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The Relationship Between Origami Activities and Fine Motor Skills in Early Childhood

Yulia Purnamasari[1], Dina Nanda Putri[2], Vebionita Megi Putri[2], Silvia Novi Yanti[2]
[1]STAI Yayasan Tarbiyah Islamiyah (YASTIS) Lubuk Bagalung Padang, Indonesia
[2] STAI-YDI Lubuk Sikaping, Pasaman Sumatera Barat, Indonesia
yuliapurnamasari0207@gmail.com, dinanandaputri.04@gmail.com, vebionita17@gmail.com, snovianti0404@gmail.com *

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Abstract

Fine motor development is an important aspect of early childhood development that needs to be stimulated through various learning activities. One activity that can develop children's fine motor skills is paper folding (origami). This study aims to determine the relationship between paper folding (origami) and fine motor skills in early childhood. This study used a quantitative approach with a correlational method. The research sample consisted of 25 children from two classes, B1 and B3. Data collection techniques used observation and documentation, using an observation sheet for children's fine motor skills. Data analysis was conducted through normality tests, linearity tests, and Pearson correlation tests using SPSS. The results showed a very strong and significant relationship between paper folding (origami) and fine motor skills in early childhood, with a correlation coefficient of r = 0.837 and a significance level of p = 0.000 (p < 0.05). Thus, origami activities can be an effective alternative learning activity for developing children's fine motor skills.

INTRODUCTION

Early childhood education is the primary foundation for developing a quality generation. During this period, all aspects of child development develop rapidly, including physical-motor, cognitive, language, social-emotional, and religious and moral values. The age of 0–6 is known as the golden age because during this period, children are highly sensitive to environmental stimulation (Eriyana et al. 2024). Therefore, early childhood education must provide appropriate stimulation to ensure optimal development of a child's full potential. arly childhood education is the primary foundation for developing a quality generation.

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During this period, all aspects of a child's development develop rapidly, including physical-motor, cognitive, language, social-emotional, and religious and moral values. The ages of 0–6 are known as the golden age because during this period, children are highly sensitive to various stimuli from their environment. Therefore, early childhood education needs to be optimally designed to provide the appropriate stimulation for the development of a child's full potential.

One aspect of development that plays a crucial role in a child's readiness to learn is fine motor development. Fine motor skills relate to the ability to use small muscles, especially the fingers, which require hand-eye coordination. These skills are essential for various activities that children frequently engage in, such as writing, drawing, cutting, stringing beads, stacking blocks, and manipulating various small objects around them. Good fine motor development will help children become more independent, confident, and able to complete various learning tasks more optimally.

Fine motor development in early childhood can be achieved through various fun activities tailored to their characteristics. At this age, children learn through play, so learning should be packaged in meaningful play activities. Through play, children can simultaneously develop physical, cognitive, social, and emotional abilities. Play activities that involve hand-eye coordination have been proven effective in helping children develop fine motor skills. One activity that can be used to stimulate fine motor development is paper folding, or origami.

Origami is the Japanese art of paper folding that aims to form various objects. This activity involves active use of the fingers, precision, patience, and the ability to follow instructions step by step. Furthermore, origami also trains hand-eye coordination, which is crucial for children's fine motor development. Through paper folding, children learn various movements such as pressing, folding, adjusting shapes, and paying attention to creases. These movements can strengthen small musclesin children's hands and fingers. Furthermore, this activity can improve concentration, creativity, and children's ability to understand the sequence of certain steps. Therefore, origami activities not only benefit fine motor development but can also support the development of children's cognitive and creative aspects.

