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DEVELOPING PHYSICAL ACTIVITY ENGAGEMENT OF 5–6-YEAR-OLD PRESCHOOL CHILDREN THROUGH FOLK GAMES

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Abstract

This article focuses on developing the physical activity engagement of 5–6-year-old preschool children through the organization of folk games (FG). Based on theoretical foundations regarding the role of FG in the physical, cognitive, and socio-emotional development of children, the study conducted a pedagogical experiment at three preschools in Tỉnh Biên Town, An Giang Province. The research sample included 90 children, divided into experimental and control groups, with the intervention carried out over four months (February–May 2025). The results show that children who regularly participated in FG achieved higher mean scores than the control group across four criteria: active participation, effort to complete tasks, cooperation with peers, and emotional perception–expression. The differences were statistically significant ($P < 0.05$). This demonstrates that FG not only enhances basic motor skills but also stimulates interest, strengthens cooperation, persistence, and the ability to express emotions. The study confirms that integrating FG into preschool education is a practical solution that contributes to comprehensive child development and fosters positive exercise habits from the early years of education.

Keywords: Folk games; physical activity engagement; 5–6-year-old preschool children; preschool education

I. Introduction

In the context of early childhood education reform, comprehensive child development requires attention not only to knowledge but also to physical and mental growth. At the age of 5–6, preschool children are in the “golden stage” for forming and developing fundamental motor skills, which lay the foundation for their future physical, intellectual, and personal development. However, in reality, children in urban areas today

often have limited opportunities for outdoor activities, with many spending considerable time on electronic devices. This leads to reduced agility, endurance, and enthusiasm for physical activity. Such circumstances raise the need for appropriate forms of activity organization that are both familiar and able to foster children’s initiative.

Folk games, with their diversity of forms and deep connections to traditional cultural life, are considered an effective means to

stimulate interest, promote physical activity, and cultivate social skills. Games such as tug of war, “ô ăn quan” (Mandarin square capturing game), hopscotch, and “rồng rắn lên mây” (dragon snake) not only provide opportunities for whole-body movement and sensory coordination but also help children experience solidarity, perseverance, and creativity in play. Integrating FG into preschool activities, especially for 5–6-year-olds, helps awaken active engagement in physical activity, builds habits of exercise, and nurtures a love for national culture. From these theoretical and practical requirements, this study aims to clarify the scientific basis and propose measures to develop physical activity engagement for 5–6-year-old preschool children through the organization of folk games in preschool settings.

II. Literature review

2.1. The role of folk games in the motor development of 5–6-year-old preschool children

According to the Preschool Education Curriculum (Ministry of Education and Training [MOET], 2009, revised 2016), physical development is one of the key areas, with the goal of “forming in children physical qualities, basic motor skills, developing physical fitness, and preparing them for Grade 1.” At the same time, the program emphasizes the task of “bringing children joy and excitement when participating in physical activities, forming exercise habits and a healthy lifestyle” (MOET, 2016, p. 23). Thus, motor development is not only about enhancing physical strength, but also about fostering interest, positive attitudes, and sustainable exercise habits. In this context, folk games (FG) are considered an effective educational medium, suitable for the psycho-physiological characteristics of preschool children. In terms of motor skills, FG consist of a rich system of movements ranging from basic (walking, running, jumping, throwing, catching, balancing) to complex (hand–eye coordination, muscle group coordination, spatial orientation). Through repeated play, children both consolidate skills and develop motor qualities such as speed, endurance, dexterity, and flexibility (Lê Thị Thanh, 2018). This is an essential foundation for readiness for primary school.

From the perspective of interest, FG are competitive, joyful, and collective in nature, giving children opportunities to participate voluntarily, with excitement and initiative. This helps form regular exercise habits, an active lifestyle, and positive attitudes toward physical activity (Nguyễn Thị Mỹ Lộc, 2018). In addition, folk games train social competencies through compliance with rules, teamwork, and role-sharing, thereby fostering discipline, solidarity, and cooperation. In this sense, FG go beyond pure physical functions, becoming an important tool for holistic development.

