Efforts to Improve Gross Motor Skills through Traditional Games in Children Aged 5-6 Years

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ABSTRACT

This study aims to improve the gross motor skills of children aged 5–6 years through traditional games at Bestari Early Childhood Education (PAUD), Tangerang City. This study uses a Classroom Action Research (CAR) design with the Kurt Lewin model consisting of four stages: planning, implementation, observation, and reflection. The research participants were 10 children (8 boys and 2 girls). Data were collected through observation, interviews, and documentation, and analyzed qualitatively and quantitatively. The results showed a significant increase in children's gross motor skills, namely from 68.1% in Cycle I to 77.2% in Cycle II, which is categorized as *Very Good Development (BBI)* . Traditional games such as *hopscotch* and *coconut shell stilts* effectively stimulate children's locomotor, non-locomotor, and manipulative movements. In addition, these activities foster cooperation, discipline, and responsibility, which are in line with Islamic educational values. Therefore, traditional games can be an innovative play-based learning model and support the development of an early childhood curriculum rooted in local wisdom and Islamic spirituality.

Keywords: *Gross motor-skills; Traditional games; Early-childhood education; Play-based learning.*

INTRODUCTION

Early childhood, defined as the ages of 0–8 years, is a golden age of human development characterized by rapid growth in various aspects. stated by Hidayat & Nurlatifah (2023), stage This crucial and not can repeated, so that need proper stimulation For optimize learning and development.

Based on Constitution Number 20 of 2003 concerning National Education System, Early Childhood Education (PAUD) provides stimulation education to child since born until age six year, prepare they For education more carry on (Maulana & Nurunnisa, 2019). Learning at the level This should based play and experience directly appropriate with characteristics child.

Gross motor development is one of the realm important for children age early. Hurlock(Sapri et al., 2021) emphasize that developing motor skills with Good contribute to trust self and readiness child For activity school. Gross motor activities involve movements that use large muscles as the main driving force. According to Sari & Sinaga (2020) that gross motor activities are types of movements that primarily involve the use of large muscles. Some of the main characteristics of gross motor skills include: 1) Using large muscles 2) Movements are clearly visible and extensive, 3) Increasing with growth and physical maturity, 4) Requiring balance and coordination between muscles and the nervous system , 5) Can be developed

through physical stimulation and exercise.

Gross motor development in early childhood is influenced by ongoing experience and practice. According to (Faridy et al., 2024) gross motor development in children aged 5–6 years occurs through practice and various experiences. At 5–6 years of age, children expected Already capable stand with one leg for ±10–11 seconds and walk in a straight line as indicator balance and coordination mature body (Wulandari et al., 2025). Based on this theory, it is concluded that the more opportunities children have to practice and explore, the more optimal their gross motor development will be.

Observations at PAUD Bestari show that a number of child Still difficulty with balance physical, jumping, and agility Because limitations of learning media and methods monotonous teaching. Gross motor skills namely ability child For move big muscles body like running, jumping, and guarding balance is foundation important in development child age early. However, still found a number of children who have not reach optimal achievement in gross motor aspects. According to Midwifery et al. (2025), study show that delay gross motor development happen around 12.4% in children preschool.

this modern era, changes style life like improvement gadget use and reduction activity physique active outdoors, adding concern that stimulation movement physique child will the more reduced, so that potential gross motor development child hampered. For overcome problem this game traditional can used as a tool for educational innovation. Games like hopscotch and stilts coconut shell coconut contains cultural and moral values that encourage physical, cognitive, and social growth. Darmawati & Widyasari (2022) emphasize that game traditional No only develop coordination physique but also maintain honesty, work The same team, and responsibility answer core elements of Islamic education.

Temporary that, the game traditional like hopscotch and stilts coconut shell provide A rich space for gross motor development through movement jumping, running, switching legs, and guarding balance. Qomariah & Hamidah (2022) show that game traditional can stimulate large muscles, balance, and coordination body child in a way comprehensive. In the context of theme The main theme of the AICIEL Seminar is "Transformation of Islamic Higher Education through Innovation and Research for Sustainable Development " development pedagogical as well as curriculum based culture local and activities physique active become form real innovation education child age friendly early environment cultural and sustainable. Although benefit game traditional towards gross motor skills has start researched, still Lots PAUD institutions that have not yet apply it in a way systematic in curriculum and learning process. Agusniatih & Juhriati (2025) reveal that although There is impact positive, implementation game traditional in PAUD

institutions yet followed with series cycle action structured and unstructured classes Lots linking aspect curriculum innovative and pedagogical. This is important For investigated Because delay in gross motor development can impact No only on the aspect physique like balance and coordination but also on the aspect cognitive and social child, remembering movement active correlated with ability exploration, interaction social, and learning. With use game traditional blend activity physical and wisdom values local, then learning become No only physique but also contextual and meaningful for children.

