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Effect of Toddler Play on Fine Motor Skills for 2-3 Years Old Children at Taska Kemas PPAK Batu Anam

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Abstract

This research focuses on fine motor skills development in early childhood, particularly in 2-3-year-old children. Previous studies have established a strong connection between fine motor skills and various areas of development, such as gross motor skills, mathematics, and literacy. The objective of this study was to investigate the impact of toddler play, including activities like holding, folding, colouring, matching, and stringing beads, on the development of fine motor skills. The study involved six children within the specified age range and employed survey and observation forms. The survey forms were administered to parents and teachers at TASKA KEMAS PPAK Batu Anam, while the observation form was used during the activities mentioned earlier. The questionnaire was divided into three parts: one for parents, one for teachers, and the other for observing the children's engagement in holding, folding, colouring, matching, and stringing beads at TASKA KEMAS PPAK Batu Anam.

Keywords: Fine Motor Skills, Hand-Eye Coordination, Motor Skills, Play-Based Activities.

Introduction

Fine motor skills are essential for the development of children's hand-eye coordination and dexterity, involving the control of small muscles in various body parts. The early years, particularly ages 0 to 6, are critical for brain development and the acquisition of physical, cognitive, and fine motor skills. Children learn best through their environment, object interactions, and observational learning. The development of fine motor skills varies with age, with milestones such as focusing on objects, reaching, and grasping, and refining skills like drawing and using scissors. These skills are vital for cognitive development as they enable children to engage in activities that support cognitive growth. Mark making and exploration of materials provide opportunities for fine motor skill development, fostering confidence and a desire to learn. This study aims to investigate the impact of toddler play on the fine motor skills of children aged 2-3 years. It seeks to explore factors influencing skill development, the roles of parents and teachers, and the significance of toys in stimulating fine motor

development. The study will assess mastery levels in activities such as holding, matching, colouring, folding, and stringing beads. Hypotheses include the expectation that exposure to toys, toddler play, parental involvement, and the use of toys as resources contribute to fine motor skill development. Understanding these factors will help promote optimal fine motor skill development during early childhood.

Literature Review

Fine motor skill development plays a crucial role in children's overall development and academic success. Various factors, such as toddler toys, parental involvement, and teacher support, contribute to the development of fine motor skills in children aged 2 to 3 years. Previous research studies have explored these factors and shed light on their impact on children's fine motor skill development. Gumusdag (2019) found that children exposed to toys exhibited better physical activity and motor skills compared to those who lacked exposure to toys. Toys not only provide fun but also contribute to children's sensory and physical development. However, excessive media usage, particularly tablets, has been linked to negative effects on fine motor skills (Martzog & Suggate, 2022). Therefore, it is important to encourage children to engage in play activities using toys and limit their screen time. Syafril et al (2018) highlighted the importance of fine motor skill development in toddlers, as it enables them to perform various tasks independently, such as using utensils and building structures.

Parents play a crucial role in supporting their child's fine motor skill development. Agard et al (2021) emphasized the need for parental attention and involvement, as children who lack parental support tend to have lower-quality fine motor skill development. Parents who have knowledge about childhood education and the importance of play tend to be more effective in promoting their child's motor development (Metaferia et al., 2020). Teachers also play a significant role in facilitating children's fine motor skill development. Gidion (2020) emphasized the importance of understanding each child's unique motor profile and limitations. Through scaffolding and tailored activities, teachers can support children's motor development and provide necessary guidance. Collaboration between parents and teachers is crucial for monitoring children's motor development and ensuring consistency in support and supervision (Jordan & Paniagua, 2021). Engaging children in activities that specifically target fine motor skill development is beneficial. Cutting activities, for example, enhance muscle control and eye-hand coordination, which are essential for writing skills (Shakibaie, 2022).

Play-based activities provide an opportunity for children to explore, problem-solve, and develop their fine motor skills (Von Tetzchner, 2022). Play not only contributes to motor development but also enhances cognitive, social, and emotional skills. To facilitate children's fine motor skill development, it is important to expose them to various play materials and activities. White Bread et al (2017) recommended exposing children to different types of play until the age of 7 before introducing formal reading skills. Simulated games that encourage fine motor skill development can also improve children's focus and academic performance (Jordan & Paniagua, 2021). Assessments and evaluations are essential in monitoring children's motor development. Various standardized measures and assessments, such as the Miller Function and Participation Scales, Goal-Oriented Assessment, and Detailed Assessment of Speed in Handwriting, provide insights into children's fine motor skills and their overall development (Matheis & Estabiilo, 2018).