2.2. The relationship between folk games and physical activity engagement

Folk games provide a favorable environment for developing physical activity engagement. Compared to monotonous exercise drills, FG are more attractive due to rules, healthy competition, and entertainment. These elements stimulate interest and intrinsic motivation – the core condition for maintaining active engagement, as explained by Self-Determination Theory (Deci & Ryan, 2000). By participating in FG, children have opportunities to demonstrate competence, make choices, and build social connections, thereby sustaining initiative and long-term enjoyment. Phạm Thị Hòa (2019) emphasizes that FG in physical education encourage “learning through play,” promoting autonomy, enjoyment, and sustained participation. Therefore, organizing FG is a natural and friendly condition for children to cultivate active engagement in movement.

Active engagement is also a condition for FG to maximize their value. The effectiveness of FG largely depends on the degree of children’s active participation. When children are proactive, follow rules, and strive to overcome challenges, the educational values of the games are fully realized. Conversely, passive attitudes reduce the effectiveness of both physical training and social development. Research by López et al. (2021) in Spain showed that children who actively participated in traditional games made greater progress in motor, cognitive, and social skills compared to passive peers. This aligns with Nguyễn Thị Mỹ Lộc’s (2018) view that active engagement is the decisive factor in turning

motor activities into effective learning processes.

The mutual reinforcement between FG and physical activity engagement can be seen as follows: FG with diverse movements (running, jumping, pulling, throwing, etc.) require activity engagement, which helps children proactively improve physical qualities; FG demanding observation, judgment, and quick decision-making encourage children to develop flexible thinking and problem-solving skills; FG of a collective nature require cooperation and coordination, where active engagement allows children to integrate, collaborate effectively, and form positive social skills (Pellegrini & Smith, 1998).

2.3. Mechanisms of the impact of folk games on physical activity engagement

Psychological–motivational aspect: FG are attractive because of competition and fun. Participation allows children to satisfy natural needs for movement, affirm themselves, and experience positive emotions. According to Nguyễn Ánh Tuyết (2018), interest is the driving force behind positive behaviors. International studies (Lee, Kim & Oh, 2020) also confirm that play-based physical activities maintain sustainable participation more effectively than monotonous training.

Motor development aspect: FG integrate many basic skills such as running, jumping, throwing, pulling, and balancing. When repeated in a play context, these skills are reinforced, creating a “positive cycle”: skill mastery → confidence → enjoyment → more participation (Lê Thị Thanh, 2018).

Cognitive–social aspect: Rules in FG require children to remember, comply, wait their turn, cooperate, and support peers. This is a social learning process, helping them practice discipline, responsibility, and cooperation (Pellegrini & Smith, 1998). Recognition from peers further strengthens interest and consolidates physical activity engagement.

2.4. Pedagogical principles in using folk games to develop physical activity engagement

Principle of purpose and developmental orientation: FG must be organized based on physical education goals, aligned with learning outcomes of the Preschool Education Curriculum. Teachers should identify which skills

a game develops and organize accordingly with clear direction (Lê Thị Thanh, 2018).

Principle of age appropriateness and individualization: Children aged 5–6 have relatively complete motor systems but remain limited in endurance and coordination. Games must fit psycho-physiological traits and be adjusted according to individual capacity to ensure participation opportunities for all (Nguyễn Ánh Tuyết, 2018).

Principle of voluntariness and enjoyment: Active engagement manifests strongly when participation is voluntary. Therefore, teachers should leverage the fun and healthy competitiveness of FG, combining encouragement, praise, and small-group organization (Deci & Ryan, 2000).

Principle of safety and value education: FG often take place outdoors with group movements, requiring adherence to safety conditions regarding space, equipment, and supervision. At the same time, cultural and communal values in games should be harnessed, ensuring that while developing physical fitness, children also learn character, solidarity, and social responsibility.

III. Research methods

To test the scientific hypothesis and evaluate the effectiveness of developing physical activity engagement (PAE) through folk games (FG), the study employed a parallel control experimental pedagogy design. The experimental procedure was conducted in three steps:

Step 1: Planning. The research team designed an intervention process aimed at developing PAE through the organization of FG for 5–6-year-old preschool children. The process was designed to be implemented both during physical education classes and outdoor playtime, ensuring feasibility and alignment with the objectives of the Preschool Education Curriculum (MOET, 2016).

