



## EDUCATIONAL MOVEMENT: DEVELOPING EMOTIONAL SKILLS IN EARLY CHILDHOOD

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### *Abstract*

*This study aims to analyze the contribution of motor movement exercises to the development of emotional skills in early childhood at three kindergartens in Pekanbaru City, namely TK Al-Ubudiyah (Islam-based), TK Melayu Fathrizk Kids (general-based), and TK Bintang Madani (Islam-general integration-based). The research uses a qualitative approach with a multi-site study design. Data were collected through participatory observation, in-depth interviews, and documentation of teachers, principals, and parents. Data analysis was conducted thematically through stages of data reduction, open coding, categorization, and inductive conclusion drawing, with validity tested through source and technique triangulation. The results show that motor exercises significantly contribute to the formation of children's emotional competence through contextual learning mechanisms. At TK Al-Ubudiyah, religious motor activities foster internalized courage to express oneself with manners and self-regulation values. At TK Melayu Fathrizk Kids, traditional games promote empathy through direct experience. Meanwhile, at TK Bintang Madani, thematic motor activities and mini outbound activities enhance concentration, independence, and collaborative skills while reducing dependence on gadgets. These findings indicate that a variety of contextual and value-based motor approaches contribute to the holistic development of children's emotional balance.*

**Keywords:** motor activity, emotional development, early childhood, Islamic education, device dependence.

### INTRODUCTION

The early childhood period is vital for laying the foundation for overall human development, encompassing the physical, motor, cognitive, social, and emotional domains that interact dynamically. (Santrock, 1990). A key element in supporting balanced development is motor activity, which not only involves movement skills but also helps children understand themselves and their social surroundings (Schnepp & Hurlock, 1950).



However, the emotional development of young children today faces new challenges as digital device use increases. Children often engage in passive activities such as watching videos or playing games, which limits direct interaction with their social environment (Rerung, 2023). Parents' habit of giving children gadgets to soothe them further reinforces this dependency (Widya, 2020). In the long term, this pattern can hinder the development of communication skills, empathy, and emotional regulation in children. Data shows that 16% of toddlers in Indonesia experience social-emotional development disorders (Silalahi, 2022). Additionally, children with high levels of gadget use tend to experience social-emotional development barriers compared to children with low usage (Imron, 2018). Other studies also indicate that excessive screen exposure is correlated with decreased children's ability to recognize emotions and build social interactions (Mayenti & Sunita, 2018; Viandari & Susilawati, 2019).

On the other hand, motor activity plays an important role in stimulating a child's social and emotional development. Through movement, children not only develop coordination of the body but also learn to manage emotions, understand social rules, and build relationships with others. This aligns with Erikson's psychosocial development theory, which places early childhood in the stage of forming independence and initiative, developed through active exploration of the environment (Erikson, 2023). Similarly, Bandura's (2001) social learning theory emphasizes that social interaction is the primary means by which children learn through observation and imitation.

Nevertheless, early childhood education practices in Indonesia still tend to focus on cognitive aspects, such as reading, writing, and arithmetic, and have not yet optimally integrated motor activities as a means of social-emotional development (Yusuf & Amin, 2020). Additionally, research on motor activities primarily focuses on physical or health aspects of children (Cendra et al., 2018; Mega et al., 2022; Puspitasari & Habibah, 2022; Sutini, 2018), whereas studies linking motor activities to social-emotional development remain limited. Research on the impact of gadget use on children generally does not examine pedagogical solutions based on physical activity.

Based on these conditions, there is a clear research gap: few studies comprehensively analyze the role of motor activity as a pedagogical strategy for developing emotional abilities in early childhood amid increasing digital exposure. Additionally, studies comparing the implementation of motor activities in educational institutions with different value orientations are still rare.

Therefore, this study aims to: (1) analyze the impact of lack of motor activity on the emotional development of early childhood, (2) examine the role of motor exercises in enhancing children's emotional abilities, and (3) identify effective forms of motor exercises in various educational contexts. This research was conducted at three early childhood education institutions in Pekanbaru City with different characteristics: Al-Ubudiyah Kindergarten (Islam-based), Fathrizk Kids Malay Kindergarten (general), and Bintang Madani Kindergarten (integrative).

