


Enhancing Ethnic Traditional Sports Education Through Sports Psychology: Significance, Challenges, and Strategies

Yong Huang¹, Bang Long² 

¹Physical Education Institute, Hanjiang Normal University, Shiyan, Hubei, 442000, People's Republic of China; ²Physical Education Institute, Hunan University of Science and Engineering, Yongzhou, Hunan, 425100, People's Republic of China

Correspondence: Bang Long, Email bcze042@163.com

Abstract: As a vital carrier of Chinese national culture, ethnic traditional sports encapsulate the life wisdom and spiritual essence of diverse ethnic groups, serving as both intangible heritage and dynamic educational tools. While previous studies have addressed cultural preservation, this study innovatively integrates sports psychology theory with ethnic sports pedagogy, systematically examining how psychological principles—such as intrinsic motivation (Self-Determination Theory) and group dynamics—enhance students' cultural identity, prosocial behaviors, and resilience. Through a mixed-methods approach combining literature analysis and cross-cultural case studies (eg, Japan's kendo and Mexico's ulama), we identify key barriers to implementation, including resource gaps and teacher training deficits, and propose actionable strategies: gamified curriculum design, AR/VR-enhanced cultural immersion, and community-driven psychosocial support systems. Our findings contribute to three domains: (1) a novel theoretical framework linking sports psychology to ethnic cultural education; (2) empirical evidence of stress inoculation techniques improving student persistence by 45%; and (3) policy recommendations for scalable, culturally adaptive teaching models. This work bridges the gap between tradition and modernity, offering a replicable blueprint for global educators seeking to harmonize cultural heritage with psychological pedagogy.

Keywords: sports psychology perspective, ethnic traditional sports education, significance, limitations, optimization strategies

Introduction

As an integral part of Chinese culture, ethnic traditional sports carry profound historical and cultural significance, representing a valuable cultural heritage jointly created, continually developed, and passed down through generations by various ethnic groups.¹ This field encompasses a wide range of activities, including martial arts, dragon boat racing, dragon and lion dances (a few key examples, with additional details in Figure 1), which reflect the lifestyle and values of different ethnic groups and embody unique national spirit, social functions, and emotional expression.² In today's context of globalization and cultural diversity, ethnic traditional sports retain high cultural and recreational value and hold important educational and social significance.³ In addition to China's ethnic traditional sports, we can also see the successful integration of traditional sports like Brazil's Capoeira and Japan's martial arts (such as Judo and Karate) in global education. These programs not only enhance physical fitness but also have a profound impact on social integration and psychological development. Promoting ethnic traditional sports courses in schools can help students deeply understand the cultural essence of the Chinese nation, foster respect and appreciation for multi-ethnic cultures, boost cultural confidence, and promote national unity.⁴

In recent years, the state has issued a series of policy documents, such as the Opinions on Implementing the Project of Inheriting and Developing Excellent Chinese Traditional Culture and the Opinions on Comprehensively Strengthening and Improving School Physical Education in the New Era, laying a policy foundation and providing development opportunities for the promotion and popularization of ethnic traditional sports.^{5,6} The Chronicle of Chinese National Traditional Sports records up to 977 ethnic traditional sports items, offering valuable resources for diversifying school sports curricula and modernizing

**Chinese Martial Arts****Dragon Boat Racing****Dragon and Lion Dance****Wrestling****Archery****Pearl Ball****Traditional Tug-of-War****Bamboo Pole Racing****Figure 1** Examples of Traditional Sports.

the transmission of ethnic traditional sports. Schools, as the core platform for knowledge and cultural transmission, bear a significant responsibility for promoting national culture. Introducing ethnic traditional sports courses into school classrooms is not only an important way to inherit national culture but also an effective approach to enhancing national unity and consolidating the sense of community among all ethnic groups in China. This effort has profound practical significance for accelerating the establishment of China as a strong sports nation and for promoting Chinese traditional culture.⁷⁻⁹

Existing studies have predominantly focused on the cultural preservation of ethnic traditional sports but have not sufficiently addressed their psychological and motivational aspects within formal educational systems. In this promotion process, sports psychology, a discipline that studies psychological phenomena and behavioral characteristics in sports, provides scientific guidance for curriculum design, teaching methods, and student motivation in ethnic traditional sports.^{10,11} Sports psychology theories can assist teachers in designing courses more scientifically, fostering student interest and motivation, and enhancing their classroom participation.¹² However, in the teaching of ethnic traditional sports, effectively integrating sports psychology knowledge and methods to stimulate student enthusiasm and cultivate cultural identity remains one of the main challenges in current educational practice.

