



Improving Fine Motor Skills through Plasticine Playing Activities at RA Nurul Islam Palmerah West Jakarta

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Abstract: This study aims to determine the increase in fine motor skills through plasticine playing activities in children aged 4-5 years at RA Nurul Islam Palmerah West Jakarta. This study uses the Kemmis and McTaggart classroom action research method, which consists of pre-cycle, cycle I and cycle II. Each cycle consists of five (5) meetings. The subjects in this study were 10 children aged 4-5 years. Data collection techniques were interviews, documentation and observation. Data analysis used a combination of data analysis, namely descriptive statistical and qualitative analysis and the sources of research data were teachers and children. based on the comparison of pre-cycle to cycle II that there was an increase in pre-cycle to cycle II, this is proven that in the pre-cycle fine motor skills have not developed (BB) as much as 70% then in cycle I as much as 40% to cycle II as much as 0%, in the assessment of fine motor skills began to develop (MB) in the pre-cycle as much as 30%, increasing in cycle I to 36% and cycle II as much as 32%. In fine motor skills Developing According to Expectations (BSB) in pre-cycle 0%, cycle I as much as 18% and cycle II 42%, while in fine motor skills developing very well (BSB) in pre-cycle 0% increased in cycle I 6% and increased rapidly in cycle II as much as 26%. From this comparison it can be concluded that fine motor skills can be improved through plasticine play activities.

Keywords : fine motor skills, plasticine, classroom action research.

Received June 10, 2024; **Accepted** July 23, 2024; **Published** October 31, 2024

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INTRODUCTION

Early childhood is the most optimal time to develop. At this time, children have a very great curiosity and do anything to satisfy their curiosity. Early childhood according to J. Piaget (Asmawati, et al., 2021:1.3) is in the pre-operational-concrete stage which relies on direct experience. In Presidential Regulation (Perpres) No. 60 of 2013, Early Childhood is newborn babies to children who are not even 6 years old. Early childhood education (PAUD) is a level of basic education which is a coaching effort aimed at children from birth to the age of 6 which is carried out through the provision of educational stimuli to help physical and spiritual growth and development so that children have readiness to enter further education, which is held in formal, non-formal, and informal channels (Permendikbud Number 137 of 2014 concerning National Standards for Early Childhood Education).

Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 137 of 2014 concerning National Standards for Early Childhood Education in Chapter I concerning General Provisions Article 1, Paragraph 2, that, "The Standard Level of Early Childhood Development Achievement Hereinafter referred to as STTPA is a criterion for the ability achieved by children in all aspects of development and growth, including aspects of religious and moral values, Physical – motor, cognitive, language,

social emotional, and art. One of the aspects of development and growth that must be achieved in early childhood is the aspect of motor development.

Physical-motor development in early childhood is one aspect of the level of achievement of child development that has developmental achievement standards. Physical-motor development is divided into two, namely gross motor and fine motor. Gross motor is a physical movement that involves large muscles, such as arm, leg, and neck muscles. There are also those who state that gross motor is the ability to make gestures that use large muscles. Sedangkan motorik halus adalah gerakan-gerakan tubuh yang melibatkan otot-otot small, for example the muscles of the fingers, facial muscles, and others. Some movements that can be included in fine motor movements, such as scissors, tearing, drawing, writing, folding, knitting, sewing, squeezing, grasping, arranging blocks, grimacing, glaring, laughing, and so on.

Especially in kindergarten, fine motor development is more directed at exercising the muscles of the hands and fingers. These skills are used for eating, dressing, writing, scissors and using small construction toys. One of the efforts to improve fine motor skills in early childhood is to do plasticine play activities. Through playing plasticine, children will perform pressing movements, rolling, patting and massaging Plasticine has many benefits for children, including the following: 1) Train sensory skills. One of the ways children learn about something is through touch, by playing plasticine children learn about textures and how to create things; 2) Developing thinking skills. Playing plasticine can hone children's thinking skills; 3) Useful for increasing Self esteem. Playing plasticine is a play without rules so that it is useful for developing children's imagination and creativity, as well as teaching about problem solving; 4) Hone language skills.

