

Rhythmic Gymnastics: Games for Stimulating Kinesthetic Intelligence in Early Children

Pahenra¹, Zulaeni Eshita², Wa Ode Sari Amalia³, Sitti Salma⁴, Nurhalizah⁵

^{1,2,3,4,5} Universitas Muhammadiyah Kendari, Indonesia

DOI: 10.15294/ijeces.v13i1.75471

Submitted: 18/10/2023 Revised: 30/04/2024 Accepted: 08/05/2024

ABSTRACT

Kinesthetic intelligence is the ability to combine the physical and the mind to produce perfect movements. One method to improve children's kinesthetic intelligence is by playing rhythmic gymnastics games. This research aims to determine the increase in kinesthetic intelligence of early childhood in the Darussalam Kindergarten, Kendari city, using rhythmic gymnastics as a media game. The type of research is classroom action research which includes 2 cycles with 10 action assessment indicators. Data collection methods are carried out through observation, interviews and documentation. Based on the results of research conducted at the initial stage of the rhythmic gymnastics activity process by designing learning modules, preparing the media to be used, organizing classes to condition children. In the core activity, children begin to do rhythmic gymnastics activities. At the end of the activity the teacher held a discussion regarding the rhythmic gymnastics activities that had been carried out and held a reflection. The success indicator in this research is 75%. The results of the research show that children's kinesthetic intelligence can be improved through rhythmic gymnastics games. It is known that in the initial conditions or cycle 1, the child's success indicator only reached 46.67%. Then in cycle II it increased to 86.67%, this increased significantly. It can be concluded that rhythmic gymnastics games have succeeded in increasing the kinesthetic intelligence of early childhood in the Darussalam Kindergarten, Kendari City, therefore the research results can be used as a reference by early childhood education institutions to improve children's motor skills, especially children's kinesthetic intelligence.

Keywords: Kinesthetic intelligence, rhythmic gymnastics, early childhood action research

Copyright (c) 2024 Pahenra, et al

Corresponding Author:

Pahenra

Universitas Muhammadiyah Kendari, Indonesia

Email: pahenra9313@gmail.com

1. INTRODUCTION

The Social Studies curriculum in Nigeria aims to develop learners who are responsive to the national development needs by adapting to their changing environment while contributing positively to the development of society (Federal Ministry of Education, 2007). However, the pedagogical strategies employed by teachers in ensuring that social studies learners are well equipped continuously surface as a source of concern to stakeholders in the education sector. As such, there is a concern about learners' preparedness to meet the demands of present-day Nigerian society. In this study, we, therefore, set out to investigate the pedagogical choices made by teachers in social studies in lower grades of primary education in Nigeria.

Early childhood education is one of the national education pathways which aims to develop all children's potential as students, so that basic knowledge and children's behavior are formed according to their development. Then you prepare to take part in the next training (Ahmad Susanto, 2021; Rahmatunnisa & Halimah, 2018; Syaumi et al., 2022). A form of organizing early childhood education that focuses on laying the foundation for physical, intellectual, social, emotional, language and communication growth and development in accordance with the unique character and stages of development experienced by early childhood children (Aprinawati, 2017; Aryanti et al., 2021; P. Larasati et al., 2021). Early childhood is a period of maturation of physical and psychological functions that are ready to respond to environmental stimuli (Saripudin, 2017; Simanjuntak & Hasanuddin, 2022) This period is to lay the initial foundation for developing physical (motor), intellectual, emotional, social, linguistic, artistic and moral spiritual potential (Tussubha & Hadiyanto, 2020; Untung et al., 2023; Watini & Efendy, 2018) Therefore, one way to improve children's developmental abilities is to increase children's kinesthetic intelligence.

Kinesthetic intelligence is the potential to combine the physical and the mind to obtain maximum and regular movements (Komarudin et al., 2020; Sadaruddin et al., 2022). With maximum movement resources obtained by combining physical and mental, children will be well trained and everything a person does will be achieved optimally (Ishar et al., 2023). Kinesthetic intelligence is a person's ability to combine the physical and the mind to produce perfect movements (Hartini & Winarsih, 2019; Hasibuan et al., 2020; Imrah Dewi et al., 2021). If perfect movements that come from a combination of mind and body are trained well, then whatever the person does will be successful, even perfect. Apart from that, children's kinesthetic intelligence can be achieved by providing stimulation through simple activities that children like (Rofiqoh & Rasidi, 2021). In general, children have kinesthetic intelligence abilities, for example, if a child gets the object he wants, the child will naturally feel happy and the child will dance spontaneously. Children like to exercise, especially when accompanied by music and songs (Hardasari & Diana, 2020; Khuluqo, 2020; Mardikaningsih & Kurniasari, 2019; Sukmawati et al., 2020). In this way, children can imagine and forget incidents or events that previously made the child uncomfortable. This makes rhythmic gymnastics the right stimulus to give to children from an early age.