With consider context need gross motor stimulation child ages 5–6 years, and relevance innovation curriculum and pedagogy based play in framework development sustainable research This become very urgent. Research This aim For analyze and improve gross motor skills through game traditional in children 5–6 years old at PAUD Bestari in general systematic using action models class. Contribution study This nature double: in theoretical, enriching literature about innovation learning based culture local For gross motor development; in general practice, provide guide for PAUD educators in design and implement activity game integrated traditional in curriculum and pedagogy modern pedagogy. Research This in line with AICIEL Seminar theme that encourages transformation education through relevant research and innovation with development sustainable Because active, contextual, and problem-based learning culture can strengthen quality education child age early in a way holistic.

Therefore that, research This approach aims to implement traditional games as a play-based learning innovation to improve gross motor skills. This in line with policy Freedom to Learn and support Sustainable Development Goal 4 (Quality Education), which integrates the spiritual and social dimensions of Islamic education.

METHOD

Subjects of Research

Study This The study was conducted at Bestari Early Childhood Education (PAUD), located in Pinang District, Tangerang City, Indonesia. The subjects were ten children aged 5–6 years, consisting of eight boys and two girls. The subjects were selected based on observations indicating that some children had not yet reached the expected developmental milestones in gross motor skills, particularly in balance and coordination activities. The Bestari Early Childhood Education (PAUD) learning environment was chosen because it represents a common early childhood environment with limited physical activity facilities, making it suitable for the implementation of play- based learning. traditional as approach innovative pedagogical.

In this study, the researcher used Classroom Action Research (CAR) with Kurt Lewin's model. According to Machali (2022)Kurt Lewin, the model is the main foundation for various approaches in action research, especially classroom action research (CAR). Lewin was the first figure to introduce the concept of action research. According to Lewin, the core of action research includes four main stages, namely: (1) planning, (2) implementing actions (acting), (3) observing, and (4) reflecting.

Instruments and Interview Questions

The main instruments used in this study included observation sheets, performance rubrics, and interview guidelines for teachers: 1) The observation sheets were designed to assess children's progress in gross motor skills, focusing on three domains: locomotor (e.g., running, jumping), non-locomotor (e.g., bending, balancing), and movement. manipulative (e.g. , catching, throwing) (Utami, 2024). 2) A performance rubric was used to categorize the level of development into four indicators: Not Yet Developing (BB), Beginning to Develop (MB), Developing as Expected (BSH), and Developing Very Well (BSB). 3) Interview questions were given to teachers to explore their perceptions of the learning process and the challenges faced. in apply game traditional (Zuhra, 2024). Sample interview questions include: 1) How do traditional games help stimulate children's physical and social development ?; 2) What challenges do teachers face when implementing game-based activities in daily learning ?; 3) How do children respond to traditional game-based learning compared to regular classroom activities?

All instruments were validated by two early childhood education experts to ensure construct validity and content relevance before use in the classroom.

Data collection

Data were collected through two cycles of action following Kurt Lewin's Classroom Action Research model, namely planning, action, observation, and reflection. 1) In the planning stage, researchers collaborated with teachers to develop a learning plan (RPPH) that integrates hopscotch and stilts. coconut shell Game coconut 2) In the action stage, traditional games are implemented as part of physical education sessions and play-based learning. 3) The observation stage includes recording children's motor responses, participation levels, and coordination improvements. 4) In the action stage, traditional games are implemented as part of physical education sessions and play-based learning. reflection, researchers and teachers analyze observation data For determine effectiveness of the intervention and plan necessary adjustments for the next cycle.

Data analyzed use analysis descriptive qualitative and analytical quantitative percentage with the formula:

$$P = \frac{F}{N} \times 100\%$$

Where P represents success percentage, F is the number of indicators achieved, and N is the total possible score. This research was conducted from March to June 2025, including proposal approval, instrument design, classroom implementation, data collection, and analysis.

RESULTS AND DISCUSSION

The results of the study showed a significant increase in gross motor skills in Cycle I. by using hopscotch, children's development reaches 68.1%, whereas in Cycle II by using coconut shell stilts, it increased to 77.2%, categorized as Very Well Developed.