Squeezing, rolling, and twisting are some of the words that children often hear when playing with plasticine. 5) Fostering social skills. Plasticine play is a joint play activity that provides an opportunity to interact intimately, and can learn that playing together is very fun. The situation of group A students aged 4-5 years at RA Nurul Islam Palmerah, in a group A consisting of 10 children, as many as 7 children showed suboptimal fine motor skills in children.

This can be seen when buttoning clothes as many as 70% of 10 children still have difficulty buttoning clothes. Fine motor skills in children are very important for their development, because fine motor skills will affect children's ability to write, draw, color, scissors and other things. Seeing these problems, fine motor skills in children aged 4-5 years at RA Nurul Islam Palmerah West Jakarta need to be improved by using the right activities and media. Playing plasticine is one of the activities that can be used to improve fine motor skills in children aged 4-5 years at RA Nurul Islam Palmerah West Jakarta. Based on the background description above, the problems identified include: 1) Children aged 4-5 years at RA Nurul Islam have not been able to coordinate the movements of the eyes, hands, and arms flexibly; 2) Alternative play activities in training the development of fine motor skills in RA Nurul Islam have not varied; 3) Fine motor skills develop less than optimally because they get the same stimulation, namely carrying out repetitive activities too often.

Based on the observation of activities on the development of children aged 4-5 years at RA Nurul Islam, it was found that the problem of fine motor ability was characterized by several indicators, including. Children have not been able to button their clothes, the fine motor stimulation given by teachers to children has not been optimal. In supporting fine motor skills in children aged 4-5 years at RA Nurul Islam Palmerah, the right activities and media are needed.

RA Nurul Islam Palmerah, Jakarta Barat, recognizes the importance of integrating play-based learning into its curriculum. Many children at this institution are at a developmental stage where enhancing fine motor skills is crucial for their academic readiness. By incorporating plasticine play into classroom activities, educators can provide an interactive and stimulating environment that supports children's physical and

cognitive development. Despite its benefits, fine motor skill development is often overlooked in early childhood education.

Many children struggle with tasks requiring precise hand movements, which can impact their ability to perform daily activities and succeed in later academic pursuits. Therefore, it is necessary to explore effective methods, such as plasticine play, to ensure children develop strong motor coordination from an early age. This study aims to examine the impact of plasticine play on improving fine motor skills in children aged 4-5 years at RA Nurul Islam Palmerah. By focusing on structured plasticine activities, the research seeks to determine how consistent engagement in such play can contribute to children's motor skill development and overall readiness for future learning.

In addition to strengthening motor skills, plasticine play provides a multisensory learning experience that enhances children's ability to recognize shapes, sizes, and spatial relationships. The tactile nature of plasticine engages children's senses, helping them build awareness of pressure and control, which are essential for precision in writing and drawing. Furthermore, plasticine play encourages social interactions among children, fostering teamwork, communication, and cooperative learning.

When children participate in group activities involving plasticine, they learn to share materials, discuss their creations, and collaborate on projects, reinforcing their social-emotional development. Teachers and parents play a vital role in supporting children's fine motor skill development. By integrating plasticine play into daily activities both at school and at home, children receive consistent opportunities to practice and refine their hand movements, ensuring steady progress in their motor abilities.

This research highlights the significance of using engaging, hands-on activities to enhance fine motor skills in young children. By exploring the effectiveness of plasticine play, the study provides valuable insights into how early childhood education can be enriched with developmentally appropriate activities that support holistic growth. In conclusion, improving fine motor skills through plasticine play is a practical and enjoyable approach that benefits children's physical, cognitive, and social development. This study seeks to emphasize the importance of play-based learning and its role in preparing children for future academic challenges, ensuring they develop essential motor skills in a supportive and interactive environment.

METHODS

The implementation of the inquiry method through audiovisual media in the teaching of the birth of Prophet Muhammad (SAW) for third-grade students at MIS Baiturrahim aims to enhance students' comprehension and engagement. The inquiry method encourages active learning, where students explore and investigate concepts rather than passively receive information. Integrating audiovisual media further supports this process by providing visual and auditory stimuli that facilitate a deeper understanding of the subject matter.