Understanding the importance of toddler toys, parental involvement, and teacher support in fine motor skill development can guide parents and educators in promoting children's motor skills effectively. By providing appropriate play opportunities and engaging children in activities that enhance fine motor skills, parents and teachers can contribute to children's overall development and academic success. Toddler motor skills can be assessed through professional practice, emphasizing the importance of play and adult involvement in promoting movement and fine motor skill development (Smith, 2019). Rather than simply judging a child's motor skill development, adults, including teachers and parents, should provide encouragement and support to help children reach their developmental milestones. Engaging in physical activities such as grasping, walking, and reaching can enhance children's fine motor skills. Adults can facilitate interesting experiences for children, such as cooking, sewing, and gardening, which encourage the use of tools and grasping with their fingers. Interview sessions with parents, caregivers, and teachers can provide a comprehensive assessment of toddler motor skills development (Esatabillo, 2018). These sessions yield valuable information that can be used to understand children's fine motor skill development and determine suitable activities to enhance their skills. Good communication and collaboration between parents and teachers are crucial for supporting children's development. For example, if a child faces difficulties in activities involving holding, the teacher should plan appropriate activities and inform the parents about the efforts being made to help the child. Teachers should explain the effectiveness of these activities and encourage parents to continue supporting their child's development at home. It is important to note that children progress in fine motor skill development at their own pace. Parents should not be concerned if their child's progress differs from that of other children, as they will naturally develop these skills as they grow and engage in learning (Brennan, 2021). However, active parental involvement in finding activities that stimulate fine motor skills is crucial for optimal development. Informed parents tend to have more successful children in their development. Parents should remain attentive to their child's developmental stage and focus on their specific needs. They should actively engage in activities that support and encourage their child's development.

Folding activities can significantly contribute to the development of fine motor skills. These activities involve the use of tiny muscles and require careful coordination and accuracy. Folding activities, such as origami, can enhance fine motor skills by approximately 43% (Anisa et al., 2021). Moreover, folding activities can improve spatial visualization skills and help children develop their own understanding of the world around them. These activities also provide opportunities for problem-solving and social interaction. Fine motor skill development occurs in four stages: whole arm, whole hand, pincer, and pincer coordination (Greutman, 2017). Parents and caregivers should support children in developing their fine motor skills by ensuring their development follows the appropriate trajectory and providing activities that enhance these skills. Several important features of fine motor skill development should be emphasized, including palmar arches, wrist stability, skilled side of the hand, intrinsic hand muscle development, bilateral hand skills, and scissor skills.

Motor learning is influenced by genetics, environments, and surrounding stimuli. Training equipment can facilitate the learning of new motor skills. In developing motor skills, motivation and hand tasks play vital roles. Adults should act as coaches, encouraging children to work hard and develop their motor skills (Rudd & Davids, 2021). Adults can support motor development at all ages by recognizing and focusing on various aspects. For toddlers, adults can encourage block play and tower building, organize parades or follow-the-leader games,

promote exploration of the environment through walking or bicycle riding, and engage in ball-rolling activities. Fine motor skills are essential for children's daily routines, enabling them to perform tasks such as writing, eating, and getting dressed. Developing fine motor skills involves the use of small muscles. Mark making activities are particularly important, as children attribute meaning to their marks. Mark making allows children to develop dexterity, coordination, and creativity. Teachers and parents can encourage mark making through various materials such as clay, dough, and sand, facilitating fine motor skill development (Beeley, 2023). Activities or games contribute to holistic education for young learners. They promote language development, mathematical knowledge, social interaction, and both fine and gross motor development (Morgan, 2021). Activities involving holding pens, mark making, pincer grip, tripod grip, and prewriting activities help children build strength, coordination, and control in their fine motor skills. Parents and teachers should prioritize activity-based learning for children's health and development. Unstructured play, providing simple materials for creativity, encouraging body exploration, and emphasizing the benefits of play are recommended approaches.