In a child's environment, optimal exercise or play will be easy to obtain from an early age, because the physical form of young children is still in the process of growth and development, and brain development is progressing rapidly (Gibbs, 2019; Kohlberg, 1968). This allows the child to combine his imagination and body movements to achieve maximum flexible movement. Children can also carry out actions optimally and exceed their parents' speed (Connor, 2003), also by (Faber, 2017; Yuningsih et al., 2019) explaining that ways to stimulate kinesthetic intelligence in children

include dancing, role playing/drama, physical skills training and sports. Sports activities can improve health and growth. Sports should be appropriate to children's motor development, such as swimming, mini football, tennis, badminton or gymnastics.

One activity that aims to optimize children's kinesthetic intelligence is through rhythmic gymnastics or also called rhythmic gymnastics. Rhythmic gymnastics is an activity to help children fulfill their desire to move, and furthermore as a forum for developing children's kinesthetic intelligence. Apart from that, it can also be used to develop various types of process-oriented basic movement skills, and as an enrichment for various types of exercise. type of child development. (P. Larasati et al., 2021; Rosalia Yunita et al., 2023; M. Ulfah & Khoerunnisa, 2018). Rhythmic gymnastics are gymnastic movements performed following the rhythm of music, with or without instruments (Farida & Nugroho Sinung, 2022; A. A. Ulfah et al., 2021). In simple terms, rhythmic gymnastics is also defined as gymnastic movements accompanied by music. Rhythmic Gymnastics is used as a way to optimize kinesthetic intelligence. Carrying out rhythmic gymnastics activities can stimulate children's kinesthetic intelligence, with coordinated body movements, strength, flexibility, balance, accompanied by pleasant musical rhythms, and can teach children about health (A. Larasati et al., 2019; Magfiroh & Siti Tsaliska, 2020; Yuningsih et al., 2019). Thus, kinesthetic intelligence is a form of physical intelligence or a person's ability to combine physical and mental so as to produce perfect movements and create beautiful movements that can increase physical intelligence with artistic activities or works of body parts.

Rhythmic gymnastics is a branch of art that involves performing movements that require strength, speed and harmony with regular physical movements (Polat, 2018; Sulistyowati et al., 2022). Rhythmic gymnastics is a series of gymnastic movements performed using steps, arm swings and body positions accompanied by rhythm or music. Besides that, (Mahendra et al., 2023; Salwiah et al., 2020), explains that rhythmic gymnastics are gymnastic movements carried out with rhythm or music, or sports activities carried out rhythmically. Likewise (Bahodirovna & Ilxomjonovich, 2022; Maryani et al., 2022), states that rhythmic gymnastics is done following the rhythm of music or free exercises that are done rhythmically. Gymnastic movements are very suitable to complement arts education programs. These movements stimulate the development of physical fitness components such as muscle strength and endurance in all parts of the body. Apart from that, gymnastics also has the potential to develop basic movement skills, as an important foundation in mastering technical skills in a sport. In short, learning rhythmic gymnastics aims to develop gross motor aspects, or improve children's basic kinesthetic abilities; (Meitarani, 2019; Salwiah et al., 2020) Rhythmic Gymnastics is used as a way to optimize kinesthetic intelligence. Thus, it can be understood that rhythmic gymnastics is a gymnastic movement accompanied by musical rhythms. So that there is a match between movement and music, resulting in beautiful movements.

