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Effect APE Maze On Fine Motor Children 4-6 Years Old In Kartini Kindergarten Curah Buntu Jember

Putri Cindy Laura Faradila[*], Yuningsih[2]

[1]Student of Department of Midwifery, Faculty of Sciences, Universitas dr. Soebandi, Indonesia
[2]Department of Midwifery, Faculty of Sciences, Universitas dr. Soebandi, Indonesia

***Corresponding Author:**
Putri Cindy, student of midwifery Department Faculty of sciences, Universitas dr. Soebandi,Indoenesia B Building 1nd Floor Kampus Universitas dr. Soebandi, Indonesia, E-mail: putricindylaurafaradila@gmail.com, Phone: +6282334945772

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ABSTRAK
Perkembangan motorik halus anak usia 0-6 tahun berkembang pesat. Menurut Kemenkes RI 2020, sebanyak 18% anak di indonesia mengalami gangguan motorik halus. Akibatnya, anak sulit berkonsentrasi, merasa tidak percaya diri, dan muncul sikap ketergantungan. Salah satu kegiatan yang dapat meningkatkan perkembangan motorik halus anak yakni dengan menggunakan APE Maze. Tujuan penelitian untuk menganalisis pengaruh APE Maze terhadap motorik halus anak usia 4-6 Tahun di TK Kartini Desa Curah Buntu Jember. Desain penelitian experiment pre-post test control goup design. Teknik sampling menggunakan system random sampling. Populasi 25 responden dan sampel 24 responden yang terdiri dari 8 orang pada setiap kelompok APE Maze level 1, 2, dan kelompok kontrol. Teknik pengumpulan data menggunakan DDST II. Uji normalitas menggunakan Kolmogorov-Smirnov Test. Uji bivariate Wilcoxon dan dilanjutkan uji Mann Whittney U. Uji normalitas Kolmogorov Smirnov Test <0,001 artinya data tidak terdistribusi normal. Terdapat pengaruh APE Maze level 1 terhadap motorik halus anak usia 4-6 Tahun di TK Kartini Desa Curah Buntu Jember dengan p value 0,008< a 0,05.Terdapat pengaruh APE Maze level 2 terhadap motorik halus anak usia 4-6 Tahun di TK Kartini Desa Curah Buntu Jember dengan Asymp. Sig. (2-tailed) sebesar p value 0,011< a 0,05. Kesimpulan penelitian ini yakni terdapat pengaruh APE Maze terhadap motorik halus anak usia 4-6 Tahun di TK Kartini Desa Curah Buntu Jember. Anak dengan perkembangan motorik halus yang optimal dapat menjadi generasi yang unggul. Oleh karena itu, stimulasi APE Maze dapat menjadi alternative upaya untuk mengoptimalkan perkembangan motorik halus anak.

Keywords:
Children, APE, Maze, Fine Motor Skills.

ABSTARCT
Fine motor development children aged 0–6 years progresses rapidly. According to Ministry of Health (2020), 18% of Indonesian children experience fine motor disorders. This condition often leads to difficulties in concentration, low self-confidence, and a tendency to become dependent. An activity proven to support fine motor development is the use of a Maze Educational Play Tool (APE Maze). The pupose to analyze APE Maze effects on the fine motor development of children aged 4–6 years at Kartini Kindergarten, Curah Buntu Village, Jember. This study applied a pre-post test control group experimental. Sampling was conducted using a simple random technique. Out of 25 children, 24 were selected and divided into three groups: APE Maze Level 1, level 2, and a control group. Data were collected using the Denver Developmental Screening Test II (DDST II). The Kolmogorov–Smirnov test was used for normality, while the Wilcoxon and Mann–Whitney U tests were used bivariate analysis. Results the Kolmogorov–Smirnov test showed < 0,001, indicating non-normal data

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distribution. APE Maze Level 1 had a significant effect on fine motor skills of children aged 4-6 years with p value 0,008< a 0,05. As did APE Maze Level 2 with Asymp. Sig. (2-tailed) p value 0,01< a 0,05. The conclusion is APE Maze significantly influences fine motor development in children aged 4–6 years. Children with optimal fine motor skills are more likely to become independent and high-achieving individuals. Thus, APE Maze can be considered an effective strategy to enhance early childhood motor development.