The novelty of this research lies in its comparative and contextual approach, which not only views motor activity as physical exercise but also as a means of shaping children's emotional development across various educational value systems. Therefore, this study

is expected to contribute to the development of a more holistic early childhood education paradigm, positioning motor activity as an integral part of children's social and emotional development.

## **METHODOLOGY**

This study uses a qualitative, descriptive approach to explore the role of motor activity in the emotional development of early childhood. This approach was chosen because it enables the researcher to thoroughly explore children's experiences and behaviors in their natural environment (Creswell, 2020). The main focus of the research is on emotional aspects, including the ability to recognize, manage, and respond to frustration and interactions during motor activities.

This research was conducted at three early childhood education institutions in Pekanbaru: TK Al-Ubudiyah, TK Melayu Fathrizk Kids, and TK Bintang Madani. The selection of locations was intentionally based on specific criteria, namely: (1) institutions that regularly carry out motor skills activities, (2) having children aged 4–6 years as the main subjects, and (3) representing different educational approaches (religious, general, and integrative). This variation aims to enrich the analysis of how motor activities are implemented in the development of children's emotional aspects.

The research subjects include classroom teachers, school principals, and children aged 4–6 years. The children were purposively selected based on criteria: (1) regularly participating in motor activities, (2) demonstrating a range of emotional abilities (such as easily angered, shy, or able to control emotions), and (3) obtaining permission from parents to be observed. The number of children observed ranged from 10 to 15 per institution. Teachers and principals were chosen because of their direct involvement in planning and implementing activities.

Data was collected through participatory observation, in-depth interviews, and documentation. Observations focused on indicators of the child's emotional development, including emotional expression, self-control, responses to failure, and behavioral changes during and after motor activities. Observations were conducted repeatedly over three weeks to capture consistent behavioral patterns. Semi-structured interviews with teachers and parents gathered information on the child's emotional changes and gadget use at home. Supporting data came from learning records, activity photos, and teacher reflections.

Data analysis was conducted interactively following the Miles, Huberman, and Saldaña (2014) model through several stages: initially, the data were reduced by transcribing interviews, selecting observation notes, and coding related to emotional aspects such as 'emotional expression,' 'emotional regulation,' and 'response to frustration.' Next, the data were categorized and grouped into major themes such as 'improvement in emotional control' or 'reduction of tantrums.' The analysis results were presented as descriptive narratives and comparison matrices between institutions to identify patterns and differences. Finally, conclusions were drawn and inductively verified by identifying relationship patterns between motor activity and children's emotional development, as well as confirmed through source and technique triangulation.

To ensure the trustworthiness of data, the following strategies are employed: (1) source triangulation involving teachers, parents, and direct observation, (2) technique triangulation with observation, interviews, and documentation, and (3) member checking, where preliminary results are verified with informants. Additionally, the researcher engages in extended fieldwork to deepen understanding of the research environment.

As researchers conducting a qualitative study, we recognize the risk of subjective bias. To address this, we practice self-reflection (reflexivity) by revisiting our initial assumptions about how motor activity influences children's emotional development. We strive to remain neutral during observations, document data descriptively before interpreting it, and ground our analysis in empirical evidence from multiple data sources.

## RESULTS AND DISCUSSION

Observations at three institutions showed that integrating motor activity into learning, in different forms and intensities, affects variation in children's emotional development. At Al-Ubudiyah Kindergarten, motor activities are conducted through Islamic gymnastics, prayer-song movements, and structured line games. Children tend to exhibit controlled emotions but are less expressive. During activities, children generally follow instructions well but rarely show initiative in expressing their feelings. In group situations, some children appear hesitant to participate actively and prefer to observe.

This is reinforced by the teacher's statement, Mrs. R (interview, June 15, 2025), who said: "*Children here sometimes are afraid of making mistakes, so they prefer to stay silent. If invited to play together, they are willing, but it takes time for them to adjust.*" However, after three weeks of regularly implementing motor activities, there was a noticeable increase in the children's emotional bravery. Children who had previously hesitated began to show greater confidence in following movements and performing in front of their friends, although their emotional expressions remained controlled.

