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Promoting preschoolers' academic and social development with effective assessment practices

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Abstract: The early childhood years are critical for establishing the groundwork for future academic and social success. This study explores the role of effective assessment practices in fostering preschoolers' development in these areas. By examining contemporary assessment methodologies, the research offers teachers practical insights for enhancing early childhood education. Assessment practices extend beyond simply measuring academic progress; they are essential in shaping educational experiences tailored to the unique developmental needs of young children. This study highlights formative assessments, which are dynamic and ongoing, providing immediate feedback for customizing educational interventions. These include observational techniques, developmental checklists, and playbased assessments, offering a comprehensive view of a child's growth. Observational methods allow teachers to document children's interactions, behaviors, and skills in natural settings, while developmental checklists serve as benchmarks to identify areas needing support. Play-based assessments engage children in activities that reveal cognitive, social, and emotional strengths. A key focus is on culturally responsive assessments, crucial in diverse educational settings. These ensure tools and methods are relevant and fair, accurately reflecting each child's abilities and respecting varied backgrounds. The findings reveal that effective assessment practices not only prepare children for academic challenges but also enhance social competence, including communication, empathy, cooperation, and emotional regulation. The research underscores the importance of involving parents in the assessment process, fostering strong teacher-parent partnerships that support comprehensive child development. Ultimately, effective assessment practices lay the foundation for personalized education, respecting each child's individuality and cultural heritage, and preparing them for long-term success in school and life.

Keywords: Academic development, Effective assessment practices, Observation method, Preschool, Social development.

1. Introduction

The early years of a child's life are crucial in establishing the groundwork for future academic and social achievements. In Malaysia, the significance of preschool education has been increasingly acknowledged, primarily for its role in nurturing cognitive, emotional, and social growth. Effective assessment practices have been identified as crucial strategies for promoting holistic development. By systematically evaluating young children's progress, teachers can adapt their teaching methods to accommodate individual needs, foster an inclusive environment, and ensure each child reaches their full potential. Recent studies highlight innovative approaches in early childhood education, which contribute to a supportive educational landscape [1]. This study explores the impact of these assessment practices on preschoolers' development in Malaysia, emphasizing the adoption of novel methodologies that enhance learning outcomes.

1.1. Background of Study

In Malaysia, the importance of early childhood education has been acknowledged, with reforms aimed at improving quality and accessibility. The Malaysian government's National Preschool Curriculum emphasizes comprehensive education. However, more refined assessment practices are needed to capture diverse developmental trajectories. Assessments serve multiple functions: informing instruction, identifying needs, guiding resources, and supporting communication. Traditional methods, often focusing on academics, may not encompass the holistic nature of child development, necessitating multifaceted approaches for a complete picture of growth. Moreover, teachers face challenges and opportunities in implementing effective assessments. Cultural diversity, resource access, and pedagogical philosophies influence how assessments are conducted. This study aims to explore current practices, identify gaps, and propose improvements to enhance preschoolers' development through inclusive assessment practices. Understanding these practices is vital for teachers, parents, and policymakers to ensure children thrive academically and socially, setting the stage for lifelong learning.

1.2. Statement of Research Problem

In the context of Malaysian preschools, the lack of comprehensive assessment practices significantly impacts the holistic development of children. While traditional assessments in Malaysian preschools emphasize academic skills such as literacy and numeracy, they often overlook critical areas like emotional intelligence, creativity, and social interaction. This narrow focus can hinder the development of a balanced curriculum tailored to the needs of young children. Current research highlights the need for more inclusive assessment practices that encompass these broader developmental areas, thereby supporting holistic child development [2]. Additionally, there is a notable gap in research regarding effective preschool assessment practices in Malaysia, which leaves teachers and policymakers without a comprehensive framework to guide their efforts in promoting well-rounded learning experiences [3]. This gap emphasizes the urgent need for a shift towards more holistic assessment approaches in early childhood education.

1.3. Research Objectives

In early childhood education, assessment practices are crucial for shaping academic and social development. Effective methods are essential for identifying learning needs, tracking progress, and informing strategies. This research aims to:

- 1. Assess current preschool assessment practices.
- 2. Explore teachers' readiness to implement effective practices.
- 3. Identify challenges teachers face in implementing practices.
- 4. Identify strategies and approaches for assessing development effectively.

1.4. Research Questions

Early childhood education is vital for academic and social development, laying the foundation for lifelong learning. Effective assessment practices identify strengths and areas for growth. The research uses case studies to explore:

- 1. What are the current assessment practices in preschool?
- 2. What support and resources do teachers need for effective implementation?
- 3. What barriers and challenges arise in holistic practices?
- 4. What strategies are effective in enhancing development?

