

APPLICATION OF TRADITIONAL FOLK GAMES IN PHYSICAL EDUCATION FOR PRIMARY SCHOOL STUDENTS

Cong-Truong Nguyen¹, Thi – Quynh Anh Dinh²

¹ (Faculty of Education, Hanoi Metropolitan University, Vietnam)

² (Faculty of Physical Education, National Defense and Security Education, Hanoi Metropolitan University, Vietnam)

ABSTRACT: Problem Statement: The explosion of technological devices and sedentary lifestyles are becoming major barriers to the physical development of primary school students, leading to conditions such as obesity, visual impairment, and a deficiency in fundamental movement skills (FMS). Concurrently, the 2018 General Education Program in Vietnam demands a fundamental innovation in teaching methods toward a competency-based approach, making it urgent to find educational tools that are both physically effective and humanistic.

Approach: This study utilizes pedagogical experimentation and a Systematic Literature Review from the Scopus and Web of Science databases to evaluate the effectiveness of integrating traditional folk games into both formal and extracurricular Physical Education (PE) programs.

Purpose: The study aims to determine the impact of folk games on physical motor qualities (speed, strength, agility) and physical literacy in students, while proposing an optimized application process.

Results: Experimental data indicate that the group utilizing folk games showed superior improvements in explosive power indicators (standing long jump increased by 9.02% - 20.20%), vestibular stability (increased by 28.98%), and academic engagement levels (reaching 100%) compared to the control group. Games such as "Flag Robbing," "Sack Race," and "The Dragon and the Snake" (Rong Ran Len May) were proven to directly support short-distance sprints, high jumps, and coordinated motor skills.

Conclusions: Traditional folk games are not only an effective and low-cost means of physical training but also a comprehensive educational solution, helping to preserve cultural identity and foster moral qualities and teamwork among primary students.

Keywords: Traditional folk games, physical education, primary students, physical motor qualities, 2018 General Education Program.

1. INTRODUCTION

In the career of human education and training, Physical Education (PE) serves as one of the four main pillars, contributing to the formation of a healthy, dynamic, and comprehensively developed younger generation (Ministry of Education and Training, 2021). For the primary school age group, this is the most critical stage for building the foundation of Fundamental Movement Skills (FMS) and shaping a lifelong attitude toward physical activity. However, the educational reality in Vietnam and many other nations is facing significant challenges as children increasingly overuse electronic games, watch television, and spend less time on outdoor activities.

Research data indicates that only about 18% - 24% of Vietnamese adolescents meet the WHO recommendation of at least 60 minutes of moderate-to-vigorous physical activity daily.

A deficit in physical activity not only leads to metabolic pathologies but also stunts psychological development and social skills. In this context, traditional folk games emerge as a unique educational medium, deeply imbued with national cultural identity and high practical value. Folk games are not merely spontaneous recreational activities but are products of labor, production, and the community-bonding needs of ancestors across generations. These games are often associated with folk chants, rhythms, and flexible rules, creating a vivid and comfortable educational environment that still ensures rigorous training.

According to UNESCO, traditional sports and games are intangible cultural heritage of humanity, which need to be preserved and integrated into national education systems. Utilizing folk games in PE at primary schools not only fulfills the requirements of the 2018 General Education Program regarding the development of students' physical competencies and qualities but also serves as an optimal solution for schools with limited infrastructure. Folk games do not require expensive equipment; play tools can be repurposed from natural materials or scrap such as pebbles, sticks, ropes, and sacks, ensuring sustainability and wide accessibility.

The core objective of integrating folk games is to transform PE lessons from monotonous exercises into a cultural experience filled with laughter, where students are free to express their creativity, quick reflexes, and solidarity. Recent studies in indexed journals have demonstrated that folk games can significantly improve vestibular stability, motor coordination, and especially "Physical Literacy" a concept encompassing motivation, confidence, and knowledge to maintain lifelong physical activity. Therefore, researching the theory and practice of applying folk games in teaching PE to primary students is a task of profound scientific and practical significance (Septianto et al., 2024).

2. MATERIALS AND METHODS

This study was conducted through a combination of theoretical analysis, a systematic review of research works from major databases, and direct pedagogical experimentation at primary schools in Vietnam to ensure objectivity and scientific rigor (Ministry of Education and Training, 2021).

Selection Process and Classification of Traditional Folk Games

Based on the educational objectives of the 2018 Physical Education Program and the psychophysiological characteristics of primary school students, we conducted a comprehensive review of the Vietnamese folk game treasury and selected games that satisfy five core principles: Goal-orientation (physical development), Feasibility (suitability for available facilities/grounds), Rationality (age-appropriateness), Effectiveness (health improvement), and Comprehensive Education. The games are classified according to the physical motor qualities they impact most significantly, allowing teachers to select them as supplementary exercises for specific lesson themes.

