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APPLICATION OF LOOSE PART MEDIA THROUGH A VARIETY OF FINE MOTOR ACTIVITIES IN CHILDREN AGED 4–5 YEARS AT AD-DAHIRIYYAH ISLAMIC KINDERGARTEN

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Abstract

This research is motivated by the low fine motor skills of children aged 4-5 years which can be seen from the difficulty of children in carrying out activities of picking, attaching, and arranging materials. This study aims to describe a variety of fine motor activities through the use of Loose Part media and analyze its impact on early childhood development. The research used a descriptive qualitative approach which was carried out at Ad-Dahiriyyah Joglo Islamic Kindergarten, West Jakarta. The research subjects were children aged 4-5 years. Data collection techniques are carried out through observation, interviews, and documentation, then analyzed descriptively. The results of the study showed that a variety of fine motor activities through the Loose Part media included pattern drawing, squeezing, pinching, and sticking. These activities are able to stimulate children's fine motor development, such as finger muscle strength, hand-eye coordination, concentration, patience, and neatness. In addition, this activity also has an impact on increasing creativity, confidence, and habituation of Islamic values through learning that begins with prayer and gratitude. It was concluded that the application of Loose Part media through a variety of activities had a positive impact on the fine motor development of children aged 4–5 years.

Keywords: Loose Part Media, Fine Motor Skills, Early Childhood, Learning Activities

Abstrak

Penelitian ini dilatarbelakangi oleh rendahnya kemampuan motorik halus anak usia 4–5 tahun yang terlihat dari kesulitan anak dalam melakukan aktivitas menjumput, menempel, dan menyusun bahan. Penelitian ini bertujuan untuk mendeskripsikan ragam aktivitas motorik halus melalui penggunaan media Loose Part serta menganalisis dampaknya terhadap perkembangan anak usia dini. Penelitian menggunakan pendekatan kualitatif deskriptif yang dilaksanakan di TK Islam Ad-Dahiriyyah Joglo, Jakarta Barat. Subjek penelitian anak usia 4-5 tahun. Teknik pengumpulan data dilakukan melalui observasi, wawancara, dan dokumentasi, kemudian dianalisis secara deskriptif. Hasil penelitian menunjukkan bahwa ragam aktivitas motorik halus melalui media Loose Part meliputi kegiatan menggambar pola, meremas, menjumput, dan menempel. Aktivitas tersebut mampu menstimulasi perkembangan motorik halus anak, seperti kekuatan otot jari, koordinasi tangan dan mata, konsentrasi, kesabaran, serta kerapian. Selain itu, kegiatan ini juga berdampak pada peningkatan kreativitas, rasa percaya diri, dan pembiasaan nilai-nilai Islami melalui pembelajaran yang diawali dengan doa dan rasa syukur. Disimpulkan bahwa penerapan media Loose Part melalui ragam aktivitas memberikan dampak positif terhadap perkembangan motorik halus anak usia 4–5 tahun.

Kata Kunci: Media Loose Part, Motorik Halus, Anak Usia Dini, Ragam Aktivitas

INTRODUCTION

Early childhood education is a fundamental basis for developing the quality of human resources in the future. During this period, children are in the "golden age," a phase of rapid development where they are highly sensitive to various stimuli. Every aspect of a child's development—cognitive, language, socio-emotional, moral, and physical-motor—requires optimal stimulation to ensure balanced growth (Sujiono, 2009).

One developmental aspect that plays a crucial role in supporting a child's readiness for the next level of education is fine motor development. Early childhood (0–6 years) is known as the golden age, a period that determines the foundations of a child's development, including physical-motor, cognitive, language, social-emotional, and moral aspects. One aspect that is very important to stimulate is Fine motor skills involve the coordination of small muscles, particularly in the fingers and hands, integrated with eye-hand coordination. This ability is essential for daily activities such as writing, drawing, and manipulating objects (Santrock, 2011).

