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Traditional Bakiak Game in Enhancing Kinesthetic Intelligence of Early Childhood

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Abstract

Kinesthetic intelligence among early childhood students at TK Theobroma PTPN Banjarsari, Bangsalsari Subdistrict, Jember Regency. The bakiak game, which involves teamwork, balance, and body coordination, was selected as a medium to develop children's gross motor skills. A qualitative approach with a case study design was employed. Data were collected through observation, interviews, and documentation. The findings revealed that the bakiak game improved gross motor skills, spatial awareness, and peer cooperation. Physical activity in this game also had a positive impact on body balance and coordination. Overall, the bakiak game proved effective in stimulating the development of kinesthetic intelligence in children at TK Theobroma Banjarsari. These results suggest that traditional games can serve as enjoyable and beneficial alternatives for learning activities in early childhood education.

Keywords: *Traditional Games; Bakiak; Kinesthetic Intelligence; Early Childhood*

Introduction

Early childhood development is a crucial phase that includes cognitive, emotional, social, and physical aspects. One of the important aspects of this development is kinesthetic intelligence, which is the ability to coordinate body movements effectively. Traditional games such as bakiak are a potential learning medium in developing children's kinesthetic intelligence. This game has been a part of Indonesian culture for centuries and contributes to improving children's gross motor skills, balance, and coordination of movements.

However, the current of technological developments and the growing interest in modern games have shifted people's attention, including children, away from traditional games. This has led to a decrease in awareness of the importance of games such as bakiak in supporting children's growth and development, especially in the kinesthetic aspect (Fachruddin, 2023).

The game of bakiak not only demands gross motor skills such as maintaining balance and moving the legs simultaneously, but also trains cooperative skills, nonverbal communication, and social coordination because they are played in groups. The hands-on experience that children gain during play helps them in movement control, problem-solving, and building kinesthetic memory that is important for physical and mental development.

Unfortunately, this traditional game is starting to be marginalized, replaced by digital games that have minimal physical activity. The lack of role of parents and educators in reintroducing traditional games has also exacerbated this condition. Therefore, there needs to be a systematic effort in developing bakiak games as a learning medium

This study aims to develop clog games to improve early childhood kinesthetic intelligence. The research was conducted at Theobroma Kindergarten Banjarsari using the Research and Development method. The subjects of the study were students of class B1, with data obtained through observation, interviews, and documentation. Through this research, it is hoped that an effective approach can be found in integrating traditional games in early childhood learning and contributing to the development of child development theories.

Literature Review

Kinesthetic intelligence is one of the components of the theory of multiple intelligence proposed by Howard Gardner. This intelligence refers to the ability to control body movements and handle objects skillfully, especially through coordination between gross and fine motor skills (Gardner, 2003). In early childhood, kinesthetic learning is essential because children are in an active developmental stage where they learn most effectively through physical interaction with their environment. Physical activity not only supports health and fitness, but also promotes brain development and cognitive engagement through movement (Yus, 2011).

To support the development of kinesthetic intelligence, traditional games offer a meaningful, culturally rooted approach to learning. These games provide a rich and fun medium where children can develop physically, socially, and emotionally. Traditional games such as engklek, jump rope, gobak sodor, and bakiak have long been known in Indonesian culture and contain educational values such as cooperation, discipline, respect, and coordination (Suyadi,

2014). This game is a practical tool for educators to incorporate character formation and motor development into daily activities (Rochaeni, 2019).

Among these games, bakiak stand out as a very effective game in improving gross motor coordination and social cooperation of children. The game requires a group of children to walk in unison using long wooden bakiak, which demands balance, rhythm, and teamwork. Through this activity, children improve their body control skills, spatial awareness, and the ability to respond to others in coordinated movements. As explained by Sukmadinata (2005), motor activities that involve rhythm and synchronization like bakiak are essential to strengthen the connection between the nervous system and muscle function, which is the core of kinesthetic intelligence.

Research supports the effectiveness of bakiak games in an early childhood education setting. A study by Fitriyani and Wahyuningsih (2022) shows that regular involvement in bakiak play significantly improves children's coordination and balance. Children who consistently played bakiak showed measurable improvements in physical control and cooperative behavior. These findings are in line with the goals of the Independent Curriculum which emphasizes game-based contextual learning to support children's development holistically (Ministry of Education and Culture, 2022).

The success of traditional games such as bakiak also depends heavily on the active role of teachers. The teacher acts as a facilitator who designs and guides games aimed at achieving certain developments. Teachers also make authentic observations and assessments of children's development during play activities. According to Mustofa (2020), integrating traditional games into a structured learning plan allows teachers to support children's physical, emotional, and social growth naturally and pleasantly. Therefore, the role of teachers is not only as a supervisor, but also as a creator of a learning environment where traditional games become effective pedagogical tools.