To promote children's physical development, teachers should prioritize at least three hours of physical activity each day. Open-ended physical play is beneficial for developing both gross and fine motor skills. Teachers should incorporate daily fine motor activities such as playdough, sorting, folding paper, and pointing games to enhance children's finger strength. Parents can support fine motor skill development by involving children in practical activities like washing windows or folding clothes. Fine motor skills, involving small muscles in the hands, wrist, and fingers, are crucial for various daily tasks such as writing, eating, and dressing. Parents can help their children develop fine motor skills by teaching them how to use tools, improving eye-hand coordination through activities like catching a ball, promoting independence and confidence, and engaging in cognitive activities like coloring and tracing. Fine motor skills begin to develop in infancy and continue to progress throughout toddler and preschool years. Fine motor skill development is linked to academic achievement and success in social and personal aspects of life. Crafting activities, such as cutting and gluing, can improve eye-hand coordination and dexterity. Teachers should focus on fine motor skill practice during the school day to track children's progress. Children's motor development is influenced by factors such as genetics, birth weight, sex differences, environment, physical activity, nutrition, immunization, and opportunity. Parents play a crucial role in promoting children's motor development by creating a playful environment, providing appropriate activities, ensuring a safe environment, and setting limits on screen time. Mark making activities, such as drawing numbers, contribute to the development of fine motor skills and support children's tactile processing. Developing fine motor skills before introducing pencil and paper is essential. Movement and physical activity enhance motor skill development. Teachers can support fine motor skill development through activities like cutting, monkey bars, and stringing beads. Children who develop fine motor skills are happier and more successful in school. Craft time during learning sessions can be used to practice fine motor skills and boost children's confidence. Cutting activities help children develop eye-hand coordination, bilateral coordination, and attention skills.

Movement and play contribute to brain and language development. Physical activity guidelines for preschoolers should be followed to ensure children's bone properties, fitness, and motor skill development. Play and educational toys are integral to children's development and should be encouraged. Observation, communication, reporting, and assessment can help track fine motor skill development. In conclusion, play is crucial for

building fine motor skills, and parents and teachers play significant roles in supporting children's development. It is important to strike a balance between providing support and allowing children to explore and try new things independently. Play is also essential for learning life skills and is used by therapists to teach children with skill deficiencies. Parents and teachers must collaborate to develop fine motor skills, understanding the developmental milestones and incorporating play and activities into children's daily lives.

Methodology

Methodology and data collection are vital components of research studies that ensure the research is conducted systematically and effectively. This chapter outlines the study location, design, sample selection, instruments, and methodology used in the research. The qualitative approach was employed, involving observations and interviews to explore the effect of toddler play on fine motor skills in 2-3 years old children at TASKA KEMAS PPAK Batu Anam. The research aimed to investigate the factors that encourage fine motor skills development in 2-3 years old children, the role of parents and teachers in fostering these skills, and the impact of toddler play. The study also sought to determine the effect of toddler play on fine motor skills development at TASKA KEMAS PPAK Batu Anam. Data was collected through observations and interviews. Participants included children aged 2-3 years, their parents, and teachers at TASKA KEMAS PPAK Batu Anam. Purposive sampling was used to select participants based on specific criteria. Verbal consent was obtained from all participants, and ethical considerations were considered throughout the study. Observations were conducted to assess the children's fine motor skills during activities such as holding, folding, colouring, matching, and stringing beads. Scores were assigned based on the child's performance, ranging from low to good achievement. Semi-structured interviews were conducted with parents and teachers to gather information about their role in supporting fine motor skills development and how they exposed children to toddler play. The interviews were conducted in bilingual (Malay and English) to accommodate participants' language preferences.

The collected data was analysed in several steps. Firstly, the data was reviewed to understand the overall information and objectives of the study. Then, exploratory analysis was conducted to refine the research objectives and hypotheses. Next, the data was cleaned and organized for further analysis. The analysis focused on identifying the factors influencing fine motor skills development and determining the impact of toddler play on 2-3 years old children. Finally, the findings were summarized and communicated effectively. The methodology employed in this study involved qualitative data collection through observations and interviews. The data was analysed to investigate the effect of toddler play on fine motor skills development in 2-3 years old children. The research design, participant selection, and data collection process were conducted with ethical considerations in mind. The study aimed to uncover the factors influencing fine motor skills development and the role of parents and teachers in fostering these skills. The findings of this research will contribute to understanding the impact of toddler play on fine motor skills in early childhood.