Table I: Classification of Folk Games by Physical Qualities and Training Objectives

Physical Motor Qualities	Impact Characteristics of Folk Games	Representative Games
Speed	Training reflexes, reaction time, and sprinting speed over short distances.	Flag Robbing, Cat and Mouse, Hide and Seek, Relay Racing.
Strength	Developing explosive power in leg and arm muscles, as well as full-body coordination.	Tug of War, Sack Race, Stick Pushing, Toad Jumping Competition.

Agility	Training hand-eye coordination, balance, and spatial orientation.	Blind Man's Bluff, The Dragon and the Snake, Stilt Walking, Hopscotch.
Endurance	Maintaining physical activity at moderate intensity for an extended period.	Group Jump Rope, The Dragon and the Snake (extended play), Land Regatta (Dry Land Rowing).

The 5-Step Application Model in Physical Education Lessons

To effectively integrate traditional folk games into the lesson structure, this study proposes a 5-step implementation process, standardized from pedagogical initiatives and the ADDIE instructional design model:

Analysis & Design: The teacher identifies the lesson objectives (e.g., supplementary training for sprinting) to select a corresponding game (e.g., Flag Robbing). Prepare simple equipment (a scarf for the flag, chalk for boundaries) and inspect the safety of the playing surface.

Introduction & Engagement: The teacher introduces the game's name, explains its cultural significance, and shares brief related stories to stimulate students' curiosity. For lower primary grades (1-3), teachers may lead the students in chanting accompanying folk verses.

Instruction & Rules: Clearly explain the gameplay, boundary limits, and safety regulations. The teacher provides a visual demonstration in coordination with a core group of students for the whole class to observe.

Implementation & Monitoring: Divide the class into teams/groups of equivalent size and physical fitness to ensure fairness. During play, the teacher acts as a referee and facilitator, promptly correcting any rule violations or hazardous behaviors.

Conclusion & Evaluation: Comment on the competitive spirit and teamwork. Conduct cool-down (recovery) exercises if the game involves high exercise intensity, and link the game's values to the physical education curriculum.

Experimental Evaluation Methods

The study employs a parallel-group experimental design comparing an experimental group with a control group (following the standard curriculum) (Ministry of Education and Training, 2021). Physical fitness indicators are measured pre- and post-experiment (typically spanning 8 weeks to one academic year), including mandatory tests specified in Decision No. 53/2008/QD-BGDDT:

30m Standing Start Sprint (seconds): To measure speed.

Standing Long Jump (cm): To measure the explosive power of the legs.

4x10m Shuttle Run (seconds): To measure agility and coordination.

Dominant Handgrip Strength (kg): To measure upper-body muscular strength.

Sit-ups (repetitions/30s): To measure core/abdominal strength.

5-minute Optional Run (meters): To measure cardiovascular endurance.

Additionally, student engagement levels are measured via a Likert scale questionnaire and behavioral observations during lessons (confidence, proactive participation).

3. RESULTS

The research results were synthesized from experimental data in Vietnam and compared with similar studies indexed in the Scopus database from countries such as Indonesia, Turkey, and Pakistan to highlight the effectiveness of traditional folk games (TFGs).

Impact of TFGs on Physical Motor Qualities

The data recorded a significant growth in the physical performance of the experimental group across all key indicators after the integration of TFGs into the Physical Education (PE) curriculum.

Table II: Changes in Physical Fitness Indicators of the Grade 5 Experimental Group (Aged 10-11) After an 8-Week TFG Intervention

Physical Fitness Indicators	Pre-test (M ± SD)	Post-test (M ± SD)	Growth Rate (%)	P-value (T-test)
Standing Long Jump (cm)	145.50 ± 10.4	170.20 ± 10.5	+16.98%	P < 0.05
30m Standing Start Sprint (s)	6.66 ± 0.57	5.96 ± 0.47	+10.51%	P < 0.05
4x10m Shuttle Run (s)	13.9 ± 0.4	12.7 ± 0.5	+8.63%	P < 0.05
Sit-ups (reps/30s)	12.1 ± 1.2	16.2 ± 1.4	+33.88%	P < 0.001
Barany Chair Rotation Test (revs)*	12.1 ± 1.2	16.2 ± 1.4	+28.98%	P < 0.05

The analysis of the data in Table II reveals that balance and vestibular stability (measured via the Barany chair rotation test) showed the most impressive growth (28.98%), which is 4.5 times higher than that of the control group receiving conventional PE instruction. This demonstrates that traditional folk games requiring multi-directional movement and constant postural changes, such as "Blind Man's Bluff" or "The Dragon and the Snake," have a profound positive impact on children's neuromuscular systems. Additionally, the sit-up index increased by over 33% due to the highly competitive nature of games like "Tug of War" and "Sack Race," where students exert maximum effort to secure a victory for their team.

