate interventions aimed at redirecting or modifying maladaptive behaviours as they occur.

Many studies find low levels of parents' knowledge about child development among less advantaged groups. It therefore seems more important to concentrate on interventions to give parents tools to build their understanding and warmth of communication.

There are many factors that contribute discipleship. Teaching and learning also different between preschool students and students with special needs. When there are students with special needs in the preschool class, preschool teachers need to prepare different techniques between these two students. These is proven through the National Preschool Curriculum Standard Document (revision 2017) which is used by Ministry of Education MOE between preschools class and special education preschools is also different.

3. Methodology

This study is a qualitative study using a single case study design. Set of interviews conducted based on the research questions were created and used to find out the readiness, knowledge, skill of preschool teacher in accepting and handling special education children or children with late development which is pointed towards the objective of this study. A qualitative methodology was determined to be appropriate for this study, allowing for the flexibility needed to analyse

participants' thoughts and opinions. (David R. Byrd 1 and Melina Alexander 2,2020). This study is also a qualitative study that uses a single case study design. A single case study is an intensive study that focuses on a specific matter. (Nusaibah Wan Fatul, Dr. Aliza Alias.2020).

The location of this study is Seremban district, Negeri Sembilan. The reason of choosing the Seremban district is because the population of preschool class and student is larger than other districts in Negeri Sembilan as shown in the table below. The study population involved preschool teachers of the Ministry of Education Malaysia. Next, purposive sampling was conducted and 5 preschool teachers were selected. The research instrument was adapted according to the suitability of the study. A set of knowledge tests was conducted based on the established scoring method to measure the level of knowledge of preschool teachers in handling students with special needs in preschool classes. The knowledge test included questions about the characteristics of learning problems in general.

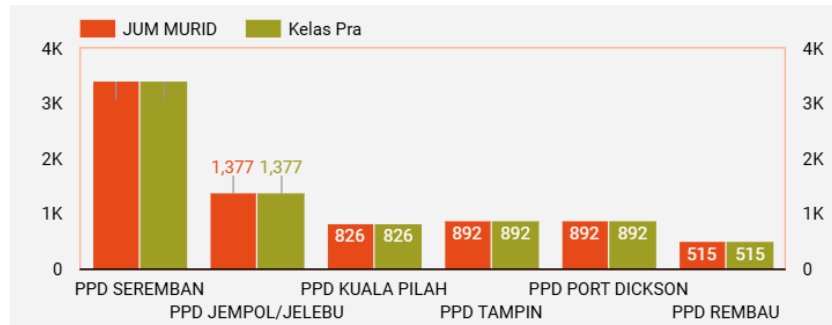


Figure 4. Number of student in every district in Negeri Sembilan

This study used semi-structured interviews. and in-depth interviews. By using semi-structured interviews, a number of planned questions are prepared, but the interviewer has more freedom to modify the wording and order of questions. Nevertheless, In-depth interview is less formal and the least structured, in which the wording and questions are not predetermined. This type of interview is more appropriate to collect complex information with a higher proportion of opinion-based information. The findings from the interview were then made through the scoring method. The accumulated scores were summed up into a percentage. The percentage score of each respondent was divided into 3 levels, namely, Low (L) for 0 – 49 percent, Medium (M) for 50 – 69 percent and High (H) for 70 – 100 percent.

This interviews question is divided into two parts, namely A and B. Part A consists of the background of the respondents. Six items were designed by the researcher to find out the background of the respondents. Questions for the items in part A consist of gender, age, highest academic achievement, teaching experience, the total number of children in their class, the total number of special education children in their class. Part B is a questionnaire on the readiness, skill and knowledge of preschool teachers to accept special education children. 10 items were formulated to obtain information about the readiness of teachers to accept special education children, including the training they have received.

This study uses a qualitative approach, which is through interviews and observations to collect as much information or data as possible, the use of triangulation techniques itself has been able to strengthen the validity of the study. The use of triangulation techniques that are used simultaneously in a study must be done in an equivalent form. The validity of the criteria in the interview is achieved by interviewing individuals who truly have knowledge and information on the researcher's field of study.