Children aged 4–5 years are expected to demonstrate improvements, such as holding writing tools steadily and cutting patterns. However, many children still face difficulties in controlling finger movements, often due to teacher-centered learning and the excessive use of conventional worksheets (Hidayah* et al., 2024). Fine motor skills relate to a child's ability to coordinate small muscles, particularly in the fingers and hands, integrated with hand-eye coordination. This ability is essential for daily activities such as writing, drawing, cutting, pasting, stringing, and various other manipulative activities. Children aged 4–5 years are expected to demonstrate developmental improvements in fine motor skills, such as the ability to hold a writing instrument more steadily, cut following simple patterns, and arrange and assemble objects with good coordination. However, in practice, not all children demonstrate optimal fine

motor development.

Various factors can influence a child's fine motor development, one of which is the learning experiences they receive in the educational environment. Learning that lacks variety and tends to be teacher-centered can limit children's opportunities to explore and develop their motor skills. In some early childhood education institutions, fine motor skills activities are still dominated by the use of one-way worksheets that provide little space for children to freely create. This situation has the potential to cause children to quickly become bored and lack optimal stimulation.

As early childhood learning approaches evolve, educators are required to design active, creative, and child-centered learning activities. One approach that can be used is the use of learning media that is open-ended, flexible, and easily found in the surrounding environment. Loose Part Media is an alternative learning medium considered effective in supporting early childhood development, particularly in fine motor skills. Loose Parts are materials that can be moved, arranged, combined, separated, and manipulated according to the child's imagination and creativity

To address this, educators must design active learning experiences. One effective approach is using Loose Part Media. Loose parts are materials that can be moved, arranged, and manipulated according to a child's imagination. This media allows children to develop fine motor skills through activities like stacking, squeezing, and sticking while fostering creativity (Sumarseh & Eliza Delfi, 2022).

In the context of early childhood Islamic education, the use of Loose Parts media also has strong relevance to Islamic values. Children can be introduced to the concept of gratitude for Allah SWT's creation through the use of natural materials and the surrounding environment as learning media (Oktavia Lestari & Karim Halim, 2022). Furthermore, learning activities involving

cooperation, patience, and responsibility align with efforts to develop Islamic character from an early age. Therefore, the integration of Loose Parts media in fine motor skills learning not only supports children's physical development but also contributes to the formation of moral and spiritual values.

Based on the results of initial observations conducted at the research location, it was found that some children aged 4–5 years still experience difficulties in performing fine motor activities, such as cutting according to patterns, sticking neatly, and arranging objects in an orderly manner. This condition indicates the need for efforts to improve the quality of learning through the use of more varied media that are appropriate to the characteristics of child development. Therefore, this study focused on the application of Loose Part media through a variety of fine motor activities as an effort to improve the fine motor skills of children aged 4–5 years.

METHODS

This study employed a qualitative descriptive approach to gain an in-depth understanding of the implementation of Loose Part media in early childhood learning. The approach was chosen because it allows researchers to explore learning processes naturally and in accordance with real conditions in the field. The research design was based on a conceptual framework that began with identifying problems related to the fine motor development of children aged 4–5 years, followed by the implementation of learning activities using Loose Part media, and concluded with observing changes in children's fine motor skills.

The participants were children aged 4–5 years enrolled in TK Islam Ad-Dahiriyyah. They were selected because this age range represents a critical period for fine motor skill development. The research setting was chosen due

to its supportive learning environment and its suitability for implementing activity-based learning using Loose Part media.

Data were collected through observations, interviews, and documentation. Observations were used to record children's behaviors during learning activities, while interviews with teachers and parents provided supporting information. Data validity was ensured through source and method triangulation. Data analysis followed qualitative procedures, including data reduction, data display, and conclusion drawing based on the patterns and themes that emerged, enabling the findings to be interpreted in accordance with the research objectives.