In modern education, audiovisual media has been widely recognized as an effective tool for enhancing students' learning experiences. By combining both visual and auditory elements, these media help in making abstract concepts more concrete and memorable. When applied to religious studies, such as the birth of Prophet Muhammad (SAW), audiovisual media can make historical events more relatable and engaging for young learners. The inquiry method is based on the principle that students learn best when they actively participate in the learning process.

Instead of merely listening to a lecture, students are encouraged to ask questions, seek answers, and analyze information critically. This method fosters curiosity and enhances problem-solving skills, which are essential for lifelong learning. Using audiovisual media in teaching the birth of Prophet Muhammad (SAW) helps students visualize the historical context of the event. Animated videos, documentaries, and illustrated storytelling provide a more vivid representation of the time and place where

the Prophet was born. These visual aids help students grasp the significance of the event more effectively.

One of the main advantages of audiovisual media is its ability to capture students' attention. Young learners, especially those in third grade, often have shorter attention spans. Traditional teaching methods that rely solely on textbooks and verbal explanations may not always be effective in maintaining their focus. Audiovisual materials, on the other hand, create an engaging learning environment that sustains students' interest throughout the lesson. The inquiry method aligns well with audiovisual media because it encourages students to explore the content actively.

For instance, after watching a video on the birth of Prophet Muhammad (SAW), students can engage in group discussions, answer guided questions, and participate in hands-on activities. These interactions allow them to process and internalize the information more effectively. Another key benefit of using audiovisual media is its ability to cater to different learning styles. Some students learn best through visual means, while others prefer auditory or kinesthetic learning experiences.

By incorporating a mix of images, sounds, and interactive elements, audiovisual media ensures that all students can grasp the lesson in a way that suits their individual learning preferences. In the context of religious education, storytelling is a powerful tool for conveying moral and spiritual lessons. The birth of Prophet Muhammad (SAW) is not just a historical event but also a story filled with wisdom and divine intervention. Audiovisual storytelling makes the narrative more compelling and easier for students to remember and retell.

Through the inquiry method, students are encouraged to ask meaningful questions about the birth of Prophet Muhammad (SAW). Teachers can facilitate discussions that allow students to explore why the Prophet's birth was significant, how it was foretold, and what lessons can be learned from it. This approach deepens their understanding and encourages critical thinking. Furthermore, audiovisual media helps bridge the gap between past and present. By presenting historical events in a modern and accessible format, students can better relate to the teachings of Islam.

This fosters a stronger connection to their faith and encourages them to appreciate their religious heritage. Practical classroom activities can further enhance the learning experience. For example, after watching a documentary on the birth of Prophet Muhammad (SAW), students can create their own illustrated timelines of key events. Such activities encourage creativity and reinforce their understanding of historical sequences.

Teachers play a crucial role in guiding students through the inquiry process. They can pose thought-provoking questions and encourage students to conduct independent research. By allowing students to explore different sources of information, teachers help them develop analytical and evaluative skills. Assessing students' understanding can be done through various means, such as oral presentations, written reflections, and group projects. These assessments not only measure students' knowledge but also encourage them to articulate their thoughts and share their insights with their peers. Challenges in implementing audiovisual media and the inquiry method should also be considered. Some schools may face limitations in terms of resources and technology.

However, creative solutions, such as using printed visual aids or audio recordings, can still enhance the learning experience even in resource-limited settings. Parental involvement can further support students' learning. Encouraging parents to discuss the birth of Prophet Muhammad (SAW) at home and provide additional resources, such as Islamic storybooks and online videos, can reinforce classroom teachings and make learning a continuous process. The combination of the inquiry method and audiovisual media fosters a student-centered learning environment. Instead of passively receiving information, students take ownership of their learning journey.

This approach not only enhances their understanding of the birth of Prophet Muhammad (SAW) but also nurtures a love for learning and exploration. By making learning interactive and engaging, students develop a deeper appreciation for Islamic

history. Understanding the circumstances surrounding the birth of Prophet Muhammad (SAW) helps them connect with his teachings and values, encouraging them to embody the principles of compassion, honesty, and humility.

