

## Research on the Promotion Strategy of Shuttlecock Kicking as a Campus Characteristic Activity Among Children Aged 9-10

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### Abstract

With the in-depth implementation of the "Healthy China 2030" Initiative and the "Double Reduction Policy", exploring effective and easily promotable forms of campus sports activities has become a key focus of current school physical education work. As a traditional sports event integrating fun, fitness, and ethnic characteristics, shuttlecock kicking has comprehensive value for children's physical and mental development that urgently needs to be rediscovered and applied. This study takes children aged 9-10 as the research object, adopts the literature review method, logical analysis method, and other research methods. First, it demonstrates the feasibility of designating shuttlecock kicking as a campus characteristic activity, and then systematically analyzes the positive impacts and potential challenges of promoting shuttlecock kicking on children of this age group. On this basis, this paper constructs a set of systematic campus shuttlecock kicking promotion strategies from five dimensions: curriculum development, teacher training, competition system, cultural atmosphere, and school-family-community collaboration. It is expected to provide theoretical references and practical paths for enriching primary school physical education content, promoting children's physical health, and achieving their all-round development.

### Keywords

Shuttlecock Kicking; Campus Characteristic Activity; Promotion Strategy; Children Aged 9-10; School Physical Education.

### 1. Introduction

At present, the physical health issues of children and adolescents in China, such as obesity, myopia, and declining endurance, remain severe. The state has successively issued a series of policies, including the Outline of the "Healthy China 2030" Initiative and the Opinions on Further Alleviating the Burden of Homework and Off-Campus Training for Students in Compulsory Education, aiming to strengthen the core role of school education, ensure students' daily physical activity time, and effectively promote their physical and mental health development [1]. Against this background, how to utilize the limited campus space and time to develop characteristic sports activities that are popular among students, effective in exercise, and easy to popularize has become an important issue for primary and secondary schools.

Children aged 9-10 are in a critical period of physical development and motor skill formation. Their bones have high elasticity and strong plasticity, making this stage a "golden period" for developing physical fitness such as agility, coordination, and flexibility. However, traditional physical education content sometimes fails to continuously stimulate the interest of children in this age group, and the effect of exercise also faces bottlenecks [2].

Shuttlecock kicking, derived from "Cuju" (an ancient Chinese ball game), integrates the venue of badminton, the rules of volleyball, and the techniques of football. It is a unique traditional ethnic sports event. With the characteristics of low threshold, high fun, strong fitness effect, and

weak confrontation, it has low requirements for venues and equipment, and high safety, making it very suitable for promotion in campuses. Although the theoretical fitness value of shuttlecock kicking has been widely recognized, research on strategies for promoting it as a systematic campus characteristic activity is still insufficient [3]. Therefore, this study aims to deeply explore the promotion value and implementation path of shuttlecock kicking in the upper grades of primary schools, so as to fill this gap and contribute to the popularization of shuttlecock kicking in campuses and the promotion of children's physical health.

## **2. Feasibility Analysis of Shuttlecock Kicking as a Campus Characteristic Activity**

### **2.1. Feasibility of Hardware Conditions: Low Requirements for Venues and Equipment, High Economy**

Shuttlecock kicking has extremely flexible requirements for venues. A flat open space, corridor, or a corner of the playground can be used for the activity. Although official competition venues have certain specifications, there is no need for strict line marking for daily practice and games. The only required equipment is shuttlecocks, which are low in price and have a low loss rate. Schools can use them for a long time with a one-time investment, featuring high economy. It is very suitable for promotion in primary schools in areas with unbalanced educational resources. School playgrounds, corners of basketball courts, open spaces in front of teaching buildings, and even indoor gymnasiums can be used as activity venues, without the need for constructing complex sports facilities. In terms of equipment, shuttlecocks are divided into feather shuttlecocks, rubber shuttlecocks, etc. Among them, rubber shuttlecocks are durable and low in price, with a single cost of only 2-5 yuan. Schools can purchase them in batches to meet the needs of all students. Compared with sports such as football and basketball that require professional venues and high-priced equipment, shuttlecock kicking can significantly reduce the cost of school sports activities, making it particularly suitable for primary schools at the grassroots level with limited funds.

### **2.2. Feasibility of Operational Safety: Controllable Sports Risks, High Safety**

Compared with sports with physical collisions such as football and basketball, shuttlecock kicking is a net-separated or circle-around sport with weak direct physical confrontation. The intensity of exercise can be adjusted according to individual conditions, providing a large space for independent regulation. Its technical movements mainly rely on gentle force from the lower limbs, waist, and hips, which greatly reduces the risk of sports injuries. It conforms to the fundamental principle of "safety first" for campus sports activities and is easy to gain the recognition and support of school management and parents. Shuttlecock kicking is a non-confrontational sport. During the activity, children do not need direct physical contact, avoiding accidental risks such as collisions and falls. The shuttlecock itself is soft in texture, and even if it accidentally hits the body, it will not cause serious injuries. In addition, the intensity of shuttlecock kicking can be flexibly adjusted. Teachers can control the activity time and intensity according to children's physical conditions, effectively reducing the probability of sports injuries. Compared with confrontational sports such as football and basketball, shuttlecock kicking has a higher safety factor and is more likely to be recognized and supported by schools and parents.