RESULTS AND DISCUSSION

The results of this study were obtained through systematic observations of 4–5-year-old children during fine motor learning activities using Loose Parts media. Observations focused on the children's abilities in performing various activities involving the coordination of small muscles, especially in the fingers, as well as the integration of hand and vision movements. The learning activities were designed in several sessions with a variety of fine motor activities, allowing researchers to observe the gradual development of children's abilities.

Initial Conditions of Children's Fine Motor Skills

Initial observations at TK Islam Ad-Dahiriyyah showed that children's fine motor skills were not yet optimal. Many children struggled with precision tasks, such as pasting or cutting, leading to messy results and lack of focus. This aligns with the theory that fine motor skills require consistent and varied stimulation (Hurlock, 2004)

In pasting activities, children also showed limitations in managing the use of glue and placing materials according to instructions. Some children attached materials in an irregular manner and were unable to adjust their

positions to fit the available space. This situation indicates that children's hand-eye coordination still needs more intensive stimulation. When arranging and assembling objects, children tended to quickly become bored and lack focus, resulting in less precise and neat arrangements.

Based on this initial data, it can be concluded that children require more varied learning stimulation and direct manipulative activities. Therefore, the use of Loose Parts media was chosen as a learning strategy to help improve children's fine motor skills through exploratory and enjoyable activities.

Implementation of Learning Using Loose Part Media

The implementation involved materials like bottle caps, popsicle sticks, and eggshells. In the Eggshell Squeezing activity, children developed finger strength and sensory awareness. In the Pasting activity, using small pieces of eggshells, children practiced the "pincer grasp," which is vital for writing readiness (Wirdayanti., Sri Yuliani M., 2023).

In each activity, the teacher acts as a facilitator, providing initial guidance, simple examples, and support throughout the learning process. Children are encouraged to actively try, experiment, and complete tasks independently. Through this approach, children appear more enthusiastic and actively engaged in learning activities. A fun and non-pressurizing learning environment fosters children's confidence in fine motor skills activities.

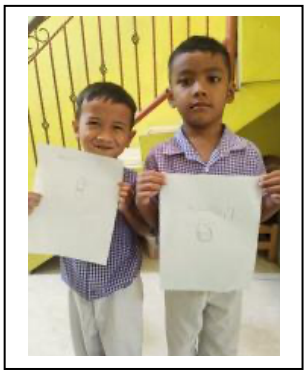
Table 1. Development of Children's Fine Motor Skill

No	Name	Before	After
1.	AQ	Starting to Grow	Developing very well
2.	AH	Starting to Grow	Developing as expected
3.	AS	Starting to Grow	Developing very well
4.	AF	Starting to Grow	Developing very well
5.	BP	Starting to Grow	Developing as expected
6.	CN	Not yet Developed	Starting to Grow
7.	DP	Not yet Developed	Starting to Grow

8.	ER	Starting to Grow	Developing as expected
9.	FD	Starting to Grow	Developing as expected
10.	MA	Starting to Grow	Developing as expected
11.	MU	Starting to Grow	Developing as expected
12.	MB	Starting to Grow	Developing as expected
13.	MS	Starting to Grow	Developing very well
14.	MR	Starting to Grow	Developing very well
15.	YH	Starting to Grow	Developing as expected

Table 1. Improvement of Fine Motor Skills of Children Aged 4–5 Years Through Loose Part Media. The data presented in Table 1 show an improvement in children's fine motor abilities after participating in learning activities using Loose Part media. Most children demonstrated progress in tasks requiring finger coordination and precision. These findings suggest that the use of varied and hands-on learning materials contributes positively to fine motor development.

