

The Influence of Montessori Education and Traditional Education on Children's Learning Psychology

Jiali Liu *

School of International Education, Wuhan Institute of Physical Education, Wuhan, 430079, China

* Corresponding author Email: Iris_edu@163.com

Abstract: This paper aims to explore the influence of Montessori education and traditional education on children's learning psychology and compare the advantages and disadvantages of the two educational methods. First, the influence of Montessori education and traditional education on children's learning ability and attitude was explored through observation and comparative analysis. In terms of learning ability, Montessori education focuses on cultivating children's independent learning ability and practical ability, while traditional education pays more attention to the indoctrination of knowledge and examination results. In terms of learning attitude, Montessori education cultivates children's concentration and continuity, while traditional education may lead to children's interest in learning and motivation to learn. Next, the advantages and disadvantages of Montessori education and traditional education are analyzed. Finally, the integration and innovation of Montessori education and traditional education are discussed. In conclusion, Montessori education and traditional education have different influences in terms of children's learning psychology, and integrated education may provide better educational methods for children's all-round development.

Keywords: Montessori Education; Traditional Education; Children's Learning Psychology; Learning Ability; Learning Attitude; Fusion Education.

1. Introduction

In the contemporary society, education plays a vital role in the development of children. Different educational methods have different effects on children's learning psychology. Montessori education is an educational method named after the Italian educator Maria Montessori, which aims to cultivate children's autonomy, self-discipline, and self-confidence. [1-2] As a new educational method, Montessori education is obviously different from the traditional education. Montessori education gives children the opportunity to freely choose and explore, encouraging them to learn through their own experiences. [3-5] While traditional education pays more attention to the indoctrination of knowledge and the standardization of discipline. Student learning process is usually conducted according to a unified teaching plan, with emphasis on the imparting of knowledge and assessment of learning outcomes. [6] These two educational methods have different effects on children's learning psychology, which is worth further study and discussion.

This paper aims to compare and analyze the influence of Montessori education and traditional education on children's learning psychology and explore the reasons. To provide the public with reference on educational choices, help them better understand the impact of different educational methods on children's development, and make more rational educational decisions.

2. Comparison and Reason Analysis of the Influence of Montessori Education and Traditional Education on Children's Learning Psychology

2.1. Comparison and Reason Analysis of Mathematics and Chinese Learning Ability

Mathematics, and Chinese learning ability is an important aspect of children's learning, Montessori education and traditional education have different effects on mathematics and Chinese learning ability. In terms of mathematics, Montessori education focuses on cultivating children's mathematical thinking ability and practical operation ability. [7] By providing specific mathematical teaching AIDS, children can learn mathematical concepts through personal operation and perception. For example, through numerical sticks and textile hammer teaching AIDS, children can understand the concept and quantity relationship of numbers. [8] This practical way of learning can stimulate children's interest and curiosity, and improve their learning enthusiasm. In terms of Chinese, Montessori education focuses on cultivating children's language expression ability. Through the free language environment and various language games, Montessori education has stimulated children's interest in language and cultivated their language expression ability. [9] Traditional education pays more attention to the transmission of knowledge and exam-oriented training; it usually teaches mathematics and Chinese knowledge, and the ability to memorize and apply formulas; lack of children's independent expression and the application of practical ability. This teaching method may lead to a decline of students' interest in learning, prone to learning boredom and anxiety. [10, 11]

Here, 5 children who received Montessori kindergarten education and 5 children who received traditional kindergarten education were invited to observe the two groups of children learning math and Chinese within 3 weeks.

Children educated in Montessori Kindergarten provide specific mathematical AIDS through a complete classroom environment to learn mathematical concepts through personal operation and perception; for example, children understand the concept of number through log sticks and the exploration of spinning sticks and experience the increase and decrease of quantity. The traditional kindergarten children need to sit well, listen to the teacher's explanation carefully, and conduct repeated training through paper and pen after class. During the observation period, it was found that the children receiving Montessori education were in good mental state. Although they were occasionally distracted, they would not doze off, and continued to explore and learn, while the children receiving traditional education would doze off or talk to other partners while listening to the teacher. After class, Montessori children share with their peers what they do today, while traditional children talk about other games.

