

THE CRUCIAL ROLE OF EARLY CHILDHOOD EDUCATION IN SUPPORTING CHILDREN'S COGNITIVE, SOCIAL, AND EMOTIONAL DEVELOPMENT

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Abstract

Childhood is a crucial and golden period in human development, during which children's brains rapidly absorb new information and form neural connections that serve as the foundation for their future growth. Early childhood education, particularly preschool education, plays a significant role not only as preparation for formal schooling but also as a formative stage that influences children's holistic development. However, public awareness of the importance of preschool education remains limited. This study aims to explore the essential role of preschool education in supporting children's physical, emotional, social, and cognitive development. The research employs a qualitative approach using a literature review method as the primary instrument for data collection. Through the analysis of relevant theories, concepts, and previous research findings, this study identifies the multidimensional benefits of preschool education in fostering children's attitudes, knowledge, creativity, and adaptability to their environment. The findings indicate that preschool education provides a solid foundation for lifelong learning and overall personal growth, both through formal institutions such as kindergartens and non-formal settings like playgroups and childcare centers. Therefore, it can be concluded that preschool education serves as a vital stage in preparing children for academic success and well-rounded development in later stages of life.

Keywords:

Pre-school education, Pre-school child development

INTRODUCTION

Childhood is often regarded as the golden period of human development. During this stage, children's brains absorb new information at an astonishing rate, forming neural connections that lay the foundation for their future growth. Early childhood, particularly from birth to six years old, plays a fundamental role in shaping the groundwork for lifelong development. Preschool education, which is often viewed merely as preparation before formal schooling, actually holds a much more significant role than simply readying children for school life.

Children aged 60–72 months experience rapid cognitive, motor, social-personal, and language development (Soetjningsih & Ranuh, 2015). Through various enjoyable and interactive learning activities, preschool education not only stimulates cognitive growth but also nurtures social and

emotional intelligence that will support them throughout their lives. In general, preschool education provides the foundation for the development of various aspects, including attitudes, knowledge, creativity, skills, and social adjustment. Therefore, preschool education can be understood as an organized effort to assist the physical and spiritual growth of children outside the family environment before entering elementary school, which may take place through formal institutions such as kindergartens or non-formal settings like playgroups and daycare centers.

Kindergartens typically serve children aged five to six, while playgroups or daycare programs are designed for children aged three and above (Indrawan & Hadion, 2020). However, many people still underestimate the importance of preschool education, assuming that children are too young to learn or that formal education only begins in elementary school. In fact, numerous studies have demonstrated that early learning experiences have a profound and lasting impact on children's success later in life (UNESCO, 2023; Shonkoff & Phillips, 2021; Yoshikawa et al., 2020).

Recent studies have confirmed that preschool education significantly contributes to children's holistic development, including literacy, emotional regulation, and problem-solving skills (Bakken et al., 2022; Burchinal et al., 2023). Furthermore, high-quality early childhood education (ECE) programs are strongly correlated with improved academic performance and social competence during adolescence (Heckman & Karapakula, 2021; Li et al., 2022). A growing body of research also shows that preschool participation enhances executive function, school readiness, and socio-emotional resilience in diverse cultural contexts (Britto et al., 2021; Melhuish & Gardiner, 2023; OECD, 2024). This highlights that investing in preschool education is a critical step in ensuring sustainable human development and long-term social equity.

Based on the background described above, this study aims to achieve several objectives. First, it seeks to examine the role of preschool education in supporting children's holistic development, encompassing cognitive, emotional, social, and moral growth. Second, the study intends to analyze how preschool education contributes to the formation of children's foundational skills and abilities before entering elementary school, particularly in fostering creativity, social interaction, and emotional intelligence. Third, this research aims to identify the challenges and misconceptions commonly faced by society regarding the importance and relevance of preschool education. Lastly, it seeks to explore how preschool education can serve as a strategic foundation for sustainable human development in the future, by preparing children to become adaptive, responsible, and competent individuals in an ever-changing world.

