The Development of Physical Education Teaching using Games-Based Learning to Enhance Skill of Football and Physical Fitness in Students Primary School

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Abstract

The purposes of this research were: 1) Development of physical education teaching using games-based learning to enhance skill of football and physical fitness in students primary school. 2) Evaluate of physical education teaching using games-based learning to enhance skill of football and physical fitness in students primary school. The sample group consisted of grade 6 students in primary school in the second semester of the academic year2023. The researcher randomly selected the sample classrooms using a cluster random sampling method by drawing lots to determine the research sample classrooms. Two classrooms were selected and divided into an experimental group of 40 students physical education teaching using games based learning and a control group of 40 students normal physical education teaching. The research was conducted for 40 minutes three times a week for total 10 weeks. The tools used in the study were 1) physical education teaching using games-based learning 10 lesson plans with an IOC average congruence index of 0.84 and 2) Skill of football test with a reliability of 0.88. and the physical fitness test are speed, strength, flexibility and agility measurement form National students physical health standards test in China with a reliability of 0.91. The data was analyzed using means and standard deviations, and the difference in average scores was tested using a t-test.

The results indicate that:

1. The average of skill of football and physical fitness students in the experimental group, who received physical education teaching using games-based learning, significantly increased at the .05 level and the control group, received conventional normal physical education teaching, did not significantly change at the .05 level.

2. After the experiment, the average of skill of football and physical fitness in the experimental group was significantly higher than that of students in the control group at the .05 level.

The results suggest that the implementation of game-based learning in physical education effectively enhances both skills of football and physical fitness in students primary school.

Keywords: Physical Education Teaching; Games Based-Learning; Skill of Football; Physical Fitness.

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Introduction

The state general administration of sports proposed that "football should start from the baby" is the genetic engineering of Chinese football and the basic engineering of campus football. "Doll football" and even "campus football" want to develop, we must investigate its roots and find the most effective path. From a psychological point of view, interest is the inner power to promote children's active knowledge, promote their own knowledge and give priority to sports activities. Pupils are lively and active, curious about any new things, reflecting the characteristics of fun. By mobilizing students' interest, PE teachers can effectively improve class quality and attract children's attention. And games are a common means of stimulating interest in physical education. Compared with conventional teaching or game courses, children's football suitable games are high-level games that respect children's game subjectivity and appropriate game needs under the effective intervention of teachers, emphasize comprehensive learning in games, integrate with teaching, and effectively connect with the curriculum outline and school-based curriculum of contemporary sports and health curriculum standards.

Zheng (2016) pointed out in his research that as for the setting of sports skill goal of campus football course, experts point out that the main skill goal of primary school students is to master a good sense and consciousness of the ball. In addition, students acquire the basic skills of physical movement is also the key content of skill training at this stage. Many experts, scholars and teachers said that the school football curriculum for this age group does not emphasize the training and mastery of children's football skills but focuses more on improving children's ball sense and physical movement skills through games and various forms of activities. It lays a solid foundation for the future football study and practice and the overall development of the body. Football skill is the main line of school football course content, reflecting the goals and tasks of different periods of the course. In the research survey of the scholar, the research results show that the primary school students' football skills learning to "pass and catch", "shooting" as the main skills learning content, in which the pass and catch technology teaching accounted for the largest proportion. Further investigation shows that the proportion of primary school students "actual combat" has further increased, in addition to "shooting" in the football course has gradually become the main course content. In the investigation process, many teachers or coaches believe that the primary school students to cultivate children's interest in football learning and ball sense as the main goal, the choice of practice content to increase children's touch opportunities as the main goal, so the form of practice to strive to diversify, to learn football skills mainly pass and catch.

