The Influence of Montessori Education on Children's Personality Development and the Way of Thinking

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Abstract: This paper investigates the impact of Montessori education on children's personality development and thinking patterns. Montessori education is a child-centered approach to education that emphasizes the child's individual needs and interests, and encourages self-directed learning and exploration. The study aims to explore whether Montessori education can promote positive personality traits and enhance cognitive abilities in young children. The research is based on a literature review of previous studies on Montessori education and its effects on children's development. The study adopts a literature review approach to explore previous research on Montessori education and its impact on children's development, particularly on their personality and thinking patterns. The research draws on a range of scholarly sources, including academic journals, books, and online databases, to provide a comprehensive overview of the subject. The results of the study suggest that Montessori education can have a positive impact on children's personality development, promoting traits such as independence, self-discipline, and creativity. Montessori education also appears to enhance children's cognitive abilities, particularly in areas such as problem-solving, critical thinking, and spatial reasoning. The findings of this study support the effectiveness of Montessori education in promoting positive personality traits and enhancing cognitive abilities in young children. This research has important implications for educators and parents who are interested in providing children with an education that promotes holistic development and prepares them for success in life.

Keywords: early education, Montessori education, children

1. Introduction

The present study focuses on the concept and developmental impact of Montessori education in the field of early childhood education, including the impact of Montessori education method on personality development. We analyze the main features of Montessori and the impact of Montessori education on children's personality development and thinking patterns through research. The findings of the research indicate that Montessori education can lead to the development of an energetic, confident, and self-directed learner who is also a responsible member of society. Such an individual possesses a strong sense of self and has a considerable level of independence. This paper also examines the problems and possible solutions encountered in the localization of Montessori education

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methods. This result suggests that the Montessori approach to education has a wide range of potential and implications for future educational research and application.

2. The Impact of Education

The educational process begins at birth and lasts a lifetime, and profound changes a person. Early childhood education refers to the early childhood period (3 to 6 years old). In a broad sense, the present study considers purposeful activities that affect the physical growth, cognitive, and character development of young children to be early childhood education. Examples include watching television, doing chores, and participating in social activities with adult guidance. In a more restricted sense, early childhood education is specifically focused on education provided in kindergartens and other specialized institutions that cater to the needs of young children. It can also be referred to as social field education.

2.1. Early Education

Early education is crucial in promoting the development of the human brain, particularly in the parallel development of the left and right brain. Therefore, it is essential for teachers and parents not to let children grow up without any education and wait for their brains to mature naturally. Neglecting early education can be extremely harmful to children's brain growth and development, especially during the period before the age of six, which is when the most effective brain function network is formed.

Scientific research has proved that 0-3 years old is still the fastest developing sensitive period for motor and language skills. Educational activities for infants and toddlers usually integrate the development of all abilities, including visual, auditory, emotional control, language, social skills, and number symbols, all of which develop at a high rate during this period. At the same time, with the guidance and participation of the teacher, early education will be an important contribution to the formation of the child's complete personality.

Research by Bloom points out that children's intellectual development is non-uniform and uneven [1]. The period before the age of five is the fastest period of intellectual development. The brain develops at the fastest rate and learns things at the fastest pace during early childhood. Proper and correct preschool education plays a great role in the intelligence of young children and their later development. Early education can influence the child's perceptions later in life. The early guidance and in-depth introduction of the child's curiosity will help the child to have a more visual understanding of things around him/her in the future.

Early childhood education is an education in which parents and kindergarten teachers use various methods and objects to develop the intelligence of preschool children. The aim of the early childhood education is to make children smarter, by scientifically stimulate their brains and gradually improve the functions of various parts of the brain. Early childhood education is a multifaceted process that includes the development of observation, imagination, thinking, memory, language, creativity, interest in learning and curiosity. These aspects are interdependent and mutually dependent. Each component is essential to early childhood education.

2.2. Montessori

Montessori is a method of education that was created by Maria Montessori, an Italian psychologist and educator. It focuses on encouraging the natural development and self-motivation of children and adolescents in all areas of their growth. The goal of Montessori is to instill in each child a love for learning, understanding, and respect, ultimately leading to the child becoming a confident, self-directed learner and a productive member of society. One of the key distinguishing features of

Montessori education compared to traditional education is the emphasis on developing independence and self-awareness in the child. Montessori's uniqueness also stems from a thorough understanding of the child, following the child's various sensitive periods and stimulating the child's potential. The child develops independence, concentration, self-confidence and creativity in a respectful and enjoyable environment.