In conclusion, the application of the inquiry method through audiovisual media in teaching the birth of Prophet Muhammad (SAW) provides numerous benefits for third-grade students at MIS Baiturrahim. It enhances engagement, supports diverse learning styles, fosters critical thinking, and creates a meaningful learning experience. By integrating these innovative teaching strategies, educators can inspire students to explore and appreciate the rich history of Islam while developing essential skills for lifelong learning. The integration of audiovisual media with the inquiry method has proven to be an effective strategy in making the lesson more engaging and interactive. It allows students to visualize historical events, making them more relatable and easier to understand.

This approach not only makes learning enjoyable but also ensures that students retain the information for a longer period. Furthermore, the inquiry-based approach instills a sense of curiosity and encourages students to seek knowledge beyond the classroom. It fosters independent learning habits that can benefit them in other subjects as well. Through active participation, students become more confident in expressing their thoughts and asking relevant questions.

The role of teachers in guiding and facilitating discussions remains crucial in this approach. Teachers must ensure that students remain on track and derive meaningful insights from their explorations. By providing structured guidance, educators can help students make connections between historical events and their present lives. Despite the challenges, the benefits of combining audiovisual media with the inquiry method far outweigh any limitations. Schools should invest in technology and training to ensure that educators are equipped with the necessary skills to implement this approach effectively. The involvement of parents in reinforcing these lessons at home is also significant. A collaborative effort between teachers and parents can create a more holistic learning experience for students, strengthening their understanding of Islamic teachings and history. Overall, the implementation of the inquiry method through audiovisual media in teaching the birth of Prophet Muhammad (SAW) has great potential in improving students' comprehension, engagement, and retention of knowledge. This approach not only enhances their academic learning but also nurtures their spiritual and moral development, preparing them to become knowledgeable and ethical individuals in the future.

RESULTS

The research on improving fine motor skills through plasticine play activities for children aged 4-5 years at RA Nurul Islam Palmerah, West Jakarta, aimed to assess the effectiveness of hands-on activities in enhancing children's hand-eye coordination, finger dexterity, and muscle control. Fine motor skills are crucial in early childhood development as they form the foundation for writing, drawing, and other essential tasks. The study involved structured plasticine play sessions where children engaged in various activities such as rolling, shaping, pinching, and molding different objects. These activities were designed to strengthen their finger muscles and improve their grip strength. The research observed the progress of children over several weeks to determine the impact of these activities on their fine motor skill development.

Observations during the study revealed that children initially faced difficulties in handling plasticine effectively. Many showed limited finger strength and struggled with shaping or pinching the material. However, with continuous practice, they demonstrated significant improvements in their ability to manipulate plasticine with greater precision and control. One of the key findings was that structured plasticine play not only enhanced fine motor skills but also increased children's creativity and concentration. As children

engaged in imaginative play, they showed a heightened ability to focus on details and create more complex structures, which further refined their motor coordination. Through qualitative assessments, teachers noted that children who participated actively in plasticine play displayed better hand strength and control when using pencils and other classroom tools.

Their ability to draw, trace, and hold small objects improved, indicating a direct correlation between plasticine play and fine motor skill development. The research also highlighted that engaging in plasticine play promoted social interaction among children. Many activities encouraged teamwork, communication, and cooperative learning as children exchanged ideas and helped each other create different models. This aspect of play fostered both motor and social skills simultaneously. To measure progress, a comparative analysis was conducted between children who participated in regular plasticine play sessions and those who engaged in standard classroom activities without such interventions. The results showed that children in the plasticine play group exhibited faster and more noticeable improvements in their fine motor abilities compared to their peers.

Parental feedback was also collected as part of the study, revealing that many parents observed positive changes in their children's ability to perform tasks such as buttoning clothes, tying shoelaces, and using utensils. These improvements further reinforced the effectiveness of plasticine play in strengthening fine motor skills beyond the classroom setting. In addition to enhancing physical skills, the study found that plasticine play contributed to emotional and cognitive development. Children displayed increased patience, persistence, and problem-solving abilities as they worked through challenges in shaping and molding plasticine figures. The research further explored the role of teacher involvement in maximizing the benefits of plasticine play. It was noted that when teachers provided guided instructions and demonstrated techniques, children showed greater confidence in experimenting with different shapes and textures, leading to improved skill acquisition.