Chen (2013), the survey in the study shows that results show that coaches and teachers generally believe that the primary school students should take the development of children's physical fitness, the formation of correct body posture, and the cultivation of good movement patterns as the main goals of the curriculum. In the survey, experts and scholars said that primary school students are in a sensitive period of learning and development of physical movements, so they should strengthen the exercise and training of movement patterns and carry out a variety of movement exercises such as running, jumping, throwing, climbing and rolling. Physical exercises emphasize physical flexibility, balance and coordination, and do not carry out excessive intensity and too long special football physical training. At this stage, children should develop correct body posture, guided by good living and training habits, and avoid the appearance of bad posture. According to the data of 130 primary school football teachers or coaches surveyed, speed ability, sensitivity and

coordination exercises are the key content of physical development at this stage. Football teachers or coaches said that the development of speed ability, coordination ability and sensitivity of primary school students is a sensitive period, so the curriculum content should be dynamic exercises focusing on the development of the above qualities and abilities. Avoid excessive use of static exercises such as "holding your breath". In addition, teaching primary school students to use more "football game" games, through the adjustment of rules can effectively develop children's different physical abilities.

Lu (2019) pointed out in the study the football game lesson plan fully considers children's age suitability, individual suitability, social and cultural suitability. Focusing on children's basic motor skills, sports concepts, sports experience and experiential games, and emphasizing the combination of games and planned sports experience, it has unique insights and practical models in curriculum decision-making, promoting children's all-round development, designing learning experiences, implementing evaluation, and promoting maximum participation. From a physiological and psychological point of view, compared with younger age groups, primary school students have a rapid increase in the breadth and quality of their attention, but the attention span is shorter, and they focus on a certain point of information or the appearance of things. Children at this age are very active, but their coordination is still poor, and their views of things become more specific and relevant to the present situation. Elementary school students can spend 60 minutes on one activity and have limited interest in group games. Children compare their own abilities with those of others more often, and their understanding of differences is more accurate and of higher quality. From the perspective of the educational environment, the kindergarten curriculum is based on games, the class time is very short, the main purpose is to cultivate interests and habits, the teaching does not pursue high goals, and resides in the daily life of children, while the primary school curriculum objectives are more clear, focusing on teaching and mastering certain knowledge and skills as the main task. This age stage is an important stage in the formation and development of physical activity. Daily physical activity in this period can not only promote the development of children's basic physical activity, but also promote the formation of children's lifelong positive attitude and evaluation to participate in regular, beneficial and healthy physical activity. The appropriate football game curriculum can consider the age, individual, social and cultural characteristics of children, so that children in physical education recognize that they have different levels of development, sports experience, health and motor skill levels, age and physical characteristics, and gain the learning experience of the next stage of development in sports, training and competition. It will increase the opportunity for children to learn and succeed and shape their excellent character and good habits.

Lu & Ji (2019) Creation of Scientific and effective sports game standard Sports game evaluation criteria, Experts and scholars generally advocate the extensive development of sports game courses in primary school physical education to effectively mobilize children's interest in learning. Experts build the school education system based on the educational value of play. Experts divide children play into three levels, including chaotic play, simple repetitive play, and purposeful, complex play that can make children concentrate, and point out that the development of appropriate play is to carry out those purposeful, high-level, complex play. Make children in the game to obtain all-round development benefits. At present, the research on primary school sports games or football games mainly focuses on game creation methods,

game creation principles, sports game applications and other related fields, and has formed a wealth of theoretical research results. Experts believe that the scientific classification of sports games is the basic premise of creating effective game courses. He summarized the basic classification methods of sports games, including classification according to the basic activity ability of the human body, classification according to the development of physical fitness, classification according to sports items, classification according to the structure of sports courses, and classification according to the form of activity.

The article summarizes the basic principles of sports game creation, including the principle of exercise, the principle of education, the principle of safety, and the principle of pertinency. Experts also summarize the problems existing in the current sports game creation and application. Including blind and random selection of games, games that violate the scientific nature of sports, do not pay attention to the regulation of technical action training games, adult games for young children, security risks and unreasonable sports load arrangement games.

Research Objectives

1. Development of physical education teaching using games-based learning to enhance skill of football and physical fitness in students primary school.

2. Evaluate of physical education teaching using games-based learning to enhance skill of football and physical fitness in students primary school.