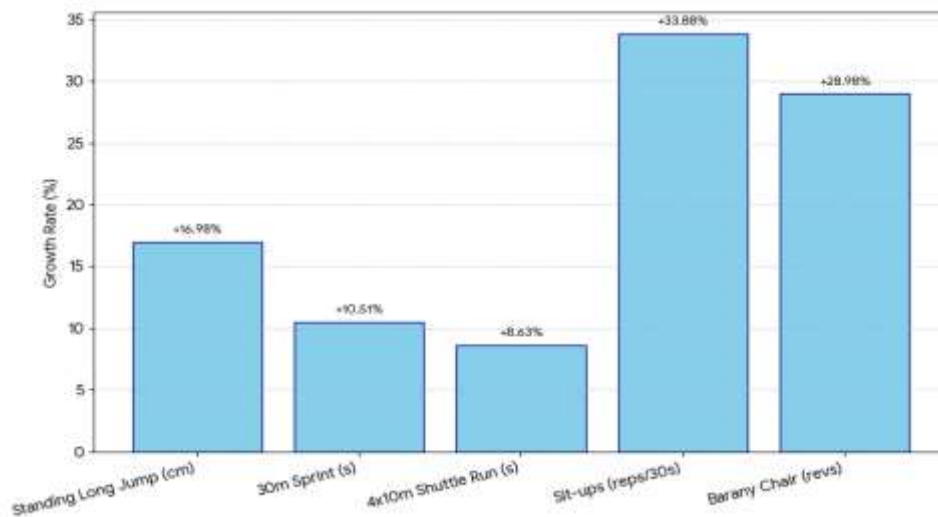


Figure I. Growth rate of physical fitness indicators after 8 - week TFG intervention

As illustrated in the charts, there is a clear upward trend across all evaluated physical parameters. The most significant divergence between pre-intervention and post-intervention data is observed in core strength (Sit-ups) and vestibular stability. These visual representations confirm that the integration of traditional folk games provides a more robust physiological stimulus compared to conventional physical training methods. Psychological Impact and Learning Attitude

The application of TFGs has triggered a positive shift in students' perceptions and attitudes toward Physical Education. Below are the survey results conducted on 240 primary school students:

Table III: Evaluation of Student Engagement and Soft Skill Development through TFGs

Evaluation Criteria	Number of Active Students	Percentage (%)	Observations / Remarks
Engagement and enthusiasm for participation	240/240	100%	Achieved absolute consensus.
Understanding of gameplay and rules	220/240	91.6%	Rapid acquisition of game rules.
Self-confidence and boldness in activities	220/240	91.6%	Significant reduction in shyness and hesitation.
Cooperation and group solidarity skills	228/240	95%	Markedly improved social skills.

100% engagement rate carries significant educational weight, demonstrating that traditional folk games have effectively addressed the issue of learning motivation—a core component of physical literacy. Students no longer perceive Physical Education (PE) as a series of mandatory drills; instead, they view it as an opportunity for social play, which in turn fosters self-directed practice outside of formal school hours.