1.5. Significance of Research

Research on promoting development through assessment is important for lifelong learning. Effective methods, such as inclusive educational practices, tailor education to meet unique needs, fostering environments where all children can thrive. According to the Ministry of Education Malaysia, the Malaysia Education Blueprint 2013-2025 emphasizes the importance of early assessments in detecting developmental delays and disabilities, allowing for timely interventions that significantly improve educational outcomes. This research contributes to evidence-based policies ensuring all children access quality education, enhancing growth, and promoting equity in education. The significance extends beyond classrooms, impacting families and communities. Accurate assessments inform and empower parents, fostering collaboration with teachers for cohesive support systems. This reassures parents and fosters engagement in education. Effective practices have broader societal implications, ensuring children receive the support to become well-rounded individuals ready for future complexities.

2. Literature Review

Preschool education plays a vital role in laying the foundation for academic and social development. During early childhood, children experience rapid cognitive, social, and emotional growth, which can influence their later success in school and beyond. Based on the National Association for the Education of Young Children (NAEYC) [4], early childhood assessment must highlight various domains of development, including cognitive, language, motor, and social-emotional skills. Assessment practices in early childhood environments are essential for monitoring and supporting this development. Effective assessment practices allow teachers to recognize and understand children's strengths and areas for growth, tailor teaching strategies, and ensure that developmental progress is aligned in both academic and social domains [5]. This literature review examines key strategies for promoting preschoolers' academic and social development through effective assessment practices.

2.1. Academic Development

Effective assessment practices provide essential data on how preschoolers develop academically in areas such as numeracy, literacy, and problem-solving skills. Research indicates that early academic proficiencies, such as letter identification, vocabulary, basic grammar, number recognition, and color sense, are strong predictors of future academic achievement [6]. Assessments that focus on numeracy skills, such as tracking letter-sound relationships or early counting abilities, equip teachers with valuable information for instructional planning [7].

Moreover, integrating social development into academic assessment is crucial. Studies have shown that children who develop strong social skills, such as communication, self-regulation, and empathy, are better prepared to engage in academic tasks [8]. A child who can regulate emotions and collaborate with peers is more likely to participate in classroom activities, seek help when needed, and persist in tasks.

Early childhood education encourages cooperation and teamwork among children. Discussions, activities, and class projects foster communication skills, collaboration, and the ability to work productively with others [9]. Early education also emphasizes experiential learning, providing opportunities for hands-on experiences, experiments, field trips, and real-world applications that help children connect theoretical concepts with practical outcomes [10]. Additionally, early childhood education highlights the importance of social and emotional development by incorporating activities that foster empathy, conflict resolution, self-awareness, positive relationships, and communication skills with peers and adults [11].

Holistic child education aims to support children's emotional, intellectual, social, and physical well-being through a balanced approach that nurtures overall growth and development. It also promotes continuous assessment and feedback to monitor progress, identify areas for improvement, and provide timely guidance. Assessment methods may include informal assessments, projects, quizzes, and portfolios, all of which contribute to a more inclusive, engaging, and effective learning environment that supports children's development and prepares them for future success [12].

2.2. Social Development

Social and academic development are equally important in the preschool years. According to the Collaborative for Academic, Social, and Emotional Learning (CASEL), social-emotional learning (SEL) abilities, such as self-awareness, self-management, social awareness, relationship skills, and responsible decision-making, are fundamental to early childhood development [13]. Assessment practices that focus on social development help teachers understand children's abilities to communicate with others, resolve conflicts, and manage emotions effectively [11].

For instance, teachers can use observational assessments to monitor a child's ability to share resources, participate in group activities, and express feelings appropriately. Developmental checklists should also highlight social-emotional milestones, such as the ability to follow directions, use polite language, and engage in reciprocal play [14]. By integrating SEL assessments into daily classroom routines, teachers can intentionally support children's social development alongside their academic progress [12].

2.3. Conceptual Framework

A conceptual framework provides the foundational ideas, variables, and relationships that guide research or intervention. In the context of promoting preschoolers' academic and social development through effective assessment practices, the conceptual framework emphasizes the interaction between developmental domains, assessment practices, and effective teaching strategies.

Developmental domains comprise academic and social development. Academic development encompasses early literacy, numeracy, problem-solving skills, and cognitive development. Preschoolers are expected to develop foundational literacy skills (e.g., letter recognition, phonemic awareness), numeracy (e.g., counting, understanding number relationships), and communication abilities [15]. Social development includes emotional regulation, communication skills, peer relationships, and social problem-solving. Preschoolers gradually develop the ability to express emotions, collaborate with peers, follow social norms, and participate in cooperative play [14].

Assessment practices comprise formative, summative, and authentic assessments. Formative assessments are observation-based assessments that track a child's progress over time (e.g., observation of play, learning journals, checklists). These assessments help teachers tailor instruction based on individual student needs [12]. Summative assessments are conducted at the end of a specific period to evaluate a child's learning, often using standardized tests or structured assessments. However, in most preschools, summative assessments are less formal and may be incorporated into developmental checklists [16]. Authentic assessments include play-based assessments, portfolio reviews, and project-based activities to evaluate a child's real-world skills and abilities, such as storytelling, block-building, or social interactions in group settings [17].