In conclusion, traditional bakiak are a very valuable medium for improving kinesthetic intelligence in early childhood. Through movement-based play, children not only develop their motor skills, but also cooperative and cognitive abilities. Supported by educational theory and empirical evidence, this approach bridges cultural heritage with modern pedagogical practices, making it a powerful tool in early childhood education.

Method

This study uses a qualitative approach with mixed methods to describe the learning process and explain the role of teachers in child development. The type of research used is field research, where data is collected directly through interviews, observations, and documentation at the research site. The location of this research is Theobroma Banjarsari Kindergarten, Banjarsari Village, Bangsalsari District, Jember Regency. The location was chosen because it is relevant to the need to develop children's kinesthetic intelligence through traditional play activities that support gross motor and cooperation.

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1. Data Analysis Techniques

Data analysis is carried out qualitatively, starting from the data collection process to completion. The stages include:

a. Data reduction: filtering out important data that is relevant to the focus of the research.
b. Data presentation: compiling data in the form of narratives or relationships between categories.
c. Conclusion drawing and verification: drafting initial conclusions that are tested for validity through evidence during the research process.

2. Data Validity Test

The validity of the data is tested through:

a. Extension of observation, namely direct involvement in the field to strengthen the data.

b. Triangulation, which combines various data collection techniques from the same source to ensure accuracy.
c. Research Stages
d. Preparation: problem identification, literature review, proposal preparation, licensing.
e. Data collection: interviews, observations, and documentation.
f. Data analysis: reduction, presentation, and drawing of conclusions.
g. Report preparation: writing, revision, validation, and publication.
h. Evaluation and reflection: assessing the process and providing recommendations

Result/Findings

Analysis of Bakiak Traditional Games on the Development of Kinesthetic Intelligence of Children Aged 5–6 Years at Theobroma Kindergarten Banjarsari

Based on the results of field observations conducted at Theobroma Kindergarten Banjarsari, data was obtained that traditional bakiak play has a significant role in shaping gross motor skills and kinesthetic intelligence in early childhood. Children who regularly play bakiak seem to be more able to control body movements in a structured manner and show courage and consistency in performing complex movements with their group.

Bakiak require children to synchronize their footsteps with group members in unison, while maintaining a balanced body position. This stimulates cooperation between body parts as well as sensory-motor coordination. These activities also involve social and non-verbal communication aspects, such as the use of body language, gazes, and hand gestures to regulate the rhythm of steps. Over time, children experience improvements in the speed of responding to instructions, understanding the space of movement, and initiative in leading or following the strategy of the game.

Figure 1. Aktivitas Anak Menggunakan Bakiak

In addition, teachers reported a significant increase in children's participation during other physical activities in the classroom. Children who engage in bakiak become more active, initiative, and brave to try new things without fear of failure. This reinforces the understanding that traditional physical games are not only recreative, but also educational and character-building for children from an early age (Purwanto, at. All, 2023).

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Aspects of Kinesthetic Intelligence Development Influenced by Traditional Bakiak Games

Bakiak play is found to be able to target various aspects in the domain of kinesthetic intelligence, which include:

a. Gross Motor Coordination: This game demands the cooperation of movement between hands, feet, and posture. The child must balance the body while aligning the footsteps with the group. It helps to hone the integration of large muscles in the body.

b. Body Balance: The process of walking together on bakiak trains the child to keep the center of gravity stable. It is important in developing vestibular control which is essential in other physical activities.
c. Flexibility and Agility: Movement in bakiak trains the leg and hip muscles to move flexibly and responsive to team dynamics. Children are also required to quickly adjust when the rhythm of the steps changes
d. Awareness of the Body in Space: Children become more sensitive to their position among their peers and the surrounding environment. They learn how not to collide and maintain optimal distance while moving.
e. Body Movement Control: This game encourages children to be able to resist impulses to move carelessly and be better able to manage movements consciously and in a directed manner.

The benefits of bakiak also include an increase in positive body image in children. Children who are trained in recognizing their bodies and abilities physically tend to have higher levels of self-confidence. They also show awareness of their own physical boundaries and those of others, thus minimizing conflicts when playing together (Kurniawan & Amalia, 2024).

The cognitive aspect is also formed when children have to estimate the distance of their steps, adjust to the team's tempo, and respond to unexpected changes in movement. This means that clog games not only develop physical intelligence, but also involve the ability to think quickly and solve problems spontaneously in a social context.