Literature Review

1. The medium and long-term development plan for Chinese football.
2. Development for skill of football in students.
3. Physical fitness in football in students.
4. The physical education teaching using games-based learning for primary school students.
5. Conceptual framework.

Research Methodology

1. Population and sample

Step 1 The data collection, review of academic literature and research results, and understanding of previous research and interpretation of the status of physical education teaching using games can establish a basic understanding and knowledge of the status of football plan teaching using games.

Step 2 Expert interview survey, on-site interviews and email interviews were used to interview experts and scholars in the fields of school physical education, children's education, pedagogy and psychology research, football teaching and training, through interviews, suggestions are given on the selection of football games and the preparation of football plans.

Step 3 Experiment research method this study selected two classes of grade 6 in Tangqi No. 1 Primary School in Linping, Hangzhou, Zhejiang Province. The method randomly selected the sample classrooms using a cluster random sampling method by drawing lots to determine the research sample classrooms: Two classrooms were selected and divided into an experimental group of 40 students and a control group of 40 students. The

experimental group implemented the physical education teaching using games-based learning for primary school students and control group teaching normal content in school.

Step 4 The analyze the data to summarize and finally, based on the collected data and related information, generalize, analyze, and summarize.

Research Design

This study adopted a quasi-experimental design and was divided into two research groups. A total of 2 measurements were conducted before training and 10 weeks after training. The analysis followed a multiple time series design and the study design is outlined in Table 1.

Table 1: Experimental Design

Sample Group	Pre-test	Treatment	Post-test
E	O1	X	O2
C	O3	-	O4

Experimental Designs

E: Experimental group
C: Control group
O1, O3: Pre-test skill of football and physical fitness test
O2, O4: Post-test skill of football and physical fitness test after 10 weeks
X: Physical education teaching using games-based learning

Table 2 Skill of football and physical fitness test for student

Test	Test items	Test index
Skill of football test	Ball sense	Bounce the ball, step on the ball
	Dribbling ability	Round-trip dribble
	Kicking ability	Kick accuracy
	Dribbling speed ability	Dribble running
Physical fitness test indicator	Speed	10 meters return run
	Strength	Standing long jump
	Flexibility	Sit in a forward bend
	Agility	Cross quadrant jump