Introduction

Preschool age refers to children aged 0-6 years. During this period, a child's development is quite rapid, commonly known as the golden age. There are four aspects of child development: fine motor, gross motor, language, and personal-social skills. A frequent issue encountered in elementary school is concentration disorders, which leave children unprepared for learning. This often occurs due to a lack of stimulation in fine motor development. Fine motor development is the process of increasing the ability to use or move small muscles with precision. This serves as the foundation for a child's learning success, particularly in writing and drawing; therefore, fine motor development must be optimized.

Based on information from the World Health Organization (WHO) in 2023, as many as 52.9 million children under the age of 5 experience developmental disabilities globally. In 2020, the World Health Organization reported that 28.7% of toddlers suffer from growth and developmental disorders, with Indonesia ranking as the third-highest country in the Southeast Asian Region (Heryanto et al., 2024). National data from the Indonesian Ministry of Health (Kemenkes RI) states that the incidence rate of fine motor disorders among preschool children in Indonesia in 2020 was approximately 13%-18% (Novela et al., 2024). According to 2018 Ministry of Health data, the prevalence of fine motor development disorders among preschool-aged children in East Java Province reached 24.5% (Elizya et al., 2023). In Jember Regency, a study conducted by Umami et al. (2022) indicated that 47.7% of children have fine motor impairments. Based on preliminary study observations on November 2, 2024, at Kartini Kindergarten in Curah Buntu Village, Jember, 8 out of 10 children experienced fine motor issues as measured using the DDST II.

The lack of stimulation in children's small muscles is influenced by several factors, such as technological advancements that lead children to play with gadgets

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frequently, resulting in suboptimal use of their free time for fine motor activities. This inevitably causes underdevelopment in children's fine motor skills, leading to concentration disorders and writing difficulties when they enter school (SUNDARI et al., 2023). Furthermore, delays in fine motor skills can have several impacts, such as feelings of low self-confidence, jealousy toward other children, and the emergence of dependency. This can make it difficult for children to socialize with their peers, which is crucial for transitioning to higher educational levels. The impact of fine motor delays can also cause a decline in academic performance compared to their age group. Fundamentally, children at the kindergarten level possess fine motor skills that are not yet as developed as those in elementary school. Therefore, stimulation or interventions are required to control and enhance children's fine motor development (Fadilah et al., 2024).

In developing the fine motor skills of early childhood, it is essential to consider learning models, strategies, and the media used to support optimal developmental achievements. Young children generally enjoy play-based activities. One activity that can influence children's fine motor development is the use of Educational Teaching Aids (APE) in the form of a Maze. A Maze is a simple path-board game designed to find the correct route to a predetermined goal. APE Mazes can be implemented to enhance children's fine motor skills, as this game requires hand movements and eye-hand coordination (Arpandjaman et al., 2023). There are various types of Mazes for children, such as circular shapes, tracing a path to a house, or finding the way to school. Tracing-path Maze media is considered practical for fine motor development because it meets assessment criteria for ease of use, safety, and engagement for children (Mununawaroh et al., 2020). The practicality of tracing-path Mazes in fine motor development aligns with research conducted on a sample of 32 children aged 4-5 years at Dharma Wanita Sumber Pangkur Kindergarten, Ngawi (Mununawaroh et al., 2020). The novelty of this research lies in the use of Level 1 and Level 2 Tracing APE Mazes to compare their effectiveness. Furthermore, these APE Mazes are reusable. Based on this background, the researcher is interested in studying the influence of APE Mazes on the fine motor skills of children aged 4-6 years

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at Kartini Kindergarten, Curah Buntu Village, Jember.

Method

This research is a quantitative study utilizing a pre-test post-test control group design to measure children's fine motor skills before and after the APE Maze intervention. The population consisted of 25 respondents, with a final sample of 24 respondents due to one participant dropping out after moving schools. The sample was divided into three groups: 8 respondents in the Level 1 APE Maze group, 8 respondents in the Level 2 APE Maze group, and 8 respondents in the control group. The sampling technique employed was systematic random sampling, which involves selecting samples randomly from a homogeneous population without regard to strata. The inclusion criteria for this study were preschool children in Class A, aged 4-6 years, at Kartini Kindergarten, Curah Buntu Village, Jember, whose parents consented by signing the informed consent form. Meanwhile, the exclusion criteria included preschool children diagnosed with existing physical or developmental disorders.