Findings

This qualitative study examines the impact of toddler play on the development of fine motor skills in 2-3 years old children at TASKA KEMAS PPAK Batu Anam. The research aims to understand how toddler play affects the children's fine motor skills and the role of parents and teachers in fostering this development. Data was collected through surveys and observations, and the findings address the research objectives. Data was collected from

surveys completed by parents and teachers, as well as observations of children aged 2-3 years old. The survey questionnaire consisted of 8 questions for parents and teachers, focusing on toy exposure and the role of parents and teachers in fine motor skills development. The observation form assessed activities such as holding, folding, colouring, matching, and stringing beads.

The data was analysed through a qualitative approach, examining themes and patterns. The study found that children who were exposed to toddler toys at home demonstrated better performance in fine motor skill activities compared to those who were not exposed. These children were more proficient in grasping, holding, and following instructions. Parents play a crucial role in developing their children's fine motor skills by providing toy exposure and encouraging play. Teachers also have an important role in supporting fine motor skills development by providing a variety of toys and monitoring children's progress. The research concludes that toddler play has a positive effect on fine motor skills development in 2-3 years old children. Parents should recognize the importance of toy exposure and actively engage their children in play activities. Teachers should provide a conducive environment and a range of toys to facilitate fine motor skills development. The findings emphasize the significance of toddler play in supporting children's overall motor skills and highlight the collaborative effort required between parents and teachers in promoting healthy development in this age group. The findings are based on the hypothesis below

Ho1 : There is a different in the fine motor skill of children who are exposed to toys and are not given exposure to toys

Based on observations and a survey, it is hypothesized that there is a difference in the fine motor skill development of children who are exposed to toddler toys compared to those who are not. The parents of the children reported that those exposed to toddler toys at home find it easier to engage in activities that require holding and grasping skills. According to Wang (2020), children have a sensitive learning period and can recognize and internalize social cues from their environment. Therefore, it is essential for adults to play a role in encouraging children's exposure to toddler toys, as these toys can serve as tools for encouraging and influencing their fine motor skill development.

Ho2 : Toddler Play Is The Main Factor That Can Encourage 2- 3 Years Old Children In Developing Their Fine Motor Skills

Based on the conducted observation and survey, it is evident that toddler play not only provides enjoyment to children but also plays a significant role in the development of fine motor skills, especially in children aged 2 to 3 years old. Engaging in play with toddler toys involves the use of small muscles in the fingers and hands, which encourages the refinement of fine motor skills. As stated by Mironcika (2018), regular practice and engagement with fine motor skills contribute to improved muscular abilities, hand-eye coordination, and balance development. The research supports the notion that children thrive in their development through play, and toddler toys, in particular, present opportunities for children to explore, learn, and have fun while enhancing their abilities.

Ho 3 : Parents play an important role in developing children fine motor skill development at home and teachers play an important role in developing children in fine motor skill development at TASKA

The research findings indicate the crucial role parents play in fostering their children's fine motor skills development. It highlights the significance of parents having knowledge and understanding of fine motor skills' importance and actively encouraging their children's progress in this area. Brennan (2021) emphasizes that parents need to facilitate the development of dexterity and strength in their children's hands, making them instrumental in promoting fine motor skills growth. This can be achieved by encouraging children to play and interact with a diverse range of toddler toys, even incorporating everyday items like kitchen tools, which aids in preparing children for tasks like pencil use.

Furthermore, the research emphasizes the importance of teachers' involvement in children's fine motor skills development. Teachers should identify students facing challenges in this aspect and provide them with additional attention and suitable toddler toys that promote fine motor development. Keeping parents informed about children's progress is essential, and Hamilton (2011) suggests that short lessons can be highly effective in enhancing children's learning. Thus, teachers are encouraged to incorporate toys that require hands and fingers' engagement in the classroom, thereby effectively supporting children's fine motor skills development at school.