Effective teaching strategies include differentiated instruction, active learning, and scaffolding. Differentiated instruction involves adapting educational content to meet the diverse needs of preschoolers, ensuring that every child, regardless of developmental level, remains engaged and progresses [18]. Active learning integrates hands-on experiences, inquiry, and interaction to support both academic and social growth [19]. Scaffolding provides temporary guidance to children as they acquire new skills, gradually reducing support as they gain independence [20].

2.4. Theoretical Framework

A theoretical framework provides the lens through which research or interventions are analyzed. It draws upon established theories to support the study or practice. In the context of promoting preschoolers' academic and social development through assessment practices, theories provide a strong psychological, developmental, and educational foundation.

Learning is a social process that occurs through interactions with more knowledgeable individuals (e.g., teachers, peers, family members) [20]. Vygotsky's Sociocultural Theory highlights the significance of scaffolding, where teachers provide support to help children achieve higher levels of understanding. In the context of assessment, Vygotsky's theory underscores the importance of formative assessments, in which teachers observe and interact with children during activities to assess their current understanding and guide them within their Zone of Proximal Development (ZPD) [21]. This approach ensures that assessments are dynamic, responsive, and supportive of each child's learning trajectory.

In Piaget's Cognitive Development Theory, children actively construct knowledge through interactions with their learning environment. Cognitive development occurs in stages, influencing a child's ability to process information and make decisions [22]. Piaget's stages of cognitive development, particularly the preoperational stage in preschoolers, inform the types of cognitive tasks assessed. Assessments should align with preschoolers' cognitive abilities, such as symbolic play and the development of logical thinking [23]. Understanding a child's cognitive stage allows teachers to tailor assessment methods and instructional strategies, ensuring they align with age-appropriate learning expectations [24].

In Bronfenbrenner's Ecological Systems Theory, a child's development is influenced by multiple environmental systems, including immediate surroundings (family, school) and broader contexts (culture, society) [25]. This theory highlights the importance of assessing a child's development within their ecological context. Effective assessment practices should incorporate the child's family, community, and cultural background, recognizing that development does not occur in isolation but within an interconnected system [26]. The framework suggests that assessments should not only evaluate individual performance but also consider social and environmental factors that influence a child's development [27].

2.5. Motivation

Despite the growing body of literature on assessment methods, a gap remains in effectively integrating tools that address both cognitive and socio-emotional development in preschool settings. A key motivation for this study is the increasing emphasis on holistic development in early childhood education. Traditional assessment approaches often prioritize academic skills while neglecting the equally critical social and emotional aspects of development. Given that the preschool years lay the foundation for future learning, there is a need for comprehensive assessment strategies that support the full spectrum of a child's growth. By bridging academic and social-emotional assessments, teachers can implement more effective teaching and intervention strategies aligned with children's developmental milestones.

3. Methodology

3.1. Research Design

This study employed a mixed-method approach, integrating both qualitative and quantitative methodologies to explore the impact of effective assessment practices on preschoolers' academic and social development. The combination of these methods provided a comprehensive understanding by capturing both numerical data and contextual insights. Data collection methods included structured questionnaires, developmental checklists, and systematic classroom observations. These instruments were selected to ensure a balanced approach to evaluating preschoolers' developmental progress. Creswell and Creswell [28] emphasize that integrating qualitative and quantitative methods in research

enriches understanding of the subject and helps overcome the limitations associated with relying exclusively on a single approach.

3.2. Population and Sample Selection

The population targeted in this research consisted of three key groups: preschool teachers from Preschool A, parents of preschoolers enrolled in Preschool A, and early childhood education experts from UNITAR International University. The inclusion of these groups ensured a broad and multifaceted understanding of assessment practices, drawing from the perspectives of teachers, caregivers, and academic professionals.

A stratified random sampling method was employed to ensure diverse representation across socioeconomic backgrounds and educational settings. Patton [29] highlights that employing this sampling method ensures that key subgroups within a population are adequately represented, reducing sampling bias and improving results reliability.

The sample included 30 preschoolers, 4 teachers, and 30 parents. Selection criteria required that children have been enrolled in the preschool program for a minimum of six months before data collection to ensure sufficient exposure to assessment practices. Teachers selected for participation had a minimum of two years of experience in early childhood education to provide informed insights into assessment strategies.

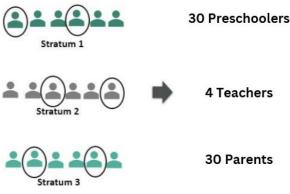


Figure 1.
Stratified random sampling.