This study obtained ethical clearance under number: 746/KEPK/UDS/II/2025 on February 18, 2025. The research was conducted at Kartini Kindergarten, Curah Buntu Village, Jember. The pre-test was administered on February 19, 2025, followed by the APE Maze intervention, which was carried out over six days from February 20 to February 26, 2025. The post-test was then conducted on February 26, 2025. Data collection was performed through direct observation using Standard Operating Procedures (SOP) and the Denver Developmental Screening Test II (DDST II) as instruments. Once collected, the data were processed and analyzed using SPSS version 30 software.

Statistical analysis in this study consisted of univariate and bivariate analyses. Univariate analysis was used to explain or describe the characteristics of each research variable, employing the Kolmogorov-Smirnov test for normality. Two types of bivariate analyses were utilized the Wilcoxon signed-rank test and the Mann-Whitney U test. The Wilcoxon test was conducted to determine the effect of the APE Maze on fine motor development within each paired group measured twice (pre-test and post-test). If a significance value of $\alpha < 0.05$ was obtained H0 was rejected and H1 accepted, indicating a

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significant effect of variable X on Y that can be generalized to the study population; conversely, if the significance value was α > 0.05, there was no significant effect. The Mann-Whitney U test was employed as a non-parametric statistical test to compare differences between two independent groups. If the *p-value* was less than the significance level α < 0.05, it indicated a significant difference between variables X and Y (Arimbi Pamungkas, 2024).

Results

General Data

Table 1. Respondent Characteristics Based on the Age of Preschool Children at Kartini Kindergarten, Curah Buntu Village, Jember, 2025

	Age of Control Group		Age of APE Maze Level 1 Group		Age of APE Maze Level 2 Group	
	F	*Percent*	*F*	*Percent*	*F*	*Percent*
4 Years Old	1	12.5	5	62.5	4	50.0
5 Years Old	6	75.0	3	37.5	3	37.5
6 Years Old	1	12.5			1	12.5
Total	8	100.0	8	100.0	8	100.0

Source: Primary Data 2025

In Table 1, the majority of respondents in the control group were 5 years old, accounting for 75%. In the APE Maze Level 1 group, the largest age group was 4 years old, representing 62.5%. Similarly, in the APE Maze Level 2 group, the majority were 4 years old, with a percentage of 50%. Data collection was conducted during the pretest on February 19, 2025.

Table 2. Respondent Characteristics Based on Gender of Preschool Children at Kartini Kindergarten, Curah Buntu Village, Jember, 2025

	Gender of Control Group		Gender By APE Maze Level 1 Group		Gender By APE Maze Level 2 Group	
	F	*Percent*	*F*	*Percent*	*F*	*Percent*
Male	3	37.5	3	37.5	1	12.5
Female	5	62.5	5	62.5	7	87.5
Total	8	100.0	8	100.0	8	100.0

Source: Primary Data 2025

In Table 2, the majority of respondents in both the control group and the APE Maze Level 1 group were female, each accounting for 50%. In the APE Maze Level 2 group, the majority of respondents were also female, representing 87.5%. Data collection was conducted during the pretest on February 19, 2025.

Specific Data

Table 3. Pre-test of Fine Motor Development Among Children Aged 4-6 Years at Kartini Kindergarten, Curah Buntu Village, Jember, 2025.

	Control Group Pre-test		Maze Level 1 Group Pre-test		Maze Level 2 Group Pre-test	
	F	*Percent*	*F*	*Percent*	*F*	*Percent*
Delayed	5	62,5	3	37.5	4	50.0
Caution	2	25.0	3	37.5	4	50.0
Normal	1	12.5	2	25.0		
Total	8	100.0	8	100.0	8	100.0

Source: SPSS Primary Data Analysis 2025

Based on Table 3, the pre-test results for the control group showed that the majority

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of respondents fell into the *delayed* category, totaling 5 children (62.5%). In the APE Maze Level 1 group, there were 3 respondents in the *delayed* category and 3 respondents in the *caution* category. Regarding the APE Maze Level 2 group, 4 respondents were categorized as *delayed* and 4 respondents as *caution*.

Table 4. Post-test of Fine Motor Development Among Children Aged 4-6 Years at Kartini Kindergarten, Curah Buntu Village, Jember, 2025.