Therefore, the sample used is focused on teachers who have taught in the KPM Preschool class for not less than 5 years. Usually for this purpose, researchers will interview several informants in different study locations where they are not from the same school as long as they have the same characteristics and characteristics that are academically competent in Preschool Education.

4. Findings

4.1 Participant Demographics

The study involved five preschool teachers. All participants have an educational qualification and have been teaching for more than 10 years. The majority of the teachers (80%) have taught children with special needs between 5 to 10 times. However, most of the teachers (60%) have not received training in special education.

Table 2. Demographic information of preschool teachers who participated in this study

Demographic background	Frequency	Percentage
Age		
30-39 years old	1	20
40-49 years old	3	75
50-59 years old	1	20
Lengh of service as preschool teacher		

Below 10 years	0	0
11-15 years	1	20
16-20 years	1	20
21-25 years	2	40
26-30 years	1	20
Qualification in education		
Yes	5	100
No	0	0
Frequency teaching SE children in preschool		
Below 5 times	0	0
5-10 times	4	80
More than 10 times	0	20
Training in SE		
Yes	2	40
No	4	60
Total	5	100

4.2 Teacher Readiness, Skills, and Knowledge

Table 3 show assessed the readiness, skills, and knowledge of preschool teachers in handling children with special needs. The findings indicate that teacher readiness to accept these students is generally low, with three out of five participants assessed at a low level. One teacher directly linked this to preparedness, stating, "Lack of knowledge and skills causes me to not agree to accept these special needs students". Other factors influencing readiness included the belief that "The development of special needs students is better when they are in special education classes compared to mainstream classes" and the challenge of large class sizes, as one teacher noted it "makes it difficult for me to handle these special needs students because most of these special needs students need individual guidance". Consequently, a participant suggested that "Preschool teachers need to receive in-service training to improve their knowledge in handling students with special needs".

In contrast to readiness, the teachers' overall skills and knowledge were found to be at a moderate level. A majority of the teachers, three out of five, demonstrated a moderate skill level, and statistical analysis confirmed the median and mode for skill level were both moderate. Similarly, four out of the five teachers were rated as having a moderate level of knowledge, with the mode and median for this category also being moderate.

Table 2. Level of Readiness, Skill, and Knowledge of Preschool Teachers

Participant	Readiness	Skill	Knowledge
N1	Low	Moderate	Moderate
N2	Low	High	Moderate
N3	Low	Moderate	Moderate
N4	Moderate	High	High
N5	Moderate	Moderate	Moderate

5. Discussions

Results from the interview answered the aim of the study was to explore the readiness, knowledge and skills of preschool teacher in handling students with special needs in the preschool classroom. Based on the interview findings, it can be concluded that there are several factors that influence teachers' readiness in accepting students with special needs in the preschool classroom. The skills of preschool teachers do not depend solely on teaching experience but also depend on existing knowledge and training in the field.

Teacher Readiness: Based on the findings of the study conducted through interviews, it was found that three respondents were not willing to accept students with special needs and two other respondents accepted conditionally. The reasons for the rejection were due to lack of knowledge and skills, increased workload and also class control. The two teachers who accepted stated that if the student was only weak in learning and did not disturb other students, they would be more willing. The large capacity of preschool students also influences the acceptance. Support from those around them such as parents, school administrators and fellow teachers also influenced this willingness.

Teacher knowledge: Knowledge in this study refers to exposure and ways of knowing information about students with special needs as well as the ability to understand them and manage children with special needs in preschool classes. Based on the 5 respondents who were interviewed, only one or two respondents had ever taken a course on students with special needs. Based on the interview, it was found that the lack of knowledge, especially in terms of managing children with special needs in preschool classes as stated through the interviews carried out, affects the readiness of teachers. Among them, one of the answers obtained from the interview was:

'We only get general knowledge about the category of students with special needs so we do not have the skills to control students with special needs, especially those who disrupt the learning process'

Teacher Skill: As previously reported, only two teachers have received training in handling students with special needs. Long experience in early childhood education does not contribute to teachers' skills in controlling students with special needs in preschool classes. Skills in controlling classes also involve the safety of children with special needs. With a preschool class capacity of 25 compared to 7 students in education classes, it is not easy for preschool teachers to control the class, let alone those with behaviour problems.