3.3. Research Instruments

Structured questionnaires were used as a primary quantitative instrument. These are shown in Appendices A to C and comprise 21 questions covering four domains: cognitive, social, emotional, and physical development. The questionnaire used both closed-ended (select-and-tick) and open-ended questions to allow for both measurable data collection and additional qualitative insights. DeVellis [30] highlighted that well-structured questionnaires enhance the reliability and validity of data collection by ensuring that both subjective perceptions and objective measurements are accurately captured.

Developmental checklists tailored for children aged 4 to 6 were employed to assess academic and social competencies. These are provided in Appendices D to F and contain 34 age-specific items. The checklists evaluate essential developmental areas such as literacy, numeracy, motor coordination, and interpersonal skills. According to Meisels et al. [31], developmental checklists provide structured benchmarks, allowing teachers to identify specific areas, such as where children excel or where additional support may be needed, making them a valuable tool in early childhood education.

Observation reports (Appendices G to I) were used to document children's behavior and engagement in their learning environment. Teachers systematically recorded interactions, learning

engagement, and socio-emotional responses. This method ensured a more holistic understanding of each child's developmental progress [32].

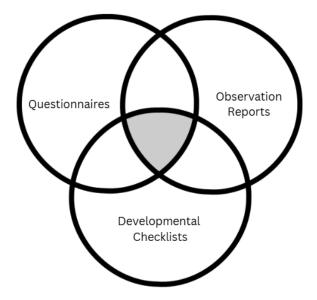


Figure 2.
Triangulation of data sources to obtain more holistic results.

3.4. Procedure for Data Collection

Data collection was conducted during school hours over two consecutive working days, specifically on the 5th and 8th of July 2024. This scheduling minimized disruptions to daily routines. Questionnaires were distributed and collected by four teachers from Preschool A, while three lecturers from UNITAR International University participated in the study.

To maintain confidentiality, completed questionnaires were returned in sealed envelopes. The teachers collected the parents' responses, while teachers and lecturers submitted their own responses directly to the principal. All collected data was securely stored until analysis commenced.

3.5. Procedure for Data Analysis

Descriptive statistical methods were applied to analyze the questionnaire data. Responses were assessed using frequency counts and percentage distributions to identify trends in cognitive, social, emotional, and physical development. These statistical measures provided a structured analysis of preschoolers' developmental progress based on questionnaire responses. Field [33] highlights that statistical analysis helps identify developmental trends and variations across different demographic groups, ensuring that assessment tools are both reliable and valid for early childhood education.

The developmental checklists for 4, 5, and 6-year-olds (Appendices D to F) utilized a three-point rating scale (1 = Poor, 2 = Good, 3 = Excellent), with a total possible score of 99 (plus 1 additional mark for calculation purposes). The checklist assessed a range of academic and social development areas, such as cognitive abilities, literacy skills, numeracy proficiency, creative thinking, motor coordination, and social behaviors. Data from these checklists were analyzed to determine developmental trends across different age groups.

Observation reports (Appendices G to I) provided qualitative insights into children's development. These reports documented literacy, numeracy, fine motor skills, social interactions, communication abilities, and self-regulation. Observations were categorized into recurring themes related to academic progress and social competence. The qualitative data allowed for a deeper contextual understanding of

each child's development. This was emphasized by Patton [29] in qualitative methods, researchers can explore complex behaviors and social interactions in natural settings, providing richer insights beyond numerical analysis.

3.6. Research Ethics

Ethical considerations were strictly upheld throughout the study. Research ethics frameworks, such as those outlined by the American Psychological Association [34], emphasize the importance of informed consent, confidentiality, and participant welfare in educational research.

Ethical considerations were strictly upheld throughout the study. Informed consent was obtained from all participants before data collection. Parental consent was secured for preschoolers, ensuring that guardians were fully aware of the study's objectives, procedures, and potential implications.

Confidentiality was maintained by anonymizing all data. No personal identifiers were recorded, and all responses were securely stored to protect participant privacy. Physical copies of the data were kept in locked cabinets, while digital records were stored in password-protected files.

The study design ensured that no harm came to participants, with observations conducted in a non-intrusive manner. If any signs of discomfort or distress were observed among children, necessary steps were taken to ensure their well-being, including the option to withdraw from the study without consequences. By maintaining ethical integrity and employing rigorous data collection and analysis methods, the study aimed to contribute valuable insights to the field of early childhood education.

4. Findings

Promoting preschoolers' academic and social development is a critical aspect of early childhood education. Effective assessment practices play a pivotal role in understanding and fostering the growth of young learners. This research aims to explore qualitative and quantitative findings on effective assessment practices and their impact on preschoolers' academic and social development. This finding will begin with understanding the background of respondents, addressing specific research questions, and providing insights into the best practices for assessing and promoting preschoolers' academic and social development by adapting effective assessment practices.