This study draws on sports psychology frameworks, including Motivation Theory and Group Dynamics, to explore how these principles can enhance student engagement and cultural identity. Specifically, this study seeks to answer the following questions: Specifically, this study seeks to answer the following questions: (1) How can sports psychology theories be integrated into ethnic traditional sports curricula? (2) What are the key challenges in implementing these curricula in schools?

(3) What strategies can optimize the teaching environment and student engagement? Through this research, we hope to provide theoretical support and practical reference for the extensive promotion of ethnic traditional sports in schools and inject new vitality into the inheritance and promotion of outstanding Chinese traditional culture.

The Value of Ethnic Traditional Sports Education

Cultivating Students' Morality and Prosocial Behavior

In the teaching process, ethnic traditional sports courses not only focus on students' development of physical skills but also emphasize moral education and the cultivation of prosocial behavior through sports activities. As a comprehensive

educational tool, sports activities are deeply rooted in cultural traditions. Their core is not only physical training but also the embodiment of social moral standards and collective values.¹³ Especially in ethnic traditional sports, principles such as loyalty, self-discipline, and cooperation are transmitted and practiced through participation. For example, the Chinese dragon boat race emphasizes collective responsibility, and Japan's kendo (traditional swordsmanship) incorporates respect and self-discipline into its teaching philosophy.¹⁴ A 2021 study found that 78% of kendo practitioners reported improved conflict resolution skills in school.¹⁵ Similarly, New Zealand's kapa haka (Māori performing arts) enhances cultural pride and social cohesion through rhythmic movements and singing, and long-term data shows that bullying in schools implementing this program decreased by 29%.¹⁶

For example, lion and dragon dances emphasize teamwork. The dragon boat race requires high coordination, and bamboo pole racing requires mutual support among team members. These activities help students develop personal qualities, foster awareness of rules, and promote respect for others.¹⁷ The values of loyalty, integrity, and cooperation embedded in ethnic traditional sports can enhance students' adherence to social norms.¹⁸ This collective activity atmosphere not only promotes healthy social relationships but also helps students build harmonious interpersonal relationships both inside and outside the campus.

A 2023 survey of 500 Chinese middle school students involved in lion dance projects showed that, compared to non-participants, participants self-reported a 32% increase in prosocial behaviors (such as helping classmates).¹⁹ These findings are consistent with Brazil's capoeira education project, where ethnographic studies show that participating in "roda" (the circle activity) enhanced adolescents' empathy.²⁰

Enhancing Team Cohesion and Cultivating Students' Social Adaptability

Team cohesion refers to the strong bonds and cooperative spirit formed among team members under a common goal. This cohesion plays a crucial role in improving collective efficiency, unleashing potential, and fostering harmonious interpersonal relationships. In the school environment, especially within classes and sports teams, cultivating team cohesion can motivate students to work more actively toward collective goals and create a supportive, success-driven learning environment.

Ethnic traditional sports activities, which carry rich cultural heritage, enhance students' sense of belonging through teamwork and interaction.²¹ For instance, schools can organize traditional martial arts, dragon and lion dances, tug-of-war, and other ethnic sports projects. These activities can attract students' participation, cultivate trust and tacit understanding among students, and effectively enhance team cohesion.

Tuckman's team development theory²² clearly defines four stages of ethnic sports team development (forming, storming, norming, performing), where conflict resolution helps improve team cohesion. Social adaptability refers to an individual's ability to flexibly adjust behavior and maintain a balance with the external environment in the face of change.²³ In modern society, with the acceleration of environmental changes, students need the ability to quickly respond to various challenges. Ethnic traditional sports provide a practical platform for students to learn social adaptability. In participating in these sports, students need to balance teamwork and competition, face challenges, and actively cope with setbacks.

Korea's ssireum (traditional wrestling) course further demonstrates the role of ethnic sports in cultivating resilience. Coaches use "stress inoculation" strategies, gradually increasing task difficulty, and the results showed that participants' perseverance in facing academic challenges increased by 45%.²⁴ Compared with some Chinese traditional ethnic sports (such as martial arts), wrestling courses provide new ideas for Chinese sports education by systematically increasing task difficulty. For example, when teaching Chinese martial arts, we can optimize the teaching process based on the characteristics of different ethnic sports projects to better promote the improvement of students' psychological qualities.

This experience enhances students' psychological resilience, helping them face future social pressures with confidence and composure. In addition, through role division within the team and the cultivation of rule awareness, students gain a deeper understanding of the relationship between the individual and the collective, gradually forming a sense of social responsibility and rule awareness, thus laying a foundation for better adaptation to future social life.²⁵ (See Table 1 for Comparative Case Studies).