Based on observations made by researchers at the Darussalam Kindergarten in Kendari City, it appears that there are still children whose kinesthetic intelligence has not developed, this can be seen from the children's movement which is not optimal. Children are not yet able to improve and level their minds. and body movements, improving body skills and balance, and aligning the eyes with time. In this study, researchers will show that rhythmic gymnastics is not difficult but provides encouragement for the development of kinesthetic intelligence, even though the implementation of rhythmic gymnastics activities is carried out when the Covid-19 pandemic has ended or after the pandemic, thus making it possible for children to carry out rhythmic gymnastics activities. still

traumatized because the impact of the pandemic is still being felt by the children. Especially at the Darussalam Kindergarten, Kendari City. Based on previous research, the latest research where researchers used rhythmic gymnastics variables was carried out after the Covid-19 pandemic. Where the impact is still felt by children, so that children's kinesthetic development will be more varied due to reduced activities during the pandemic. The aim of this research is to find out whether rhythmic gymnastics can improve the kinesthetic skills of early childhood in Darussalam City Kindergarten.

2. METHOD

This research is action research, namely one of the teacher's efforts in the form of various activities carried out to improve and/or increase the quality of learning in the classroom (Arikunto, 2021) Therefore, this research uses an action approach carried out in the classroom in an atmosphere of learning activities and places teachers and students as research subjects (Abbas et al., 2021). The stages of implementing this research were carried out in 2 cycles, each cycle consisting of activities: planning, implementation, observation or observation and reflection. This action research design is shown in Figure 1

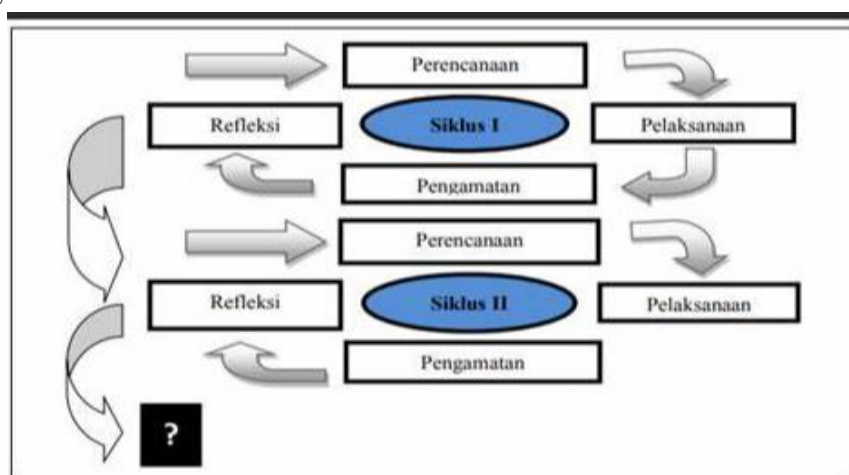


Figure 1. Action research design (Arikunto, 2021)

The research was carried out in Group B Kindergarten Darussalam Kendari City. Data collection took place from March to June 2022 of the 2021/2022 academic year.

In the data analysis activity, the researcher calculated the child's total score along with an explanation of the assessment steps and data analysis formula. The steps are: 1) Carry out an assessment using a symbol assessment format (in which there are several indicators that are observed/assessed during the child's activity process. The indicators determined as material for assessment and data analysis activities are: 10 indicators. 2) Activities then calculate the number or frequency of each score: Very Well Developed (BSB), Developing according to expectations (BSH), Starting to develop (MB) and Not yet developing (BB) which were successfully achieved by students at the evaluation activity stage, with weights of 4,3,2,1; and 3) After assigning weights, an analysis is carried out to calculate the weight of all total scores obtained by children in assessment activities, so that the final score for each student activity is obtained based on the results of the activity. Score acquisition facility (individual) with calculation results criteria based on child conversion in Table 1.

Table 1. Requirements for obtaining grades with calculation criteria based on child conversion

No	Criteria	Indicator
1	BSB (very well developed/complete)	if the final calculation result is between 3.50-4.00
2	BSH (developed as expected/complete)	if the final calculation result is between 2.50-3.49
3	MB (starting development/not ready)	if the final calculation result is between 1.50-2.49
4	BB (not yet developed/unfinished)	If the final calculation result is between 0.01-1.49.