The research instruments

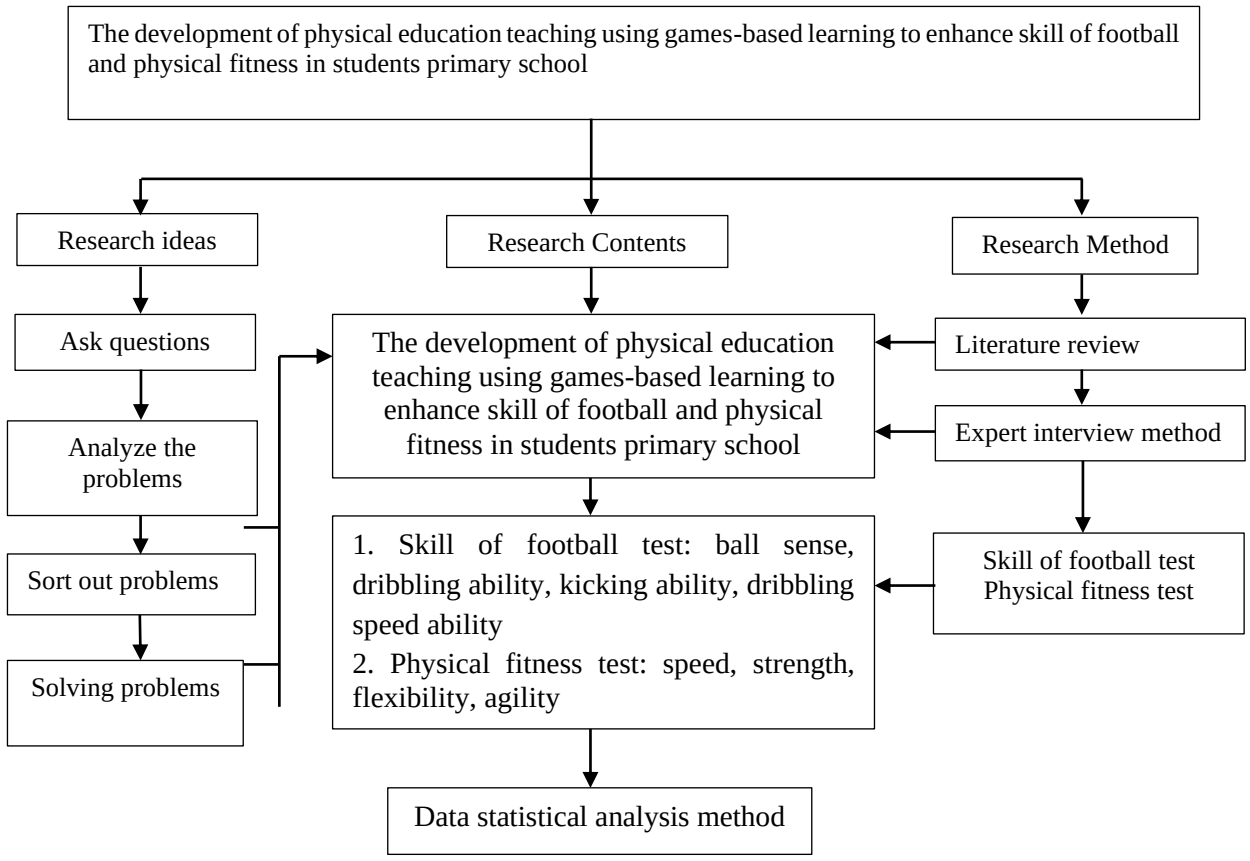
The football plan teaching using a game base learning. Duration: October 2023 to December 2023, 3 time per week, each class 40 minutes, 10 weeks.

Table 3 Football Game Course Content for Primary school Students (10 weeks)

Period	Chapter/Topic	Content Settings and game numbering	Class hour
1-5 weeks	Week 1: Kicking methods	1. Kick the ball with the inside of your foot 2. Kick the ball on the inside of your instep	3
	Week 2: Throwing football	1. Take the throw 2. Throw the ball 3.Throw the bocce ball	3
	Week 3: Touch the ball	1. Pull the ball under your feet 2. Step on the ball 3. Soccer dance 4. Pull and pull the ball with left and right feet	3
	Week 4: Base stop	1. Foot contact 2. Touch cushion 3. Stop the football	3
	Week 5: Base the ball with the foot	1. The ground bounces the ball 2. Keep bouncing the ball 3. Bounce the ball on the instep	3
6-10 weeks	Week 6: Basic dribble	1. Straight and curved dribble 2. Racing relay dribble 3. Barrier-free and barrier dribbling	3
	Week 7: Passing drills	1. Passing routes 2. Passing distance 3. Passing style	3
	Week 8: Pass and catch	1. Pass and control routes 2. Pass and control distance 3. Pass and control the ball	3
	Week 9: Shooting	1. Shooting accuracy 2. Accessibility 3. Shooting distance 4. A football on the move	3
	Week 10: Football match	1. 3 vs 3 game 2. Pass and catch games 3. Scramble game	3

Research Conceptual Framework

Table 4 Research Conceptual Framework



Data Collection

After all the research instruments were developed and approved, the researchers conducted the study to develop the teaching. The process is explained as follows: The research was conducted for 40 minutes 3 time per week total 10 weeks. Skill of football test and physical fitness test and data collection were conducted before and after the physical education teaching using games-based learning experiment and control group.**Data analysis**

The data collected from all developed research instruments were analyzed as follows: The researchers analyzed the data using means, percentage, and standard deviation. The investigators analyzed the data to compare differences in students skill of football physical fitness using the t-test samples.

Research Results

This study presents the results of the data analysis of this study as follows:

1) Compare physical education teaching using games-based learning to enhance skill of football and physical fitness before and after teaching between the experiment group and control group.