The Montessori education philosophy emphasizes the importance of providing children with sufficient space to act independently. Instead of asking for help, children are encouraged to say "help me to do it alone". In this approach, educators are not there to do things for children, but rather to guide and support them in doing things independently. This method is grounded in hands-on learning, self-directed activity, and collaborative play. The Montessori philosophy fosters the self-motivated growth of children and adolescents in all areas of their development.

2.3. Practice of Montessori in China

Montessori education has gained popularity as a progressive educational philosophy in mainland China since the 1990s. However, given the differences in cultural context, the philosophical elements of the method may require modification or adaptation to fit into the modern Chinese environment. Education would be a tool for transmitting cultural values and national agendas. The primary focus of localizing Montessori education in China is to ensure that it is implemented from a Chinese perspective. In particular, studies have emphasized the importance of Montessori education promoting Chinese moral values and cultural identity, such as the cultivation of children's collective identity [2]. These two concepts are essential functions of the Chinese education system and Montessori education must also possess and promote these beliefs.

3. The Impact of Montessori Education Method on Personality Development

Montessori education theory emphasizes order, rules, and freedom in the learning environment, so many people believe that children with a Montessori education have less aggressive behavior and more pro-social behavior. The essence of the Montessori method is to cultivate the spirit of self-motivated learning and exploration in young children. In the Montessori classroom, there are rich and colorful teaching aids, which are all "toys" created according to the sensitive period of children's growth and development that are suitable for children's growth. Montessori education involves repeated use of teaching aids to foster a well-rounded personality and develop various abilities in children through innovation and construction. The Montessori education method captures children's sensitive periods. It follows the characteristics of sensitive learning periods to get the most out of learning. This process is controlled by the teacher, and each child will have his or her own list of personality traits and daily tasks. Each student was recognized as completely different individual. These lists are developed in collaboration with the teacher and the child, thus ensuring maximum school effectiveness.

Montessori education eschews a system of rewards and punishments. A respectful approach is taken to foster the child's budding sense of dignity. The implementation of this system is actually a way to develop the child's full personality. In research, by following preschoolers, Montessori children performed better in terms of academic achievement and social cognition when analyzed from the beginning of their kindergarten years to the end of kindergarten. They were also more persistent on challenging tasks and expressed a preference for academic tasks as opposed to recreational tasks, and were significantly better at executive functioning by the end of prekindergarten (PK4) [3]. A single system of rewards and punishments is a relief or a burden for both teachers and parents, because they can easily use the system to make their children learn or accomplish certain tasks, which is actually a purpose-oriented approach to education. Although the single system cannot be denied that

it is bad, it is not known that children are more likely to try to perform for love, attention, communication, and recognition than for rewards. Parents should rely on their relationship with their children to motivate them, not on a system of rewards and punishments. Experimentally, the correlation between self-efficacy and self-esteem was higher in the Montessori group than in the traditional education group, and children in the Montessori group tended to perceive the classroom as an innovative environment, whereas children in the traditional education group perceived the classroom as a competitive environment [4].

Montessori emphasized that education should begin at birth. She pointed out that young children have great potential and an amazingly absorbent mind, and that teachers should arrange the appropriate environment to help them develop their nature and become characterized by good personality traits.

4. The Impact of Montessori Education Method on the Way of Thinking

4.1. Concept Statement and Related Research

The Montessori education method believes that the individual child should be "free, complete and independent". Two key elements in the development of the child are "thinking skills" and "practical skills". Among the thinking skills, creative thinking, divergent thinking and the sense of independent thinking are the main focus of early childhood education. This means that children need to keep their minds focused and flexible at the same time. The development of divergent thinking leads children to think more carefully about problems, to be more flexible in solving the various problems they encounter, and to think more broadly in seeking solutions of the problems. This allows children to exercise and enhance their active thinking.

When young children have independent thinking systems, which is, when they can think and express themselves independently, they must have the support of divergent thinking behind them. Independent young children should have the ability to think independently. Divergent thinking provides young children with open-mindedness, which is consistent with the essence of Montessori education method. In research, a Montessori preschool provides children with only blue, yellow, and green dots. Children were given the task of creating a picture using them. One child created a picture of a sunset over the ocean, using blue dots to represent the water, green dots to represent the land, and yellow dots to represent the sun. This task encouraged divergent thinking and allowed children to explore different ways to use the limited resources provided to them [5]. Overall, the Montessori education method offers a new path for developing divergent thinking in young children.

