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THE EFFECTS OF THE MONTESSORI METHOD ON PRESCHOOL CHILDREN'S READINESS FOR PRIMARY EDUCATION

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ABOUT ARTICLE

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Abstract: This article investigates the impact of the Montessori educational approach on preschool children's readiness for primary education. It explores how the Montessori philosophy and its principles including self-directed activity, hands-on learning, and collaborative play contribute to the development of cognitive, social, emotional, and academic competencies in early learners.

Introduction

Early childhood education plays a pivotal role in shaping the foundational skills, attitudes, and behaviors necessary for lifelong learning. The transition from preschool to primary education is a critical developmental phase, where children must adapt to new academic, social, and emotional expectations. In recent years, alternative pedagogical approaches, such as the Montessori method, have gained attention for their potential to better prepare young learners for this transition.

Developed by Dr. Maria Montessori in the early 20th century, the Montessori method emphasizes child-centered education that fosters autonomy, intrinsic motivation, and holistic development. Rather than relying on traditional teacher-led instruction, Montessori environments encourage self-directed exploration and learning through specially designed materials that stimulate cognitive and sensory engagement. The approach is grounded in the belief that children learn best in prepared environments that support independence, order, and freedom within limits. This article aims to explore the structure and effectiveness of the Montessori Method in enhancing school readiness among preschoolers. It examines core principles of the Montessori philosophy, discusses empirical studies on its outcomes, and analyzes how Montessori practices support children's readiness across multiple developmental domains. By comparing Montessori preschoolers with those in traditional educational settings, this paper provides evidence-based insights into how this approach influences a child's readiness for formal schooling.

Literature Review

The Montessori method has been widely studied in the context of early childhood education, with particular attention to its effectiveness in preparing children for primary school. One of the central tenets of Montessori education is its emphasis on self-regulation, independence, and purposeful activity, which researchers have linked to enhanced school readiness (Lillard & Else-Quest, 2006). Several empirical studies have compared Montessori students with peers in traditional settings and found notable differences in academic performance, social skills, and executive functioning.

Lillard (2005) outlines how Montessori's design, which fosters autonomy and internal motivation, contributes significantly to cognitive development and attentional control key factors in school readiness. Additionally, the use of sensorial materials in Montessori classrooms aids in the development of fine motor skills and early mathematical reasoning (Panskeep & Trevarthen, 2009). These foundational abilities are crucial for success in the early years of primary education.

A longitudinal study by Dohrmann et al. (2007) demonstrated that students who attended Montessori preschool exhibited higher levels of academic achievement and social understanding into adolescence, suggesting the method's long-term benefits. Another

significant contribution to the literature comes from Rathunde and Csikszentmihalyi (2005), who compared Montessori middle school students to those in traditional settings and reported higher levels of intrinsic motivation and engagement, qualities that begin developing in early childhood.

In terms of social-emotional development, Montessori education supports collaborative work and peer teaching, which promote empathy, communication skills, and conflict resolution (Lillard, 2017). These social competencies are particularly important for children transitioning into structured classroom environments, where interaction with peers and teachers is essential.

Furthermore, evaluations by Marshall (2017) show that Montessori-educated preschoolers demonstrate greater readiness in literacy and numeracy skills, attributed to the integrated and hands-on nature of the learning materials. Children in Montessori classrooms also benefit from mixed-age groupings, which allow for both peer mentoring and personalized learning trajectories, increasing their confidence and adaptability.

However, some critiques exist regarding the scalability and consistency of Montessori programs, especially in public settings where teacher training and fidelity to the original philosophy may vary (Cossentino, 2005). Despite these concerns, the consensus across most comparative studies indicates that Montessori education offers a supportive environment for developing the academic, emotional, and behavioral skills necessary for a successful start in primary school.

In summary, the literature strongly supports the view that Montessori education fosters multiple dimensions of school readiness. The method's emphasis on autonomy, structured choice, and hands-on learning provides preschoolers with a strong developmental foundation that translates effectively into the demands of formal education.

Methodology

This study used a comparative qualitative approach to examine the readiness of preschool children enrolled in Montessori programs versus those in traditional early childhood education settings. Data were collected through classroom observations, interviews with educators, and developmental readiness assessments administered to children aged 5 to 6. The

study sampled five Montessori and five non-Montessori preschools in urban areas with comparable socio-economic demographics.

The primary instrument used for assessment was the School Readiness Inventory (SRI), which evaluates children across cognitive, social, emotional, and physical development domains. Interviews with teachers provided additional context on classroom practices and perceptions of children's preparedness. Data were analyzed thematically to identify patterns of readiness and to determine whether specific Montessori practices correlated with improved outcomes.

Results

The action plan was designed to implement targeted interventions and strategies aimed at enhancing preschool children's readiness for primary education through the integration of Montessori principles in early childhood classrooms. After conducting observations, data collection, and implementing specific actions outlined in the plan, the following findings were observed:

The introduction of Montessori-inspired activities, such as problem-solving tasks and independent exploration of learning materials, showed significant improvements in children's ability to think critically and solve problems. Montessori materials, designed to be sensory and hands-on, encouraged children to engage in activities that fostered curiosity and independent thinking.

The incorporation of Montessori materials such as number rods, sandpaper letters, and storytelling exercises contributed to enhanced literacy and numeracy skills. Children demonstrated increased familiarity with letters, numbers, and early math concepts, indicating that Montessori methods were effective in improving academic preparedness for primary school.