At Fathrizk Kids Malay Kindergarten, motor activity-based games such as hopscotch (engklek), relay races, and children's song exercises foster a more open emotional dynamic. Initially, children display unstable emotional control, often responding with anger, disappointment, or tears when they lose. The classroom teacher, Mr. A (interview, June 20, 2025), explained: "Children often get angry when they lose in a game, but after participating in group games several times, they start to be able to hold back." Over time, repeated involvement in motor activities leads to a noticeable improvement in children's ability to manage their emotions. They begin to accept the game's results and show more stable responses than before.

Meanwhile, at Bintang Madani Kindergarten, motor-skill activities, such as thematic gymnastics and outbound games, were linked to improved emotional regulation, especially among children with high screen time at home. At the start of the observation, these children appeared easily bored, lacked focus, and tended to give up quickly when faced with physically challenging activities. Mrs. F (interview, June 22, 2025) noted: "Some children, when they get tired, immediately ask for their phone. But since participating in gymnastics and thematic games, they have become more enduring and

focused.” After regularly engaging in motor activities, the children began to show greater resilience and the ability to stay engaged despite difficulties.

In general, the observation results indicate that children's involvement in motor activities is associated with both variations and changes in emotional abilities, particularly in three main aspects: courage to express emotions, self-control, and resilience to frustration.

If analyzed further, the experience at TK Al-Ubudiyah aligns with Bandura's (2001) social learning theory, in which children learn through imitation and observation of models' behaviour (teachers or peers). In this context, teachers serve as social models who provide concrete examples of how to move and behave politely (Bandura, 2023). Manners are no longer taught through lectures but are internalized through movement — a form of embodied learning that aligns with Islamic values.

In contrast, Fathrizk Kids Malay Kindergarten focuses on developing motor skills through traditional games. This supports the findings of Singer, Kephart, and Delacato (Kershner, 1968), which suggest that body movements can enhance children's cognitive and emotional development. Engaging in fun physical activities helps children understand their own emotions and those of others, while also building social skills by improving coordination and rhythm.

Meanwhile, TK Bintang Madani integrates motor activities through thematic and outbound exercises, supporting the views of Putro (2016); Suci (2019); and Vanagosi (2016) that fundamental movements form the basis for more complex motor skills, including children's social and emotional skills. This result indicates that motor skill training in real-life contexts can restore children's social functioning as interactive and empathetic beings. In this context, motor activities not only strengthen physical abilities but also develop children's emotional abilities. Movements performed through directed play, group cooperation, and empathy-based activities help children understand others' feelings, develop social role-taking skills, and build confidence in interactions.

These findings align with the views of Rudd et al., (2015) and Zawi et al., (2022) explain that mastery of basic movements, such as locomotor, non-locomotor, and manipulative skills, is a prerequisite for children to develop adaptive functions within their social environment. Children skilled in motor movements tend to be more active in social participation and to have higher self-confidence (Fitrianti & Reza, 2013; Jacob & Watini, 2022; Rufaida et al., 2019).

This is reinforced by Pellegrini & Smith, (1998), who found that motor activities in social play contexts can enhance emotion regulation, sharing, and cooperation among peers. Additionally, Vygotsky (2019), through his socio-cultural development theory, emphasizes that children's cognitive and social development occurs through meaningful social interactions. Motor activities conducted in groups are not merely physical activities but also processes of internalizing social values such as helping others, discipline, and empathy. Diamond (2015) also notes that good motor skills are closely related to executive function — that is, children's ability to self-regulate, focus, and solve social problems constructively.