These findings indicate that traditional games effectively stimulate children's locomotor, non-locomotor, and manipulative skills. These activities also improve coordination, self-confidence, and teamwork. This aligns with a study conducted by Triyanti (2021) and Inaya et al. (2023), who found that local traditional games improve children's balance, strength, and agility.

A number of study previously show results interesting. Afifah Maulidiyyah & Purwoko (2023) state that game traditional own role significant in gross motor development children, but Still A little research that links in a way explicit curriculum and pedagogy innovative in PAUD. Research by Wulandari et al. (2025) on games hopscotch show improvement significant gross motor skills group age 5-6 years (pre-test category "fair" 55.6%, post-test category "very good" 69.4%). Previously, Nurwiyanto et al. (2021) do review literature to game traditional in gross motor development, but method study more nature literature and less intervention directly at PAUD. From the study mentioned, it can be seen three gap main: (1) many focused research only on one type game traditional, (2) little research that uses design action class or cycle interventions in the PAUD environment, and (3) limitations integration development curriculum and pedagogy in activity game Furthermore, Utsman & Puspitasari (2025) play-based learning instills Islamic moral values, including cooperation (ta'awun), unity (ukhuwah), and discipline (istiqamah). Therefore, traditional games not only support physical growth but also foster spiritual and moral development in line with the principles of Islamic education .

For expand effort motor and social-emotional development children, important for educator For consider various type game traditional as a learning medium. According to Al Ningsih (2021) besides game hopscotch and stilts coconut shell, various type game other traditional ones such as jump rope, clogs, gobak Sodor and congklak also have potential For developed as a medium for gross and fine

motor stimulation children. Games the No only stimulate ability physical, but also training coordination, balance, strategy, and interaction social, so that can become references for study or practice learning in PAUD to in front (Djuanda, Isep, 2020). With adapt variation game traditional this, educator can designing more activities diverse and fun, at the same time maintain values culture local, so that child No only develop in a way physique but also know inheritance relevant culture.

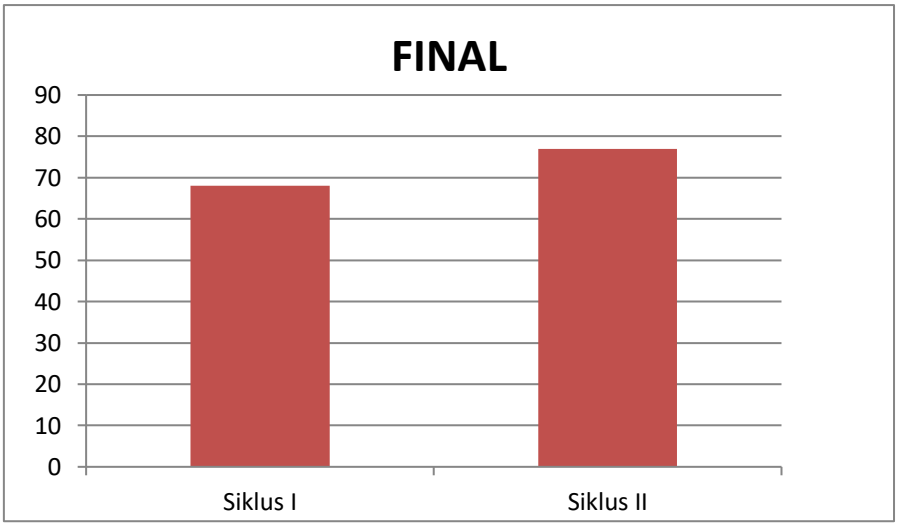

Figure 1. Final Results of Gross Motor Skill Percentage

CONCLUSION

This study conclusively demonstrates that the integration of traditional games, specifically hopscotch and coconut shell stilts, served as an effective and innovative intervention for enhancing gross motor skills in 5–6-year-old children at Bestari Preschool. The quantitative data strongly support this finding, showing a noticeable improvement in children's performance, rising from an initial mastery level of 68.1% to 77.2%. This significant increase confirms that traditional play-based activities successfully enhance children's balance, strength, and coordination. Furthermore, integrating these traditional games into the Early Childhood Education (PAUD) curriculum offers a valuable, play-based pedagogical approach rooted in local culture and Islamic values, which is essential for supporting holistic child development and aligning with the principles of Sustainable Development Goal 4 (Quality Education). Based on these findings, it is recommended that teachers consistently incorporate traditional games into their curriculum to foster both motor skills and character development; schools should provide adequate facilities and safe outdoor environments to fully support this play-based learning methodology; and future researchers are encouraged to investigate the correlation between traditional games and other developmental domains, such as cognitive

abilities and socio-emotional skills, to establish a broader understanding of their overall educational benefit.

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