

## TRANSFORMATION OF EARLY CHILDREN'S GROSS MOTOR ABILITIES THROUGH MOVEMENT AND SONG ACTIVITIES

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### ABSTRACT

Gross motor development in early childhood is an important aspect in a child's growth and development, which includes the ability to make large movements such as running, jumping and kicking. Movement and song activities have been recognized as effective methods for stimulating this development. This research aims to explore the influence of movement and song activities on the transformation of gross motor skills in young children. This research uses a qualitative approach with a case study method on two groups of children aged 5-6 years at PAUD institutions in Serang City. The research was conducted involving 10 students in group B, data was collected through direct observation, interviews with teachers and parents, as well as documentation. Research shows that children experience a significant increase in gross motor skills, such as children having good balance, coordination and muscle strength. Furthermore, the results of observations stated that movement and song activities not only make young children more physically active but also improve children's social and cognitive skills. The involvement of early childhood children through movement and song activities can increase children's self-confidence, active participation in group activities, and increase the ability to focus and pay attention, this was discovered through interviews with parents and teachers. Meanwhile, documentation on children's development shows an increase in various aspects of gross motor skills. So movement and song activities can significantly transform the gross motor skills of young children. Movement and song activity programs should be integrated into the early childhood education curriculum to support optimal physical and cognitive development.

**Keyword:** *physical motor skills; early childhood; transformation; movement and song.*

### INTRODUCTION

Early childhood gross motor skills are an important aspect in a child's overall development. This ability involves body movements that use large muscles, such as running, jumping and kicking. Good gross motor development can support children's physical abilities, improving balance, coordination and strength. However, not all children have the same opportunity to develop their gross motor skills optimally. Environmental factors, stimulation provided by parents, and learning approaches used in educational institutions can influence children's gross motor development (Ahdad & Diana, 2022; Ho Weatherly & Weatherly, 2024).

Movement and singing activities are one approach that can be used to develop gross motor skills in young children (Gencigör & Akın, 2024; Ma et al., 2024). Through movements adapted to the

rhythm of the song, children not only learn to move their bodies, but also learn to understand rhythm, coordination and balance. This activity can also provide rich sensorimotor experiences, which are important for children's cognitive and social emotional development. In addition, movement and singing can be fun and interesting activities for children so they are more motivated to participate and learn.

In practice, many early childhood education institutions implement movement and singing activities as part of their curriculum (Ma et al., 2024). However, effective implementation requires a deep understanding of how these activities can affect children's gross motor development. There needs to be more in-depth research regarding how movement activities and songs can be integrated into learning programs to improve children's gross motor skills (Bornstein et al., 2006; Ho Weatherly & Weatherly, 2024). This research is important for providing empirical evidence that educators can use in designing more effective programs.

Apart from that, although there has been a lot of research conducted on the gross motor development of young children, there is still little that has specifically examined the influence of movement and singing activities. Most studies focus on general physical activity or specific sports. Therefore, this research aims to fill this knowledge gap by exploring in depth how movement and song activities can provide transformation in the gross motor skills of young children.

This research is also relevant in the context of early childhood education in Indonesia, where activity-based learning approaches are still often ignored. With more and more children growing up in urban environments that lack space for play and physical activity, it is important to find innovative ways to support their motor development. Movement and song activities offer solutions that can be applied in a variety of contexts, both in the classroom and outdoors, and can be adapted to various environmental conditions (Bornstein et al., 2006; Ho Weatherly & Weatherly, 2024; Santos et al., 2018).

In addition, it is important to consider aspects of inclusivity in early childhood education. Movement activities and songs can be adapted to meet the needs of children with varying levels of physical and cognitive abilities. Thus, this approach not only supports gross motor development but also contributes to the development of a learning environment that is inclusive and responsive to the needs of all children.

Through this research, it is hoped that a more effective method can be found to develop the gross motor skills of young children through movement and song activities (Santos et al., 2018). It is hoped that the results of this research can make a significant contribution to the theory and practice of early childhood education, as well as provide practical recommendations for educators and policy makers in designing better learning programs. Apart from that, it is also hoped that this research will pave the way for further research in the same field, focusing on various aspects of early childhood development.

In the end, the transformation of gross motor skills through movement and song activities will not only improve children's physical abilities, but also have a positive impact on their emotional, social and cognitive well-being. Thus, this research has the potential to make a broad contribution to overall early childhood development.