Step 2: Selection of experimental and control samples

The experiment was carried out in parallel comparison between two groups:

Experimental group (45 children): Hướng Dương Preschool – 15 children (8 boys, 7 girls); An Nông Kindergarten- 15 children (7 boys, 8 girls); Tuổi Thơ Preschool – 15 children (6 Khmer boys, 9 Khmer girls).

Control group (45 children): Hường Dương Preschool – 15 children (8 boys, 7 girls); An Nông Kindergarten – 15 children (7 boys, 8 girls); Tuổi Thơ Preschool – 15 children (6 Khmer boys, 9 Khmer girls).

Both groups had equivalent numbers of children and gender distribution, ensuring comparability. The three preschools were all located in Tịnh Biên Town (An Giang Province), implemented the official Preschool Education Curriculum issued by MOET, and did not differ significantly in terms of facilities.

Step 3: Teacher training and guidance

Requirements: Participating teachers were required to have equivalent qualifications, experience in teaching 5–6-year-olds, and proficiency in organizing FG.

Implementation: Instructional materials describing and guiding FG were provided for teachers to study and apply during activity organization. The research team also offered training and addressed questions to ensure consistency in implementation.

Duration of experiment: The experiment was conducted from February to May 2025, lasting four consecutive months. This timeframe was sufficient to observe changes in children's PAE while also fitting the academic schedule of the preschools.

The allocation of FG time was identified as a crucial factor to ensure both scientific rigor and practical feasibility. The activities were integrated as follows:

During physical education classes: Focused on observing and assessing children's motor techniques.

During outdoor playtime: Focused on observing children's interest, participation, and initiative in physical activity.

According to expert appraisal and approval, each FG was arranged with a duration of 10–12 minutes to ensure physical training effectiveness while maintaining children's enthusiasm without causing fatigue.

Assessment of experimental results. The level of development of children's PAE was evaluated using 16 criteria applied to both experimental and control groups during the experiment, comparing changes before and after the intervention. Three criteria in particular showed significant developmental changes: Two criteria under the dimension "Effort to

Complete Tasks"; "The child makes an effort to complete the task until the end."; "The child patiently repeats an action multiple times."

These shifted from "inactive" before the experiment to "average" after the experiment: One criterion under the dimension "Cooperation with Peers and Others"; "The child demonstrates friendliness and solidarity with peers." This shifted from "average" before the experiment to "active" after the experiment.

IV. Research Results

4.1. Assessment of the development of physical activity engagement in the experimental group after the intervention

After the intervention period, the manifestations of physical activity engagement (PAE) in the experimental group showed significant and consistent development. Specifically, 14 criteria were upgraded from the "average" level before the experiment to the "active" level afterward. These included: "Participating joyfully, eagerly, and enthusiastically"; "Being bold and confident when participating"; "Participating continuously without signs of fatigue (yawning, drowsiness, etc.)"; "Confidently proposing ideas for implementation"; "Discussing and negotiating with peers to carry out tasks together"; "Dividing tasks and selecting appropriate roles independently"; "Proposing solutions when problems arise"; "Listening to others' opinions and sharing their own ideas with peers"; "Demonstrating friendliness and solidarity with friends"; "Resolving conflicts among peers within the group"; "Adjusting behavior and emotions appropriately to the situation"; "Expressing emotions verbally, through gestures and cheerful facial expressions"; "Showing enjoyment when completing tasks."

Two criteria improved from the "inactive" level before the experiment to "average" or "active" afterward: "*Recognizing mistakes and making corrections*" and "*Patiently repeating an action multiple times.*" Overall, almost all PAE criteria in the experimental group recorded score increases ranging from 0.22 to 0.73 points.