METHODOLOGY

This study employs a qualitative research approach using a literature review method as the main instrument for data collection. The qualitative approach was selected to enable an in-depth understanding of the phenomenon of preschool education and its impact on children's holistic development. The literature review method allows for comprehensive analysis and interpretation of theoretical perspectives, concepts, and prior empirical research findings related to preschool education. Through this approach, the researcher seeks to explore the significance, challenges, and contributions of preschool education across different cultural and educational contexts.

The data sources used in this study include academic journals, books, conference papers, and reputable research reports published between 2010 and 2024. The literature search was carried out systematically using digital databases such as Google Scholar, ERIC, and Scopus. Specific keywords were applied, including *"early childhood education," "preschool development," "child growth and learning,"* and *"ECE models."* The selection process followed inclusion and exclusion criteria to ensure that only relevant and high-quality sources were analyzed.

Data collection and analysis followed the principles of content analysis, as proposed by Bowen (2009) and Snyder (2019). The analysis process consisted of several stages: (1) organizing and categorizing the collected data based on research focus; (2) comparing and contrasting various findings to identify common patterns and differences; and (3) synthesizing key insights to formulate new theoretical

perspectives. This systematic procedure ensured that the analysis was both rigorous and comprehensive, allowing the researcher to draw meaningful conclusions about the role of preschool education in supporting children's holistic growth.

To strengthen the validity and reliability of the research, international and cross-contextual studies were also integrated into the analysis. By synthesizing data from both developed and developing countries, the study captures a holistic and comparative view of preschool education practices in the 21st century (Brown et al., 2021; O'Connell & Westrupp, 2022). This integration not only enhances the credibility of the findings but also provides insights into the global innovations and best practices that can inform future educational policies and frameworks for early childhood learning.

RESULTS AND DISCUSSION

Preschool education, often regarded as the initial stage in a child's long educational journey, plays a much greater role than merely preparing children to enter elementary school. The early childhood period, particularly between the ages of 0 to 6 years, is known as the golden age of human brain development. During this stage, neural connections are rapidly formed, allowing children to absorb new information and experiences at an extraordinary rate. Preschool education serves as the foundation for the development of attitudes, knowledge, skills, creativity, and social adaptation. It aims to support children's physical and spiritual growth outside the family environment before entering primary education, and it can be delivered through formal education (schools) or non-formal education pathways. Preschool education includes kindergarten, playgroups, and childcare centers. Kindergarten is intended for children aged five to six years, usually for one to two years, while playgroups and daycare centers serve children aged three years and above. Preschoolers are individuals with multiple potentials that must be stimulated and developed to achieve optimal growth. When these potentials are delayed or hindered, developmental problems may arise (Indrawan & Wijoyo, 2020).

Characteristics of Preschool Children

According to Snowman (as cited in Patmonodewo), preschool children aged 3 to 6 years exhibit various characteristics that include physical, social, emotional, and cognitive aspects. Physically, preschoolers are generally active and require sufficient rest after engaging in multiple activities. At this stage, their large motor muscles develop faster than fine motor control, making it difficult for them to perform complex tasks such as tying shoelaces. They may also struggle to focus on small objects, as hand-eye coordination is still developing. Although their bodies are flexible, their skull bones, which protect the brain, remain soft. Boys typically have larger body sizes, whereas girls are often more skilled in practical fine motor tasks. However, boys should not be criticized for their lack of dexterity, and comparisons between boys and girls should be avoided to maintain their psychological well-being.

Socially, preschoolers usually have one or two close friends, though these friendships often change rapidly. They can easily adapt to new play environments and adjust socially. Playgroups at this age tend to be small, unstructured, and frequently change. Children also enjoy playing alongside older peers, which indirectly supports the development of their communication and social skills. Emotionally, kindergarten children express their feelings openly and spontaneously, often showing anger or frustration directly. Jealousy is also common at this stage, as children may compete for the teacher's attention. Emotional regulation at this age heavily depends on parental and teacher guidance, helping children recognize and manage their emotions effectively. Cognitively, preschoolers typically show good language skills and can express their needs, feelings, and ideas effectively. Their cognitive development can be fostered through meaningful interactions, opportunities to explore, and a nurturing environment that encourages curiosity and creativity.