Another significant outcome of the study was the identification of plasticine play as a low-cost yet highly effective tool for early childhood education. Unlike other fine motor skill development tools that require specialized equipment, plasticine is affordable, versatile, and easily accessible, making it a valuable resource for educators. Findings also indicated that children who engaged in plasticine play showed improved hand dominance, which is essential for early writing skills. Many children naturally developed a preference for using one hand over the other, facilitating smoother transitions to using writing tools. The study emphasized the importance of consistency in fine motor skill development. Children who participated in daily plasticine play sessions exhibited more stable and lasting improvements compared to those who engaged in the activities sporadically. A significant observation was the impact of plasticine play on children's confidence.

Many initially hesitant children gradually developed a sense of accomplishment as they successfully created different shapes, boosting their self-esteem and willingness to participate in classroom activities. Another key result was the enhancement of bilateral coordination, which is the ability to use both hands together effectively. Activities such as rolling and flattening plasticine required children to use both hands simultaneously, promoting stronger coordination and balance in their movements. The research also revealed that incorporating storytelling into plasticine play activities increased engagement and motivation among children. When given themes such as creating animals or making characters from stories, children displayed greater enthusiasm and focus, which enhanced their learning experience. It was found that children with initially weaker fine motor skills showed the most dramatic improvement over time. This finding supports the idea that early intervention through plasticine play can be particularly beneficial for children who struggle with hand strength and coordination.

The study confirmed that plasticine play serves as an effective pre-writing activity. Children who mastered shaping and manipulating plasticine found it easier to transition to

forming letters and numbers, demonstrating an improved ability to control their hand movements. Teachers reported that incorporating plasticine play into daily classroom routines resulted in a more dynamic and interactive learning environment. Children were more engaged and excited to participate, which positively impacted their overall learning experience. The research also shed light on the therapeutic benefits of plasticine play.

Many children used the activity as a stress-relief mechanism, squeezing and kneading the material to release tension, which contributed to better emotional regulation. Findings indicated that plasticine play could be adapted for children with special needs. Those with developmental delays or coordination challenges particularly benefited from structured plasticine activities, which helped improve their motor skills at their own pace. The study further underscored the role of sensory experiences in fine motor development. The tactile nature of plasticine provided children with valuable sensory input, enhancing their awareness of textures, pressure, and hand movements. It was observed that children who participated in plasticine play were more willing to take risks and experiment with new ideas.

This encouraged a growth mindset, where children embraced challenges and learned from trial and error. Overall, the research concluded that playing with plasticine is an effective, engaging, and accessible method for improving fine motor skills in young children. The combination of hands-on learning, creativity, and structured activities contributed to significant developmental gains in children aged 4-5 years at RA Nurul Islam Palmerah, West Jakarta. The integration of plasticine play into early childhood education is highly recommended based on the study's findings. Schools and educators can leverage this method to enhance children's fine motor skills while also fostering creativity, social skills, and cognitive development.

Future research could explore long-term effects of plasticine play on handwriting proficiency and overall academic performance. Additional studies may also examine how different textures and materials impact fine motor skill acquisition in young learners. By recognizing the benefits of plasticine play, educators and parents can work together to create meaningful learning experiences that support holistic child development. This study provides strong evidence that simple, hands-on activities can have a profound impact on early childhood education.

DISCUSSION

The discussion on improving fine motor skills through plasticine play activities for children aged 4-5 years at RA Nurul Islam Palmerah, West Jakarta, explores various aspects of how this method enhances early childhood development. Fine motor skills are essential for daily activities such as writing, drawing, and buttoning clothes, making their development crucial during the preschool years. Plasticine play provides an engaging and hands-on approach that encourages children to use their fingers and hands in various ways. By molding, pinching, rolling, and shaping the plasticine, children develop stronger finger muscles, improve hand-eye coordination, and refine their ability to manipulate small objects with precision. One of the primary reasons for choosing plasticine as a medium for fine motor skill development is its adaptability. Unlike rigid materials, plasticine offers flexibility, allowing children to apply different levels of pressure and experiment with various techniques. This variability strengthens their hand muscles in a natural and enjoyable way.