4.1. Background of Respondent

The respondents for this research comprised a diverse group of individuals. This research involved 30 children, 4 teachers, and 30 parents, working closely with 3 experts in education. The parents of the preschoolers are predominantly from a middle-class residential area with a wide range of professional backgrounds. This blend of teachers, parents, and academic experts offered a well-rounded perspective crucial for understanding and enhancing assessment practices in early childhood education.

4.2. Problem Statement

The role of assessment in early childhood education is incredibly crucial. Assessment practices help teachers understand children's developmental progress and inform instructional strategies. Effective assessments provide comprehensive insights into children's cognitive, social, and emotional development, enabling tailored educational interventions.

However, challenges persist in the implementation of effective assessment practices. Teachers often face difficulties due to the lack of standardized assessment tools, varying levels of training, and the diverse needs of children. Addressing these challenges is crucial for ensuring that assessments genuinely support the developmental needs of preschoolers, specifically regarding the responses gathered from teachers.

RQ1 – What are the Current Preschool Assessment Practices?

The findings indicate that the current preschool assessment practices use a mix of traditional and contemporary methods. Traditional methods such as written tests and worksheets are still widely used.

Observational assessments are increasingly used, allowing teachers to monitor and record children in a natural setting. Portfolio assessments, which compile children's work over a period, provide a comprehensive view of children's development. Checklists, anecdotal records, and rating scales help systematically record children's academic and social progress. Play-based assessment provides holistic approaches to capture children's development through structured and unstructured play. Formative assessments are gaining traction to provide ongoing feedback to both teachers and children to improve learning outcomes. According to Thompson et al. [35], a student-centered classroom is crucial for ensuring all preschoolers have an opportunity to be successful.

RQ2 – What additional support and resources do teachers need to effectively implement assessment practices? The four key areas identified as additional support and resources are professional development, allocated collaborative planning time, updated resources and materials, and integrated technology. Continuous professional development is essential for equipping teachers with updated skills and knowledge in the evolving education world. Allocated collaborative planning time is crucial for teachers to work together, share insights, and develop cohesive assessments that can be consistently implemented across classrooms. Updated resources and materials include high-quality, diverse, and relevant assessment tools, which can enhance teachers' ability to design meaningful and effective assessments catering to children's varied learning needs. Technology integration can help streamline the assessment process, making it more efficient and less time-consuming.

RQ3 – What are the perceived barriers and challenges that might arise in implementing holistic assessment practices?

According to Lichtenberger et al. [36], while formative assessment is a widely valued approach to support meaningful learning, due to time constraints and conflicts with other goals, successful implementation remains a challenge. Several perceived barriers and challenges in implementing holistic assessment practices are identified in the findings. High workload is perceived as a significant issue as teachers struggle to find time for comprehensive assessment while juggling heavy workloads. Due to a lack of training in holistic assessment approaches, teachers feel unprepared to implement these practices effectively. Cultural resistance to change exists as traditional test-based assessments are prioritized due to familiarity and perceived reliability and objectivity. The high value placed on academic achievement over social and emotional development further reinforces the preference for traditional approaches. Resource limitations further complicate the adoption of holistic assessment. Effective holistic assessments require technologically integrated materials, such as tablets, for recording, documenting, and data processing to track children's progress in real time. The lack of resources and materials can hinder thorough and meaningful assessment. Large class sizes and diverse learning needs can make the implementation of holistic assessment challenging. Teachers are unable to give individual attention to each child, which is crucial in holistic assessments. Diverse learning styles and needs of children from various cultural and linguistic backgrounds require tailored assessment approaches for effective and meaningful assessments.

RQ4 – What strategies and approaches are effective in assessing and enhancing preschoolers' academic and social development?

The findings highlight several effective strategies in assessing and enhancing preschoolers' academic and social development. Play-based learning stands out as a prominent strategy as it allows children to demonstrate their skills and abilities in a relaxed, comfortable, and familiar environment. Continuous formative assessments are conducted regularly throughout the school year to monitor children's progress and make timely adjustments to teaching strategies to better support children's development. Formative assessment is a key component to move towards a child-centered assessment [35]. Parents' engagement in the assessment process is another key strategy as parents can provide unique insights and reinforce learning at home. This collaborative method creates a consistent support system for children both at school and at home. The development of an Individual Lesson Plan (ILP) is essential. ILPs allow teachers to set personalized goals and design targeted interventions to cater to children's unique learning needs, thereby better supporting both academic and social development.

According to van der Steen et al. [37], formative assessment plays an important role as the connection between teaching and learning. However, the implementation of formative assessment that truly makes a difference remains a challenge for all teachers.

