Research on the Development of Modern Information Technology for Children's Physical Fitness Education

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Abstract. With the change of people's parenting concept, Chinese residents tend to let children sit in daily life, which will lead to the continuous decline of children's physical health. Therefore, the detection rate of obesity and overweight of children in China continues to rise, which requires kindergartens to choose a more efficient physical exercise method. Through scientific physical health education, we can guide children to pay attention to physical exercise, which will help them acquire lifelong sports awareness and ability. At the same time, physical health education can promote children's health, which is also the most effective measure. Therefore, some kindergartens have formed children's physical education curriculum with the help of modern information technology, which will help children better develop their physical quality. However, some kindergartens also have some problems when introducing physical fitness courses, such as lack of experience, lack of understanding of concepts, curriculum confusion, etc., which will be difficult to fully reflect the development of physical fitness. First of all, this paper analyzes the impact of physical training on children. Then, this paper analyzes the problems of modern information technology. Finally, some suggestions are put forward.

Keywords: Modern Information Technology, Children, Physical Health Education

1. Introduction
In 2016, the newly revised "working regulations for kindergartens" put kindergarten care education in the first place, which needs to promote the coordinated development of children's normal physical development and function [1]. By strengthening physical fitness, children can develop a good living habits, which can also increase interest in sports activities [2]. Therefore, children must fully protect the healthy growth of children, which will serve the future development of children. Through professional design and planning, 3-6-year-old children can have more scientific sports, games, rhythm and life. At present, overweight and obesity in children has become a major health problem. Obesity in Chinese children not only affects physical development, but also increases the risk of obesity in adulthood [3-4]. 30% of children in the United States have high cholesterol. Adult type
diabetes is also increasing in children and adolescents. According to relevant studies, physical activity level is negatively correlated with obesity. Therefore, children must strengthen physical exercise, which will directly improve the physical health of children [5-6]. Lack of physical activity will cause the decline of children's quality. Therefore, the kindergarten must strengthen physical health education, which will better improve the amount of exercise of children. Through games, play, running and other ways, we can improve students' enthusiasm for sports [7].

2. The influence of physical exercise on children
But with the growth of age, the amount of physical activity of children began to decrease. Therefore, the long-term lack of physical exercise is the direct factor causing the continuous decline of children's physical health, which requires us to improve children's physical training. Physical exercise has an important impact on children, as shown in Figure 1.

![Figure 1. The influence of BDMT on IAPE](image)

2.1. Improve the quality of action completion
Through the relevant experiments, physical training helps to improve the quality of children's basic movements. Through physical training, such as tennis long throw, standing long jump, 10 meter turn back run, two feet continuous jump and other sports, children will improve their basic sports ability, which will improve the quality of action completion. As the process of practice, children's physical fitness will be a series of targeted exercises, which will improve the overall level of physical fitness. Through the improvement of physical quality, children's external performance sports ability is bound to improve. In the process of practice, the diversification of exercise will improve children's physical coordination, which will improve the experience of various forms of action. Therefore, with children's more rich sports experience, it will promote the movement of technology transfer [8].

2.2. Improve children's sports potential
Through relevant experiments, physical exercise can stimulate children's sports potential. For example, ball games do not appear spontaneously, which must provide opportunities for guidance in practice. Through a variety of equipment movement practice, such as playing balloon, playing football, small cloth ball, table tennis racket exercise, children can train their basic movements. We can improve children's body coordination by increasing unusual non mobile movements, such as gravity shift, wave, twist, jump, etc [9]. Compared with the traditional sports teaching activities, the control ability of children's ball games is generally poor, which will be difficult to do some movements, such as sliding step, running jump step, cross step, cushion step, twisting and so on. Therefore, children's movement is not natural development, which requires many times of practice to master. Therefore, preschool teachers should give children the opportunity to train their physical ability, which needs to be stimulated by a variety of actions. Therefore, some exercises can induce the development of children's physical ability. The development of children's physical training is not the result of natural growth, it
is the product of repeated practice. Therefore, as long as the kindergarten teachers guide well, children will be interested in all the exercises, which is also the best time to learn movements [10].

2.3. **Cultivate children's personality and develop in an all round way**
Physical training is an effective way to develop children's personality in an all-round way. In practice, children can act as a brave person. Teachers can use encouraging language to arouse children's spiritual satisfaction, which can satisfy the upsurge of emotion. According to parents and teachers, since children participate in physical training, not only their physique has been improved, but also their attention will be improved. Therefore, children's mood will be more optimistic. In dealing with difficulties, children can show "I am not afraid of difficult movements, as long as I practice more" self-confidence attitude. Children's age characteristics and the law of physical and mental development determine that children's physical training is different from that of adults. In early childhood physical exercise, children should be "tight, relaxed". "Xinsong" refers to the ability of young people to practice, focusing on "music in practice" and "practice in play". "Tight body" refers to the requirement for the amount of exercise to be "tight" when carrying out body movements in physical exercise. In practice, we need to properly deal with the relationship between "loose heart" and "tight body", which can achieve the degree of "loose" and "tight". By stimulating the interest in sports, children can improve their physical fitness [11].

3. **Physical education of children**
This paper conducted a questionnaire survey. A total of 400 questionnaires were distributed and 383 valid questionnaires were collected. The effective rate reached 95.75%.