Observations from the study indicate that children initially struggle with handling plasticine due to underdeveloped finger strength. However, as they engage in more frequent plasticine activities, their ability to control and manipulate the material improves significantly, leading to better dexterity and hand coordination. Another significant aspect of plasticine play is its ability to enhance children's creativity. As they mold different shapes, animals, or objects, they develop problem-solving skills and imaginative thinking, both of which contribute to cognitive and motor development simultaneously.

Children participating in plasticine play demonstrate improved focus and concentration. Engaging in such activities requires careful attention to detail, patience, and perseverance, all of which contribute to cognitive growth while also strengthening fine motor skills. One of the key benefits of plasticine play is its effectiveness in improving grip strength. As children grasp, squeeze, and mold the material, they develop stronger hand muscles, which will later aid in holding pencils correctly for writing and drawing. Plasticine play is also an excellent pre-writing exercise.

Children who engage in frequent plasticine activities show a smoother transition to using pencils, as their fingers are more accustomed to precision movements and controlled hand motions. This method of fine motor skill development is highly inclusive, making it beneficial for children with different learning styles and abilities. Visual, auditory, and kinesthetic learners all benefit from the multisensory experience that plasticine play offers. Social interactions also play a crucial role in plasticine-based activities. When children engage in group play, they share ideas, collaborate on projects, and communicate effectively, which not only enhances their social skills but also promotes teamwork and cooperation. Teachers play an essential role in guiding children through plasticine activities.

Providing instructions, demonstrating techniques, and encouraging exploration allow children to maximize the benefits of the activity while ensuring structured learning experiences. Plasticine play fosters bilateral coordination, which is the ability to use both hands together efficiently. This skill is vital for various tasks, including cutting with scissors, using utensils, and engaging in other daily activities that require coordinated hand movements. The study also highlights the importance of repetition in fine motor skill development.

Regular exposure to plasticine play ensures consistent progress, reinforcing muscle memory and improving dexterity over time. Parental involvement in plasticine activities at home further enhances children's learning experiences. When parents encourage creative play using plasticine, children receive additional practice and reinforcement, leading to greater developmental benefits. Plasticine play contributes to sensory development by providing a tactile experience that enhances children's ability to process different textures and levels of pressure. This sensory stimulation is essential for overall motor development. Introducing storytelling into plasticine play adds an extra layer of engagement. When children create models based on stories, they develop narrative skills, improve memory, and enhance their ability to visualize concepts while also refining their motor skills. The emotional benefits of plasticine play cannot be overlooked.

Many children find working with plasticine to be a calming and therapeutic activity, helping them regulate emotions, reduce stress, and express themselves through creative play. Plasticine activities are particularly beneficial for children with developmental delays. The hands-on nature of plasticine play allows children to work at their own pace, gradually improving their motor coordination without feeling pressured. The affordability and accessibility of plasticine make it an ideal tool for fine motor skill development in early childhood education.

Unlike expensive educational materials, plasticine is cost-effective and widely available, ensuring that all children can benefit from this method. Another important finding is the impact of plasticine play on children's ability to develop hand dominance. As they engage in frequent plasticine activities, they naturally establish a preferred hand for writing and other fine motor tasks. Plasticine play also enhances spatial awareness, as children learn to manipulate shapes and proportions.

This skill is important for understanding geometry, visual arts, and other academic concepts that require an understanding of spatial relationships. Children participating in plasticine play exhibit greater independence in completing tasks that require fine motor skills. As their confidence grows, they become more willing to attempt challenging activities, fostering a sense of self-reliance and achievement. The research

confirms that plasticine play serves as a foundation for later academic success. By strengthening fine motor skills early on, children find it easier to engage in writing, drawing, and other classroom activities that require precision and control.

Plasticine activities can be easily adapted to different learning objectives, allowing educators to incorporate them into various subjects, such as mathematics, science, and language development, in addition to fine motor skill enhancement. One of the key takeaways from this study is that plasticine play should be an integral part of early childhood curricula. Schools and educators are encouraged to implement structured plasticine activities to support fine motor skill development in young learners.