4.3. Research Result

4.3.1. Questionnaire Results from teachers (Figure 3)

Regarding cognitive development, more than 70% of teachers find it very effective for mathematical and problem-solving skills. For language and literacy, 50% of teachers find it somewhat effective. Concerning social-emotional development, more than 80% of teachers find it very effective for social interaction and self-confidence, while 50% find it somewhat effective for emotional regulation. In physical development, 100% of teachers find it very effective for gross motor skills, and about 60% find it very effective for fine motor skills.

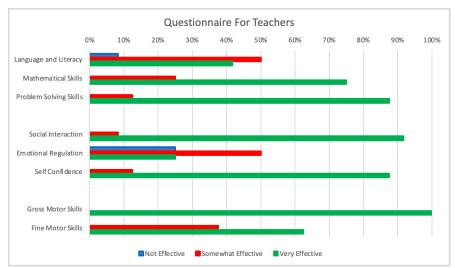


Figure 3. Questionnaire for Teachers.

4.4. Questionnaire Results from Parents (Figure 4)

On Cognitive Development, more than 80% of parents find it very effective across all three areas of development – Language and Literacy, Mathematical Skills, and Problem-Solving Skills. On Social-Emotional Development, more than 80% of parents find it very effective in all three areas of development – Social Interaction, Emotional Regulation, and Self-Confidence. On Physical Development, more than 80% of parents find it very effective in both Gross Motor Skills and Fine Motor Skills.

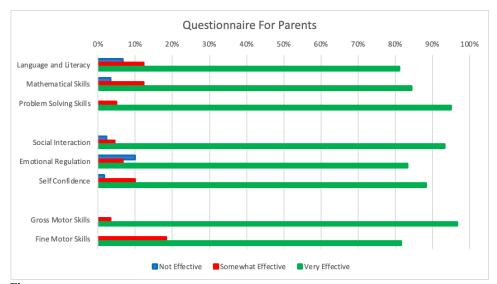


Figure 4. Questionnaire for Parents.

4.5. Questionnaire Results from Experts (Figure 5)

On Cognitive Development, more than 60% of experts find it very effective in Language and Literacy and Mathematical Skills, while 50% find it very effective in Problem-Solving Skills. On Social Emotional Development, more than 60% of experts find it somewhat effective across all three areas of development - Social Interaction, Emotional Regulation, and Self-Confidence. On Physical Development, more than 60% of experts find it very effective for both Gross Motor Skills and Fine Motor Skills. On Curriculum and Pedagogy, 50% of experts find it very effective in Curriculum Appropriateness, while more than 60% find it somewhat effective in Teaching Practices. On Parental Involvement, more than 80% find it somewhat effective in Parental Engagement, while more than 60% find it very effective in Communication with Teachers.

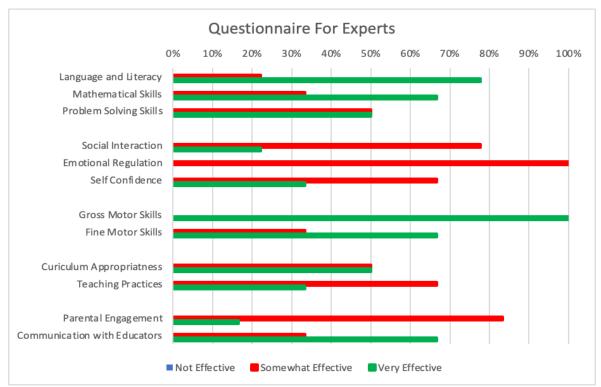


Figure 5. Questionnaire for Experts.

4.6. Developmental Checklist for 4-Year-Olds (Quantitative)

In a group of five 4-year-old preschoolers, effective assessment practices have significantly enhanced both academic and social development. In terms of academic development, 50%-70% of children are excellent at literacy, numeracy, and pre-writing skills. More than 90% are excellent at cognitive development. Close to 10% are poor at literacy and numeracy development. Regarding social development, 70% or more of children are excellent across all four skills: social, emotional, independence, and creativity. More than 10% of children are poor at emotional skills.

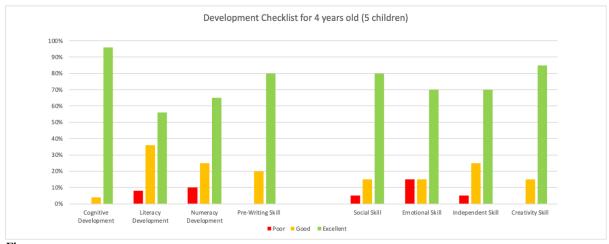


Figure 6.
Development Checklist for 4-year-olds (5 children).

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4.7. Developmental Checklist for 5-Year-Olds (Quantitative)

In a group of eleven 5-year-old preschoolers, effective assessment practices have significantly enhanced both academic and social development. In academic development, more than 80% of children are excellent across all five areas of development – cognitive, literacy, numeracy, creativity, and fine motor skills. 100% of children are good (5%) and excellent (95%) at cognitive development. Numeracy development has the highest percentage of children with poor performance at 7%. In social development, 100% of children are good (6%) and excellent (94%) at independent skills. About 73%-89% of children are excellent at social skills, emotional skills, and role-playing. 21% of children are good and still working in progress on their emotional skills. 9% of the children are poor at role-playing.