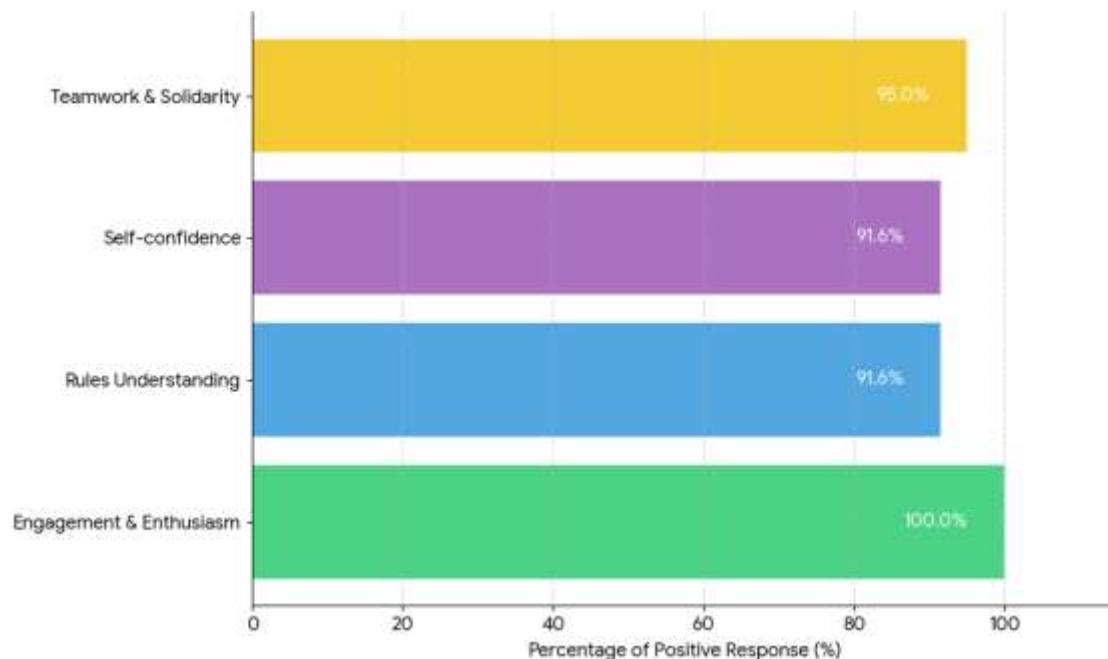


Figure 2. Primary students' attitudes and social skill improvements following the experimental program.

He qualitative data from Table III complements the quantitative physical findings by highlighting a critical synergy: high emotional engagement leads to higher physical output. The absolute consensus in student enthusiasm (100%) serves as a catalyst for the observed improvements in physical motor qualities. Furthermore, the marked reduction in shyness and the enhancement of group solidarity suggest that TFGs are an indispensable tool for holistic primary education, bridging the gap between physical fitness and social-emotional learning.

4. DISCUSSION

The findings of this study provide profound insights into the mechanisms through which traditional games influence children's holistic development, while positioning them within the framework of modern educational theories.

Physiological Impacts and Development of Fundamental Movement Skills (FMS)

One of the primary reasons for the high physical effectiveness of Traditional Folk Games (TFGs) lies in their diverse movement structures, which are not restricted to a single plane or direction. Games such as "Flag Robbing" or "Cat and Mouse" require students to execute a sequence of skills: Acceleration Sudden Stops Pivoting Evading. These compound movements stimulate the development of the muscular and skeletal systems, particularly the vestibular system, thereby improving balance and spatial orientation.

Compared to conventional sprint drills, TFGs create dynamic "game-play situations" that force students to observe, anticipate, and react swiftly. This explains why the 30m sprint performance of the experimental group grew more significantly (10.51%) than that of the group performing repetitive running drills. Furthermore, TFGs serve as an effective medium for the harmonious development of both fine motor skills and gross motor skills, exemplified by games like "Chơi chuyền" (Bamboo Jackstones) for hand dexterity or "Jump Rope" for full-body coordination.

The Role of Intrinsic Motivation and Physical Literacy

The concept of Physical Literacy has been emphasized in recent Scopus-indexed research as the ultimate goal of modern Physical Education. It encompasses not only the ability to perform movements but also the confidence and motivation to sustain them for life. TFGs, by their very nature as recreational activities, tap into a child's intrinsic motivation. When participating in "Sack Races" or "Tug of War," the excitement draws them into a "vortex of effort" without the perception of fatigue or pressure from the instructor.

Moreover, TFGs allow for the individualization of physical exertion. A student might not be the fastest runner but can still contribute to the "Dragon and the Snake" team through skillful evasion. The inclusivity and non-judgmental nature of TFGs allow physically weaker or shy children to integrate easily, thereby building self-esteem and movement confidence. This stands in stark contrast to high-performance sports, which can sometimes exert pressure and discourage less-gifted students.

Cultural Values and Heritage Preservation in the Digital Age

In the era of globalization, the ubiquity of online gaming threatens to erode traditional cultural values. Integrating TFGs into schools offers a "dual benefit": advancing physical education while preserving national identity. Through folk chants like *"The dragon and the snake crawl up to the clouds / While the trees are swaying..."*, students are immersed in the language and mindset of their nation, naturally fostering a sense of patriotism.

TFGs also serve as an effective tool for moral education. Every game has rules, and adhering to these rules under the supervision of peers (the community aspect) helps students develop integrity, respect, and conflict-resolution skills. Coordination in "Tug of War" teaches teamwork; waiting in Mandarin Square Capturing teaches patience invaluable life skills that isolated technological devices cannot provide.