Analysis of the calculation of each child's final score is carried out using the formula for the weighted percentage of the child's total score as follows:

$$PNA = \frac{(BSB (4) + BSH (3) + MB(2) + BB(1))}{\text{Number of indicators}}$$

Apart from that, it is adjusted to the performance indicators used to determine the success of classic performance in each action cycle. In this research, the classic 75% benchmark study was used with the following formulation:

$$PV = \frac{\text{Number of children who achieved BSB + BSH}}{\text{The number of students}} \times 100$$

Indicators for assessing children's motor skills include: 1) Children can walk normally with their bodies upright; 2) The child can move both legs alternately; 3) Children can step right and left with their feet; 4) Children can jump by opening and closing their legs; 5) Children can do that Raise the right arm to shoulder height at a 90 degree angle then lower the arm; 6) The child can wave his arms straight up; 7) The child can swing his arms up alternately; 8) Children can do it. You can stretch your right arm to the right side then bend it backwards; 9) Children are able to push their right hand up by turning their wrist forward; and 10) The child is able to push his left hand up by turning his wrist forward.

3. RESULTS AND DISCUSSION

Results

The first stage of this research included initial observation activities, collaboration, and meetings with teachers and school principals. Based on the results of these observations and meetings, researchers and teachers concluded that various aspects of learning approaches and techniques had been applied to students, but the results had not been able to stimulate children's kinesthetic intelligence skills. This is because the teaching carried out by teachers is still based on the old model, and innovative learning approach strategies have not been developed. Therefore, the research team together with teachers tried to design a form of activity that was good and fun for children to improve children's kinesthetic intelligence. This activity consists of rhythmic gymnastics games. In the next stage, researchers work together with teachers to prepare learning modules or daily learning plans. The module includes: 1) time to carry out activities; 2) learning objectives; 3) method; 4) media; 5) teaching materials used and determining the number of students who will be used as test subjects; and 6) compiling student ability assessment tools, observation guidelines, and documentation during observation activities (researchers).

Examination procedures are prepared and adjusted according to a predetermined schedule; no less than two cycles whose criteria have achieved performance of more than 75%. Each cycle consists of 2 meetings with the same material, namely: increasing children's kinesthetic intelligence through rhythmic gymnastics games. Next, the presentation of findings regarding the implementation of learning in subject classes includes a description of the results of implementing actions in Cycle I and Cycle II. Table 2 shows the planning and description of activities in each cycle. Researchers and teachers plan 2 meetings in each cycle. In each cycle, teachers and researchers need to prepare several things, namely: modules, media for rhythmic gymnastics activities, assessment instruments, teacher observation sheets and the learning process.

Table 2. Planning and description of activities in each cycle

Planning stages for each cycle	Implementation of actions	
	Meeting 1	Meeting 2
<p>Create observation sheets so teachers and students can monitor activities during the learning process.</p> <p>Create observation sheets so teachers and students can monitor activities during the learning process.</p> <p>Prepare teaching materials that will be used in learning activities.</p> <p>Design and prepare evaluations for assessments in the cycle</p>	<p>At this stage the research action was carried out in the school yard. Learning activities in action cycle I, meeting I begin with opening activities; the teacher greets and prays together, then the teacher carries out movements to prepare various materials/materials and other equipment that are needed and can help in teaching students, as well as to facilitate the performance of kindergarten teachers in guiding and teaching, so that the aim is to improve students' kinesthetic skills. achieved in accordance with the activity steps.</p> <p>The learning step is complete, at this level the child is instructed to do this. Take normal steps with the body upright. Furthermore, move both legs alternately. Then step your feet to the right and left. Then jump by opening and closing both legs and finally raise your right arm to shoulder height at a 90 degree angle then lower your arm. Moreover, student learning activities during the teaching and learning process are interesting and fun. This can be seen from the children's motivation when walking, but there are still children who walk while learning gymnastics. Teachers and researchers convey and explain the contextual context. There are those who take normal steps with an upright body, move both legs alternately, step to the right and left, jump by opening and closing the legs, and raise the right arm to shoulder</p>	<p>The implementation of actions from cycle I, meeting I, had been carried out and had not achieved maximum results, so it was continued at meeting II. Learning activities in action cycle I, meeting II begin with opening activities; namely the teacher greets and prays together</p> <p>The learning step is complete, at this level the child is instructed to do this. Take normal steps with the body upright. Furthermore, move both legs alternately. Then step your feet to the right and left. Then jump by opening and closing both legs and finally raise your right arm to shoulder height at a 90 degree angle then lower your arm. Moreover, student learning activities during the teaching and learning process are interesting and fun. This can be seen from the children's motivation when walking, but there are still children who walk while learning gymnastics. Teachers and researchers convey and explain the contextual context. There are those who take normal steps with an upright body, move both legs alternately, step to the right and left, jump by opening and closing the legs, and raise the right arm to shoulder height at a 90 degree angle then lower it. arm.</p> <p>After the children have done a number of rhythmic gymnastics movements, they set aside the materials used. There are children who are good at</p>

height at a 90 degree angle then lower it. arm.