Apart from using data through interviews, comparisons through previous studies were also used to strengthen the analysis of this study. There are various journals related to the readiness of preschool teachers in handling students with special needs, however, in the Malaysian context, five articles were selected to make a comparison to strengthen the findings of this study. List of the studies used can be referred to in the table 3 below:

Table 3. Comparative Review of Selected Malaysian Studies on Preschool Teachers' Readiness in Handling Students with Special Needs

No.	Author and Year of publication	Study title	Journal name	Study purpose
1	Erni Marlina Saari, Nor Azah Abdul Aziz, Roznim Mohamad Rasli, Mazlina Che Mustafa & Sopia Md Yassin, (2022)	Early Childhood Education of Children with Special Needs in Malaysia: A Focus on Current Issues, Challenges, and Solutions	<i>World Journal of English Language</i>	To examine issues, challenges, and solutions concerning the current practices of teachers and operators of early childhood education teachers and operators of both public and private sectors in Malaysia
2	Nurul Izzah Yusof, Hazhari Ismail (2021)	Knowledge and Readiness of Preschool Teachers in Accepting Special Needs Children	<i>Turkish Journal of Computer and Mathematics Education</i>	To observe the level of knowledge and readiness faced by kindergarten educators in accepting special needs children
3	Syar Meeze Mohd Rashid and Mei Ti Wong (2023)	Challenges of Implementing the Individualized Education Plan (IEP) for Special Needs Children with Learning Disabilities: Systematic Literature Review (SLR)	<i>International Journal of Learning, Teaching and Educational Research</i>	Identified teacher challenges in the implementation of the individualized education plan (IEP) for special educational needs (SEN) children with learning disabilities (LD).
4	Nur Haziqah Husin, Suziyani Mohamed (2024)	Knowledge of Preschool Teachers About Pupils with Special Educational Needs	Jurnal Dunia Pendidikan	to identify the level of knowledge of preschool teachers towards the pupils with special education needs
5	Nusaibah Wan Fatul, Dr. Aliza Alias (2020)	Knowledge of Preschool Teacher on Characteristics of Learning Difficulty	Journal of Quran Sunnah Education and Special Needs	to examine the level of knowledge among preschool teachers on the characteristics of learning difficulty

The findings of this study aim to create implications for stakeholders in the education system. The implications of this study will focus on teacher readiness and also the emergence of special needs students. Based on this framework, every agency involved in influencing teacher attitudes will be taken into account. Secondly, the emergence of special education students also depends on the level of awareness of those around them, namely parents, teachers and the community.

There are several limitations that need to be highlighted and discussed. This is because these limitations can affect the findings of the study. Among the necessary limitations found in this study are:

Preschool teachers' experience teaching in preschool classes, frequency of accepting students with special needs and the type or category of special needs students accepted. Bias can occur while affecting participant responses. For example, teachers' understanding and perception of the level or spectrum of 'learning difficulties' and 'emotional behaviour difficulties'. Based on the interviews conducted, teachers are more willing to accept students who have 'learning difficulties' than students with 'emotional behaviour difficulties'.

The next limitation is the training received regarding students with disabilities. The acceptance of teachers who have relevant training are also different compared to teachers who have never followed any training on special education. The acceptance of teachers who have received training is more positive compared to teachers who have longer teaching experience, but have never followed any relevant training.

The distribution of demographic characteristics such as gender, religion and race of the respondents also limits the study. For example, in terms of gender, race and religion; the majority of the respondents were Malay and Muslim women. This may be homogenous which may contribute to the lack of differences between groups in the sample.

6. Conclusions

This study explored the readiness, knowledge, and skills of preschool teachers in Seremban, Negeri Sembilan, regarding the inclusion of children with special needs. The findings highlight a critical gap: while teachers possess moderate knowledge and skills, their readiness to accept these children is low, primarily due to a lack of specialized training, large class sizes, and insufficient support. The key implication is that without addressing this lack of preparedness, the successful implementation of inclusive education policies is hindered, potentially compromising the educational and emotional development of children with special needs in mainstream settings. Therefore, this study strongly recommends the implementation of continuous and targeted professional development programs to equip teachers with the necessary competencies and strategies for managing inclusive classrooms effectively. Furthermore, providing better support systems, including administrative and parental collaboration, is essential to foster a more positive and accepting environment, ultimately bridging the existing knowledge gaps and enhancing educational outcomes for all students

Acknowledgement

The authors would like to thank the fellow authors and City University, Malaysia whose intellectual properties were utilized for this study.