One aspect of development that is crucial for children's learning readiness is fine motor development. Fine motor skills relate to the ability to use small muscles, especially the fingers, which requires hand-eye coordination (Azizah et al. 2023). These skills form the foundation for various activities such as writing, drawing, cutting, stringing, and manipulating small objects. Children with good fine motor skills tend to be more confident and independent in completing learning tasks (Listiyani, A. 2024). Fine motor development is closely related to children's readiness to participate in formal learning activities. Children who have well-developed fine motor skills tend to be more prepared to engage in academic tasks such as writing, drawing, coloring, and manipulating learning materials. Therefore, providing stimulation that involves finger movement and hand coordination is very important during early childhood education. Teachers are expected to design learning activities that can stimulate the development of these abilities through interesting and meaningful experiences for children.

One learning activity that is widely recommended for stimulating fine motor development is art-based activities. Art activities allow children to explore movements using their hands while expressing their creativity and imagination. Activities such as drawing, cutting, coloring, and paper folding provide opportunities for children to practice controlling their finger movements. Through repeated practice in these activities, children's hand muscles become stronger and more flexible, which supports the improvement of fine motor skills.

The development of fine motor skills in early childhood can be achieved through directed and meaningful play activities. Play is the primary means for children to learn and develop their abilities. Play activities that involve hand-eye coordination have been shown to be effective in improving children's fine motor skills (Oktaviani et al. 2024).

One form of play that can be used to stimulate fine motor skills is paper folding, or origami. Origami is the Japanese art of paper folding, designed to create various objects. This activity involves finger dexterity, precision, concentration, and hand-eye coordination (Kusdinar et al. 2025). Furthermore, origami can develop children's creativity, imagination, and patience (Romadloni, M.A. et al. 2025).

Several previous studies have shown that paper folding has a positive relationship and influence on children's fine motor development (Puspiani et al. 2024). Origami activities are also considered to align with the teacher's role as a facilitator who provides meaningful learning experiences for children (Reviani, M.F. (2023). Based on initial observations at RA Al-Ikhlas, origami activities have been implemented in learning.

However, the relationship between these activities and children's fine motor skills has not been studied quantitatively. Therefore, this study aims to determine the relationship between paper folding (origami) activities and fine motor skills in early childhood.

METHODS

This study used a quantitative approach with a correlational method. This method was used to determine the relationship between variable X (paper folding/origami activities) and variable Y (children's fine motor skills). The study population was all 59 children in Group B at RA Al-Ikhlas. The study sample consisted of 25 children from classes B1 and B3. Data collection techniques used observation and documentation. Observations were conducted to directly observe children's fine motor skills during the paper folding activities (Fitriyah, L., & Jazuly, A. (2025). The research instrument was an observation sheet containing indicators of fine motor skills. Children. Instrument validity and reliability tests were conducted using SPSS. Data analysis techniques included the Shapiro-Wilk normality test, linearity test, and Pearson Product Moment correlation test.

RESULT AND DISCUSSION

The development of fine motor skills in early childhood is a crucial aspect of the learning process in early childhood education institutions. Fine motor skills relate to a child's ability to use small muscles, especially those in the fingers, which require eye-hand coordination. This ability is crucial because it forms the foundation for various learning activities, such as writing, drawing, cutting, stringing, and other activities that require precision and coordination of hand movements.

Efforts to develop children's fine motor skills can be achieved through various active, creative, and fun learning activities. Teachers play a crucial role in designing learning activities that provide appropriate stimulation for children's development. One activity that can be used to stimulate children's fine motor development is paper folding, or origami. This activity involves various finger movements that require precision, concentration, and eye-hand coordination. Origami, as a form of art, has many benefits in children's learning. Early childhood. Through paper folding activities, children learn to follow instructions, understand sequences of steps, and develop visual and spatial thinking skills. Furthermore, this activity can train children's patience and perseverance in completing a task. Repeated paper folding can help strengthen small musclesin the hands, thereby improving the development of children's fine motor skills.