2) Compare physical education teaching using games-based learning to enhance skill of football and physical fitness after the experiment between experiment group and control group.

Table 5 Compare pre and post test skill of football and physical fitness between the experiment and control group

Experiment N = 40		Pre-test		Post-test		t	*p*
		mean	SD	mean	SD		
Skill of football	1. Ball sense	7.48	1.53	8.56	1.24	-5.13	0.00*
	2. Dribbling	5.94	1.57	7.68	1.27	-5.45	0.00*
	3. Kicking ability	7.12	1.55	8.63	1.16	-3.79	0.00*
	4. Dribbling speed	7.24	1.44	8.72	1.35	-3.35	0.00*
Physical fitness	1. Speed	6.12	0.36	7.32	0.54	3.66	0.00*
	2. Strength	6.26	2.21	7.54	1.45	-4.15	0.00*
	3. flexibility	7.21	0.61	8.36	0.84	-2.36	0.00*
	4. Agility	7.15	7.26	8.65	1.89	2.64	0.00*
Control N = 40		Pre-test		Post-test		t	*p*
		mean	SD	mean	SD		
Skill of football	1. Ball sense	7.45	1.52	7.93	1.23	-4.23	0.06
	2. Dribbling	5.89	1.54	6.76	1.12	-4.66	0.07
	3. Kicking ability	7.11	1.52	7.52	1.13	-2.89	0.06
	4. Dribbling speed	7.26	1.41	7.61	1.31	-3.35	0.07
Physical fitness	1. Speed	6.13	0.33	6.63	0.53	2.94	0.06
	2. Strength	6.34	2.44	6.84	1.33	-3.43	0.09
	3. Flexibility	7.19	0.56	7.75	0.67	-2.02	0.07
	4. Agility	7.17	1.25	7.66	1.66	1.86	0.08

*$p<0.05$

Table 6 The paired sample t-test was carried out on the test data of the experimental group before and after the experiment, and it was found that the scores skill of football test, $p<0.05$, indicating that there were significant differences between the data before and after the experiment. The paired sample t-test was carried out on the test data of the experimental group before and after the experiment, and it was found that the scores of physical fitness test, $p<0.05$, indicating that there were significant differences between the data before and after the experiment. The paired sample t-test was carried out on the test data of the control group

before and after the experiment, and it was found that the scores skill of football test, indicating that there were no significant differences between the data before and after the experiment. The paired sample t-test was carried out on the test data of the control group before and after the experiment, and it was found that the scores of physical fitness test, indicating that there were no significant differences between the data before and after the experiment.

Table 7 Compare the experiment and control groups post-test results for skill of football and physical fitness

Skill of football	Experiment (N = 40)		Control (N = 40)		t	*p*
	mean	SD	mean	SD		
1. Ball sense	8.56	1.24	7.93	1.23	-2.54	0.02*
2. Dribbling	7.68	1.27	6.76	1.12	-3.22	0.01*
3. Kicking ability	8.63	1.16	7.52	1.13	-2.35	0.03*
4. Dribbling speed	8.72	1.35	7.61	1.31	-3.12	0.01*
Physical fitness	Experiment (N = 40)		Control (N = 40)		t	*p*
	mean	SD	mean	SD		
1. Speed	7.32	0.54	6.63	0.53	2.45	0.02*
2. Strength	7.54	1.45	6.84	1.33	-2.68	0.03*
3. Flexibility	8.36	0.84	7.75	0.67	-2.65	0.01*
4. Agility	8.65	1.89	7.66	1.66	1.53	0.04*

*$p<0.05$

Table 7 After the experiment, through data collection and analysis, it is concluded that $p<0.05$ is the difference between the experimental group and the control group, indicating that there is a significant difference between the data. The paired sample t-test was conducted on the test data of the control group and the experimental group after the experiment, and it was found that the skill of football test was $p<0.05$, indicating that the data of the control group and the experimental group after the experiment were significantly different. The paired sample t-test was conducted on the test data of the control group and the experimental group after the experiment, and it was found that the score of the physical fitness test was $p<0.05$, indicating that the data of the control group and the experimental group after the experiment were significantly different.