## RESEARCH METHODS

This research uses qualitative research with a case study approach in analyzing movement and song activities in the transformation of gross motor skills in early childhood. Qualitative research is used according to the aim of studying, understanding, or describing problems found in the field (Creswell et al., 2007; Metodologi, 2000; Subagyo et al., 2023). As reinforcement, literature from various scientific publications and journals related to this topic is discussed. A more in-depth discussion

regarding movement and song activities in the transformation of gross motor skills in early childhood is then explained based on studies from various sources. Case study research is an actual determination of an event, which is ongoing and carried out in detail, detail and depth (Creswell, 2012; Smith, 1990) so that researchers can obtain comprehensive information and leave no remaining information (Metodologi, 2000; Moleong & Edisi, 2004). Determination of sources in this research was carried out using purposive sampling, namely a subject selection technique based on criteria deemed appropriate (Alaslan, 2022; Subagyo et al., 2023). The subjects of this research were 2 PAUD teachers in Serang City. Furthermore, the design of this research is as follows:

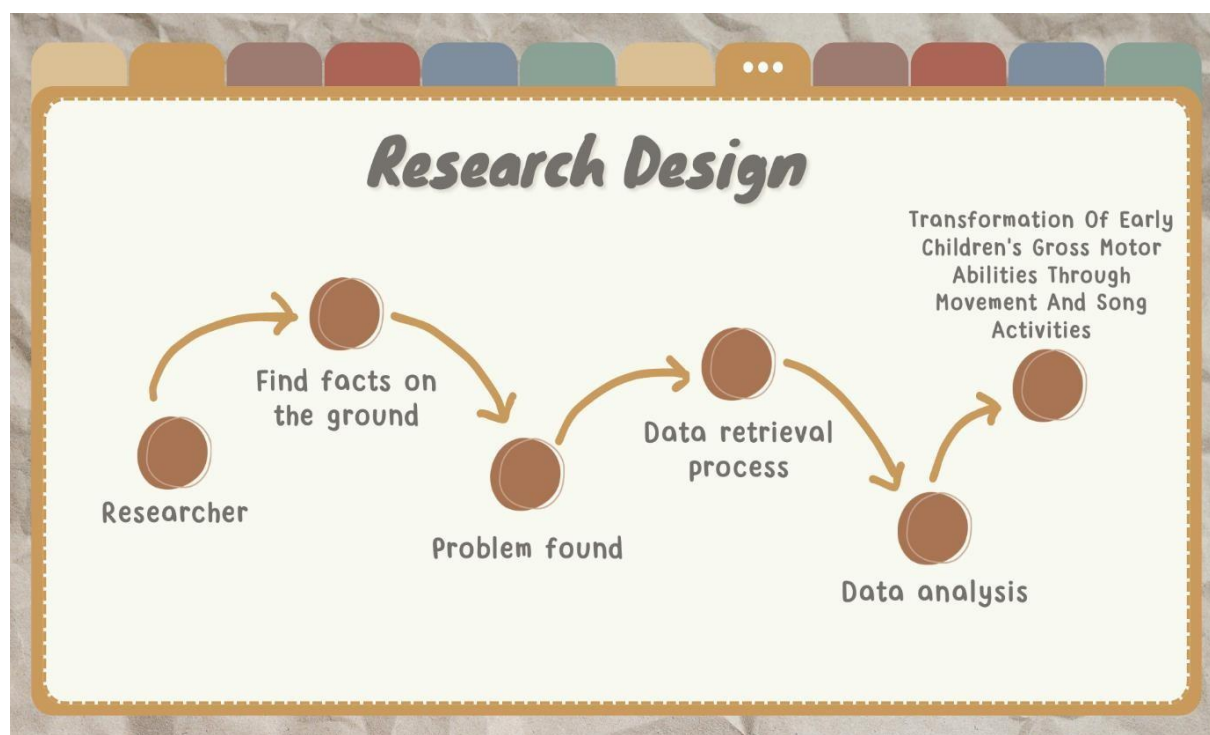


Figure 1. Research design

## RESULTS AND DISCUSSION

This research reveals that movement and song activities play an important role in the transformation of early childhood gross motor skills, as observed from the results of case studies in two PAUD in Serang City. Through in-depth interviews and observations, the two PAUD teachers who were respondents showed that children who were regularly involved in movement and song activities showed significant improvements in aspects of balance, coordination and physical strength (Bornstein et al., 2006; Colombo-Dougovito et al., 2020). This activity has also proven effective in attracting children's interest in moving, especially those who previously tended to be passive in physical activities (Ahdad & Diana, 2022; Sari, 2019). This is in line with motor development theory which states that stimulation through movement and music can accelerate gross motor development in early childhood.