	Control Group Post-test		Maze Level 1 Group Post-test		Maze Level 2 Group Post-test	
	F	*Percent*	*F*	*Percent*	*F*	*Percent*
Delayed	3	37.5	0	00.0	0	00.0
Caution	3	37.5	0	00.0	0	00.0
Normal	2	25.0	3	37.5	4	50.0
Advanced	0	00.0	5	62.5	4	50.0
Total	8	100.0	8	100.0	8	100.0

Source: SPSS Primary Data Analysis 2025

Based on Table 4, the post-test results for the control group showed that 3 respondents were in the *delayed* category and 3 respondents were in the *caution* category. After receiving the Maze Level 1 intervention six times, the fine motor skills of the respondents in the APE Maze Level 1 group showed an improvement, with 5 respondents reaching the *advanced* category. Meanwhile, in the APE Maze Level 2 group, the respondents' fine motor skills also improved, with 4 respondents categorized as *normal* and 4 respondents categorized as *advanced*

Table 5. The Effect of APE Maze on the Fine Motor Skills of Children Aged 4-6 Years at Kartini Kindergarten, Curah Buntu Village, Jember, 2025.

		Ranks		
		N	Z	Asymp. Sig. (2-tailed)
Post Test Maze Level 1 -Pre Test Maze Level 1	Negative Ranks	0[a]		
	Positive Ranks	8[b]		
	Ties	0[c]		
	Total	8	-2.640[b]	.008
Post Test Maze Level 2 - Pre Test Maze Level 2	Negative Ranks	0[d]		
	Positive Ranks	8[e]		
	Ties	0[f]		
	Total	8	-2.558[b]	.011
Post Test Kelompok Kontrol - Pre Test Kelompok Kontrol	Negative Ranks	0[g]		
	Positive Ranks	3[h]		
	Ties	5[i]		
	Total	8	-1.732[b]	.083
Total		24		

Source: SPSS Primary Data Analysis

(Wilcoxon Test)

Table 6 illustrates the effect of the APE Maze on the fine motor skills of children aged 4-6 years at Kartini Kindergarten, Curah Buntu Village, Jember, following a six-day intervention period from February 20–26, 2025. In the Maze Level 1 group, all 8 respondents showed fine motor development, with post-test scores significantly higher than pre-test scores, yielding an Asymp. Sig. (2-tailed) value of 0.008 < 0.05. This indicates that APE Maze Level 1 has a significant influence on the fine motor skills of children aged 4-6.

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Similarly, all 8 respondents in the Maze Level 2 group experienced development, achieving higher post-test results with an Asymp. Sig. (2-tailed) value of 0.011 < 0.05, confirming that APE Maze Level 2 also significantly affects children's fine motor skills. In contrast, in the control group, only 3 respondents showed higher post-test results, while 5 respondents showed no change between their pre-test and post-test scores. This signifies that there is no significant improvement in children's fine motor development without the APE Maze intervention.

Table 6. The Effectiveness of APE Maze on the Fine Motor Skills of Children Aged 4-6 Years at Kartini Kindergarten, Curah Buntu Village, Jember, 2025.

Ranks				
	Level *Maze*	N	Z	Asymp. Sig. (2-tailed)
Post Test	Control Gruop	8		
	Maze Level 1	8		
	Total	16	-3.159	.002
Post Test	Control Gruop	8		
	Maze Level 2	8		
	Total	16	-3.062	.002
Post Test	*Maze* Level 1	8		
	Maze Level 2	8		
	Total	16	-.488	.626

Source: SPSS Primary Data Analysis (Mann-Whitney U Test)

Table 7 illustrates the comparative effectiveness of APE Maze Level 1, Level 2, and the control group on children's fine motor development following a six-day intervention period from February 20–26, 2025. The Mann-Whitney U test results confirm a significant difference in fine motor development between the APE Maze Level 1 group and the control group, with an Asymp. Sig. (2-tailed) p-value of 0.002 < 0.05. The Maze Level 1 group demonstrated a greater impact, as evidenced by a mean rank of 12.3 compared to the control group's mean rank of 4.88. Similarly, a significant difference was observed between the APE Maze Level 2 group and the control group (p=0.002 < 0.05), where the Maze Level 2 group showed higher effectiveness with a mean rank of 12.00 versus 5.00 in the control group. Conversely, no significant difference was found between the APE Maze Level 1 and Level 2 groups, as the p-value was 0.626 > 0.05. Nevertheless, the Maze Level 1 group yielded a slightly higher influence with a mean rank of 9.00 compared to 8.00 for the Maze Level 2 group.