Discussion

1. Discussion skill of football

This study found that the experimental group made greater progress than the control group in football skill after the experiment when there was no significant difference in the data between the control group and the control group before the experiment, which was more conducive to the development of various test indicators.

Zhao (2020) Football game training method in primary school physical education teaching effect research. In this paper, the comparative analysis of the tests of the experimental group before and after the experiment through the analysis of the experimental data, we found that 30 primary school students in the experimental group have made great progress in various items after the game training method of football teaching, and there are great differences before and after. This shows that the students' physical flexibility, comprehensive quality and shooting have a qualitative leap. Through the analysis of experimental data, we found that 30 primary school students in the control group also achieved impressive results in various items after football teaching with game training method. There were some changes before and after the experiment, which indicated that primary school students had made great progress in physical flexibility, cooperation ability and shooting. After the experiment, through the analysis of the experimental data, we found that 30 primary school students in the control group and 30 primary school students in the experimental group have made different levels of progress in various items after the game training method of football teaching. The primary school students in the experimental group were much better than the control group in the folding line dribbling football. The students in the experimental group were better than those in the control group in T-shaped running with the ball. Students in the experimental group scored much higher than those in the control group on shooting with the ball at the same time. Our conclusions are consistent with those of this article.

Yang (2023) in the paper, after the end of the experiment, the data obtained by the author is analyzed as follows: After the 12-week teaching experiment, the statistical method of independent sample t-test was used to analyze the difference in the test scores of operant motor skills of the two classes, with the purpose of exploring the influence of daily sports activities organized by kindergartens and football games created based on gross motor development on operant motor skills of 4-5 year-old children. The average score of the experimental class in kicking the fixed ball was 5.91 points, and that of the control class was 3.03 points, which was 2.88 points lower than that of the experimental class, and the P value was $0.002 < 0.01$, there was a very significant difference. The average score of the experimental class was 3.29 points, and that of the control class was 4.71 points. The average score of the experimental class was 1.42 points lower than that of the control class, and the P value was $0.004 < 0.01$, showing a very significant difference. The average score of the experimental class was 2.86 points, and that of the control class was 2.03 points. The average score of the control class was 0.83 points lower than that of the experimental class, and $P=0.145>0.05$ showed no significant difference. In terms of the total score of operant motor skills, the average scores of the experimental class and the control class were 18.40 points and 13.94 points respectively, and the experimental class was 5.46 points higher than the control class, with a P value equal to $0.042 < 0.05$, indicating that there were significant differences between the experimental class and the control class in operant motor skills after intervention. From the above data, the football game created in this study is significantly better than the daily sports activities organized by kindergartens in promoting the two operant motor skills of

children aged 4-5, such as kicking fixed ball and throwing ball on the shoulder. In terms of football skill development, our experimental results showed consistency.

Zhang (2023) Application of Adversarial Games in the Teaching of football Dribble technique in Grade 5 of primary school, In the paper, after the end of the experiment, the data obtained by the author is analyzed as follows: The influence of adversarial games on football dribbling skills of the fifth grade students in Huzhou Phoenix Primary School was studied through a 12-week teaching experiment, and the students were divided into experimental group and control group. The teaching contents of the experimental group and the control group were the same, but the teaching methods were different. The experimental group mainly used adversarial game teaching and added adversarial game teaching into the teaching of football dribbling technology, while the control group used traditional football teaching methods. Before and after the experiment, the two groups of students were tested respectively on physical fitness, soccer dribbling skills and soccer interest. The results are as follows :1. Both the experimental group and the control group have improved their soccer dribble skills, and the test scores of the experimental group in the dribble retrace, line dribble and T-shaped dribble test items are significantly different from those of the control group ($p<0.01$). 2. The soccer dribbling skill of the experimental group was significantly better than that of the control group ($p<0.01$). The conclusion is as follows:1. Adversarial games play an extremely significant role in the improvement of students' dribbling skills. 2. Adversarial games promote the transformation of students' soccer dribbling skills into dribbling skills, effectively improving students' soccer dribbling skills and abilities. In terms of football skill development, our experimental results showed consistency.