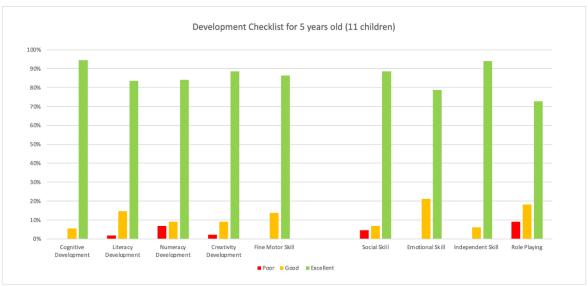


Figure 7. Development Checklist for 5-year-olds (11 children)

4.8. Developmental Checklist for 6-year-olds (Quantitative)

In a group of fourteen 6-year-old preschoolers, effective assessment practices have enhanced both academic and social development. More than half of preschoolers demonstrated strong reading skills, recognizing sight words, using context clues, and answering comprehension questions accurately. In academic development, more than 70% of children excel across all four areas of development: cognitive, literacy, numeracy, and creativity. Numeracy development has the highest percentage of children with poor performance at 11%. In social development, more than 80% of children excel across all four areas: social skills, emotional skills, moral development, and behavioral development. 100% of children are good and excellent across three areas: social skills, moral development, and behavioral development. On emotional skills, 4% of children are poor, while 9% are good.

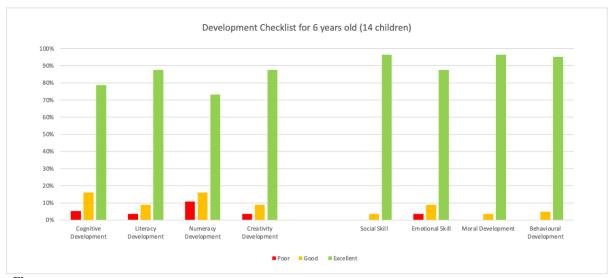


Figure 8.
Development Checklist for 6-year-olds (11 children).

4.9. Observation Report Result (Qualitative)

Observation report across the three age groups provides more insights. On cognitive development, interaction and hands-on engagement with children show better retention in terms of knowledge compared to worksheets alone. Children have shown better collaboration and communication skills observed during group activities. Parents who are involved and regularly communicate and collaborate with teachers on a child's development progress help reinforce learning at home.

5. Discussion

In the rapidly evolving landscape of early childhood education, the importance of formative assessment practices cannot be overstated. The foundational years of a child's education set the stage for future academic and social success, making it imperative to adopt practices that cater to the unique developmental needs of each child. This discussion explores how these practices can be leveraged to enhance preschoolers' growth. By integrating both qualitative and quantitative methodologies, the study aims to offer a comprehensive understanding of the impact of assessment practices on young learners in Malaysia.

The early years of education are critical, and formative assessments play a vital role in shaping a child's learning journey. These assessments are not one-size-fits-all; they must be tailored to the cultural and individual contexts of the children. In Malaysia, as in many parts of the world, teachers are recognizing the value of culturally responsive practices that acknowledge and respect the diverse backgrounds of preschoolers. This approach not only helps in accurate assessments but also fosters an inclusive environment where every child feels valued and understood.

5.1. Summary of Research Findings

The study highlights the critical role of early childhood years in laying the foundation for future academic and social success. It emphasizes how effective assessment practices, especially within the Malaysian context, can significantly enhance preschoolers' development by providing teachers with practical insights to improve educational approaches. The research underscores that assessments are not merely tools for measuring academic progress but are integral in crafting experiences tailored to each child's unique developmental needs. Formative assessments, characterized by their dynamic and ongoing nature, offer immediate feedback for customizing educational interventions. These include

observational techniques, questionnaires, developmental checklists, and play-based assessments, which collectively provide a comprehensive view of a child's growth (PDF) [38].

Incorporating both traditional and innovative assessment tools allows teachers to capture a holistic view of a child's development. Observational techniques, for instance, enable teachers to see beyond academic performance and understand the social and emotional aspects of a child's growth. Similarly, developmental checklists can guide teachers in identifying specific areas where a child may need additional support, thereby facilitating personalized learning plans.

A significant focus of the study is on culturally responsive assessments, which are crucial in diverse educational settings. These assessments ensure that tools and methods are relevant and fair, accurately reflecting each child's abilities while respecting varied cultural backgrounds. The findings indicate that effective assessments not only prepare children for academic challenges but also enhance social competencies, including communication, empathy, cooperation, and emotional regulation. The research also highlights the importance of involving parents in the assessment process to foster strong teacherparent partnerships that support comprehensive child development [39].