Table 1 Comparative Case Studies

Country	Sport	Psychological Mechanism	Measured Outcome
Japan	Kendo	Ritualized respect (Bushido, as elaborated in Cultivating Students' Morality and Prosocial Behavior)	40%↓ school bullying
Ghana	Traditional Wrestling	Community bonding	22%↑ cooperative learning
Australia	Indigenous Games	Spatial cognition	15%↑ STEM problem - solving

Meeting Students' Self-Actualization Needs and Relieving Negative Emotions

According to Maslow's Hierarchy of Needs Theory,²⁶ self-actualization is the highest level of human needs. In modern society, as material needs are gradually met, adolescents are seeking self-fulfillment and the realization of their potential. Ethnic traditional sports activities not only provide students with opportunities to exercise their bodies but also offer them platforms to showcase their abilities and achieve self-worth. By integrating traditional sports into school curricula, particularly through team competitions and performance exhibitions, students can express creativity and teamwork skills through participation. These activities stimulate students' interest, enhance cultural identity, meet self-actualization needs, and cultivate a positive learning attitude and sense of purpose.

As previously mentioned, Self-Determination Theory (SDT) emphasizes that intrinsic motivation is nurtured when students experience autonomy, competence, and relatedness during activities. In the context of ethnic sports, students experience autonomy when choosing to participate in these activities; competence is cultivated as skills improve and they perform successfully within the team; and relatedness is enhanced through social connections and trust built during group activities. This holistic satisfaction of psychological needs is crucial for fostering intrinsic motivation and enhancing students' sense of self-fulfillment.

At the same time, due to academic pressure and self-perception issues, adolescents are prone to anxiety, depression, and other negative emotions. Appropriate physical activities, especially ethnic traditional sports, can effectively alleviate student stress and reduce negative emotions. India's National School Yoga Program provides a comparative perspective: long-term data from 50 schools shows a 27% decrease in participants' anxiety levels, a result that aligns with martial arts intervention studies in China.²⁷ In Mexico's ulama (ancient ball game) revival project, combining physiological sensors and interviews revealed that 68% of students experienced a reduction in cortisol levels during gameplay.²⁸

Studies²⁹ show that moderate exercise promotes the secretion of "happiness hormones", making people feel relaxed and at ease, thus reducing anxiety. The diversity, fun, and interactivity of ethnic traditional sports enable students to gain a sense of achievement through participation, helping them cope with stress and enhancing psychological resilience. These activities also provide students with effective emotional regulation methods, enrich campus life, and support the development of mental health. It should be noted that while ethnic traditional sports can alleviate negative emotions, competitive pressure and performance expectations, especially among students who are not skilled or familiar with these sports, may lead to anxiety. To address this issue, schools should focus on creating a non-competitive, supportive environment where every student can experience success. (See Table 2 for a summary of ethnic traditional sports in meeting students' self-actualization needs and relieving negative emotions).

Ethnic traditional sports activities significantly alleviate students' negative emotions by meeting their achievement needs and fostering positive attitudes toward life. These activities not only enhance students' sense of self-actualization but also play an important role in emotional regulation and mental health, helping students face various challenges in learning and life with greater confidence and composure.

Challenges in Conducting Ethnic Traditional Sports Curriculum from the Perspective of Sports Psychology

Insufficient Student Motivation to Learn

In sports psychology, motivation is a key factor driving students' active participation in physical activities. However, in ethnic traditional sports education, students often show a lack of motivation, which limits the effectiveness of teaching.

Table 2 Summary of the Impact of Ethnic Traditional Sports on Fulfilling Students' Self-Actualization Needs and Alleviating Negative Emotions

Value Dimension	Specific Manifestation	Implementation Path	Educational Effect
Self-Actualization Needs	Showcasing individual abilities, fostering creativity	Organizing traditional sports projects and team competitions	Stimulates cultural identity, enhances sense of achievement
Creativity and Collaboration	Cultivating individual innovation and teamwork awareness	Designing adapted traditional games and performance displays	Improves self-confidence and teamwork awareness
Emotion Regulation	Relieves anxiety, enhances psychological resilience	Releases stress and gains a sense of achievement through sports	Promotes secretion of happy hormones, generates positive emotions
Mental Health	Promotes physical and mental well-being, strengthens stress resilience	Continuous participation in ethnic sports activities	Enhances adaptability, reduces occurrence of negative emotions
Life Attitude	Cultivates independence and optimism	Experiencing positive emotions and success in sports	Develops a positive life attitude and greater happiness

Motivation can be divided into two main components: intrinsic needs and external support.³⁰ The lack of both components in ethnic traditional sports impacts students' willingness to learn.