Ho 4 : Toys as an important resource in developing fine motor skills for children 2-3 years old.

The research findings, based on observations and surveys, strongly suggest that toddler toys not only provide enjoyment for children but also serve as a significant catalyst in developing their fine motor skills. The results from the observation list indicate that children who have been exposed to these toys demonstrate greater ease in performing various activities compared to those who have not had such exposure. Children's learning is closely tied to their play and exploration, as noted by Almqvist (2008), and toys play a central role in encouraging them to discover and engage with the world around them.

Toys act as motivating tools for children from an early age, encouraging them to use their hands and feet to explore and gain valuable learning experiences. Furthermore, toys play a crucial role as enhancers, contributing to well-developed motor skills in children, which can prove beneficial for their future success.

Summary, Conclusion, Discussion, and Recommendations

This report summarizes a study on the effect of toddler play on fine motor skills development in 2–3-year-old children at TASKA KEMAS PPAK Batu Anam. The research aimed to identify factors that encourage fine motor skill development, the role of parents and teachers in fostering this development, and the impact of toddler play on children's fine motor skills. Data was collected through surveys and observations, and the findings provide insights into the implications and recommendations for future research.

The study focused on understanding the effect of toddler play on fine motor skills in 2–3-year-old children. Three research questions were addressed: factors that encourage fine motor skill development, the role of parents in development, and the role of teachers in development. Data was collected through observations of 6 children and surveys completed by parents and teachers at TASKA KEMAS PPAK Batu Anam.

The findings revealed that children exposed to toddler toys at home demonstrated better fine motor skill development compared to those without exposure. Parents played a significant role in fostering fine motor skills through toy exposure and engagement at home. Teachers also had a role in supporting development but to a lesser extent. The study found that exposure to toddler toys positively impacted children's fine motor skills, regardless of their age.

The study's findings have theoretical and practical implications for understanding the importance of toddler toys in fine motor skill development. It emphasizes that toys provide opportunities for sensory and physical development, aiding children in acquiring fine motor skills. Parents should recognize their crucial role in motivating and encouraging their children's fine motor skills development. Teachers, although secondary to parents, play a supportive role in providing a conducive environment and appropriate toys for children's development.

To build upon this study, future research should consider a larger sample size and include both genders. Online survey sessions could promote further discussion and exploration. Additionally, it is recommended to involve specialists or teachers in discussions with parents of children facing difficulties in fine motor skill development. This will help identify effective strategies to support these children.

This study highlights the positive impact of toddler play on fine motor skills development in 2–3-year-old children. Parents play a crucial role in fostering development, while teachers provide support and guidance. The findings underscore the significance of toy exposure and emphasize the importance of collaboration between parents and teachers in promoting children's fine motor skills. By understanding the implications of this research, parents and educators can create a nurturing environment that facilitates the healthy development of children's fine motor skills.

Conclusion

The primary objective of this study was to identify the effect of toddler play on fine motor skills for 2 - 3 years old children at TASKA KEMAS PPAK Batu Anam in this study. The objectives of this study were to identify factors that encouraged 2-3 years old children in developing their fine motor skill development, to determine the important role of parents in developing children's fine motor skills, and also to determine the important role of teachers in developing children's fine motor skills through the three research questions listed as follows:

RQ1: What were the factors that encouraged 2 - 3 years old children in developing fine motor skill development?

RQ2: How did parents play an important role in developing children's fine motor skills?

RQ3: How did teachers play an important role in developing children's fine motor skills?

Research question 1 identified the factors that encouraged 2-3 years old children in developing fine motor skills, which were identified from the results of the observation on 6 children at 2 - 3 years old at TASKA KEMAS PPAK Batu Anam, focusing on their abilities and achievements while engaging in activities such as holding, folding, coloring, matching, and stringing beads. Research question 2 aimed to identify the parents' role in exposing their children to toddler play and the effect on their children’s fine motor skill development. This information was gathered from the parents' responses on the survey forms given to the parents of 2-3 years old children at TASKA KEMAS PPAK Batu Anam. Finally, research question 3 aimed to identify the role of teachers in developing children’s fine motor skills, which were

identified from the teachers' answers on the survey forms given to the 2-3 years old teachers at TASKA KEMAS PPAK Batu Anam.

