Research on the Strategy of Integrating Folk Sports Games into Kindergarten Physical Education

Jing Qi^{1,2}

¹Krirk University, Bangkok, Thailand

Abstract: In physical education teaching, we should use games to stimulate children's interest, subjectively change children's attitude to sports, so as to establish the correct sports learning motivation, cultivate children's sports ability, so that children better understand folk culture, improve the interest in sports learning. The purpose of this paper is to study the strategy of integrating folk sports games into kindergarten physical education. This paper defines the related concepts of folk sports games and puts forward specific suggestions and countermeasures for kindergarten sports teaching. Through questionnaire survey and other methods, the second and third grades of kindergarten were selected as the research object to understand the role of mass sports in cultivating the interest in sports learning and sports quality.

Keywords: Folk Sports, Sports Games, Kindergarten Education, Physical Education, Educational Strategy

1. Introduction

Childhood education is the initial stage of the educational process, and good basic education plays a key role in early childhood development and the transition of children to adolescents. The age of information technology data as well as population density and family characteristics in modern society have brought a series of problems to kindergarten education, such as the decrease of space and opportunities for children to play outdoor activities and the increase of left-behind children, thus shortening children's outdoor playing time to a certain extent. With the development of modern science and technology, the popularity of scientific and technological products and convenient operation, children can play some electronic games through mobile phones, computers and other products, which may form bad habits, only slight activities; The lack of time for outdoor activities and the reduction of sports activities lead to the decline of children's physical condition, which is not conducive to the physical and mental development of children [1-2]. Sports activities currently lacking in children's daily life can be improved according to kindergarten physical education [3]. Folk culture is the traditional culture of our country, folk culture has been integrated into children's physical education, on the one hand, the children can understand folk culture, inherit culture in the sport [4]. On the other hand, children can exercise in games to promote physical development and physical and mental health [5].

With the rapid development of society and the change of people's lifestyle, 3-6 years old preschool children are also deeply affected by the lack of physical activity. How to ensure the level of physical activity of children has become an important subject of child health research. On this basis, Ata Otaran uses the literature method to study the factors that affect the physical activity of children aged 3-6 in kindergarten, and discusses the favorable factors to improve the level of physical activity of children, providing theoretical reference for kindergartens and other kindergartens [6]. Svetlana Kubiyeva, based on Suhomlinsky's theory, studies the creation of lucky gambling on the basis of observation, literature and theoretical analysis. It is necessary to create a dominant sports environment in the whole environment to attract children's active participation; It is necessary to improve the implicit environmental support system, encourage children to adhere to the spirit of physical activity, and promote their liberation from the nature of sports in a free environment to achieve good development [7]. Physical education in early childhood can provide more opportunities for students to develop their sports ability through various physical exercises. Pitsanu Chaichitwanidchakol has developed an ideal physical education program for cultivating young children's physical education ability. The study involved 20 kindergarteners (aged ≤ years) who participated in six sports conferences using the Dick

²Ministry of Public Infrastructure, Inner Mongolia National Preschool Normal College, Ordos, 017000, China

and Carey system approach. He used three research tools: leg balance test, force test, horizontal jump, and coordination test, jump performance. Therefore, there was a significant difference (significance < 0.05%) between pre-test and post-test for each relevant variable. In short, the implementation of these instructions to improve children's body quality has played an effective role [8].

This study tests whether folk sports can promote children's physical fitness based on the folk sports game curriculum through experimental research. The relevant results provide a strong foundation for the theoretical research of children's education. Through the feedback effect of kindergarten curriculum, children's interest in sports learning can be known. The practical teaching of folk sports games can provide theoretical basis for the reform of PE curriculum in the future.