From the perspective of “intrinsic needs”, technological advances have shifted the interests of adolescents towards digital entertainment and social media. The popularity of smartphones and computers means that many students prefer virtual entertainment over physical activities. Moreover, ethnic traditional sports often require high skill levels, with beginners struggling to achieve early success, leading to frustration and reduced motivation. Compared to modern sports, ethnic traditional sports lack strong cultural significance and value recognition, especially as they focus more on cultural harmony rather than competition and fame as seen in modern sports.

From the perspective of external support, school facilities and curricula mainly focus on modern sports, with limited resources for ethnic traditional sports and fewer opportunities for participation. Additionally, due to the dominance of the examination-driven education system, schools and parents often underestimate the importance of physical education, viewing ethnic traditional sports as “non-productive”, further diminishing students' motivation to participate. To improve motivation, self-determination theory (SDT) must be incorporated into the design of ethnic traditional sports curricula. For example, Japan's relay marathon (ekiden) schools increased participation by 53% by implementing tiered cultural badges (such as “persistent runner”),³¹ and Finland's traditional baseball (pesäpallo) curriculum improved intrinsic motivation by 41% by allowing students to co-design the rules³² (See Table 3, Factors Contributing to Low Motivation in Ethnic Traditional Sports Education and Improvement Suggestions).

Table 3 Summary of Factors Contributing to Insufficient Motivation in Ethnic Traditional Sports Education

Factor Type	Insufficient Aspects	Influencing Factors
Intrinsic Needs	Lack of interest in traditional sports	Replaced by digital entertainment and virtual interactions; high complexity of traditional sports
Sense of Achievement	Lack of success experiences in early stages	Complex movements, lack of cultural identity
External Support	Insufficient resources, inadequate facilities	Lack of dedicated facilities and equipment; school curriculum focused on modern sports
Perceptual Influence	Schools and parents prioritize academics over sports	Heavy exam-oriented education pressure, little attention to sports projects
Lack of Motivation	Absence of long-term value support for learning	Traditional sports not included in core academic evaluations

The Urgent Need to Improve the Teaching Environment for Ethnic Traditional Sports

The sports teaching environment includes all external conditions necessary for effective teaching, including both material support and psychological atmosphere. A positive environment is crucial for improving teaching quality.³³ However, the current school sports environment mainly supports modern sports and neglects the specific needs of ethnic traditional sports, affecting their promotion and integration in schools.

In terms of the material environment, most schools focus resources on modern sports facilities, and ethnic traditional sports (such as martial arts or dragon and lion dance) often lack dedicated spaces, equipment, and safety measures. For example, dragon and lion dance require specific spaces and equipment, but many schools cannot provide them, impacting teaching quality, and students are unable to fully experience the cultural significance of these sports. Therefore, schools should increase investment in specialized facilities and resources, allowing students to experience the unique cultural charm of ethnic sports in an appropriate environment.

In terms of the psychological environment, the campus sports atmosphere, teaching philosophy, and activity design have a significant impact on students' willingness to participate. Ethnic traditional sports have rich content and profound cultural connotations, requiring good psychological support. However, schools generally focus more on modern sports, and ethnic sports are often neglected. Although the Ministry of Education encourages schools to carry out ethnic cultural education, the actual implementation is insufficient. Popular sports such as basketball and soccer dominate campus sports activities, and ethnic traditional sports are only offered in a few schools, limiting students' exposure to ethnic sports and preventing them from appreciating the cultural value of these activities.

To address these issues, schools should not only improve material facilities but also create a positive psychological environment, increase ethnic sports publicity, integrate them into extracurricular activities, and enhance cultural pride through school-wide events (See Table 4, Insufficient Teaching Environment for Ethnic Traditional Sports and Improvement Suggestions).

Insufficient Application of Sports Psychology Theories in Ethnic Traditional Sports Teaching

Sports psychology theories can effectively enhance students' psychological engagement in ethnic traditional sports. However, these theories are currently underutilized in teaching, leading to poor student learning experiences and low classroom participation. Motivation theories, group dynamics, and emotional regulation theories can significantly enhance students' sense of participation and cultural identity.^{26,34}

Table 4 Summary of the Value of Ethnic Traditional Sports Courses in Cultivating Students' Morality and Prosocial Behavior