Table 1. Movement Comparison in Three TK

Aspect	TK Al-Ubudiyah (Islam)	TK Melayu Fathrizk Kids (General)	TK Bintang Madani (Integrative)
Value Orientation	Manners and obedience	Social and cultural	The balance of faith and intellect
Type of Movement	Islamic exercise, prayer movement	Traditional game	Thematic exercise, mini outbound
Purpose of the Movement	Courage and politeness	Cooperation and emotional control	Empathy and social focus
Teacher's Strategy	Integration of Islamic values	Group game	Switching from devices to social activities
Results of the Change	Children are more polite and confident	Children are more patient and appreciate friends.	Children are more focused, caring, and empathetic.

Comparative analysis shows that the three schools have different directions of emotional development, but they complement each other. Al-Ubudiyah Kindergarten stands out in character building related to politeness; Fathrizk Kids Malay Kindergarten excels in developing emotional control and sportsmanship; and Bintang Madani Kindergarten is effective in fostering empathy and overcoming digital dependence. All three confirm that motor activity is not just physical exercise but an effective medium for emotional value education.

This finding reinforces Theisen & Erikson, (1951) theory about the importance of social experiences in building initiative and self-confidence, as well as Bandura's (1986) assertion that children learn through interaction and observation of social behavior (Novia & Listiana, 2023; Nupus et al., 2023). Conceptually, this research shows that body movement is an expression of values, as explained by Singer et al., that harmonious movement coordination fosters a balance between cognition and emotion.

Conceptually, this research shows that body movement expresses social-emotional values and meanings. As explained by Meyer et al., (1988) harmonious movement coordination fosters a balance between cognition and emotion, because each movement involves perception, decision-making, and affective expression simultaneously. Therefore, motor activity is not just a biological response but also a form of nonverbal communication that reflects an individual's emotional and social state.

Furthermore, through a phenomenological approach to the body, it is emphasized that the body is the primary medium in understanding the world and establishing emotional relationships. Well-coordinated movements indicate self-awareness and awareness of others, which form the basis of empathy and healthy social interactions. In this context, embodied cognition plays an important role — that a child's thoughts, emotions, and actions are not separate from their physical and social experiences. As Barsalou (Barsalou, 2008) stated, bodily experiences in daily activities provide a structure for social and moral understanding (Ignatow, 2010; Schweiger, 2009).

Thus, the results of this study imply that every early childhood education institution needs to design gross motor activities that are not only healthy but also foster children's social

and emotional character. Movement becomes the language of education — a place where children learn to understand the world, manage their feelings, and build empathetic relationships.

## CONCLUSION

This research confirms that motor activity plays a crucial role in the social and emotional growth of early childhood across different learning settings, each with its own values and methods. The results suggest that limited motor activity may restrict children's ability to express themselves, manage emotions, and interact socially. On the other hand, intentionally designed motor activities help boost children's confidence, empathy, cooperation, and social awareness. The way these activities are implemented varies by institution, reflecting their specific value systems. For example, Al-Ubudiyah Kindergarten integrates movement with religious principles, Fathrizk Kids Malay Kindergarten focuses on social development through traditional games, and Bintang Madani Kindergarten combines approaches to address modern issues like device dependency. These differences indicate that the success of motor activities largely depends on the educational context and goals.

However, this study has several limitations. First, the scope of the study is limited to three institutions, so generalizing the findings should be done cautiously. Second, the qualitative approach used does not allow for quantitative measurement of the extent of motor activity's influence on social-emotional variables. Third, this research has not explored external factors, such as the role of family or social environment, which may also affect child development.

Theoretically, this finding reinforces Erik Erikson's psychosocial development perspective and Albert Bandura's social learning theory, while also expanding it by demonstrating that motor activity can serve as a concrete medium for internalizing values and character formation. This suggests the need for a more systematic integration between motor approaches and character education curricula in early childhood education.

Practically, the results of this research have implications for educators and early childhood education institutions in designing motor activities that are not only focused on physical aspects but also explicitly develop children's social and emotional dimensions. Additionally, innovative programs that are adaptive to social changes are needed, including the use of motor activities as an alternative strategy to reduce children's dependence on digital technology.

In the future, further research is recommended to involve a broader sample, use mixed-methods approaches, and examine the relationship between motor activity and family and social environment factors more comprehensively. Thus, understanding of the role of motor activity in child development can be expanded both theoretically and practically.

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