Discussion

1. **Fine Motor Development of Children Aged 4-6 Years Prior to APE Maze Intervention in Level 1 and Level 2 Groups at Kartini Kindergarten, Curah Buntu Village, Jember**

   The fine motor skills pretest for

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children aged 4-6 years was conducted on February 19, 2025, at Kartini Kindergarten, Curah Buntu Village, Jember, utilizing the DDST II (Denver Developmental Screening Test II) assessment sheet. The pretest assessment for the APE Maze Level 1 group, involving 8 respondents (attendance numbers 9-16), revealed that 3 respondents (37.5%) were interpreted as *delayed*, 3 respondents (37.5%) as *caution*, and 2 respondents (25.0%) as *normal*. Regarding the APE Maze Level 2 group, which consisted of 8 respondents (attendance numbers 1-8), the results indicated that 4 respondents (50.0%) were interpreted as *delayed* and 4 respondents (50.0%) as *caution*. Furthermore, the assessment for the Control Group (attendance numbers 17-24) using the DDST II showed that 5 respondents (62.5%) were interpreted as *delayed*, 2 respondents (25.0%) as *caution*, and 1 respondent (12.5%) was classified as *normal*.

Toddlers who grow and develop optimally according to their age will become healthy adults, a process influenced by both genetic factors and the environmental conditions in which they grow (Sari et al., 2024). Fine motor development varies between children even at the same age, and delays are often caused by a lack of parental stimulation, limited opportunities to hone motor skills, and overprotection. Ideally, stimulation should be provided during interactions with the child, as frequent and consistent stimulation is more effectively received by the senses and transmitted to the brain, ensuring that the coordination of small muscles in the hands is well-trained. To address fine motor development issues, play therapy using Educational Purpose Apparatus (APE) can be implemented, as it allows for the identification of a child's strengths, weaknesses, and interests in completing their play-based tasks (Putri & Sulistyawati, 2024).

According to the researcher, older age does not necessarily guarantee the maturity of fine motor development. As a child's age increases, the possibility of

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experiencing developmental delays remains significant if the stimulation provided is inconsistent. In addition to age, gender also influences a child's fine motor development, as girls tend to be more interested and engaged in activities such as drawing, coloring, or playing with small tools that involve fine muscle coordination. Conversely, boys are often more active in gross motor activities, such as running, jumping, or physical play, which may affect their fine motor development due to a lack of exposure to activities that hone hand skills and visual-motor coordination. Consequently, gender differences are not permanent barriers, but they require appropriate strategies to ensure that every child can develop optimally according to their potential. Therefore, the researcher will provide an intervention using the APE Maze to improve the fine motor skills of children aged 4-6 years at Kartini Kindergarten, Curah Buntu Village, Jember.

2. **Fine Motor Development of Children Aged 4-6 Years Following APE Maze Intervention in Level 1 and Level 2 Groups at Kartini Kindergarten, Curah Buntu Village, Jember**

Post-test data were collected on February 26, 2025, using the DDST II. Over a six-day period (February 20–26, 2025), the control group (attendance numbers 17-24) did not receive the APE Maze intervention. Post-test results for this group showed that among the 8 participating children, 3 respondents (37.5%) were interpreted as *delayed*, 3 (37.5%) as *caution*, and 2 (25%) fell into the *normal* category. According to the Wilcoxon test, there were no decreases in scores (Negative Ranks = 0), 3 respondents showed improvement (Positive Ranks = 3), and 5 respondents showed no change (Ties = 5). A significance value (Asymp. Sig. 2-tailed) of 0.083 > 0.05 indicates no significant effect on fine motor development within the control group. Meanwhile, the APE Maze Level 1 group (attendance numbers 9-16) received a six-day intervention from February 20–26,

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2025; post-test results for these 8 children revealed that 3 respondents (37.5%) were interpreted as *normal* and 5 (62.5%) as *advanced*. The Wilcoxon test for this group showed no decreases (Negative Ranks = 0), 8 respondents showed improvement (Positive Ranks = 8), and there were no ties (Ties = 0). A significance value of 0.008 < 0.05 demonstrates that the APE Maze Level 1 significantly influences the fine motor development of children aged 4-6 at Kartini Kindergarten, Curah Buntu Village, Jember. Similarly, the APE Maze Level 2 group (attendance numbers 1-8) received the same six-day intervention, resulting in 4 respondents (50%) being interpreted as *normal* and 4 (50%) as *advanced*. The Wilcoxon test indicated no decreases (Negative Ranks = 0), 8 respondents showed improvement (Positive Ranks = 8), and there were no ties (Ties = 0). A significance value of 0.011 < 0.05 confirms the significant influence of APE Maze Level 2. Finally, the Mann-Whitney U test yielded a significance value of 0.626 between the Level 1 and Level 2 interventions, meaning that both levels possess equal effectiveness in improving children's fine motor skills.