Value Dimension	Specific Manifestation	Implementation Path	Educational Effect
Moral Development	Enhancing qualities like integrity, self-discipline, and rule adherence	Through rule-setting, course guidance	Enhances moral cognition, internalizes rule awareness
Behavior Standards	Avoids negative competitive attitudes, forms positive behavior models	Integrates classroom rules and moral guidance	Fosters healthy behavior habits, reduces negative behaviors
Collective Awareness	Cultivates teamwork, strengthens sense of responsibility	Ethnic sports projects in collective activities	Promotes collective identity, enhances social adaptability
Prosocial Behavior	Enhances tendencies toward helping and caring, promotes harmonious relationships	Through participation in competitions and interactive activities	Fosters mutual assistance, creates a harmonious atmosphere
Mental Health	Provides emotional regulation channels, strengthens psychological resilience	Participates in competitive and entertaining sports activities	Enhances psychological resilience, reduces negative emotions
Moral Education Practice	A platform for practicing moral behavior, understanding moral values through activities	Teacher guidance, classroom demonstrations, and competition experiences	Establishes moral values, forms internalized norms

One main issue is that many teachers may lack an in-depth understanding of the cultural significance of these activities, limiting their ability to effectively incorporate moral education into teaching. Additionally, there is a risk of cultural misunderstandings, as students may not fully grasp the cultural background of these activities, reducing their intended moral and prosocial impact. Therefore, there is a need to invest more in teachers' professional development to ensure the full transmission of the cultural and educational significance of ethnic traditional sports³⁵ (See Table 5, Summary of the Role of Ethnic Traditional Sports Courses in Cultivating Students' Moral and Prosocial Behavior).

Moreover, individual differences theory in sports psychology emphasizes adjusting teaching methods based on students' characteristics, interests, and abilities. However, many teachers lack knowledge of psychology, preventing them from implementing differentiated teaching, leading to insufficient intrinsic motivation, low participation, and poor learning outcomes. To better apply sports psychology theories, teachers should integrate motivation theory, emotional regulation strategies, and differentiated teaching methods into the curriculum. For example, teachers can use motivation theory to introduce reward systems and goal-setting techniques to help students achieve small successes in complex tasks, thereby cultivating a sense of accomplishment. Additionally, group dynamics theory can assist teachers in creating a supportive classroom environment that encourages collaboration and positive peer interaction (See Table 6, Insufficient Application of Sports Psychology Theories in Ethnic Traditional Sports Teaching and Improvement Suggestions).

Table 5 Summary of Deficiencies in the Ethnic Traditional Sports Teaching Environment and Suggestions for Improvement

Environment Type	Existing Deficiencies	Improvement Suggestions
Material Environment	Lack of dedicated facilities for ethnic sports, insufficient equipment	Add specialized equipment and safety facilities to support diverse teaching needs
Space Guarantee	Insufficient space for specific projects; space layout unsuitable for project characteristics	Designate fixed venues for ethnic sports projects, ensuring space safety and suitability
Psychological Environment	Campus sports atmosphere focused on modern projects, lack of ethnic sports awareness promotion	Increase promotional activities for ethnic sports, enhancing the campus cultural atmosphere
Cognitive Level	Limited student exposure to ethnic sports projects, resulting in low interest and understanding	Increase student experiential opportunities through curricular integration and extracurricular activities, enriching cultural knowledge
Teacher Support	Teachers lack proficiency in ethnic sports teaching methods, limited professional knowledge	Provide specialized training and support to improve teachers' ethnic sports teaching skills
Atmosphere Building	Lack of systematic ethnic sports cultural atmosphere, low student sense of identity and participation	Organize cultural festivals and exhibitions to foster a positive attitude and sense of identity among students toward ethnic sports

Table 6 Summary of Deficiencies in the Application of Sports Psychology Theories in Traditional Ethnic Sports Teaching and Suggested Improvements

Application Area	Existing Deficiency	Suggested Improvement
Motivation Theory	Lack of effective incentive mechanisms, low student participation	Introduce reward mechanisms, goal setting, etc., to motivate students and increase classroom engagement
Teaching Method	Predominantly "demonstration-imitation", ignoring student differences	Use differentiated teaching methods, adapting to students' interests and abilities
Cultural Understanding	Focus on movement instruction, neglecting the cultural and spiritual content of ethnic sports	Enhance explanations of the cultural background of ethnic sports to deepen understanding of its inherent values
Individual Difference Theory	Fails to tailor teaching to student characteristics, limiting diverse interest stimulation	Use interest assessment and personalized guidance to meet the learning needs of different students

(Continued)

Table 6 (Continued).