Preschool Child Development

The development of preschool children, aged 3 to 6 years, represents a critical phase of growth in which cognitive, social, emotional, linguistic, and motor skills advance rapidly. According to Jean Piaget,

children at this age are in the preoperational stage, meaning they begin to think logically but still rely on direct experiences and concrete objects to understand their surroundings. During this stage, children start categorizing objects, understanding the concept of conservation (that quantity remains constant even if form changes), and recognizing cause-and-effect relationships. However, their thinking remains limited to concrete phenomena, making abstract concepts difficult to grasp (Piaget, 1952).

In addition to cognitive growth, preschoolers experience significant social and emotional development. Erik Erikson's psychosocial theory identifies this period as the stage of initiative versus guilt, during which children begin taking initiative, exploring social environments, and interacting with peers. They participate in role-play and imitation games, helping them learn to share, take turns, and develop empathy, though their cooperative abilities remain limited (Erikson, 1963). They also begin to identify and express emotions such as happiness, anger, or disappointment, but still require adult support to regulate them effectively.

In terms of language development, preschoolers expand their vocabulary and begin to use more complex sentence structures. They are able to construct longer sentences and understand grammatical tenses such as past and future forms. This contributes to their ability to communicate effectively and comprehend instructions or stories (Snow, 2010). Motor development also plays a vital role at this stage—children refine their gross motor skills such as running, jumping, and climbing, while improving fine motor abilities like drawing, holding pencils correctly, and assembling puzzles (Pica, 2011). Overall, preschool development includes cognitive growth limited to concrete reasoning, enhanced social understanding through peer interaction, improved emotional expression and regulation, and increasingly complex language and motor skills. These interconnected aspects form the basis for future learning and overall development. Understanding these developmental traits is crucial to supporting children's optimal growth through appropriate environments and educational practices.

Types of Preschool Education Institutions

Early Childhood Education (PAUD) institutions are designed to provide holistic education services for children from birth to six years of age. During this crucial developmental period, PAUD serves as the foundation for children's physical, cognitive, social, and emotional growth. In Indonesia, several types of PAUD institutions exist, each tailored to the needs and characteristics of young learners. One formal institution is Kindergarten (TK) or Raudhatul Athfal (RA), which offers educational programs for children aged four to six years, divided into Group A (ages 4–5) and Group B (ages 5–6). Through engaging learning activities, kindergartens aim to develop children's fundamental abilities and prepare them for primary education. In the non-formal education sector, Playgroups (Kelompok Bermain) serve as an alternative form of early childhood education focusing not only on academics but also on overall child welfare. Playgroups cater to children aged two to four years and emphasize educational play, socialization, and the development of language and motor skills. Activities are designed to encourage learning through play in a safe and enjoyable environment (Yuliani Nurani & Sujiono, 2009).

Another non-formal institution is the Childcare Center (Taman Penitipan Anak or TPA), which combines educational programs with caregiving services for children from birth to six years old. TPA functions as a temporary family substitute for working parents, providing structured activities that promote independence, discipline, and social interaction (Yuliani Nurani & Sujiono, 2009). Additionally, there are Similar PAUD Units (SPS), which provide minimal and flexible early education services, typically conducted once or twice a week. SPS programs are often integrated with other community service initiatives and target children aged two to four years, offering meaningful early learning experiences through simple, guided activities (Hasnida, 2015).

Collectively, all types of PAUD institutions share the same goal — to provide optimal stimulation for children's growth and development from an early age. Through diverse approaches, each institution contributes significantly to ensuring that every child gains essential early learning experiences that support holistic development across physical, cognitive, emotional, and social domains.

Formats of Preschool Education Activities

Preschool education represents a critical stage in child development, during which children experience rapid cognitive, social, emotional, and physical growth. Therefore, preschool programs must be designed holistically to meet children's developmental needs. Preschool activities are conducted through a *learning-through-play* approach that integrates physical and psychological aspects of growth, helping children prepare for formal schooling and understand their family and social environments (Syafaruddin, 2011).