During learning activities, teachers typically demonstrate the step-by-step steps of paper folding so children can easily follow the process. Children are then given the opportunity to try folding independently with the teacher's guidance. This learning process provides a meaningful learning experience for children because they are directly involved in the activity. Thus, origami activities serve not only as play but also as a means to develop various aspects of child development. In addition to benefiting fine motor development, origami activities can also enhance children's creativity and imagination. Children can choose the color of the paper to be used, imagine the shapes they will create, and express their ideas through the resulting folds. This type of art activity can help children develop creative thinking skills while increasing their confidence in their work. After the learning process, observations were made of the children's fine motor skills during the paper folding activity. These observations were conducted using an observation sheet compiled based on indicators of fine motor skills in early childhood.

The data obtained were then analyzed using statistical analysis techniques to determine the relationship between origami activities and children's fine motor skills. The results of the study showed a very strong and significant relationship between paper folding (origami) activities and the fine motor skills of early childhood children at RA Al-Ikhlas. Before presenting the statistical analysis results, the researcher first conducted observations of children's learning activities during the implementation of origami activities. These observations aimed to obtain an overview of how children participated in the activity, how they followed the teacher's instructions, and how they used their fingers when folding the paper. The learning process was carried out in a pleasant atmosphere where the teacher guided the children step by step in making simple origami shapes.

During the activity, most children showed enthusiasm and curiosity in completing the paper folding process. Some children initially experienced difficulties in following the folding instructions; however, with guidance from the teacher, they gradually became able to follow the steps correctly. This learning situation indicates that origami activities can encourage children's active participation while simultaneously training their fine motor coordination

The correlation coefficient value of $r = 0.837$ with a significance level of $p < 0.05$ indicates that the better the origami activities are implemented, the higher the children's fine motor skills. This finding reinforces the view that learning activities that directly involve the use of small hand muscles significantly contribute to children's fine motor development.

Tabel 1
Tabel Hasil Uji Normalitas

Tests of Normality

	Shapiro-Wilk		
	Statistic	df	Sig.
	.988	25	.987
	.978	25	.843

Results: Based on the Shapiro-Wilk normality test results in the table above, the significance value for variable X was 0.987 and for variable Y was 0.843. Because the significance value for both variables is greater than 0.05 ($p > 0.05$), it can be concluded that the research data is normally distributed and suitable for parametric statistical analysis.

Tabel 2

Hasil Uji Reliabilitas

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
MOTORIK * ORIGAMI	Between Groups	(Combined)	15.652	18	.870	2.573	.123
		Linearity	11.663	1	11.663	34.505	.001
		Deviation from Linearity	3.989	17	.235	.694	.743
	Within Groups		2.028	6	.338		
	Total		17.680	24			

The results of the linearity test between children's fine motor development and origami activities show a significance value of 0.743 for Deviation from Linearity, greater than 0.05. This indicates that there is no deviation from linearity, indicating a linear relationship between the two variables. Furthermore, the significance value for Linearity is 0.001, which is less than 0.05, indicating that the linear relationship between fine motor skills and origami activities is statistically significant.

Tabel 3
Tabel Korelasi

		Religiusitas	Agresivitas
Religiusitas	Pearson Correlation	1	.837**
	Sig. (2-tailed)		.000
	N	25	25
Agresivitas	Pearson Correlation	.837**	1
	Sig. (2-tailed)	.000	
	N	25	25

Based on the results of the Pearson correlation test between religiosity and aggressiveness, a correlation coefficient value of $r = 0.837$ was obtained with a significance value of $p = 0.000$ ($p < 0.05$) and a total of 25 respondents. These results indicate that there is a very strong and significant relationship between religiosity and aggressiveness. A positive correlation coefficient value indicates that the relationship between the two variables is unidirectional, meaning that the higher the level of religiosity, the higher the aggressiveness, and vice versa.