Application Area	Existing Deficiency	Suggested Improvement
Classroom Atmosphere	Lacks psychological guidance, creating a dull atmosphere with low student initiative	Apply group dynamics theories to foster a positive classroom atmosphere, enhancing student interaction
Emotional Management	Ignores students' need for emotional regulation, making it hard to relieve learning pressure	Guide students in emotional management exercises to help them enjoy the learning process in a positive emotional state
Feedback Mechanism	Single feedback approach, difficult for students to feel a sense of accomplishment	Use diverse feedback methods, such as personalized feedback and group evaluations, to boost a sense of achievement

Optimizing Ethnic Traditional Sports Classroom Teaching from a Sports Psychology Perspective

Stimulating Students' Interest and Cultivating Intrinsic Motivation

Stimulating students' interest and cultivating intrinsic motivation is crucial for enhancing the effectiveness of ethnic traditional sports education. As previously mentioned, self-determination theory (SDT) emphasizes that when students' needs for autonomy, competence, and relatedness are met in an activity, intrinsic motivation will be fostered.³⁶ In ethnic sports teaching, it is essential to design activities that allow students to feel competent, connected with peers and culture, and in control of their learning.

The following sports psychology-based optimization strategies help enhance students' motivation and participation:

Cultural Value Transmission: One important driver of intrinsic motivation is understanding the cultural significance. By using storytelling, video presentations, or inviting guest speakers to explain the cultural heritage of ethnic traditional sports, students can develop a sense of identity and spark learning motivation. For example, Mexico's ulama (traditional ball game) project enhanced student participation by 65% through augmented reality (AR) technology, combining historical scenes with games, showcasing the relatedness need in SDT.²⁸

Interesting Activity Selection: Choosing simple and fun activities, such as diabolos and shuttlecock kicking, aligns with flow theory.³⁶ Activities that match the level of challenge and skill can promote optimal engagement. These activities are easy to learn, fun, and provide instant rewards, stimulating a sense of accomplishment.

Competition and Task-Oriented Environment: By applying achievement goal theory,³⁷ setting personal goals, striving for mastery, and engaging in healthy competition can further enhance students' motivation. Regular competitions or performance exhibitions can enhance students' sense of achievement and team spirit.

Contextual Teaching Method: Implementing a contextual teaching method that encourages students to solve problems independently and engage in critical thinking not only enhances students' competence (consistent with SDT theory) but also promotes self-determined learning.

Gamification: Integrating gamification elements into learning can improve classroom attraction and reduce the difficulty of traditional activities. Gamification also promotes cooperation and competition, stimulating intrinsic motivation by providing a low-pressure learning environment.

For example, Norway's ancient kubb game reduced skill anxiety by 38% using peer tutoring systems and applying Bandura's observational learning theory.³⁸

Through these strategies, educators can create an engaging and culturally immersive classroom environment, thereby enhancing students' intrinsic motivation, which aligns with key aspects of SDT and Flow theory (See Table 7, Summary of Optimization Strategies).

Optimizing the Physical Environment for Ethnic Traditional Sports Teaching

Improving the Physical Environment and Strengthening Teaching Foundations

The physical environment is the foundation for successful ethnic traditional sports education. As Bronfenbrenner's ecological systems theory³⁹ suggests, the environment is crucial in shaping students' learning experiences. To optimize the learning environment, the following strategies should be implemented:

Table 7 Summary of Optimization Strategies to Stimulate Students' Sports Interest and Intrinsic Motivation

Optimization Strategy	Specific Measures	Expected Outcome
Cultural Value Transfer	Explain the historical and cultural significance of activities, show videos, etc.	Enhance cultural identity and stimulate enthusiasm for learning
Fun Activity Selection	Prioritize easy-to-learn, fun activities, such as diabolo spinning, shuttlecock kicking	Lower learning barriers, increase classroom participation
Atmosphere Creation	Organize regular competitions or demonstration events to promote student interaction	Strengthen collective honor and active participation
Situational Teaching	Set task scenarios, guide students to independently think and solve problems	Stimulate exploratory spirit and enhance self-motivation
Gamified Design	Incorporate game elements to enrich classroom formats and increase fun	Increase classroom appeal and willingness to participate
Content Diversity	Regularly change course content or teaching formats to avoid monotony	Maintain course novelty, prevent students' interest from waning
Feedback and Praise	Use personalized feedback or group evaluations to encourage students	Enhance sense of achievement and confidence, cultivate lasting learning motivation

Teacher Competency Enhancement: Excellent teachers are key to successful teaching. Teachers' professional development should focus not only on sports skills but also on understanding student psychology. Teachers with professional knowledge can better meet student needs, create a positive classroom atmosphere, and improve learning outcomes.

Improvement of Spaces and Equipment: Schools should ensure that ethnic traditional sports have dedicated spaces, appropriate tools, and safety measures. According to SDT theory, students are more likely to actively engage and improve their abilities in environments where they feel safe and have the necessary resources.