In terms of Chinese learning, children who receive Montessori education will read and share with friends in the prepared environment, sometimes read English picture books with other friends; they like to share their travel experience with their parents and family and their favorite toys. Children in traditional kindergartens share lectures in teachers, sometimes inviting them to answer questions; they share toys with each other, but rarely share their daily experiences.

Montessori education promotes children's learning development by stimulating interest, cultivating self-learning ability and creativity. [12] Conversely, traditional education pays more attention to the transmission of knowledge and the acceptance of students, and lacks the opportunity to cultivate children's independent learning and creative ability. However, Montessori education costs more of teaching AIDS, and teachers need special training and guidance. The traditional education teaching content pays too much attention to the examination and memory, and ignores the cultivation of students' practical application ability and creativity. [13]

2.2. Comparison and Cause Analysis of Learning Focus and Persistence

Learning focus and continuity are one of the key elements in children's learning process, which is crucial for learning results and learning results. There are some differences between Montessori education and traditional education in developing learning focus and sustainability, and the causes will be compared and analyzed below.

Montessori education focuses on creating a complete learning environment, providing a series of teaching aids and materials to attract children's attention. These aids stimulate children's interest in learning and curiosity, and help them focus and work longer.[9][12][14] Traditional education is teacher-centered, focuses on teachers' explanation and guidance, emphasizes classroom discipline and unified learning progress, and lacks attention and respect from individual differences; children need to sit at the desk for a long time and need to passively accept knowledge, which is easy to lead to the decline of students' interest and concentration, and then the impact of learning sustainability. [11]

To sum up, Montessori education has certain advantages over traditional education in cultivating learning

concentration. In contrast, the teaching methods and teaching environment of traditional education often limit the development of students' learning concentration. However, the resources and teaching aids of Montessori education are relatively expensive. This may have limited the ability of some schools and families to implement a Montessori education. Traditional education, teachers help students acquire the necessary knowledge and skills by teaching knowledge, answering questions and providing guidance. This teaching method is very effective for students to learn basic knowledge and understand concepts. [15] Therefore, future education can draw on the advantages of the two educational models and carry out integrated innovation, focusing not only on cultivating children's practical operation and thinking abilities, but also on imparting knowledge and cultivating application abilities, in order to better promote children's development.

3. The Integration and Innovation of Montessori Education and Traditional Education

Integrated education is a way of education that combines Montessori education and traditional education, which aims to integrate the advantages of both to better meet children's learning needs and development potential. The following strategies can be adopted when implementing integrated education.

First, to understand the individual differences of each child. Teachers need to understand the differences of each child in various aspects, and make personalized learning plans to meet the learning needs of different children[2-4][8][15] Secondly, create a diversified learning environment. Teachers can provide children with a variety of learning resources and materials, and design a variety of learning activities, such as group cooperation, practical exploration and games, to cultivate children's comprehensive ability and creativity. [2-4][8][15]

At the same time, the effect evaluation of integrated education needs to take into account multiple factors. First of all, academic performance is an important indicator to evaluate the effect of education. The impact of integrated education on students' academic development was assessed by comparing the academic performance of integrated education with that of traditional education. Secondly, students' learning motivation is also an important factor to evaluate the educational effect. By observing students' learning attitude and initiative in the integrated education environment, we can evaluate the degree of integrated education in stimulating students' learning motivation. [11][15]

In short, the effect evaluation of integrated education needs to take into account all aspects of students' indicators. By evaluating the effect of integrated education, the educational practice is constantly improved and optimized to provide students with better learning experience and development opportunities.