3.1. **Problems of daily health behavior education**
In the arrangement of kindergarten activities, teachers tend to pay more attention to educational activities related to cultural knowledge, which will neglect the cultivation of children's basic life ability in one day's life. According to the survey results, the main problem is Random teaching content, accounting for 60.9%. The second is Deviation of teaching design, accounting for 55.6%. Details are shown in Figure 2.

3.2. **Information technology education**
The health activities of physical growth in kindergartens are too general and abstract, which needs to be designed in strict accordance with the teaching materials. According to the survey results, the main problem is Random teaching content, accounting for 60.9%. The second is Deviation of teaching design, accounting for 55.6%. Details are shown in Figure 3.
4. Measures to improve children's physical health education

4.1. Cultivating sports interest and respecting sports interest
Physical exercise is to cultivate children's interest in sports. In the design of practice methods, research members should carry out activities of interest to children. If children are interested, it will have better learning effect. If children have no interest, the learning effect is poor. Children have the potential beyond people's imagination, they have the ability to constantly actively explore the mysteries of everything. Children have a strong curiosity and interest in all the new things they come into contact with. For young children, nothing in the world is difficult to learn. What is difficult to learn is not profound or complex. Therefore, what is not fun to learn is not simple knowledge in the eyes of adults, it is fun to learn. Children's learning does not lie in the depth, whether they are interested in learning activities. Therefore, we need as long as the guidance is appropriate, children can be interested in a lot of sports. The task of physical training is to cultivate children's interest in sports, which is not only to respect children's interest in sports.

4.2. Children's sports experience and interest
In physical training, we need to make clear another problem, which requires a correct view of the difference between children's sports experience and sports interest. Experience includes direct experience and indirect experience. Direct experience is the knowledge acquired by children's own practice. Indirect experience refers to children's knowledge acquired from other aspects. Children's sports experience is mainly the physical and mental feeling obtained from children's personal sports practice. Sports experience includes successful experience and lessons from failure. This experiment proves that most children have obtained successful experience, which is easier to be transformed into sports interest. They will be interested in any new action. To cultivate lasting interest, children must experience success. Children's interests are mostly shaped by experience. If children experience successful experience, then children's interest in this activity is strong. If children experience more failure experience, then this activity is not easy to arouse his interest. Therefore, in the process of practice, teachers should pay attention to give children multi-faceted and multi-level sports experience, which will stimulate more interest in sports.

4.3. Enrich the content of physical health education
A variety of physical health education content will make the teaching process more interesting. Therefore, children are more willing to participate in the classroom. First, reasonable distribution of the proportion of physical health education content. Reasonable distribution of the proportion of physical training content can make the content more balanced. We can avoid the singleness of
children's physical development. Through the purchase of body intelligence rhythm CD, we can carry out music rhythm teaching, which can let children follow the happy atmosphere and dynamic rhythm of music. Imperceptibly, we can improve our understanding of the beauty of movement, which will cultivate our interest in music. Secondly, it is necessary to improve the difficulty of physical health education. Teachers can appropriately improve the difficulty of physical training content under the condition of ensuring children's personal safety. By choosing some more complex AI devices, we can make the content more challenging, which will increase our interest in learning. Third, make clear the level of physical health education content. In the specific arrangement of different classes, the content of physical health education needs to distinguish the level of education content. Small class should choose more physical health education content with simple rules, less equipment difficulty and easy to understand. The middle class can choose competitive teaching content. The large class chose the physical health education content of training team cooperation consciousness. By teaching children in accordance with their aptitude at different stages, we can adapt to the needs of children's actual growth and development.

5. Conclusion
Physical health education can promote children's health, which is also the most effective measure. With the help of modern information technology, kindergartens can better develop physical fitness. Children must strengthen physical exercise, which will directly improve the physical health of children. Through games, play, running and other ways, we can improve students' enthusiasm for sports.

Acknowledgments
Study on the Urban-Rural Difference Model of Physical Activity of Preschool Children.

References
[1] Cao Zhongping. Experimental research on the application of folk sports games in children's health education [J]. Preschool education research, 2005 (01): 35-37.
[2] Chen linwen. How to reasonably arrange one-day activities in kindergartens [J]. Times education, 2017, 14 (8): 128-130.
[3] Fan Qianhui, Wu Chan, Ji Lina, Liang Yunjing, Li Yan. Infant integration promotes the healthy development of infant physical fitness [J]. Contemporary sports science and technology, 2019,9 (33): 196 + 198.
[4] He Mingyu. The value of research on the creative ability of children's sports activities [J]. Drama House (first half), 2013 (02): 69.
[5] Jiang Wuying. On children's mental health education in preschool education [J]. New curriculum (primary school), 2013 (3): 134-136.
[6] Lin Chunping. Using folk sports games to promote children's healthy development [J]. Heihe academic journal, 2015 (08): 101-102.
[7] Lin Kunfeng. Analysis on the development of positive mental health education for preschool children [J]. Enlightenment and wisdom, 2012 (10): 89-91.
[8] Sun Fangling. Reasonable arrangement of kindergarten day activities [J]. Early education, 2012,41 (9): 34-35.
[9] Tan Lei. Kindergarten physical education should strengthen the cultivation of children's physical quality. Research on preschool education, 1999 (3): 12-13.
[10] Yang Ming, Wu Hang. Misuse and abuse of discipline in the transition of one-day activities in kindergartens [J]. Preschool education, 2012, 01 (6): 23-25.
[11] Yu Guizhen. Improving the quality of one-day activities to promote children's all-round development [J]. Early education, 2012,51 (6): 23-24.