Integration of Modern Technology: Introducing augmented reality (AR) and virtual reality (VR) technologies can provide an immersive learning experience and enhance cultural understanding.⁴⁰ However, due to limited funds, some schools may not be able to use these technologies widely. Teachers can still introduce multimedia presentations to allow students to experience the cultural background of ethnic sports.

Cultural Atmosphere Building: Classrooms should feature elements of traditional culture and art to enhance students' sense of belonging and cultural identity. This aligns with Vygotsky's cultural-historical activity theory,⁴¹ which emphasizes the role of cultural objects in cognitive development.

Demand-Oriented Resource Allocation: Schools should regularly assess students' needs to ensure that teaching materials and spaces can be adjusted flexibly to accommodate students' learning requirements. Effective feedback mechanisms (consistent with SDT theory) help ensure that the teaching environment aligns with students' needs.

By implementing these strategies, the physical environment can support not only the skill learning of ethnic sports but also enhance students' cultural identity and sense of participation (See Table 8, Summary of Strategies for Optimizing the Physical Environment).

Optimizing the Psychological Environment for Ethnic Traditional Sports Classroom

The psychological environment is also crucial for ethnic traditional sports classrooms. Social cognitive theory (Bandura) suggests that students' motivation and behavior are influenced by the environment, teachers, and peers' interactions.⁴² The following strategies can help create a positive psychological environment:

Teaching Style: Teachers should adopt a flexible and adaptive teaching style to enhance teacher-student interaction. Adjusting the classroom pace according to students' engagement helps create a supportive atmosphere.

Student-Centered Approach: By involving students in the teaching process, such as co-designing lessons or organizing team competitions, students are more likely to feel ownership of the learning process. This enhances intrinsic motivation and increases participation.

Table 8 Summary of Strategies to Optimize the Teaching Environment for Traditional Ethnic Sports

Optimization Strategy	Specific Measures	Expected Outcome
Teacher Capacity Building	Introduce teachers with professional backgrounds and provide regular training opportunities	Improve teaching quality and stimulate student interest
Venue and Equipment Improvement	Set up dedicated teaching areas and equip them with safe, compliant equipment	Ensure safety and functionality in teaching
Modern Technology Support	Use multimedia, AR/VR to demonstrate movements and cultural backgrounds	Enhance classroom engagement and interactivity
Cultural Atmosphere Creation	Incorporate cultural elements like ethnic patterns and traditional tools into classroom design	Strengthen cultural identity and learning motivation
Demand-Oriented Allocation	Regularly survey student needs and adjust venue and equipment arrangements	Increase the relevance and adaptability of teaching
Environment Safety Assurance	Regularly inspect and maintain teaching facilities to ensure equipment is in good condition	Improve classroom safety and reduce injury risks
Equipment Usage Training	Educate students on equipment usage and safety points, fostering their ability to use facilities correctly	Improve equipment utilization efficiency and boost learning confidence
Flexible Space Configuration	Provide adjustable teaching spaces to accommodate varying numbers and activity types	Improve space utilization and meet diverse teaching needs

Positive Feedback and Encouragement: Teachers should provide regular, constructive feedback, celebrate small achievements, and encourage self-reflection. This helps students feel competent and appreciated, fostering motivation to continue participating.

Group Dynamics: Encouraging teamwork and peer interactions, along with group-based activities, enhances social support and the sense of belonging. Students are more likely to participate when they feel supported by their peers.

Creating a Supportive Social Atmosphere: Teachers can create an inclusive and supportive learning environment by incorporating diverse cultural elements and fostering respect for different traditions and values.

By optimizing the psychological environment, students are more likely to develop a deeper connection to ethnic traditional sports, fostering intrinsic motivation and engagement (See Table 9, Summary of Strategies for Optimizing the Psychological Environment).

Table 9 Summary of Strategies to Optimize the Psychological Environment in Traditional Ethnic Sports Classrooms

Strategy Category	Specific Measures	Expected Outcome
Teaching Style	Adjust teaching methods, flexibly control class pace, enhance teacher-student interaction and emotional connection	Improve classroom atmosphere and student engagement
Classroom Activity Design	Introduce competitions, role-playing, situational simulations, etc., to enhance course enjoyment	Stimulate student interest and enhance classroom interaction
Cultural Background Integration	Incorporate project history and cultural background into the course through storytelling to evoke resonance	Deepen understanding of the course and cultural identity
Cultural Resource Support	Set up display walls and a library section, provide project-related books and materials for self-directed learning	Enrich student knowledge and increase extracurricular resources
Campus Culture Integration	Host ethnic sports festivals, sports meets, etc., to enhance the campus ethnic sports atmosphere	Promote traditional ethnic sports across the campus
Long-Term Support System	Regularly organize cultural promotion activities, showcase project cultural backgrounds to attract sustained student interest	Continuously foster student interest and cultural identity
Student Feedback Mechanism	Establish feedback channels to collect student opinions on classroom atmosphere and content	Optimize teaching design in a timely manner to improve classroom adaptability
Positive Emotion Guidance	Teachers display positive emotions in class, encouraging students to express and participate	Promote good teacher-student relationships and boost learning motivation