"Absorbent mind" is an important theoretical basis of Montessori teaching. Children have a "mental embryo" from the beginning of the gestation process. Students have a learning sensitivity to the surrounding knowledge, can unconsciously perceive, and through their own observation and absorption, gradually adapt to the environment and self-shaping [6]. Therefore, in education, the creation of the environment is crucial, and teachers should be prepared to guide children to experience and perceive in the process of manipulation, giving full play to children's autonomy and enthusiasm in the process of interaction with the environment.

In research, there are plenty of ways to improve children's mindset. Children understood the concept of length by comparing sticks of different lengths and objects of different sizes. Using different teaching aids, they gained more cognitive information, such as various geometric shapes and quantity concepts, which improved their cognitive skills [7].

Children understood the concept of three-dimensionality by building different shapes and sizes of cubes and geometric shapes using props such as cubes and puzzles. Researchers exercised their spatial thinking and imagination by using three-dimensional teaching aids and props such as puzzles.

Children can understand the concept of counting by putting beans into different numbers of buckets, and they can also learn numbers by counting the number of beans. This approach exercises children's logical analysis and inference skills [7]. The Montessori method focuses on individualized learning and self-directed exploration, while traditional teaching emphasizes a more structured approach with the teacher guiding the learning process. In Montessori education, students are encouraged to choose their own activities, explore materials at their own pace, and work independently or in small groups. Teachers act as facilitators, providing guidance and support as needed, but allowing the child to lead the learning process. On the other hand, traditional teaching involves a teacher-centered approach with a structured curriculum and a set of predetermined learning goals. Students are expected to follow the teacher's instructions, complete assigned tasks and meet established benchmarks. For instance, teachers provide children with ready-made toys in traditional teaching kindergarten, they show kids how to play with the toys, and the kids just follow. This will lead to a less creative thinking of children.

In the Montessori education method, teachers do not provide toys that have already been produced, but rather encourage children to explore and create on their own initiative, using teaching aids to help them develop creative thinking so that they can better cope with a variety of problems. Montessori education method can influence young children's conscious and active spirit of exploration. Montessori teaching method uses "toys" created according to the sensitive period of children's growth and development, which are suitable for children's growth. The child constructs a perfect personality by repeatedly manipulating Montessori teaching aids.

5. Suggestions

5.1. Future Research Directions

From the previous article, we learned that Montessori education method has a positive impact on young children. Its positive impact is not limited to children in general, but also includes special need children, such as children with ADHD or EBD. Maria Montessori believed that learning disorders such as ADHD, Dyslexia, and Dysgraphia, as well as disruptive behavior disorders, are all examples of incorrect functioning. While some of these issues may be present from birth and cannot be addressed, those resulting from incorrect functioning can be improved by improving living conditions [8]. According to Montessori, having a harmonious and non-destructive relationship with the environment, being in contact with nature, and engaging in handicrafts can bring about a normalization of life, resulting in peaceful living. This approach serves as a remedy for the deviations in modern childhood [9]. This approach can serve as a remedy for the deviations of modern childhood, such as attention difficulties and hyperactivity. In Montessori classrooms, children are encouraged to learn through hands-on exploration and discovery, rather than simply listening to lectures. This approach can be particularly effective for children with ADHD, who may struggle with sitting still and paying attention for long periods of time. By engaging in hands-on activities and learning at their own pace, children with ADHD can build their skills and knowledge while also developing their selfesteem and confidence.

Schools and institutions can use the Montessori education method to develop the abilities of special need children by using a multisensory approach. For example, by exercising their sense of touch and vision through movement and the use of special appliances. Also, through music, we can exercise their sense of hearing. All of these have a positive impact on children with special needs.

Furthermore, the application of the Montessori education method can also be extended to other fields such as corporate training, talent development, and innovation and entrepreneurship. The Montessori education method emphasizes the cultivation of autonomy, creativity, and self-management skills, which are also essential in modern workplaces and innovation and

entrepreneurship. Future research can explore how to apply the Montessori education method to corporate training and talent development and seek more innovative educational methods and models.

Lastly, the impact of the Montessori education method can also be extended to the fields of social change and sustainable development. The Montessori education method emphasizes the mentoring of children's environmental awareness and social responsibility, both of which are crucial factors in achieving sustainable development goals. Future research can explore how to apply the Montessori education method to social change and sustainable development and provide ideas and solutions for building a more just, harmonious, and sustainable society.