Thus, it can be concluded that the hypothesis stating that there is a relationship between religiosity and aggressiveness is accepted. The origami activities at RA Al-Ikhlas are structured and aligned with children's developmental stages. Teachers provide examples of folds, explain the steps simply, and provide opportunities for children to try them independently. This creates a conducive and enjoyable learning environment, so children feel motivated to participate. This aligns with the opinion of Gautam and Agarwal (2023), who stated that teachers act as facilitators, providing meaningful learning experiences for children through engaging and developmentally appropriate activities.

Paper folding activities involve various basic fine motor skills, such as pinching, pressing, folding, and stacking. These movements develop finger strength, hand muscle flexibility, and hand-eye coordination. Repeated and consistent practice will help children master fine motor skills optimally. Therefore, children who frequently engage in origami activities tend to have better fine motor skills than those who rarely engage in similar activities.

In addition to physical training, origami activities also contribute to children's cognitive development. Children learn to understand the sequence of steps, follow instructions, and solve problems when they encounter difficulties folding paper. This process develops logical thinking and concentration skills.

Origami can be used as a medium to develop children's visual and spatial thinking skills (Jf, N. Z., & Mahrani, N. (2025). The results of this study also align with previous research which stated that paper folding activities have a significant relationship with fine motor skills in early childhood. These similar findings indicate that origami is an activity that consistently has a positive impact on children's fine motor development across various educational contexts. Furthermore, origami activities also have a positive impact on the development of children's creativity and imagination (Nidar et al. 2025). Children can choose paper colors, imagine the shapes they will create, and express ideas through the folds. Art activities that involve the hands can enhance creativity and fine motor skills in children. Thus, origami functions not only as a motor activity but also as a means of developing art and self-expression in children.

Well-developed fine motor skills have important implications for children's academic readiness, particularly in writing skills (Halisah, F. N., & Muthohar, S. (2024). Children with good finger control will find it easier to hold a pencil, draw lines, and Forming letters. Fine motor skills are fundamental to a child's success in early academic activities. Therefore, origami activities can be viewed as an initial investment in preparing children for the next level of education (Adam et al. 2024). The findings of this study indicate that activities involving hands-on activity play a crucial role in developing fine motor skills in early childhood.

This aligns with previous studies that suggest that stimulation provided through manipulative activities, such as folding, cutting, or stringing, can help improve hand-eye coordination. Therefore, origami activities can be viewed as an effective learning strategy to support the physical motor development of early childhood.

Based on this description, it can be concluded that paper folding (origami) is an effective, enjoyable, and meaningful learning activity for developing fine motor skills in early childhood. Teachers are advised to regularly integrate origami activities into learning and combine them with other fine motor activities to ensure optimal child development (Jumadi, J. (2025).

CONCLUSION

Based on the results of the research conducted, it can be concluded that paper folding (origami) activities have a very strong and significant relationship with fine motor skills in early childhood. The data analysis results showed a correlation coefficient of $r = 0.837$ with a significance level of $p = 0.000$ ($p < 0.05$), indicating a positive relationship between the two variables. This means that the better the origami activities are implemented, the better the children's fine motor skills will be.

Origami activities can provide effective stimulation for fine motor development because they involve various finger and hand movements that require hand-eye coordination. Furthermore, these activities can also improve children's concentration, accuracy, and creativity during the learning process. Therefore, origami activities can be used as an alternative, engaging and meaningful learning activity to develop fine motor skills in early childhood.

REFERENCES

Adam, G., Divan, S., & Taran, E. G. M. (2024). Analysis of Fine and Gross Motor Stimulation Priorities in Early Childhood Education: Causes and Implications. Jupeis: Journal of Education and Social Sciences, 3(4), 34-43.

Azizah, A. N. I., Nadhifa, A. C., & Hakim, L. (2023). Training Fine and Gross Motor Skills in Early Childhood (Theory and Practice). Tahta Media Publisher.

Erviana, Y., Kasanah, U., Sari, N., Munawir, A. N. E. R., Mahendra, Y., Munawaroh, S., ... & Yansa, H. (2024). Early Childhood Development: Keys for Parents and Educators. Mifandi Mandiri Digital Publisher, 1(01).