From the results of the study, it was found that four children were given exposure to toys by their parents, while another two children were not given exposure to toys by their parents at home. However, the teachers who taught children at 2 to 3 years old at TASKA KEMAS PPAK Batu Anam provided all the children at TASKA KEMAS PPAK Batu Anam with exposure to toys during school sessions and learning times. Based on the observations carried out on the 2-3 years old children at TASKA KEMAS PPAK Batu Anam through activities like holding, folding, coloring, matching, and stringing beads, those children who were exposed to toys at home were more proficient in the level of their fine motor skills development compared to the children who were not given exposure to toys at home. The study found that fine motor skills could be acquired by children despite their different ages, as three-year-old children who were exposed to toddler toys exhibited similar fine motor skills development as a two-year-old child and other three-year-olds.

Based on the study's results regarding the effect of toddler play on fine motor skills for 2 - 3 years old children at TASKA KEMAS PPAK Batu Anam, it was also found that parents played a greater role in developing and stimulating their children's fine motor skill development compared to teachers at the school. This was attributed to the difference in exposure to toddler toys at home, while the exposure to such toys at school was the same for all children during their school sessions. However, the results indicated that children who were exposed to games at home were better at mastering the level of fine motor skill development compared to children who were not exposed to toddler toys at home.

The findings of this study contributed to the understanding of the importance of toddler toys in children’s fine motor skills development. The study revealed that exposure to toddler toys had a positive impact on the fine motor skills development of children between 2 to 3 years old. These findings held both theoretical and practical implications for everyone concerned about factors in developing children's fine motor skills. The implications are as follows

1) Fine motor skill development in 2-3 years old children's development

a. The study indicated that observations on children's fine motor skills development were affected by the exposure to toddler toys at home and at school. This underscored the importance of toddler toys as tools for developing children's fine motor skills. Through practice, these toys aided in the development of sensory skills and physical abilities. According to Payne (2020), toys play a significant role in enhancing imagination, cognitive abilities, and physical development.

b. The findings revealed that children exposed to toddler toys were more proficient in their fine motor skills development compared to those who were not exposed. Children who had exposure to toddler toys were able to hold and grasp items more carefully.

c. Toddler toys not only brought joy to children's lives but also acted as developmental boosters, contributing to their overall self-development.

2) Parent's role in developing 2-3 years old children in fine motor skill development:

a. Parents emerged as primary sources of motivation and played a crucial role in developing children's fine motor skills. Parents needed to be aware of the effects of toddler toys on fine motor skills development.

b. The development process of young children began at home, with parents serving as the initial educators. Parents were instrumental in children's skill development, and their

role extended beyond the home to the continuous learning process that schools provided (Tucker, 2019).

c. Acknowledging that some children were more active at home, parents were encouraged to engage their children in educational activities to foster their self-development.

3) Teacher's role in developing 2-3 years old children in fine motor skill development

a. Teachers played an important role in developing children's fine motor skills by providing toddler toys and facilitating activities that boosted fine motor skill development. However, parents remained the primary sources of influence.

b. Teachers' role in enhancing fine motor skill development was pivotal. According to Purdy (2022), teachers needed to incorporate fine motor skill activities throughout the day to ensure children achieved the required dexterity level. Play facilitated physical development, especially fine motor skills development, and fostered imagination and perseverance in children's learning journey.

Significant of Research

The research further accentuates the value of play in a child's life, emphasizing that it's not only an enjoyable activity but also a potent tool for learning. Play contributes to the development of cognitive, psychosocial, emotional, linguistic, and motor skills. The text highlights that play helps children tackle challenges, fostering problem-solving skills. The physical and motor development resulting from play positively impact children's health and overall growth. The importance of early exposure to toys and various activities, such as playing with dough, carrying objects, writing, using scissors, stringing beads, and eating with utensils, is emphasized as these activities promote fine motor skill development. In essence, the research signifies the necessity of incorporating play, appropriate toys, and collaborative efforts between parents and teachers in children's development. It reinforces the idea that fostering fine motor skills is not reliant on extravagant tools but on consistent engagement in activities that encourage children to hold, fold, color, match, and string, ultimately contributing to their holistic growth and future success.

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