### **2.3. Feasibility of Educational Value: In Line with the Physical and Mental Development Characteristics of Children**

Children aged 9-10 are active and have a short attention span. They are more interested in activities with strong fun and diverse forms. Shuttlecock kicking has a variety of styles (such as pan kicking, ke kicking, guai kicking, beng kicking, etc.). It can be practiced individually, kicked

in groups, or played as a net-separated competitive sport. Its diverse forms can effectively maintain children's sense of freshness and participation [4]. At the same time, it can comprehensively exercise children's cardiopulmonary function, physical coordination, agility, and flexibility. Its educational value is highly consistent with the goal of promoting the physical health of children in this age group. Children aged 9-10 are in the upper grades of primary school. Their physical coordination, flexibility, and reaction ability are in a period of rapid development, but their strength and endurance are relatively weak. Shuttlecock kicking mainly relies on movements of the feet and legs, supplemented by hand coordination, and the difficulty of movements can be flexibly adjusted according to children's abilities. This progressive movement method can not only exercise children's physical coordination and reaction speed but also avoid burdening children's bodies due to excessive exercise intensity.

From the perspective of psychological characteristics, children aged 9-10 are more interested in activities with strong fun and interactivity. Shuttlecock kicking can be carried out in various forms, such as single-person kicking, double-person kicking, and multi-person circle kicking. It can also be designed into shuttlecock kicking competitions, shuttlecock games, and other activities, which meet children's curiosity and competitive awareness and easily stimulate their interest in sports.

#### **2.4. Feasibility of Cultural Attribute: Inheriting Traditional Ethnic Sports Culture**

Promoting shuttlecock kicking is not only a form of physical exercise but also an inheritance and promotion of China's excellent traditional sports culture. By learning shuttlecock kicking, children can understand the wisdom and charm of traditional ethnic sports, enhance cultural confidence and national pride, and realize the organic integration of physical education, moral education, and cultural education.

### **3. Impacts of Promoting Shuttlecock Kicking on Children Aged 9-10**

#### **3.1. Positive Advantages**

##### **3.1.1. Promoting the Improvement of Physical Fitness**

Long-term participation in shuttlecock kicking can effectively exercise children's lower limb strength, physical coordination, and reaction speed. When kicking shuttlecocks, children need to control the shuttlecock through flexible movements of the feet and legs. This process can enhance the flexibility of the ankle and knee joints and improve the strength of leg muscles. At the same time, children need to concentrate on observing the flight trajectory of the shuttlecock and adjust their body posture in a timely manner, which helps to improve their reaction ability and hand-eye coordination. In addition, shuttlecock kicking can promote the development of children's cardiopulmonary function. Long-term adherence to this sport can improve children's endurance level and reduce the occurrence of problems such as obesity and myopia [5].

##### **3.1.2. Cultivating Good Psychological Qualities**

Mastering the skills of shuttlecock kicking requires continuous practice. In the process from "being unable to kick" to "being able to kick multiple times", children can experience a sense of accomplishment and enhance their self-confidence. At the same time, the team activity form of shuttlecock kicking (such as multi-person circle kicking) requires children to cooperate and communicate with each other, which helps to cultivate their team awareness and cooperation spirit. In addition, in shuttlecock kicking competitions, children will experience success and failure, which enables them to learn to face wins and losses correctly, improve their psychological endurance, and form a positive and optimistic attitude.

### **3.1.3. Inheriting Traditional Sports Culture**

Shuttlecock kicking is an important part of China's traditional sports culture and contains rich historical and cultural connotations. When promoting shuttlecock kicking in campuses, teachers can combine the historical origin, development process, and shuttlecock kicking customs in different regions into teaching, allowing children to understand the charm of traditional sports culture. By participating in shuttlecock kicking, children can experience traditional culture in practice, enhance cultural identity and pride, and contribute to the inheritance and development of traditional sports culture.

## **3.2. Potential Disadvantages**

### **3.2.1. Possible Monotony of Sports, Affecting All-Round Development**

If schools attach excessive importance to shuttlecock kicking and concentrate a large amount of physical education class hours and activity time on it, it may occupy the development space of other sports such as basketball, football, and running. Children aged 9-10 are in a critical period of physical development and need diverse physical exercises to promote the balanced development of various parts of the body. A single shuttlecock kicking sport cannot meet the needs of children's all-round development and may lead to unbalanced physical development, such as insufficient exercise of upper limb strength.