Conflict of Interest

The authors declare no conflicts of interest.

References

- Nurul Izzah Yusof & Hazhari Ismail. (2020). Kekangan guru tadika untuk menerima kanak-kanak berkeperluan khas. *Southeast Asia Early Childhood Journal*, 9(2), 120-131.
- Husin, Nur Haziqah; Mohamed, Suziyani. (2024). Pengetahuan Guru Prasekolah Mengenai Murid Berkeperluan Pendidikan Khas. *Jurnal Dunia Pendidikan*, [S.l.], v.6, n. 1, p. 488-499. <https://myjms.mohe.gov.my/index.php/jdprd/article/view/25807>
- Ruwaida Rosli & Aliza Alias. (2020). Pengetahuan guru pra sekolah terhadap ciri-ciri murid berkeperluan khas. *Journal of Quran Sunnah Education and Special Needs*, 4(2), 92-100
- Erni Marlina Saari, Nor Azah Abdul Aziz, Roznim Mohamad Rasli, Mazlina Che Mustafa, Sopia Md Yassin. (2022). Early Childhood Education of Children with Special Needs in Malaysia: A Focus on Current Issues, Challenges, and Solutions. Vol.12.No.2. <https://doi.org/10.5430/wjel.v12n2p274>
- Harun, Z., Mohd Pisol, M. I., Rosli, H. F. ., Rashed, Z. N. ., & Abdul Halim, M. N. . (2022). Teori vygotsky dalam pembelajaran murid dan kaitan dengan ciri murid bekeperluan khas penglihatan: Vygotsky theory in students' learning and its relation to characteristics of students with visual impairments special needs. *ATTARBAWIY: Malaysian Online Journal of Education*, 6(1), 57–63. <https://doi.org/10.53840/attarbawiy.v6i1.34>
- Simangunsong, B. A. M. P. (2023). Pengaruh Beban Kerja dan Kompensasi Terhadap Kerja Guru. *Jurnal Bisnisan: Riset Bisnis dan Manajemen*, 4(3), 62-76.
- Shuib, T. R., Setambah, M. A. B., Othman, M. S., Razalli, A. R., Husin, M. R., Shaffeei, K., & Jamil, M. R. M. (2023). Faktor-Faktor Persaraan Awal: Tinjauan dalam kalangan Guru-Guru Negeri Perak. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 8(3), e002193-e002193.
- Al-Ababneh, M. (2020). Linking ontology, epistemology and research methodology. *Science & Philosophy*, 8(1), 75-91. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3708935

- Nayak, J. K., & Singh, P. (2021). Fundamentals of research methodology problems and prospects. SSDN Publishers & Distributors.
http://dspace.vnbrims.org:13000/jspui/bitstream/123456789/4653/1/Fundamentals%20of%20Research%20Methodology_Nayak.pdf
- Ocaña-Fernández, Y., & Fuster-Guillén, D. (2021). The bibliographical review as a research methodology. *Revista Tempos e Espaços em Educação*, 14(33), e15614-e15614. <https://ufs.emnuvens.com.br/revtee/article/view/15614>
- Zou, P. X., & Xu, X. (2023). Research methodology and strategy: theory and practice. John Wiley & Sons. <https://books.google.com/books?hl=en&lr=&id=2SDNEAAQBAJ&oi=fnd&pg=PR7&dq=research+methodology&ots=k4CnyWW1s&sig=rsJVZFoXbOShg9RMwtUfKbpI90>
- Demchenko, I., Maksymchuk, B., Bilan, V., Maksymchuk, I., & Kalynovska, I. (2021). Training Future Physical Education Teachers for Professional Activities under the Conditions of Inclusive Education. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(3), 191-213. <https://doi.org/10.18662/brain/12.3/227>
- Zabeli, N., & Gjelaç, M. (2020). Preschool teacher's awareness, attitudes and challenges towards inclusive early childhood education: A qualitative study. *Cogent Education*, 7(1). <https://doi.org/10.1080/2331186X.2020.1791560>