Differences in Kinesthetic Intelligence between Children Who Participate in Clogs Games and Those Who Don't

Comparisons between children who were actively involved in bakiak games and those who were not involved showed significant differences. Children who regularly play bakiak are seen:

a. More active and confident: They seem less awkward when asked to perform in physical activities such as gymnastics or competitions.

b. Faster understanding of movement instructions: The child's response to the teacher's directions is faster and more accurate.
c. Be able to work together: Children learn to prioritize team cohesion and are able to adjust movements with others.
d. Have a more stable rhythm of movement: Seen in dance activities, children are able to follow the rhythm without much correction.

Meanwhile, children who are not actively involved in bakiak games often show:

a. Rigidity in physical movements, especially when asked to follow rhythmic movements.
b. Loss of balance when moving fast, such as when running or jumping.
c. Lack of initiative in group play, which is evident from dependence on the teacher's direction and lack of spontaneous interaction (Nasitoh at. All, 2023)

Furthermore, children who actively play tend to experience increased participation in other physical learning, such as outbound activities or nature exploration. This indicates the transfer of skills from one context to another, which strengthens the foundations of holistic learning.

These findings confirm the importance of integrating traditional games into the early childhood education curriculum as part of the formation of plural intelligence. In a kinesthetic context, traditional games such as bakiak are concrete, inexpensive, accessible, and have high educational value that is not inferior to modern technology-based games.

Discussion

Based on the findings at Theobroma Kindergarten Banjarsari, the traditional game of bakiak has been proven to be able to provide positive stimulation to the development of kinesthetic intelligence in early childhood. This is in line with the theory of multiple intelligence put forward by Howard Gardner, which states that kinesthetic intelligence involves the ability to use the body to express ideas and feelings as well as the skill of coordinating physical movements effectively.

The game of bakiak requires the child to work in groups, walking regularly with unusual aids, thus stimulating gross motor skills, coordination between limbs, and balance. This activity also fosters teamwork, discipline, and nonverbal communication, which indirectly enriches children's social-emotional development.

In the context of early childhood education, these games provide an active, fun, and meaningful approach to learning. Children do not only learn through observation or verbal instruction, but through gestures that optimize the involvement of the large muscles. This reinforces the view that experiential learning is very effective for children aged 5–6 years.

Comparisons between children who were actively involved in bakiak and those who did not also showed consistent results. Children who do not participate in these games have relatively slow kinesthetic development and are less responsive in physical activity. This condition shows the importance of integrating traditional games as part of the learning curriculum in kindergarten, especially in building children's movement intelligence from an early age. Thus, clog games not only preserve local culture, but also become an effective educational medium to holistically improve children's kinesthetic intelligence, covering physical, cognitive, social, and emotional aspects.

Based on the results of research conducted at Theobroma Kindergarten Banjarsari, it can be concluded that the traditional game of bakiak has a significant influence on increasing kinesthetic intelligence in early childhood, especially in the age range of 5-6 years. Through physical activity that demands coordination, balance, and teamwork, children show better development in gross motor skills, body movement control, and spatial awareness.

Clog games not only serve as a means of entertainment, but also as an effective and contextual learning medium. This activity encourages experiential learning that touches physical, cognitive, social, and emotional aspects holistically. Children who regularly participate in this game are shown to be more confident, responsive to physical instruction, and have higher movement initiative than children who do not participate.

Thus, the traditional game of bakiak is worthy of being integrated into the early childhood education curriculum as one of the strategies for developing kinesthetic intelligence. In addition to having an educational function, this activity also helps preserve local culture which is full of the value of togetherness and mutual cooperation. Support from teachers and

educational institutions is essential in ensuring the sustainability of the use of traditional games as a meaningful learning tool.

Conclusion

The traditional game of bakiak is an effective learning medium to develop kinesthetic intelligence in early childhood. Through coordinated movement, body cooperation, and balance control, children are trained to manage their gross motor skills in a structured and responsive manner. This physical involvement not only stimulates the child's nervous and muscular system, but also improves rhythmic abilities, spatial awareness, and teamwork. As a result, children become more confident in expressing themselves through movement and physical activity.

In addition to its benefits to the kinesthetic aspect, bakiak play also makes a great contribution to other areas of development. The game encourages social-emotional development through cooperation, empathy, and sportsmanship; support language development through verbal interaction and teamwork; cultivate moral values and character formation by teaching discipline, honesty, and responsibility; as well as improving cognitive development through decision-making, strategic thinking, and problem-solving during play. Therefore, bakiak support the holistic development of early childhood and become a fun, culturally meaningful, and integrated educational tool into early childhood learning programs.

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