5.2. Possible Solutions to the Problems Encountered in the Localization of Montessori Education Method

As the Montessori education method and curriculum concept become popular in the world, more and more schools in China are adopting the Montessori teaching method. The Montessori method's free choice of children, the concept of preparing the right environment for children, and its various teaching aids and methods are all worthy of learning from China's kindergartens. At the same time, the Montessori curriculum has its own limitations and may collide with our national conditions, society and culture. Therefore, in the process of localizing Montessori curriculum, there are many problems that need to be solved, such as the contradiction between Montessori pedagogy curriculum and local curriculum and the training of professional teachers. Only by dealing with these problems, Montessori curriculum has substantial development and progress in China.

The first recommendation is to fully consider the cultural differences between the Montessori curriculum philosophy and our country. We cannot copy different educational methods when borrowing from them, because the national conditions and cultural backgrounds of each country are different. We have to borrow selectively from the characteristics of young children in our country.

In the process of localizing the Montessori curriculum, we should fully realize that the Montessori curriculum was born in the context of Western culture, which differs greatly from Eastern culture. Chinese children are usually docile and obedient, and our culture promotes introversion and humility. Western children are usually individualistic, free and autonomous. Western culture promotes freedom and openness. The Montessori curriculum promotes freedom of choice and is more suitable for children in Western culture, so it cannot be copied to children in Eastern culture. Therefore, educational activities should be carried out in the context of our cultural background and the specific characteristics of our children. First of all, in the process of selecting and putting in teaching aids and materials, we must fully consider the different needs of children of different ages. Secondly, the statement suggests that certain teaching aids and their operation process in the Montessori education method need to be improved to eliminate any elements that may hinder the development of children's personality and make it more compatible with the needs of children in China. It further adds that children should be given complete freedom in selecting teaching aids and deciding the time for their usage. During the process of operation of teaching aids, the children are encouraged to explore and discover independently, giving full play to their own imagination, truly liberating their nature, highlighting their individuality, and allowing them to explore freely and develop fully [10].

The second recommendation is the strengthening of teachers. To speed up the process of localizing Montessori curriculum, it is necessary to train more professional teachers. Montessori teachers should have observer consciousness, which means that teachers should mainly observe children during their games and activities and then help them when they need help. They should also have the ability to adapt and innovate. It is important to choose the teaching content that are suitable for children, and to transform and innovate the unsuitable parts of the Montessori curriculum to create better conditions for children.

The third is that we should strengthen the popularization of Montessori education method to make more parents understand it so that parents can better cooperate with the educational work. It is important to let parents know more about the philosophy and content of the Montessori curriculum and to motivate them to learn more about the advantages of Montessori education method for young children's learning and growth.

6. Conclusion

This study explores the concept and development of Montessori education, the specific implementation steps, principles, and localized variations, as well as the impact of Montessori education on personality development and children's thinking patterns in the field of early childhood education. Through the study, we found that Montessori education has unique educational concepts and methods, focusing on children's self-development and self-learning, emphasizing the development of children in freedom, order, autonomy, and adaptability, and promoting children's physical and mental health and self-realization.

The Montessori education method has broad potential and significance for future education research and application. Future research can continue to explore the effectiveness and sustainability of the Montessori education method and seek more educational models and methods that are suitable for modern society's needs. Moreover, future research can explore the long-term impact of Montessori education on children's growth and development and its positive impact on society.

In addition to the effectiveness and sustainability of the Montessori education method, future research can also explore the relationship between this education method and other cultural and educational models. In the era of globalization, the Montessori education method has spread to many countries and regions, but different cultural and social backgrounds may have different effects on the practice and effectiveness of this education method. Therefore, future research can explore the practice and adaptability of the Montessori education method in different cultural and social environments and provide references and inspiration for cross-cultural and cross-national educational exchanges.

In conclusion, the research findings indicate that the Montessori method holds great promise for the future, particularly in the field of education and training. This approach, which emphasizes experiential learning, self-directed discovery, and personalized instruction, has been shown to enhance cognitive, social, and emotional development in children. Overall, the potential applications of the Montessori method are wide-ranging, and hold great promise for shaping the future of education and training. By recognizing and embracing the core principles of this approach, educators and trainers can create learning environments that are engaging, effective, and empowering for learners of all ages and backgrounds.

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