Figure 1. Fine Motor Activities Using Loose Part Media


The results showed a significant improvement in children's coordination and independence. Activities using loose parts not only improved physical skills but also enhanced patience and concentration. This is consistent with the view that constructive play using diverse materials can significantly boost both motor and cognitive development (Juniarti et al., 2024)

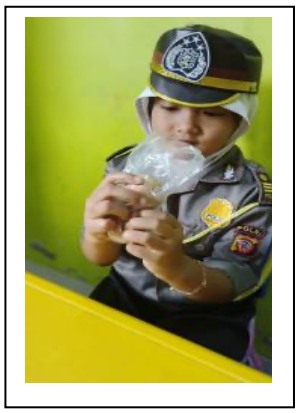
During the gluing activity, the child demonstrated improved control over the use of glue and placement of materials according to instructions. He was

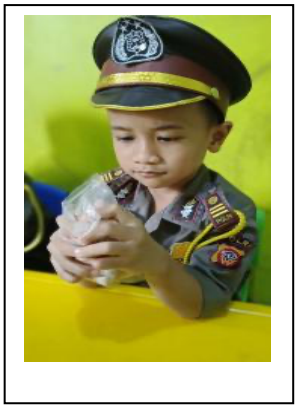
able to adjust the position of the materials to fit the available space, producing a more organized work. This demonstrates improved hand-eye coordination, an important indicator of fine motor development.

Furthermore, during the activity of arranging and assembling loose parts, children demonstrated improved coordination of finger and hand movements. They were able to assemble materials more accurately and focus for longer periods of time. This activity also fostered patience and perseverance in completing tasks, which indirectly supported social-emotional development.

Observations revealed that some children seemed happy when squeezing eggshells because it provided a new sensation, unlike usual activities. They also learned to be careful to ensure the shell fragments broke as shown. Thus, squeezing eggshells not only prepared them for gluing, but also significantly contributed to improving children's coordination, strength, and fine motor skills.

Figure 2. Egg Shell Squeezing Activity Photo





it appears that most children experienced progress from the underdeveloped category to developing as expected. Indicators such as the ability to pick up, squeeze, stack, and stick showed significant progress after the children participated in learning using Loose Parts media. Children who initially required teacher assistance gradually became able to complete tasks

independently.

By repeatedly picking up eggshells, children demonstrate improved picking skills, as evidenced by their increasingly rapid and precise picking of the fragments. This activity develops fine motor skills, particularly finger coordination, pincer grasp strength, and concentration.

Figure 3. Photo of Egg Shell Picking Activity

In this stage, children were asked to stick eggshell fragments onto a pre-patterned duck image. The duck image used was pre-patterned and medium-sized, making it easier for children to fill in specific areas with the eggshell fragments. Before the activity began, the teacher/researcher demonstrated how to glue the pieces together. They first applied glue to the duck pattern, then attached the eggshell fragments one by one, according to the shape of the image.

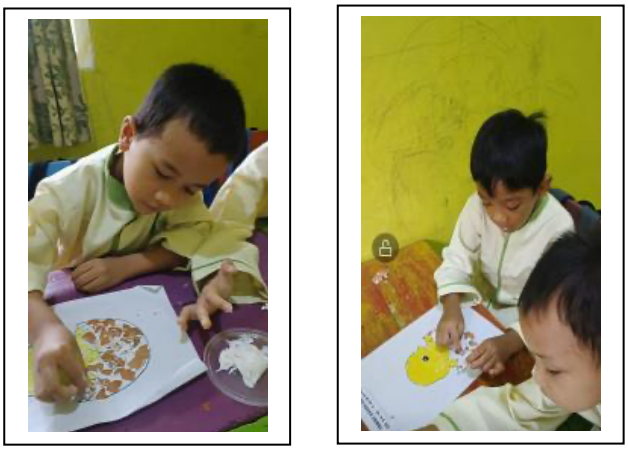
This pasting process trained children's precision and patience, as they had to position the eggshell fragments so they fit the duck pattern. Children learned not to rush, as pasting the fragments haphazardly would cause the image to look messy.

Furthermore, this activity required hand-eye coordination, as children had to precisely align the small fragments with the glued areas. Throughout the activity, some children appeared enthusiastic and engaged. They were

intrigued by the image being created, as they were working on more than just a duck pattern. They were seen carefully attaching the fragments to ensure the duck image was clearly visible. Some children also tried to arrange the fragments by color.