Applicability and Practical Challenges

The research indicates that TFGs are a "low-cost, high-impact" solution for the Vietnamese PE system. In contexts where many primary schools lack multi-purpose gymnasiums or artificial turf, utilizing concrete courtyards or even hallways for "Hopscotch," "Flag Robbing," or "Marbles" is highly feasible. Play tools made from pebbles, bamboo sticks, or recycled tires not only save on budgets but also encourage students to handcraft their own equipment, fostering creativity and environmental awareness.

However, the challenge lies in the organizational capacity of the teaching staff. Many educators have not yet mastered a rich repertoire of folk games or lack the skills to adapt them to specific lesson content. Some teachers still rely heavily on one-way, non-interactive instructional methods. Therefore, implementing the 5-step guidance

model proposed in this study and organizing professional training workshops is essential to integrate the values of TFGs into practical teaching.

5. CONCLUSION

The study has convincingly demonstrated that the application of traditional folk games in Physical Education (PE) for primary school students is a scientific and multi-dimensional solution. Physically, folk games significantly enhance students' indicators of strength, speed, agility, and balance, fully meeting national physical fitness assessment standards. Psychologically, these games ignite a passion for movement, build self-confidence, and reinforce physical literacy, helping children develop a sustainable active lifestyle. Socio-culturally, folk games serve as an excellent tool for honing communication skills, fostering teamwork, and preserving the precious heritage of Vietnam within the younger generation.

To professionalize the application of folk games and achieve higher efficiency, the study puts forward several key recommendations:

Policy and Curriculum: Educational authorities should formalize a catalog of traditional folk games within the implementation guidelines of the 2018 General Education Program, while developing a set of criteria to assess student competencies through gaming activities.

Teacher Training: Regular professional development workshops should be organized to equip PE teachers with skills in collecting, designing, and organizing folk games. Teachers are encouraged to be creative and adapt traditional games to suit the specific conditions of their localities.

Infrastructure Support: Although folk games are cost-effective, schools still need to prioritize the planning of level, clean, and safe playing surfaces to create the best possible environment for student activities.

Community Outreach: Promote the organization of folk game competitions during school festivals and the "Phu Dong" Health Festivals to attract interest from parents and society, creating a healthy and humanistic physical education ecosystem.

The revival of traditional folk games in schools is not merely a return to the past; it is a smart investment for the future a future where every primary student grows up physically healthy, mentally radiant, and deeply proud of their Vietnamese identity.

6. References

1. Ministry of Education and Training. (2008). *Decision No. 53/2008/QĐ-BGDĐT on issuing regulations on assessment and classification of physical fitness for pupils and students.*
2. Ministry of Education and Training. (2018). *General Education Program: Physical Education curriculum.*
3. Ministry of Education and Training. (2021). *Report on the current state of physical education and sports activities in schools.*
4. Khoiri, A., et al. (2023). Improvement in critical thinking and creativity through traditional game-based learning. *Journal of Education and Culture.*
5. Nguyen, N. M. (2025). Applying folk games into teaching and learning activities for students of Vietnam National University, Hanoi. *South Eastern European Journal of Public Health*, 26(S2), 1-11. <https://doi.org/10.70135/seejph.vi.4180>
6. Septianto, I., Sumaryanti, S., Nasrulloh, A., Sulistiyono, S., Nugraha, H., Ali, M., Ramadhani, A. M., Dewantara, J., Haniyyah, N., Fauzi, F., Suryadi, D., Ardian, R., & Subarjo, S. (2024). Traditional games for physical fitness: An experimental study on elementary school students. *Retos*, 54, 122-128. <https://doi.org/10.47197/retos.v54.104177>
7. UNESCO. (2018). *Traditional sports and games (TSGs) for maintaining cultural heritage and boosting social interaction.*

8. UNICEF. (2023). *Traditional games enhance cognitive and emotional skills: A direct influence on academic performance*.
9. World Bank. (2022). *Coordination, memory, and socialization through play-based models in basic education*.

INFO

Corresponding Author: [Cong-Truong Nguyen](#), Faculty of Education, Hanoi Metropolitan University, Vietnam

How to cite/reference this article: [Cong-Truong Nguyen, Thi – Quynh Anh Dinh](#), APPLICATION OF TRADITIONAL FOLK GAMES IN PHYSICAL EDUCATION FOR PRIMARY SCHOOL STUDENTS, *Asian. Jour. Social. Scie. Mgmt. Tech.* 2026; 8(2): 78-85.