Preschool learning activities should include various types that address all developmental areas. Cognitive activities involve games that develop logical thinking and problem-solving skills, such as number, shape, and color games. Social activities encourage cooperation, turn-taking, and sharing through group play. Physical activities promote gross motor skills such as running, jumping, and climbing, while emotional activities help children practice self-regulation by recognizing and expressing feelings positively and constructively.

Common preschool education programs in Indonesia include Kindergarten (TK), Childcare Centers (TPA), Raudhatul Athfal (RA), Early Childhood Education (PAUD), and Playgroups (KB). These programs aim to provide developmental stimulation across cognitive, linguistic, emotional, and social domains.

The Urgency and Role of Preschool Education

Preschool education plays a vital role in human resource development, particularly during the early years of life, which represent the most sensitive period for brain and skill development. In Indonesia, the importance of preschool education is increasingly recognized as a strategic effort to prepare children for quality primary education. According to Prof. Dr. Suyanto, an early childhood education expert, preschool education serves as the primary foundation for building character and essential skills that influence future academic, social, and emotional success. He emphasizes that children aged three to six are at a critical developmental stage, where early educational experiences lay the groundwork for cognitive, social, and emotional growth (Suyanto, 2008).

Furthermore, research by the Indonesian Ministry of National Education (Depdiknas) found that quality preschool education improves children's social abilities such as sharing, cooperation, turn-taking, and communication — essential skills for living in Indonesia's multicultural society (Depdiknas, 2010). In this sense, preschool education is not merely academic preparation but also a means of fostering moral values, empathy, and social harmony.

Dr. Eka Budianta (2015) highlights that preschool also fosters cognitive development and creativity through structured play and experiential learning, enabling children to think critically and solve problems effectively. Similarly, Asep Syaiful (2016) emphasizes the emotional benefits of preschool education, noting that emotional literacy helps children manage stress, frustration, and interpersonal relationships.

Moreover, preschool education in Indonesia helps reduce educational inequality in rural and underserved areas. Government initiatives under the Ministry of Education and Culture (Kemendikbud, 2020) aim to expand access and improve quality so that all children, regardless of background, have equal opportunities to reach their full potential.

CONCLUSION

Preschool education plays a vital role in supporting children's holistic development, encompassing cognitive, emotional, and social aspects that shape the foundation of lifelong learning. During this period, structured and play-based learning experiences help children develop curiosity, creativity, and problem-solving skills, which are essential for intellectual growth and readiness for formal schooling (Piaget, 1952;

Pica, 2011). These findings affirm that preschool education serves as more than a preparatory stage—it functions as a transformative phase that builds the fundamental competencies needed for future success.

Furthermore, preschool education contributes significantly to the development of emotional and social intelligence. Through collaborative play, communication, and guided interaction, children learn empathy, cooperation, and emotional regulation (Shonkoff & Phillips, 2021). Such competencies are crucial for adapting to both academic and social environments, promoting resilience and positive behavior as they grow. Thus, preschool education not only strengthens cognitive skills but also nurtures the emotional balance and social harmony essential for human interaction.

The study also reveals persistent challenges and misconceptions within society regarding the importance of preschool education. Many parents still perceive early education as optional or merely a form of childcare, rather than an integral part of a child's developmental journey. This misunderstanding limits opportunities for optimal growth during a critical developmental stage. Therefore, raising public awareness and improving access to quality preschool education are essential steps toward ensuring equal learning opportunities for all children.

Ultimately, preschool education serves as a strong foundation for sustainable human development. The long-term benefits extend beyond individual success, contributing to social equity, economic productivity, and national progress (Heckman & Karapakula, 2021; UNESCO, 2023; OECD, 2024). By investing in inclusive and high-quality preschool programs, societies can nurture generations that are not only intellectually capable but also emotionally intelligent, socially responsible, and well-prepared to face future challenges.

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