2. Discussion on physical fitness

This study found that the experimental group made greater progress than the control group in physical fitness after the experiment when there was no significant difference in the data between the control group and the control group before the experiment, which was more conducive to the development of various test indicators.

Ji (2020) Study on the influence of school football Activities on physical fitness of primary school students，The results of the paper show that the physical fitness changes of the two groups of primary school students before and after football training can be found: after football training, the performance of the experimental group in the forward bend of the seated body, standing long jump, one-minute jump rope, the experimental group of students improved significantly $p<0.05$ and the performance of the control group was better. It shows that football training plays an obvious role in improving the strength quality, agility quality and flexibility quality of pupils. Through the comparison of the physical fitness test results of the two groups of primary school students, it can be found that the experimental group's 25m×2 round trip performance is significantly better than the control group, especially the control group's performance in 25m×2 round trip performance is not improved but decreased. It shows that football training has an obvious effect on the physical quality of primary school students and has a significant improvement on speed quality. Systematic football training can develop students' strength, flexibility, agility, lower limb strength and other physical qualities, which can significantly improve the athletic ability of primary school students. However, there is less training on upper body strength in football, so that not only students' lower limb strength is developed, but also relevant systematic upper body strength exercises should be

added to the future football training, so that students' strength and quality can be balanced. Our results confirm the above experiment once again.

Yang (2023) Study on the influence of football game Teaching on physical fitness and social adaptability of 5-6 year children. In the paper, after the end of the experiment, the data obtained by the author is analyzed as follows: After the 12-week teaching experiment, an independent sample T-test was used to analyze the difference between the experimental class and the control class in the mobility motor skill dimension after the intervention. The purpose was to compare the influence of football games and park-based sports activities based on gross motor development on the mobility motor skills of 4-5 year children. The results are shown in Table 5.26. The average scores of the experimental class and the control class in the test items were 6.92, 5.73, 5.60, 4.09, 4.12 and 3.63, respectively. The experimental class was 1.09, 0.51 and 0.49 points higher than the control class, and the P-values were 0.115, 0.065 and 0.054, respectively. There is no significant difference between the experimental class and the control class in the test movements of running, one-legged jump and cushion step jump. The average scores of the experimental class and the control class were 5.09, 4.83, 5.23, 3.94, 6.49 and 4.49 respectively in the standing long jump, forward slide and side slide. The experimental class was 1.26 points, 1.29 points and 1.9 points higher than the control class, and the P values were 0.005, 0.001 and 0.000 respectively, all of which were less than 0.01, indicating that there were extremely significant differences between the experimental class and the control class in the test movements of standing long jump, forward slide and side slide. In terms of the total score of mobility motor skill test, the average score of the experimental class was 33.25 points, and the average score of the control class was 26.71 points, which was 6.71 points lower than that of the experimental class, and $P=0.000<0.01$ showed extremely significant difference. This study based on the development of gross motor development of children's soccer games in promoting 4-5 years old children's mobility motor skills, is significantly better than kindergarten children sports activities. In terms of physical fitness development, our experimental results showed consistency.