2. Research on the Strategy of Integrating Folk Sports Games into Kindergarten Physical Education

2.1. The Development Value of Folk Sports Games in Kindergarten Physical Education

Healthy development is the foundation of children's all-round development, as well as the foundation of children's learning and development. If you are not healthy, other development is difficult. Several factors reflect the physical and mental health of young children: good health, emotional pleasure, coordinated action development, good living habits and basic skills [9-10]. Folk sports games are mainly outdoor games, which require a lot of exercise. During the game, no matter whether the game is systematic or partial mobilization, and no matter how much exercise is required during the process, all aspects of the child's body can be fully developed. Running, jumping this popular folk sports game, not only can exercise children's leg muscles, upper body strength and central muscle quality, but also can coordinate children's hands and eyes. These exercises can rapidly improve children's reaction ability and flexibility, thus speeding up the development of muscles, metabolism and hormonal organization of the whole body, and further improving children's hand and foot movement ability and overall coordination, which plays a positive role in promoting children's exercise ability [11-12].

2.2. Selection Principles of Folk Sports Games

Educational principle: As a way of playing, folk sports games are applicable to physical education. Education is the first principle. When choosing games, we must take full advantage of their educational value. In teaching, we can introduce the background history of games, promote traditional culture, and realize the goal of moral education at the same time [13].

Principle of fitness: Folk sports games must have efficient fitness. The basic task of physical education curriculum is to impart basic sports knowledge and skills, cultivate children's physical quality, improve their physical quality. The principle of physical fitness requires that folk sports games help students fully develop basic skills in almost comprehensive physical exercise, improve their physical ability, effectively complete physical skills, and develop children's physical quality according to different teaching tasks [14-15].

Principle of cultural inheritance: Folk sports games originated from traditional folk activities, including rich folk culture. The selection of games should consider the deep cultural background of games to promote the inheritance of teaching.

Safety principle: Safety is the premise of all sports, folk sports games should be suitable for children's physical and mental development level, not too difficult, to ensure the safe organization and management of children.

2.3. Strategies of Kindergarten Physical Education

- (1) Formulating rules, regulations and policies related to sports culture. Through the national emphasis on raising awareness and attention to folk sports games, society, schools, teachers, students and parents realized for the first time that inheriting and protecting popular culture is a difficult task.
- (2) Intensify efforts to explore and organize folk sports games, and encourage kindergartens to further develop and use folk sports games. Collect and adjust as many folk sports games as possible to meet students' interests and hobbies, and provide internal motivation for the integration of games and education.

- (3) The compilation of sports teaching materials, on the one hand, is conducive to children's systematic learning of sports games; On the other hand, written records also better protect and inherit mass sports.
- (4) Strengthen the construction of teaching resources, not only introduce more higher education talents, priority training kindergarten physical education teachers. These physical education teachers must also have experience in early childhood education and must have physical education theory. Through integration, it can provide a solid foundation of human resources for integrating folk sports games into physical education.
- (5) Increase the investment in kindergarten physical education to provide a strong material guarantee for the inclusion of folk sports games in kindergarten physical education according to standards.

3. The Investigation and Research on the Strategy of Folk Sports Game Integrating into Kindergarten Physical Education

3.1. Implementation of Experimental Teaching

Class two and Class three of a kindergarten in F District of M City are selected as experimental research objects. Class two is the experimental class, and class three is the control class, each with 50 students. The teaching schedule, class time and measurement standards are the same in both classes. The experimental class is integrated into folk sports games, and the control class is taught in traditional mode.

3.2. Questionnaire Design

In this paper, Likert five-level integral method was used to design the questionnaire, with a total of 10 questions. Sports interest difference test is divided into three dimensions: sports interest, sports participation, sports knowledge. Through SPSS23 reliability analysis, reliability test and analysis were conducted on the questionnaire data measured before and after the experiment of the experimental class and the control class, and t test was conducted:

$$t = \frac{\overline{X} - \mu}{\frac{\sigma X}{\sqrt{n}}} \tag{1}$$

$$t = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}(\frac{1}{n_1} + \frac{1}{n_2})}}$$
(2)

Formula (1) is the single population test, s is the sample standard deviation, and n is the number of samples. Formula (2) is a double population test.

4. The Analysis and Research on the Strategy of Integrating Folk Sports Games into Kindergarten Physical Education

4.1. Before the Experiment, the Difference of Interest in Physical Education between the Experimental Class and the Control Class

As can be seen from the results in Figure 1, there is no significant difference between the two classes in students' interest in sports learning before the experiment. As can be seen from the independent sample t test data, p values of the three groups are greater than 0.05, with no significant difference.