(Bornstein et al., 2006; Sari et al., 2023) Furthermore, this research found that movement and song activities not only contribute to gross motor development, but also support the development of children's social and emotional skills. The second teacher reported that through shared movement, children learned to cooperate, share, and follow instructions, all of which are important for positive

social interactions. This activity also helps in reducing anxiety and increasing children's self-confidence, because they feel more capable and competent in carrying out movements that were previously difficult. This aspect shows that movement and song activities have holistic benefits that go beyond physical development alone.

NO	AGE	INDICATORS OF PHYSICAL-MOTOR DEVELOPMENT ACHIEVEMENT	
		GROSS MOTOR	FINE MOTOR
1	3 – 3.5 years	<ol style="list-style-type: none"> <li>1. Children are able to ride a tricycle</li> <li>2. Children are able to steer a bicycle by coordinating their hands, leg movements and vision.</li> </ol>	<ol style="list-style-type: none"> <li>1. Children are able to cut paper</li> <li>2. Children are able to stick paper</li> <li>3. Children are able to help adults with their work</li> </ol>
2	3,5 – 4 years	<ol style="list-style-type: none"> <li>1. Children are able to do acrobatics (somersaults)</li> <li>2. Children are able to kick the ball, catch and throw skillfully.</li> </ol>	<ol style="list-style-type: none"> <li>1. Children can eat themselves</li> <li>2. Children can wear their own clothes</li> <li>3. Children can wear their own shoes</li> </ol>
3	4 – 4,5 years	<ol style="list-style-type: none"> <li>1. The child is able to walk on one leg.</li> <li>2. The child is able to cross on a small footbridge</li> </ol>	<ol style="list-style-type: none"> <li>1. Children are able to write letters of the alphabet.</li> <li>2. Are able to fold paper into certain shapes, for example ships.</li> </ol>
4	4,5 – 6 years	<ol style="list-style-type: none"> <li>1. The child is able to walk zigzag</li> <li>2. The child is able to jump as high (at least 20 cm)</li> <li>3. The child is able to perform acrobatic movements (koprol) forwards and backwards</li> <li>4. The child is able to combine walking, squatting, running and jumping.</li> </ol>	<ol style="list-style-type: none"> <li>1. Children are able to color pictures</li> <li>2. Assemble a 4-5 piece puzzle</li> <li>3. Open and close drink bottles and place to eat on their own</li> <li>4. Bath themselves.</li> </ol>

**Table 1. Indicators of Children's Physical-Motor Development Achievements Early Age**

However, this research also identified several challenges in implementing movement and song activities in PAUD, especially related to variations in children's needs. Teachers must continue to adapt activities to suit the abilities of each child, including children with special needs. Teacher flexibility and creativity in designing and implementing these activities are key factors in the success of the program. This research emphasizes the importance of teacher training in optimizing the use of movements and songs as tools for developing gross motor skills, while recommending that these activities be integrated more systematically in the PAUD curriculum to achieve more optimal results.

## Result

This research uses a qualitative approach with a case study method, focusing on two PAUD teachers in Serang City who have implemented movement and song activities in early childhood learning. This research aims to understand in depth how movement and song activities can transform children's gross motor skills in their educational institutions (Ahdad & Diana, 2022; Gencigör & Akın, 2024; Ma et al., 2024; Zahari et al., 2022). The research results obtained through in-depth interviews, classroom observations, and document analysis showed significant results in the transformation of the gross motor skills of children involved in this activity (Ho Weatherly & Weatherly, 2024; Sari, 2019).

The first teacher, who works in a private preschool with a curriculum that focuses on motor development, explained that movement and song activities had become an integral part of the daily routine in her class. According to this teacher, this activity is designed to stimulate children's gross motor development through movements synchronized to the rhythm of music. This teacher observed that after several months of regularly carrying out movement and song activities, the children showed clear improvements in balance, coordination and agility. Teachers also note that children become more confident in exploring new movements, which may initially seem difficult or challenging to them.

For the second teacher, who teaches in a state PAUD with a larger number of students, movement and song activities are also implemented as part of the learning program. However, the approach used is slightly different because this teacher adapts activities to a more diverse range of children's backgrounds, including some children with special needs. This teacher found that through movement and song, children could learn in a more relaxed and enjoyable atmosphere, allowing them to engage more actively and enthusiastically. According to him, this activity really helps children who are usually less motivated to move, because the music and rhythm provide additional stimulus that triggers their enthusiasm.

Observations carried out at both PAUD showed that children who were involved in movement and song activities tended to be more focused and able to follow instructions better compared to children who were not involved in similar activities. This shows that movement and song activities not only have an impact on motor aspects, but also on children's ability to concentrate and work together in groups. In addition, the first teacher noted that children who previously had problems maintaining balance or coordination were now able to perform more complex movements with confidence.