Zhang (2023) Application of Adversarial Games in the Teaching of football Dribble technique in Grade 5 of primary school, In the paper, after the end of the experiment, the data obtained by the author is analyzed as follows: The influence of adversarial games on football dribbling skills of the fifth grade students in Huzhou Phoenix Primary School was studied through a 12-week teaching experiment, and the students were divided into experimental group and control group. The teaching contents of the experimental group and the control group were the same, but the teaching methods were different. The experimental group mainly used adversarial game teaching and added adversarial game teaching into the teaching of football dribbling technology, while the control group used traditional football teaching methods. Before and after the experiment, the two groups of students were tested respectively on physical fitness, soccer dribbling skills and soccer interest. The results were as follows: the physical fitness of both the experimental group and the control group was improved, but the experimental group was better than the control group, and the difference was significant ($p<0.01$). 4. Students in both the experimental group and the control group showed increased interest in football, but the interest of students in the experimental group increased more significantly, showing a significant difference from that in the control group ($p<0.01$). The conclusions are as follows :1. The adversarial game has a significant effect on the improvement of the physical fitness of the 5 grade students. 2. Adversarial game teaching can enhance students' learning interest and stimulate students' drive to learn football through

traditional teaching methods. In the fifth grade of primary school football teaching, attention should be paid to: we should fully consider the characteristics of students' physical and mental development, close to the content of football teaching, from simple to difficult consideration for each student to choose the appropriate adversarial game. In the process of using adversarial games, they can be combined to promote the transformation of students' actions from generalization to automation. In terms of physical fitness development, our experimental results showed consistency.

The same comparison between these two thousand articles was found， In this study, the conclusions drawn are similar to those of Bian & Sun (2018) and Huang & Li (2020). The football plan based on game is more conducive to improving primary school students' interest in sports. Compared with traditional courses, it can better improve students' ability in physical fitness development and football skills.

Conclusion

Based on the above analysis, the test indexes of the test items were selected by applying the "National Football Skill Evaluation Standards for Students" and "National Physical Health Standards for Students", and the test and evaluation were conducted respectively according to the differences of gender and age in the "Standards". From the students' soccer skills (ball sense, dribbling ability, kicking ability, dribbling speed), physical fitness development (speed, strength, flexibility, agility) to test and evaluate the football game course on the football skills development of primary school students. The test results show that the students' soccer skill level and physical fitness development level have been significantly improved before and after the experiment. Compared with the test scores of the experimental group and the control group before and after the experiment, the football game course has a significant effect on the development of football skills and physical fitness of students compared with the traditional campus football course. On the one hand, with the improvement of soccer standard score, higher requirements are put forward for children to master all aspects of soccer skills, which objectively affects the further improvement of soccer test score. With the in-depth development of primary school football courses, the requirements for children's football-specific teaching and training have been improved, that is, the "training" and "competitive" elements of the course are emphasized, to meet the needs of football-specific skills learning, training and long-term development. Judging from the influence of football game courses on various skill indicators, the development benefits of students' ball sense, playing ability and special quality are obvious. Therefore, it is necessary to set up the suitable football game plan for primary school students, focus on the organic integration of the football special skill standards and the creation of game scenarios, and develop children's football skills in a comprehensive and balanced. The effect evaluation of the suitable football game plan system for primary school students is mainly reflected by the learning results of the middle school students in the pilot course. This study conducted a 10-week pilot course for 80 students in grade 6 to test the practical teaching effect of the newly created plan. The experimental results found that the changes of various indicators (including physical fitness indicators and football skills indicators) before and after the experiment are compared. The experimental test results and analysis are as follows: First of all, in terms of football skills, primary school students who have learned football games have better

performance in ball sense, kicking, dribbling and speed; Second, in terms of physical fitness, primary school students who have learned appropriate football game courses have obvious advantages over traditional campus football students in terms of speed, strength, flexibility and agility.

Suggestion

The suggestions from the study are as follows:

1. Suggestions for this research

1) Schools should implement football game courses to enhance students football skills, physical development, and build a talent pool for national football.

2) Football courses should integrate modern technology for better learning environments and improved training data monitoring.

3) Combine training standards with game activities to innovate football courses and improve the development of dribbling and other football skills

2. Suggestions for further studies

1) In this study, we tested physical development indicators and football skill indicators, and indicators of mental health development can be added in future studies.

2) In this study, the experimental research object is only primary school students, and students in other states are not involved. The research scope can involve more grade groups.

3) In this study, only the influence of football program on students was studied, and the teaching level of different teachers can also be studied as an influencing factor in future studies.

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