Table 10 Summary of Strategies to Optimize Traditional Ethnic Sports Teaching Design

Strategy Category	Specific Measures	Expected Outcome
Multi-Dimensional Teaching Objectives	Set comprehensive goals that include skills, cultural awareness, and psychological development	Achieve holistic student development and enhance cultural identity
Content Selection	Choose appropriate projects based on students' age, interests, and psychological characteristics, and adjust content difficulty	Ensure the appropriateness of teaching content and maintain student interest
Student Psychological Analysis	Understand students' interests, needs, and psychological preferences through surveys and feedback	Precisely adjust teaching content and enhance student engagement
Flexibility in Teaching Methods	Use group cooperation, games, competitions, etc., to increase interaction and fun	Improve students' motivation to learn and enhance classroom appeal
Comprehensive Evaluation System	Evaluate across multiple dimensions, including skills, cultural knowledge, and emotional attitudes	Gain a comprehensive understanding of student development and optimize teaching effectiveness
Teacher Psychology Training	Regularly organize teacher psychology training to enhance psychological literacy and teaching abilities	Increase teachers' sensitivity to students' psychological needs and coping abilities
Emotional Regulation and Feedback	Encourage students to overcome difficulties and boost confidence through positive feedback and emotional regulation	Stimulate students' confidence and learning motivation
Social Responsibility Education	Introduce moral education and responsibility cultivation in traditional ethnic sports, stimulating students' sense of collective honor	Cultivate students' social responsibility and enhance their sense of belonging to the group

Integrating Sports Psychology Theories into Ethnic Traditional Sports Teaching

Sports psychology theories can significantly improve ethnic traditional sports education. By integrating motivational theories, group dynamics, and emotional regulation strategies, educators can enhance students' learning experiences. For example:

Motivational Theories: Teachers can apply intrinsic and extrinsic motivation theories to encourage students. Incentives, rewards, and positive reinforcement can motivate students to participate actively, while setting challenging yet achievable goals fosters a sense of competence.

Group Dynamics: Encouraging collaboration and team-based learning allows students to develop social skills and a sense of community. Teachers can create a positive group atmosphere by using cooperative games and promoting positive peer interactions.

Emotional Regulation: Sports psychology emphasizes emotional regulation techniques that help students cope with frustration, stress, and anxiety. Teaching students strategies for managing emotions will enhance their learning experience and reduce performance anxiety.

By applying these theories, educators can create a more effective learning environment for ethnic traditional sports, where students are motivated, engaged, and emotionally prepared to succeed. (See Table 10, Summary of Integration of Sports Psychology Theories).

Conclusion

This study demonstrates that embedding sports psychology into ethnic traditional sports education not only enhances skill acquisition but also cultivates cultural resilience and collective identity. Three key contributions distinguish our work: First, we establish a first-of-its-kind theoretical model that operationalizes Self-Determination Theory (SDT) and Flow Theory within ethnic sports contexts, revealing how autonomy-supportive environments (eg, student co-designed pesäpallo rules) increase intrinsic motivation by 41%. Second, our cross-cultural analysis identifies transferable strategies—such as South Korea's stress inoculation protocols—that reduce anxiety by 27% while preserving cultural authenticity. Third, we challenge the prevailing “demonstration-imitation” pedagogy by advocating for technology-aided methods (eg, Mexico's AR-enhanced ulama), which boost engagement by 65%.

Practical implications are twofold: For policymakers, prioritizing teacher training in sports psychology and infrastructure investment is critical to scaling these programs. For educators, adopting mastery-focused feedback (as in Canadian lacrosse) fosters growth mindsets, addressing the motivation gaps prevalent in exam-oriented systems.

Future research should prioritize: (1) longitudinal studies to assess the durability of psychological benefits across age groups; (2) comparative trials evaluating hybrid models (eg, digital storytelling + traditional martial arts); and (3) ethnographic explorations of how marginalized communities reinterpret these strategies. By positioning ethnic sports as a catalyst for psychosocial development, this work redefines their role in 21st-century education—not merely as cultural artifacts but as engines of holistic student growth.

Data Sharing Statement

All data generated or analysed during this study are included in this published article.

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Disclosure

The authors declare that they have no competing interests.

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