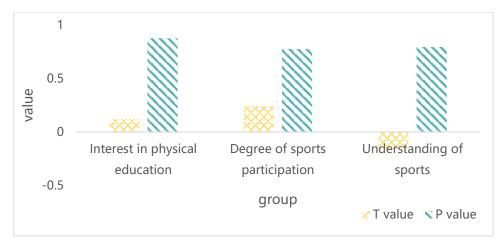


Figure 1: Test on the difference of interest in sports learning between the experimental class and the control class before the experiment.

4.2. Difference Test of Physical Fitness Index between Experimental Class and Control Class before Experiment

As can be seen from the research results in Figure 2, in the physical fitness tests, the P values of the two classes before the experiment were both greater than 0.05, showing no significant difference, that is, there was no significant difference in the average physical fitness test scores of the two classes, so the experiment could be conducted.

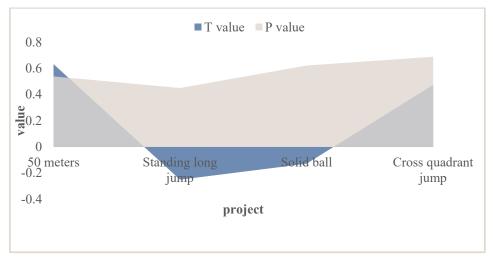


Figure 2: Comparison of physical fitness test between the experimental class and the control class before the experiment.

4.3. After the Experiment, the Difference of Interest in Physical Education between the Experimental Class and the Control Class

As can be seen from the data in Figure 3, the average score of children in the experimental class was higher than that of the control group after the experiment, and the gap between the experimental class and the control group was significantly larger than that before the experiment, as shown in Table 1. The reasons are that, first of all, folk sports games are recreational activities created by the masses since ancient times, and various folk sports games have been circulating for several years. Its original purpose was to be a form of entertainment for people, and the game itself has entertainment [16]. Different game modes bring different images and roles to students, as well as different game forms, bring different game experiences to students, so that students feel very interested in physical education, greatly improve the average score of "interest in physical education course". The traditional teaching methods basically adopt repeated practice, group practice and collective practice. Although teaching tasks can be accomplished, traditional teaching methods do not necessarily conform to the characteristics of the psychological development of today's students. Traditional PE teaching methods

are a little boring and lack of entertainment content.

Table 1: Score difference test.

group	Preface	Experimental class	Control class
I really hope to have physical education	1	4.62	3.95
Of all the courses, I like PE best	2	3.89	2.11
I think the time of each PE class is always shorter than other classes	3	4.16	3.15
I think there are too few PE classes every week	4	4.37	3.26
I feel very happy after every PE class	5	4.33	3.32

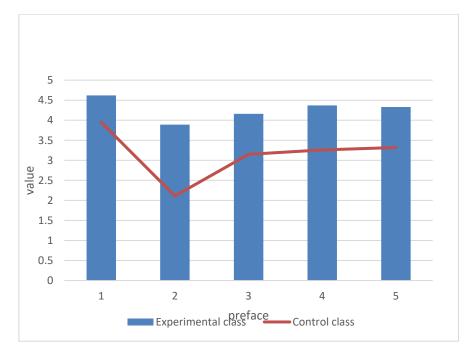


Figure 3: Test on the difference of interest in sports learning between the experimental class and the control class after the experiment.

4.4. Physical Fitness Index Test of Experimental Class and Control Class after the Experiment



Figure 4: Comparison of physical fitness tests of students in the control class after the experiment.

In terms of speed quality, the average score of students in the experimental class is slightly higher than that in the control class, but there is no significant difference, that is, both folk sports game teaching and traditional mode teaching are effective for speed quality, as shown in Figure 4.

After the experiment, the average scores of students in the cross quadrant jump experiment class were better than those in the control group, and the difference was significant. In the development of students' sensitivity, the class with folk sports games is better than the class with traditional teaching mode, and folk sports games have a significant impact on the development of students' sensitivity.