The APE Maze enhances fine motor development as it enables children to learn writing tool-holding techniques and exercise precision while navigating winding paths. The advantages of providing Maze play therapy intervention include preparing cognitive development (focus), fostering hand-eye coordination, and training a child's overall coordination skills. Furthermore, the variety of path shapes available allows children to practice finger flexibility, an activity that effectively stimulates brain function (Sianipar et al., 2022).

According to the researcher, the APE Maze requires children to focus on moving a writing tool along a specific path, which directly trains hand-eye coordination, precision, concentration, and small muscle control. The varied designs of the Maze, featuring adjustable difficulty levels, allow children to gradually

master the required skills. These results offer important implications, suggesting that educational tools like the Maze are not only entertaining but also serve as enjoyable and interactive stimulation tools for concretely developing children's fine motor skills.

3. **The Effect of APE Maze on the Fine Motor Skills of Children Aged 4-6 Years at Kartini Kindergarten, Curah Buntu Village, Jember**

This study involved 24 respondents divided into three groups: a control group, an APE Maze Level 1 group, and an APE Maze Level 2 group, each consisting of 8 respondents. To examine the impact of the APE Maze on children's fine motor skills, the Wilcoxon test was employed by measuring pretest and post-test scores within each group. The Wilcoxon test results for the control group indicated no significant effect on fine motor development without the APE Maze intervention, as evidenced by an Asymp. Sig. (2-tailed) value of $0.083 > 0.05$. In contrast, the APE Maze Level 1 group showed a significant influence on the fine motor skills of children aged 4-6 at Kartini Kindergarten, Curah Buntu Village, Jember, with an Asymp. Sig. (2-tailed) of $0.008 < 0.05$. Similarly, the APE Maze Level 2 group demonstrated a significant effect, with an Asymp. Sig. (2-tailed) of $0.011 < 0.05$. Furthermore, since two different levels of APE Maze were utilized, the Mann-Whitney U test was conducted to compare the effectiveness between APE Maze Level 1, Level 2, and the control group. The Mann-Whitney U test confirmed a significant difference in fine motor development between the APE Maze Level 1 group and the control group ($p = 0.002 < 0.05$), as well as between the APE Maze Level 2 group and the control group ($p = 0.002 < 0.05$). However, no significant difference was found between the APE Maze Level 1 and Level 2 groups, with an Asymp. Sig. (2-tailed) value of $0.626 > 0.05$.

This study aligns with the findings of Landung & Ulpi (2024), which demonstrated that maze media

constructed from recycled materials can enhance the fine motor skills of children at Tunas Harapan Kaliba Mamase Kindergarten, Walenrang District, Luwu Regency; this improvement was evidenced by observations conducted from Cycle I to Cycle II. Furthermore, Virianingsih et al. (2021) state that the Double-Sided Maze (Madasi) Educational Purpose Apparatus (APE) is valid and feasible for stimulating children's sensory-motor skills. The integration of APE into the learning process makes education more engaging and stimulates various aspects of child development. Additionally, it fosters a more enjoyable learning atmosphere, encouraging children to become more active participants.

According to the researcher, the APE Maze—with its characteristic winding paths that train hand-eye coordination, movement control, and focus—serves as an effective medium for stimulating fine motor development in early childhood. This improvement is supported by several factors, such as the principle of learning through play which prevents children from feeling pressured, the repetition and consistency of exercises that provide opportunities to master fine motor skills, and immediate feedback that helps refine their movement control. Therefore, the APE Maze can be utilized as an effective fine motor stimulation method in the education of children aged 4-6 years.

Conclusion

1. Before the Level 1 and Level 2 APE Maze intervention at Kartini Kindergarten, Curah Buntu Village, Jember, 50.0% of the fine motor skills of children aged 4–6 years were in the delayed category.
2. Following the Level 1 and Level 2 APE Maze intervention at Kartini Kindergarten, Curah Buntu Village, Jember, 37.5% of the fine motor skills of children aged 4–6 years reached the advanced category.
3. There is a significant influence of the APE Maze on the fine motor development of children aged 4–6 years at Kartini Kindergarten, Curah Buntu Village, Jember.

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Ethics Approval and Consent to Participate

This research has received an ethical feasibility test at dr. Soebandi with number: 746/KEPK/UDS/II/2025 pada tanggal 18 Februari 2025.

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