Once completed, the duck pattern created from broken eggshells provides a unique sense of satisfaction for the children. They express pride in their work. This demonstrates that pasting broken eggshells onto the duck pattern not only fosters fine motor skills but also fosters self-confidence, creativity, and an appreciation for simple artwork.

Figure 4. Photo of the Activity of Sticking Egg Shell Fragments



The variety of activities provided through Loose Part media also contributed to children's motivation and engagement in learning. Children were given the freedom to explore materials according to their creativity, which encouraged active participation and sustained attention. This learning environment allowed children to learn through play, making the learning process more enjoyable and meaningful. When children feel comfortable and interested in learning activities, they tend to persist longer and demonstrate better learning outcomes.

In addition to improving fine motor skills, the use of Loose Part media

supported other aspects of child development. Children learned to cooperate with peers, take turns, and follow simple rules during group activities. These social interactions fostered the development of communication skills and positive social behavior. Furthermore, children were encouraged to express their ideas and create unique products, which enhanced their creativity and self-confidence.

The findings of this study are consistent with the principles of early childhood education, which emphasize the importance of providing developmentally appropriate learning experiences. Loose Part media offers flexibility and openness, allowing teachers to design activities that can be adapted to children's individual needs and abilities. By utilizing simple and accessible materials, teachers can create effective learning environments that support fine motor development without relying on expensive or limited resources.

The role of teachers is crucial in facilitating learning activities using Loose Part media. Teachers are responsible for planning activities, preparing materials, and guiding children during the learning process. Effective teacher facilitation helps ensure that learning objectives are achieved while still allowing children the freedom to explore. Therefore, teachers should continuously develop their creativity and pedagogical skills in designing learning activities that promote holistic child development.

Documentation of learning activities shows that children are actively engaged in various fine motor activities using Loose Parts media. Children appear focused and enjoy the learning process, displaying positive expressions throughout the activities. These images reinforce observations that indicate improvements in children's fine motor skills. This documentation also serves as evidence that learning using Loose Parts media can create a conducive

learning environment and support optimal child development.

The application of Loose Part media through various fine motor activities has a positive and significant impact on children aged 4–5 years. Compared to conventional methods that tend to limit children's movement, Loose Parts provide the flexibility needed to build "Merdeka Belajar" or independent learning in early childhood (Sumarseh & Eliza Delfi, 2022).

These research findings align with motor development theory, which states that fine motor skills develop through repeated practice and hands-on experience (Santrock, 2011). Children need opportunities to manipulate a variety of objects of different sizes, textures, and shapes for optimal motor development (Juniarti et al., 2025). Loose Parts provides a variety of materials that allow children to perform a variety of fine motor movements naturally. Therefore, learning using Loose Parts can be considered a form of stimulation that aligns with the principles of early childhood development (Sujiono, 2009).

CONCLUSION

The application of Loose Part media through a variety of fine motor activities was found to support the development of fine motor skills in children aged 4–5 years. Activities such as squeezing eggshells, picking up small objects, arranging materials, and pasting eggshell fragments provided children with opportunities to practice finger coordination, hand-eye coordination, precision, and control of small muscle movements. Through repeated hands-on experiences, children demonstrated noticeable progress in performing fine motor tasks with greater independence and accuracy.

The findings indicated that most children showed developmental progress, moving from the categories of “Not Yet Developed” and “Beginning to Develop” to “Developing as Expected” and “Developing Very Well.” In addition to improvements in fine motor abilities, the use of Loose Part media

was associated with increased concentration, patience, confidence, creativity, and engagement during learning activities. The open-ended nature of Loose Parts encouraged active exploration and allowed children to participate in meaningful play-based learning experiences.

Overall, the study suggests that Loose Part media provides valuable learning opportunities that support fine motor development in early childhood. The implementation of various Loose Part activities highlights the importance of offering diverse and hands-on learning experiences that stimulate children's motor skills while also supporting their holistic development in accordance with the principles of early childhood education.

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