Both teachers also reported that movement and song activities played an important role in building social relationships between children. In these activities, children often work in small groups or pairs, which allows them to learn to share, wait their turn, and collaborate. The second teacher emphasized that through movement together, children learn to support each other and pay attention to their friends, which is very important for the development of social skills at an early age.

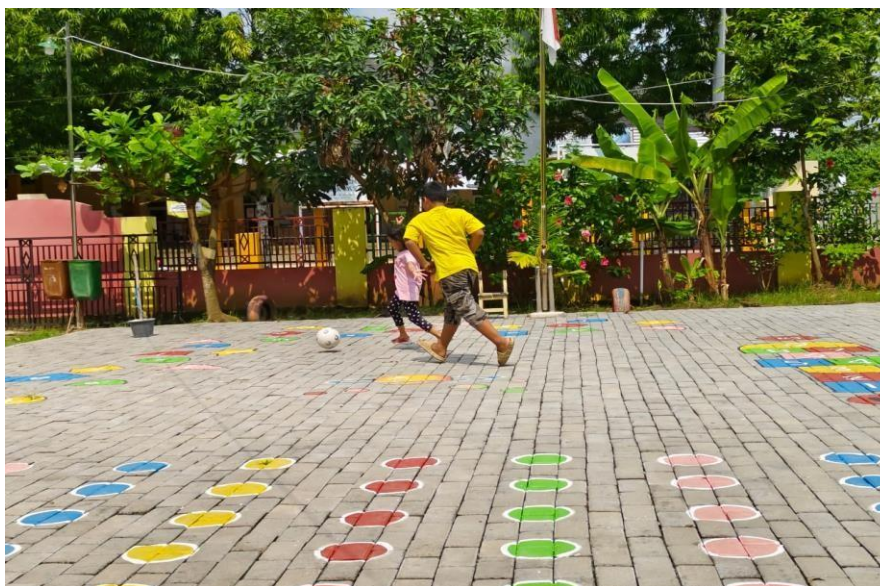
In terms of challenges, the first teacher noted that the success of the movement and song activities really depended on the teacher's ability to choose appropriate songs and create movements that were not too complicated for the children. If songs and movements are too difficult, children tend to get frustrated and lose interest. Therefore, this teacher actively evaluates and adapts the materials used, ensuring that all children can participate and enjoy the activities.

The second teacher also noted challenges in terms of learning differentiation, especially when there were children with special needs who required additional adjustments. However, with an inclusive approach and the use of strategies such as simple movements that all children can follow, these challenges can be overcome. This teacher highlighted the importance of flexibility in implementing movements and songs, so that each child can participate optimally according to their abilities.

Furthermore, both teachers emphasized that movement and song activities also have a positive impact on children's emotional development. Through movement and musical expressions, children can channel their energy in a positive way, which in turn helps reduce negative behaviors such as



aggressiveness or anxiety. The first teacher noted a significant change in the children's mood after doing the movement and song activities, where they became calmer and ready to continue other learning activities.



**Figure 2. Children's activities are playing involving gross motor skills**

At the end of the research, these teachers recommended that movement and song activities be further integrated into the PAUD curriculum systematically. They believe that by providing more opportunities for children to move and express through music, gross motor development can be significantly improved, as well as having a positive impact on other aspects of development, such as cognitive and social-emotional.

Overall, the results of this study show that the transformation of young children's gross motor skills through movement and song activities is not only possible, but also very effective. This case study reveals that with proper implementation, these activities can be a powerful tool in supporting children's overall development in early childhood settings. These results provide a basis for further development in the application of movement and song activities in various early childhood education contexts in Serang City and its surroundings.

## CONCLUSIONS

Based on the results of research that has been carried out, it can be concluded that movement and song activities have a significant role in transforming the gross motor skills of young children. Through the integration of structured movements with the rhythm of songs, children are able to develop gross motor skills such as balance, coordination and muscle strength more effectively. This activity not only stimulates children's physical development, but also has a positive impact on their cognitive and social-emotional development, by encouraging active participation, increasing self-confidence, and strengthening social interactions between children.

Furthermore, this research shows that the implementation of movement and song activities in early childhood learning programs can be adapted to various contexts and needs, including children with different physical abilities. This activity can be easily integrated into the early childhood education curriculum and is an effective tool for supporting optimal gross motor development. Thus, this approach is not only relevant in overcoming the challenges of gross motor development in urban environments where space is limited, but also has the potential to create an inclusive and enjoyable learning environment for all children.

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