Fitriyah, L., & Jazuly, A. (2025). THE EFFECT OF ACTIVITIES ORIGAMI PAPER FOLDING ON CHILDREN'S FINE MOTOR DEVELOPMENT AT KB NURUL ISLAM SUKOKERTO JEMBER. Pendas: Scientific Journal of Elementary Education, 10(03), 229-245.

Halisah, F. N., & Muthohar, S. (2024). Developing Children's Creativity Through Constructive Play. Aulad: Journal on Early Childhood, 7(3), 839-849.

Jf, N. Z., & Mahrani, N. (2025). Strategies for Developing Fine and Gross Motor Skills in Early Childhood Through Structured Play Activities. AL IHSAN: Journal of Islamic Education for Early Childhood, 6(1), 024-036.

Jumadi, J. (2025). Improving Children's Fine Motor Skills Through Creative Stringing Activities. Journal of Early Childhood, 2(2), 216-233.

Kusdinar, A., Oktavia, S., & Erwin, T. (2025). The Effect of Origami Paper Folding Activities on Improving Fine Motor Skills in Children Aged 5-6 Years. Journal of Qualitative Health Research & Case Studies Reports, 5(3), 262-271.

Listiyani, A. (2024). The Role of Paper Folding Activities in Developing Fine Motor Skills, Creativity, and Self-Confidence in Students at Kindergarten A XYZ Jakarta. Jurnal Syntax Admiration, 5(9), 3268-3278.

Nidar, C., Rezieka, D. G., & Saputra, R. (2025). Application of the Origami Paper Folding Method in the Physical Development of Fine Motor Skills in Early Childhood at Kindergarten 7 Kaway XVI. Educalia: Journal of Educational Research, 4(1), 23-39.

Noor, T. R. (2023). Optimizing Fine Motor Development Activities for Early Childhood Children Aged 3-4 Years. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini, 7(4), 4336-4348.

Oktaviani, I., Fachrunnisa, W., Wibowo, L. Y. D., Sari, H. P., & Nurainni, F. (2025). Gross and Fine Motor Skills of 4-Year-Old Children at Bintang-Bintang Preschool in Bandung City. DZURRIYAT: Jurnal Pendidikan Islam Anak Usia Dini, 3(1), 20-31.

Puspiani, D., Purbayani, R., & Herniawati, A. (2024). The Effect of Paper Folding

Activities on Fine Motor Skills of 4-5-Year-Old Children at RA Sabilissalam Baregbeg Ciamis. Jurnal Intisabi, 2(1), 146-161.

Reviani, M. F. (2023). Teacher Capacity as a Facilitator in Building KnowledgeEarly Childhood Education. Jurnal Bocil: Journal of Childhood Education, Development, and Parenting, 1(2), 99-103.

Romadloni, M. A., Azizah, F., Purwati, L. D., Indriana, N., & Maghfiroh, M. (2025). Assisting in the Use of Origami Paper as a Learning Medium to Develop the Creativity of Raudlatul Ittihad Kindergarten Children. Aksi Kita: Journal of Community Service, 1(4), 1000-1008

Putri Vebionita Megi. 2022. "Analisis Perkembangan Mental Dan Sosial Anak Usia Dini Di Masa Pandemi Covid-19" Jurnal Ilmiah Ilmu Pendidikan 5 (1), 18-22

Putri Vebionita Megi. 2024."Meningkatkan Pemahaman Pentingnya Makan Makanan Bergizi Seimbang Melalui Kegiatan Makan Bersama Di RA Al-Qur'an Kecamatan Benteng" Journal Of Education Research 5(4), 5840-5848

Putri Vebionita Megi. 2022."Dampak Pendapatan Keluarga Terhadap Kemandirian Anak Usia Dini" Bunayya: Jurnal Pendidikan Anak 8 (1), 44-53