### **3.2.2. Some Children May Develop Aversion to Difficulties**

Although it is easy to get started with shuttlecock kicking, mastering skills such as fancy shuttlecock kicking and team cooperation requires long-term practice. Some children with poor coordination or lack of patience may develop an aversion to difficulties when they still cannot improve their skills after repeated practice, and may even give up participating in shuttlecock kicking. This not only fails to achieve the exercise effect but also may affect their overall interest in sports activities.

### **3.2.3. Certain Risks of Sports Injuries**

Although shuttlecock kicking has high safety, if children do not do a good job of warming up before the sport, or adopt incorrect shuttlecock kicking postures (such as excessive knee bending, improper force application with the feet), it may lead to strain of the knee and ankle joints or muscle strains in the long run. In addition, if there are sundries in the activity venue or the ground is uneven, it may also increase the risk of children falling and getting injured.

## **4. Promotion Strategies of Shuttlecock Kicking as a Campus Characteristic Activity Among Children Aged 9-10**

### **4.1. Curriculum-Based Strategy: Developing School-Based Curriculum to Lay the Foundation for Promotion**

Upgrading shuttlecock kicking from a scattered after-school activity to a systematic school-based curriculum is the fundamental guarantee for its sustainable promotion. Schools should establish a curriculum development team led by the physical education teaching and research group and participated by off-campus experts. Closely combining the physical and mental development characteristics of children aged 9-10 and the requirements of the Physical Education and Health Curriculum Standards, the team should compile the Syllabus of Campus Shuttlecock Kicking School-Based Curriculum. The syllabus should detail the teaching objectives for each semester: for example, in the first semester of the third grade, the focus is on stimulating interest and mastering basic movements such as pan kicking and ke kicking; in the second semester, simple group cooperation and tactical awareness are taught; in the fourth grade, net-separated confrontation rules and formal competition skills are gradually introduced. In terms of teaching content, adult-oriented and professional training models

should be abandoned. Technical key points should be decomposed and integrated into situational games such as "Introduction to Shuttlecock Kicking" and "Shuttlecock Passing Relay", ensuring sufficient practice density and exercise intensity in each class. At the same time, a diversified evaluation system should be established, focusing not only on skill level but also including participation, progress range, and cooperation spirit in the assessment. Awards such as "Shuttlecock Talent" and "Progress Star" should be set up to ensure that every child can gain a sense of accomplishment, thereby ensuring the scientificity, standardization, and sustainability of shuttlecock kicking teaching.

#### **4.2. Teacher Capacity Enhancement Strategy: Building a Professional Team to Provide Core Support**

Teachers are the implementers and leaders of promotion activities, and their professional quality directly determines the effectiveness of promotion. To address the shortage of teachers, a "combination of internal and external" training plan should be implemented. Internally, regular special skill training on shuttlecock kicking should be organized for all physical education teachers. The training content should not only include shuttlecock kicking skills and competition rules but also focus on teaching methods for children, game design, safety protection, and injury treatment. Potential young teachers can be selected to participate in high-level training outside the school to cultivate core teachers within the school. Externally, we should actively explore a new model of "integration of sports and education", establish long-term cooperative relationships with local university physical education colleges, municipal shuttlecock associations, or professional clubs. In the form of "service procurement" or "voluntary service", professional coaches and athletes should be invited to regularly enter the school to guide teaching, train the school team, and hold lectures. A "dual-teacher classroom" model can even be adopted, where professional coaches serve as the main teachers and the school's physical education teachers serve as assistant teachers. This can quickly improve the professional level of the school's teachers in practice, effectively solve the teacher bottleneck, and provide solid talent support for the promotion of shuttlecock kicking.

#### **4.3. Fun and Competition-Oriented Strategy: Innovating Activity Forms to Activate Participation Motivation**

Interest is the best teacher for children. To maintain the long-term enthusiasm of children aged 9-10 for shuttlecock kicking, it is necessary to keep the activity forms full of fun and challenge. In daily teaching, "game-based teaching" should be vigorously promoted, transforming boring basic skill practice into games such as "Shuttlecock Target Shooting Competition" (with targets of different scores), "Challenging Single-Foot Kicking Records", and "Multi-Person Circle Kicking Without Dropping", allowing children to learn in play and practice in competitions. After class, a competition system of "promoting practice through competitions" should be built. A "Shuttlecock Culture Festival" should be held regularly every semester, with various events such as individual competitions, doubles competitions, and team competitions. It should also integrate links such as "shuttlecock aerobics" performances and "shuttlecock culture knowledge quizzes" to make it a sports carnival for the whole school. At the same time, a stable class league and grade challenge competition system should be established, with points and reward mechanisms designed to stimulate collective sense of honor. For high-level talents, a school-level shuttlecock club or echelon can be established for more targeted training, representing the school in inter-school or higher-level competitions. Thus, a good ecology of "combination of popularization and improvement" can be formed, allowing students of different levels to find a stage to showcase themselves.