4.2. Comparison of PAE development between experimental and control groups

After the intervention, nearly all PAE criteria of the experimental group achieved higher mean scores than the control group, with statistically significant differences. For instance, under the “Interest” dimension, the criterion “*Participating joyfully, eagerly, and enthusiastically*” scored a mean of 2.42 (SD = 0.48) in the experimental group compared to 2.18 (SD = 0.39) in the control group, with $t_{calculated} = 2.60 > t_{critical} = 1.9871$ ($P < 0.05$). Similarly, the criterion “*Being bold and confident when participating*” reached a mean score of 2.47 (SD = 0.50) in the experimental group, compared to 2.22 (SD = 0.47) in the control group, with $t_{calculated} = 2.38$ ($P < 0.05$). For the criterion “*Participating continuously without signs of fatigue*,” the experimental group scored 2.40 (SD = 0.50) versus 2.04 (SD = 0.42) in the control group, with $t_{calculated} = 3.66 > t_{critical}$, again confirming statistical significance ($P < 0.05$). Overall, the three criteria in this dimension improved from “average” (2.15) to “active” (2.43) in the experimental group, while the control group remained lower.

4.3. Results by criterion groups

Group “Active Participation”: The experimental group demonstrated higher initiative. For the criterion “*Confidently proposing ideas for implementation*,” the mean score was 2.44 (SD = 0.50), compared to 2.11 (SD = 0.38) in the control group, with $t_{calculated} = 3.54 > t_{critical}$ ($P < 0.05$). Similarly, “*Discussing and negotiating with peers*” scored 2.47 (SD = 0.50) versus 2.13 (SD = 0.46), with $t_{calculated} = 3.28$ ($P < 0.05$). Other indicators, such as “task division” and “problem solving,” also favored the experimental group. The overall mean was 2.41 (“Active”), compared to 2.13 (“Average”) in the control group.

Group “Effort to Complete Tasks”: Significant differences were also observed. For “*Striving to complete tasks to the end*,” the experimental group scored 2.22 (SD = 0.42) compared to 1.67 (SD = 0.56), with $t_{calculated} = 5.30$ ($P < 0.05$). For “*Recognizing mistakes and making corrections*,” the experimental group scored 2.36, while the control group scored 1.67, with $t_{calculated} = 6.80$. Similarly, “*Patiently repeating an action*” scored 2.29 in the experimental group versus 1.71 in the control group, with $t_{calculated}$

$= 5.42$ ($P < 0.05$). Overall, the experimental group reached 2.29 compared to 1.68 in the control group. Although both remained at the “Average” level, the gap reflected higher persistence and determination in the experimental group.

Group “Cooperation with Peers and Others”: Clear differences were found. For “*Listening to others’ opinions and sharing with peers*,” the experimental group scored 2.40 (SD = 0.50) compared to 2.11 (SD = 0.53) in the control group, with $t_{calculated} = 2.67$ ($P < 0.05$). Other indicators, such as “teamwork and sharing” and “resolving conflicts,” also favored the experimental group with statistical significance. Overall, the experimental group scored 2.48 (“Active”), higher than 2.23 (“Average”) in the control group.

Group “Perception and Expression of Emotions”: The experimental group also showed positive impact. For “*Adjusting behavior and emotions appropriately*,” the experimental group scored 2.56 compared to 2.31 in the control group, with $t_{calculated} = 2.28$. For “*Expressing emotions verbally, through gestures, and cheerful facial expressions*,” the experimental group scored 2.38 versus 2.02, with $t_{calculated} = 3.26$. Finally, “*Expressing emotions naturally and comfortably*” scored 2.47 in the experimental group versus 2.24 in the control group, with $t_{calculated} = 2.13$. All differences were statistically significant ($P < 0.05$). Overall, the experimental group scored 2.47 (“Active”) compared to 2.19 (“Average”) in the control group.

In summary, across all four criterion groups, the results demonstrated statistically significant differences between the experimental and control groups. This provides clear evidence that the application of folk games in preschool education effectively fostered physical activity engagement in 5–6-year-old children, reflected in their initiative, persistence, cooperation, and emotional perception–expression.

V. Conclusion

The study results reveal that the organization of folk games had a significant and positive impact on the development of physical activity engagement in 5–6-year-old preschool children. Across all four criterion groups – *active participation*, *effort*

to complete tasks, cooperation with peers, and emotional perception-expression – the experimental group achieved higher mean scores, with statistically significant differences compared to the control group.

This confirms that FG not only help children consolidate and develop fundamental motor skills but also nurture proactive atti-

tudes, persistence, cooperation, and socio-emotional competence. Therefore, integrating FG into preschool education is not only consistent with the objectives of holistic child development but also an effective and sustainable solution to forming positive physical activity habits in early childhood.

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