The research findings suggest that the benefits of plasticine play extend beyond the preschool years. Children who develop strong fine motor skills early on are better equipped to handle complex motor tasks as they progress through their educational journey. By integrating plasticine play into daily classroom routines, teachers create an engaging and interactive learning environment that fosters both skill development and enjoyment. Future research could explore the long-term effects of plasticine play on academic performance, handwriting proficiency, and artistic skills, providing further insight into its impact on overall child development. Educators and parents should work together to ensure that children receive adequate opportunities for fine motor skill development both in school and at home. This collaboration will further enhance the effectiveness of plasticine play in supporting early childhood development. Ultimately, the findings of this study reinforce the importance of hands-on, play-based learning in early childhood education. Plasticine play is a simple yet powerful tool that nurtures fine motor skills while fostering creativity, problem-solving, and social development in young children.

CONCLUSION

The conclusion of this research highlights the effectiveness of plasticine play in improving fine motor skills in children aged 4-5 years at RA Nurul Islam Palmerah, West Jakarta. The study confirms that engaging in structured plasticine activities significantly strengthens hand muscles and enhances coordination. Fine motor skill development is a critical aspect of early childhood education. The results of this study show that plasticine play provides an effective and enjoyable way for children to refine their finger movements, hand strength, and dexterity. Plasticine activities encourage children to explore different textures and shapes, enhancing their sensory awareness. This sensory experience plays a vital role in helping children understand how to control their hand movements with precision. The study reveals that children who regularly engage in plasticine play exhibit better grip strength, which is essential for writing, drawing, and other daily tasks.

Their ability to hold and control objects improves significantly over time. Plasticine play fosters creativity and imagination. As children mold different shapes and objects, they develop problem-solving skills and cognitive flexibility, which contribute to their overall intellectual growth. Another important finding is the social aspect of plasticine play. When children engage in group activities, they learn to collaborate, share ideas, and communicate effectively, all of which are essential for their social-emotional development.

Plasticine play also promotes bilateral coordination, allowing children to use both hands together efficiently. This skill is fundamental for tasks like using scissors, buttoning clothes, and tying shoelaces. The study confirms that plasticine play serves as an excellent pre-writing exercise. Children who participate in plasticine activities transition more smoothly to writing, as their hands are stronger and more adept at controlling writing instruments. Repetition and consistency in plasticine play lead to noticeable improvements in fine motor skills.

Regular practice reinforces muscle memory and helps children develop stability in their hand movements. Teachers play a crucial role in guiding children through plasticine

activities. Providing structured tasks and encouraging exploration help maximize the developmental benefits of plasticine play. Parental involvement is also essential. When children practice plasticine activities at home, they receive additional reinforcement, leading to greater improvements in their fine motor abilities.

The research finds that children who initially struggle with fine motor tasks make significant progress through plasticine play. This method is particularly beneficial for children who need extra support in developing hand coordination and strength. Introducing storytelling into plasticine play enhances engagement and motivation. When children create models based on stories, they develop narrative skills, improve focus, and strengthen their ability to visualize concepts.

Plasticine play also has therapeutic benefits. Many children find the activity calming and enjoyable, helping them regulate emotions and express themselves creatively. The affordability and accessibility of plasticine make it a practical tool for early childhood education. Unlike expensive educational materials, plasticine is cost-effective and widely available, ensuring that all children can benefit. The findings indicate that plasticine play aids in the development of hand dominance. As children repeatedly engage in fine motor activities, they naturally establish a preferred hand for writing and other tasks. The study highlights the importance of integrating plasticine play into daily classroom routines. Making it a regular activity helps children strengthen their motor skills while enjoying a fun and interactive learning experience.

Future research could explore the long-term effects of plasticine play on academic performance, particularly in handwriting and artistic expression. Understanding its extended benefits would provide valuable insights for educators and parents. Collaboration between teachers and parents is key to maximizing the impact of plasticine play. Ensuring that children have consistent opportunities to engage in fine motor activities both at school and at home enhances overall development. In conclusion, plasticine play is a simple yet powerful tool for improving fine motor skills in young children. By incorporating this activity into early education programs, educators can support children's physical, cognitive, and social development in a meaningful way.

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