5. Conclusions

It is the novelty, interest and competition of folk sports games that improve children's interest in learning sports courses. Children's enthusiasm in class increased, negative emotions also decreased, improved the attitude to physical education. Folk sports game teaching can effectively improve students' participation in sports classroom. However, when folk sports games are integrated into kindergarten physical education, the culture and inheritance of folk sports games should also be reflected in the classroom, emphasizing the historical origin and characteristics of each folk sports game. As an important factor to enhance students' interest in sports, the inheritance and culture of the game itself need to be further explored.

References

- [1] Connor, F., Dylan, B., Grace, L., Christine, J., Sheri, B., Darla, C., Carol, R. and Jamie, P. (2022) Project moveSMART: When Physical Education Meets Computational Thinking in Elementary Classrooms. Computer 55(11), 29-39.
- [2] Francisco, J.G., Adriana, N.R., Ramón, R. and Rafael, B. (2022) Smartphone applications for physical activity promotion from physical education. Educ. Inf. Technol. 27(8), 11759-11779.
- [3] Li, N.M., Rajiv, D. and Shanmugapriyan, J. (2022) Assessing and Improving Intelligent Physical Education Approaches Using Modified Cat Swarm Optimization Algorithm. J. Interconnect. Networks 22(Supp-01), 2141019:1-2141019:21
- [4] Marina, P. and Iakovos, M. (2021) Design, development and evaluation of open interactive learning objects for secondary school physical education. Educ. Inf. Technol. 26(3), 2981-3007.
- [5] Marina, P., Petros, N., Nikolaos, V. and Panagiotis, A. (2021) Introducing tablets and a mobile fitness application into primary school physical education. Educ. Inf. Technol. 26(1), 799-816.
- [6] Ata, O., Ozan, T. and Volkan, P. (2021) Physical Human-Robot Interaction Using HandsOn-SEA: An Educational Robotic Platform With Series Elastic Actuation. IEEE Trans. Haptics 14(4), 922-929.
- [7] Svetlana, K., Aiymgul, A., Klara, I., Nurolla, M., Alpysbay, A. and Gulnar, S. (2020) Electronic Physical Education Textbook: Effective or Not? Experimental Study. Int. J. Emerg. Technol. Learn. 15(15), 64-78.
- [8] Pitsanu, C. and Witcha, F. (2020) Design and Implementation of Interactive Mobile Application for Autistic Children in Physical Education Class. Int. J. Interact. Mob. Technol. 14(14), 134-147.
- [9] Ioannis, A., Vasileios, M. and Thodoros-Panagiotis, C. (2021) Serious Game Top Eleven as an Educational Tool in Sports Economics. Int. J. Serious Games 8(2), 3-19.
- [10] Rory, S. (2020) The Development of Sports: A Comparative Analysis of the Early Institutionalization of Traditional Sports and E-Sports. Games Cult. 15(1), 51-72.
- [11] Ornella, M., Patrizia, M.M.G., Paolo, M., Vlad, M., Tommaso, B. and Daniela, G. (2021) A Framework for Educational Robotics in Kindergarten: A Systematic Literature Review and Analysis. Int. J. Digit. Lit. Digit. Competence 12(2), 1-32.
- [12] Abdo, S.A. and Nadire, C. (2021) Developing an Electronic Device to Teach English as a Foreign Language: Educational Toy for Pre-Kindergarten Children. Int. J. Emerg. Technol. Learn. 14(22), 29-44.
- [13] Hatim, I. (2020) Effectiveness of the use of the E-Gamification strategy to develop the educational achievement of the preparatory students in Dammam City and their attitudes towards it. Educ. Inf. Technol. 25(5), 4317-4327.
- [14] Andrew, A.T., Matthew, S. and Chelsy, P. (2020) Hooper: Role of conjecture mapping in applying a game-based strategy towards a case library: a view from educational design research. J. Comput. High. Educ. 32(3), 655-681.
- [15] Narentheren, K. (2019) Educational Benefits of Using Business Strategy Game (BSG) in Teaching and Learning Strategic Management. Int. J. Emerg. Technol. Learn. 14(7), 209-215.
- [16] Mona, H.A.W. (2018) The Impact of Collaborative Learning on Web Quest Strategy Used in Learning Educational Psychology. Int. J. Web Based Learn. Teach. Technol. 13(4), 77-90.