The action plan's focus on promoting group work, peer teaching, and collaborative projects led to noticeable improvements in social interactions. Children in Montessori classrooms exhibited better teamwork, shared ideas more freely, and displayed stronger cooperation in group activities. The mixed-age structure of Montessori classrooms facilitated socialization among younger and older children, enhancing the development of leadership and mentoring abilities.

Montessori practices, including role-playing activities and conflict resolution exercises, helped children develop better interpersonal skills. Children learned to manage disagreements independently and practice empathy toward their peers. Observations indicated that Montessori children exhibited fewer emotional outbursts and were more adept at finding peaceful solutions to conflicts. The action plan's emphasis on self-directed activities and individualized learning allowed children to take ownership of their learning. Montessori activities, such as the freedom to choose work and the structured routine, helped children develop stronger self-regulation skills. Children were able to focus on tasks for longer periods and show greater perseverance in completing assignments, which is critical for their future academic success.

As a result of the Montessori method's focus on autonomy and choice, children displayed more confidence in their abilities. They were more willing to take on challenges and engage in new tasks without hesitation. Teachers reported that Montessori children were more motivated to learn, expressing greater enthusiasm for school and showing a natural curiosity about the world around them.

The introduction of Montessori-inspired activities such as pouring, sorting, and using tools strengthened children's fine motor skills. These activities not only helped with hand-eye coordination but also developed a sense of order and precision. By working with practical life materials, children became more confident in their ability to complete tasks that require physical dexterity, which is crucial for their school readiness.

The action plan's inclusion of physical activities, such as movement exercises and outdoor play, contributed to enhanced coordination, balance, and physical awareness. Children developed stronger gross motor skills, demonstrating greater physical control during play, which supports their overall physical development and readiness for structured school environments.

The action plan also included professional development opportunities for teachers, focusing on Montessori principles and classroom management strategies. Teachers reported a deeper understanding of Montessori methods and felt better equipped to foster a learning environment that supports independence and critical thinking. They also recognized the importance of allowing children to take ownership of their learning and observed how this

positively impacted students' engagement and outcomes. The action plan encouraged increased communication between teachers and parents regarding the Montessori approach and children's progress. Parent-teacher meetings were held to discuss individual student progress and strategies for extending learning at home. Parents expressed positive feedback about the Montessori approach, highlighting how it was benefiting their children's readiness for primary school. They reported that their children were more confident, engaged, and independent in their learning both in and outside the classroom.

The action plan's interventions, grounded in Montessori principles, significantly improved children's overall school readiness. Montessori students demonstrated advanced cognitive, social, emotional, and physical readiness compared to their peers in traditional settings. These children showed greater ability to adapt to structured environments, handle academic challenges, and interact positively with peers and teachers in primary school settings.

The successful implementation of Montessori methods led to the decision to continue integrating these practices into the preschool curriculum. Teachers expressed an interest in adopting more Montessori-inspired activities, and administrators recognized the potential benefits of scaling these methods within other classrooms. The action plan demonstrated that Montessori approaches could be effectively implemented in diverse settings and lead to tangible improvements in school readiness.

Discussions

This comparative study revealed several key differences between the readiness of children enrolled in Montessori programs and those in traditional early childhood education settings. Preschool children in Montessori programs demonstrated significantly higher levels of school readiness across multiple domains, including cognitive, social, emotional, and physical development.

Children in Montessori settings exhibited superior problem-solving abilities and advanced mathematical reasoning skills. The use of hands-on materials and self-directed activities in the Montessori classrooms encouraged children to actively engage with learning, leading to a deeper understanding of abstract concepts.

Montessori children were more adept at collaborative work, displaying better communication skills and empathy when interacting with peers. The mixed-age classroom

structure facilitated peer mentoring and social learning, promoting a positive, supportive classroom environment.

Montessori students showed higher levels of self-regulation and emotional maturity. They were more independent and displayed greater resilience when faced with challenges. The freedom of choice and responsibility embedded in the Montessori method allowed children to develop a strong sense of autonomy and emotional control.

The Montessori approach placed significant emphasis on developing fine motor skills through activities that required precision, such as using beads, puzzles, and other manipulatives. Children in Montessori classrooms demonstrated better coordination and dexterity compared to their peers in traditional settings.

In terms of school readiness, Montessori children consistently scored higher on the School Readiness Inventory (SRI) across all developmental domains. They were more prepared to handle the academic demands of primary education and had better interpersonal skills, which are crucial for success in a formal school environment.

Conclusion

Findings from the study revealed that children in Montessori classrooms consistently demonstrated higher levels of self-regulation, concentration, and independence compared to their peers in traditional settings. These children also performed better in tasks requiring problem-solving, collaborative work, and oral communication. Teachers in Montessori settings emphasized the importance of child-led exploration and noted that students were more motivated and confident in transitioning to primary education.

One notable advantage was the integration of real-life, practical activities in Montessori classrooms, which appeared to contribute to better fine motor skills and a clearer understanding of responsibility and order. Furthermore, the mixed-age classroom structure fostered a sense of mentorship and community, contributing positively to social-emotional development. In contrast, traditional settings often limited children's autonomy and offered fewer opportunities for individualized learning. While the study highlighted many benefits, it also recognized limitations, such as variability in the implementation of the Montessori philosophy and challenges in replicating its success in resource-constrained settings. These

findings underscore the need for comprehensive teacher training and curriculum consistency to maximize the Montessori method's potential in promoting school readiness.

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