4. Conclusion

On the basis of the comparison and analysis of the influence of Montessori education and traditional education on children's learning psychology, we draw the following conclusions:

Montessori education and traditional education have

different effects on children's learning psychology. In terms of learning ability, Montessori education emphasizes independent learning and practical experience, which cultivates children's exploration spirit and problem-solving ability. [5] By contrast, traditional education pays more attention to knowledge transmission and exam-oriented training, which may limit children's creativity and thinking development. In terms of learning attitude, Montessori education focuses on cultivating children's active participation and self-confidence, prompting them to maintain continuous interest and motivation in learning, but there is also excessive intervention and lack of systematic criticism of children's autonomy. Traditional education focuses more on discipline and competitiveness, which may lead to children's learning pressure and negative emotions, but it provides systematic knowledge teaching and exam-oriented training, and cultivates children's discipline and competitiveness.

In order to better promote the development of children's learning psychology, Montessori education and traditional education can be integrated and innovated. Integrated education can draw lessons from the independent learning and practical experience of Montessori education, and combine the systematic knowledge teaching and exam-oriented training of traditional education.

However, due to the relatively narrow scope of this study, it only focuses on the impact of Montessori education and traditional education on children's learning psychology, without involving other possible influencing factors; Meanwhile, the research method of this article mainly relies on literature review and theoretical analysis, with only a small amount of observational comparative analysis and a lack of support from empirical research. Future research can consider adding more variables and adopting more empirical research methods to obtain more specific and reliable data, in order to comprehensively explore the impact of educational methods on children's learning psychology.

References

- [1] Sun, L. (2013). On Montessori Education in Preschool Teaching. *New course learning (below)* (10), 34-35.
- [2] Yang, L. (2018). Montessori complex: a kindergarten principal Montessori education kindergarten-based exploration of the master's thesis of narrative research. Thesis of Yunnan Normal University.
- [3] safely. (2013). The application of Montessori's educational philosophy in primary school education. *Primary school Science (Teacher version)*, 05: 4.
- [4] Zhang, P. (2013). Based on the concept of Montessori teaching method, the problem of "primary school" of early childhood education is discussed. *Heilongjiang Science and Technology Information*, 10: 170.
- [5] Liang, X., Lu, X. (2012). On the practice of Montessori Education in teaching. *Oriental Corporate Culture*, 24: 234.
- [6] Xiao, Q. (2023). Teacher role positioning between traditional education and online education model. *Collection of the 2023 Second Life Education Academic Forum*, 444-446.
- [7] Chen Hui. (2011). The Application of Montessori teaching method in primary school mathematics teaching Thesis of East China Normal University.
- [8] Routledge. Denervaud, S., Knebel, J. F., Immordino, Yang, M., & Hagmann, P. (2020). Effects of traditional versus Montessori schooling on 4 to 15 year old children's performance monitoring. *Mind, Brain, and Education*, 14(2): 167-175.
- [9] Edwards, C. P. (2006). Montessori education and its scientific basis. *Faculty Publications, Department of Child, Youth, and Family Studies*, 33.
- [10] Ge, Z. (2022). The dilemma and transformation of traditional education in modern times. *Public Relations World*, 08: 139-140.
- [11] Hong, L., Cai, Z., & Ren Shan. (2018). Analyze the deficiency of two important links of traditional education mode from the requirement of innovation ability. *Education and Teaching Forum*, 21: 80-81.
- [12] Han, R. (2010). The application of Montessori Education method in early childhood education. *Anhui Literature (the second half of the month)*, 03: 208.
- [13] Trina. (2022). The interaction and coexistence of network education and traditional education mode. *Public Relations World*, 16: 54-56.
- [14] Luo, S. (2020). Application of Montessori teaching method in primary school mathematics teaching - Take the human education edition mathematics textbook as an example. *Basic Education Forum*, 07: 14-15.
- [15] Zhang, Z. (2013). The advantages of network education and traditional education are complementary. *The Road to Success*, 27: 7-8.