Parental involvement is a cornerstone of effective assessment practices. When parents are engaged in the assessment process, they become active participants in their child's educational journey. This collaboration between teachers and parents creates a support system that extends beyond the classroom, ensuring that children receive consistent guidance and reinforcement at home and at school. Regular communication with parents about assessment outcomes and developmental milestones can also help in setting realistic goals and expectations for each child.

5.2. Discussion of Findings

The study employs a mixed-method approach, integrating both qualitative and quantitative methodologies to explore the impact of assessment practices on preschoolers' development. This comprehensive approach ensures a balanced evaluation of developmental progress. The diverse cohort, comprising preschool teachers, parents, and early childhood education experts, offers a broad understanding of effective assessment methods. However, challenges such as the lack of standardized tools and varying training levels among teachers pose significant barriers [40].

The diversity of assessment practices in Malaysia, where traditional and contemporary methods coexist. While traditional written tests and worksheets remain prevalent, observational assessments, portfolio assessments, and play-based approaches are gaining traction. These contemporary methods allow for a holistic understanding of children's development. Formative assessments are increasingly utilized to provide ongoing feedback, enhancing learning outcomes. The study highlights four key areas where teachers require additional support: professional development, collaborative planning time, updated resources, and technology integration [41].

Professional development is essential for teachers to stay updated with the latest assessment practices and methodologies. Workshops and training sessions can equip teachers with the skills needed to design and implement effective assessments. Moreover, providing teachers with collaborative planning time allows them to share insights and strategies, fostering a community of practice that benefits both teachers and preschoolers. Access to updated resources and technology can further streamline the assessment process, making it more efficient and effective.

5.3. Implication of Findings

The implications of the study's findings are significant for early childhood education. Effective assessment practices are instrumental in promoting preschoolers' academic and social development. The study emphasizes the need for tailored approaches to meet diverse learning needs, focusing on continuous improvement and collaboration between teachers and parents. Barriers to implementing holistic assessment practices include high workloads, lack of training, cultural resistance to change, resource limitations, and large class sizes. Addressing these challenges is crucial to adopting comprehensive assessment methods [387].

Strategies such as play-based learning, continuous formative assessments, parental engagement, and individualized lesson plans are effective in enhancing preschoolers' academic and social development. The findings highlight the importance of continuous professional development for teachers, ensuring they are equipped with the necessary skills to design meaningful assessments. Collaborative planning time fosters consistency in assessments, while updated resources and technology integration streamline the assessment process [42].

In conclusion, the study highlights the critical role of effective assessment practices in promoting preschoolers' development in Malaysia. By tailoring approaches to meet diverse learning needs and focusing on continuous improvement, teachers can significantly enhance preschoolers' academic and social competencies. The involvement of parents and the integration of culturally responsive assessments further contribute to a comprehensive educational experience that respects each child's individuality and cultural heritage. These practices lay a strong foundation for long-term success in school and life.

The journey to effective assessment in early childhood education is ongoing and requires a concerted effort from all stakeholders. Teachers, parents, policymakers, and communities must work together to create environments that nurture and support every child's potential. By recognizing the critical role of assessment practices and addressing the challenges they present, we can ensure that preschoolers are well-prepared for the academic and social demands of the future. This collaborative approach not only benefits individual children but also strengthens the educational system as a whole, paving the way for a brighter future for all.

6. Conclusion

This study underscores the pivotal role of assessment practices in shaping early childhood education. In Malaysia, culturally responsive assessments not only respect diverse backgrounds but also foster an inclusive learning environment where every child feels valued [43]. Techniques such as observational methods, developmental checklists, and play-based assessments provide real-time feedback, enabling personalized educational experiences that promote cognitive, social, and emotional growth [44].

Parental involvement emerges as crucial, creating a supportive network that reinforces developmental milestones and bridges home and school environments [45]. The study's mixed-method approach offers a strong analysis of assessment practices, though challenges such as the lack of standardized tools and varying teacher training levels remain. Addressing these barriers through professional development and resource allocation is essential for effective implementation.

Recommendations for further research emphasize developing standardized, culturally relevant assessment tools, inspired by models like the Common European Framework of Reference for Languages (CEFR) [46]. Longitudinal studies are vital for understanding the sustained impact of early assessments on development [47]. Integrating technology into assessments presents an opportunity to enhance accuracy and efficiency [48].

Engaging diverse stakeholders, including parents, teachers, and policymakers, is crucial for a comprehensive understanding of effective practices. The Malaysian Education Blueprint 2013-2025 highlights stakeholder engagement's role in developing inclusive assessment strategies aligned with national standards [49]. Pursuing these research avenues will refine assessment practices, enhancing educational experiences and developmental outcomes for Malaysia's preschoolers, ensuring they are well-equipped for future success.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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