#### **4.4. Cultural Integration Strategy: Creating a Strong Atmosphere to Cultivate Campus Culture**

Deeply integrating shuttlecock kicking into the fabric of campus culture and making it a fashion and tradition is a key step in realizing the transition from "promotion" to "spontaneous participation". Schools should make full use of all publicity platforms to create a three-dimensional shuttlecock culture environment: set up "shuttlecock culture corners" in publicity boards and classroom corridors, displaying the historical origin, development process, basic skills, star athletes of shuttlecock kicking, and the activity style of the school's students in the form of pictures and texts; use new media platforms such as campus radio stations, WeChat official accounts, and Douyin accounts to regularly push shuttlecock teaching videos, wonderful competition highlights, and interviews with outstanding students to expand influence. More importantly, shuttlecock kicking should be combined with aesthetic education and moral education. Students should be encouraged to create paintings, essays, and photos around the theme of shuttlecock kicking and hold exhibitions; in physical education classes, the sports spirits of hard work, cooperation, and respect contained in shuttlecock kicking should be taught. Through this ubiquitous cultural infiltration, shuttlecock kicking will no longer be a simple sports activity but become a campus cultural symbol loved and recognized by students, thereby forming an internal and sustainable participation motivation.

#### **4.5. School-Family-Community Collaboration Strategy: Expanding Exercise Space to Build a Collaborative Network**

The promotion of shuttlecock kicking should not be limited to the campus but should build a collaborative education network of "school-led, family-participated, and community-supported". First, through holding parent meetings, distributing "Letters to Parents", and organizing "Parent-Child Shuttlecock Experience Days", the exercise value of shuttlecock kicking and the happy moments of children should be vividly demonstrated to parents, eliminating their concerns about "affecting learning" and gaining their understanding and support. Students should be encouraged to take shuttlecocks home and complete the small task of "daily shuttlecock kicking check-in" with their parents, extending physical exercise to the family scenario. Second, we should actively contact the community and street office where the school is located, strive to set up shuttlecock activity points in the community's public spaces and park green spaces. On weekends or holidays, the school and the community should jointly organize activities such as "Community Shuttlecock Friendly Matches" and "Family Shuttlecock Competitions", with physical education teachers or community volunteers providing guidance. This can not only effectively increase students' practice time but also create a good atmosphere where the whole society cares about children's health and supports traditional ethnic sports, forming a strong educational synergy to jointly promote children's healthy growth.

### **5. Conclusion**

With its unique fitness value, low cost, high safety, and profound cultural heritage, shuttlecock kicking is fully feasible to be a campus characteristic activity. It has a significant promoting effect on the physical health, mental health, and social adaptability of children aged 9-10. Although there are challenges such as teacher shortage, curriculum construction, and interest maintenance in the promotion process, these obstacles can be effectively overcome by implementing a set of systematic promotion strategies including curriculum-based development, teacher capacity enhancement, fun and competition orientation, cultural integration, and school-family-community collaboration, thereby giving full play to the educational function of shuttlecock kicking. Promoting campus shuttlecock kicking is not only an effective way to enrich the connotation of school physical education but also a powerful

measure to inherit national culture, promote the all-round development of children, and implement the educational concept of "health first". It is worthy of vigorous promotion and practice.

## Acknowledgements

Fund Project: Project of Zigong Philosophy and Social Sciences Research Center for National Physical Fitness and Sports Industry(Study on the Impact of Shuttlecock Training on the Physical Health of Children Aged 9-10), Project Number: GT-03202409.

## References

- [1] Ministry of Education of the People's Republic of China. Physical Education and Health Curriculum Standards for Compulsory Education (2022 Edition) [S]. Beijing: Beijing Normal University Press, 2022.
- [2] Wang, Z., Liu, X. Research on the Value, Dilemma and Path of Promoting Traditional Ethnic Sports in Campuses in China—Taking Shuttlecock Kicking as an Example [J]. Sports Culture Guide, 2021, (8): 78-83.
- [3] Zhang, R. L. Shuttlecock Kicking [M]. Beijing: Higher Education Press, 2010.
- [4] Liu, H. Y., Chen, Y. F. Thoughts on the Development of School Physical Education Under the Background of Deepening the Integration of Sports and Education [J]. Journal of Sports Science, 2021, 28(1): 1-7.
- [5] Li, J., Ma, J. Analysis on the Current Situation and Influencing Factors of Physical Health of School-Age Children and Adolescents in China [J]. Chinese Journal of School Health, 2019, 40(1): 12-15.