After the children have done a number of rhythmic gymnastics movements, they set aside the materials used. There are children who are good at doing gymnastics movements, but there are also children who are less clever. All children act based on instructions, examples, knowledge and experience that they know

doing gymnastics movements, but there are also children who are less clever. All children act based on instructions, examples, knowledge and experience that they know

Previous research shows that various rhythmic gymnastics games have an effect on children's kinesthetic intelligence. Children's kinesthetic intelligence can increase if teachers can stimulate children with rhythmic gymnastics games (Mogelea, 2023). As a teacher, you must be able to create active, innovative, creative, effective and fun learning. Through rhythmic gymnastics, basic body movements are trained expressively and will bring significant changes to children (A. A. Ulfah et al., 2021). Through his observations, increasing gross motor skills in early childhood can be achieved through strengthening children's large muscles with activities that can improve the quality of their physical development and control, namely rhythmic gymnastics activities (Magfiroh & Siti Tsaliska, 2020). Figure 2 Presents Some Documentation of Children's And Teacher's Activities in Learning Through Circuit Ball Games



Figure 2. Children warming up. The main movement is stretching the right and left arms to the right and left sides, then raising the right and left arms to shoulder height, and cooling down.

Process observation data by assigning values based on Minimum Completeness Criteria (KKM). The aim is to find out the results of the research. In carrying out KKM, a standard value must first be determined which will be used as a benchmark for comparing measurement results (Alfath, 2019; Mad Sa'i & Chairul Anwar, 2023). This benchmark value is the limit for determining success or the minimum criteria level. This 75% immunity criterion is permanent and can also be used for other groups (Febriyanto et al., 2018; Nopiyanto, 2020; Pahenra et al., 2021) to measure the completeness of the evaluation results implemented by teachers in learning activities.

Table 3. Degree of weighting

Weight (star = value)	Research	Ranking indicator
4 =****	BSB = Very well developed	Develops very well, if the child is able to demonstrate his kinesthetic abilities according to the account indicators without the help of the teacher
3 = ***	BSH = Developing according to expectations	Develop according to expectations: if the child shows his kinesthetic abilities according to the law of indicators, sometimes he still needs the teacher's guidance and help
2 = **	MB = Starting to develop	Starting to develop, namely when the child is able to demonstrate his kinesthetic abilities according to existing indicators, but is often directly guided and assisted by the teacher.
1 = *	BB = Not yet developed	Not yet developed, namely if the child has not demonstrated his kinesthetic abilities according to design as an indicator of achieving motoric development, because he must always be guided and assisted directly by the teacher from the start.

Source: school learning module 2022

The KKM value (75%) is used as a classic measure of success. This means that if 75% of children achieve a score of 75 (school standard) or higher, then the use of rhythmic gymnastics to stimulate children's kinesthetic intelligence has been successful. The researcher then also determined the degree of weighting (4, 3, 2 and 1). The application of this weight is adjusted to the assessment of the results of children's activities that apply in kindergarten. After the rhythmic gymnastics game learning activity was completed, the results were evaluated as shown in Table 4.

Table 4 Observation results for cycle 1 and cycle 2

Ranking indicator	Cycle 1			Cycle 2		
	Number of children	%	Criteria	Number of children	%	Criteria
Children who achieve the final grade of "Very Well Developed" (BSB).	3	20,00	At all	6	40,00	At all
Children who reach the final solution get a 'Developing as expected' (BSH) score.	4	26,67	At all	7	46,67	At all
Children who achieve the final grade of 'Began to develop' (MB).	5	33,33	Not complete	2	13,33	Not complete

Children who received a final grade of 'Not yet developed' (BB).	3	20,00	Not complete	0	0	Not complete
Total number of students	15	100		15	100	
Classic success rate number of children who completed it (BSB and BSH)	7	46,67		13	86,67	
Percentage of children who have not completed it	8	53,33		2	13,33	

Source: Results of PTK data analysis in 2022

In cycle I, the data in the table above shows that in the classical activity of increasing children's kinesthetic intelligence through rhythmic gymnastics games in the evaluation stage of cycle I, the number of children who received a BSH (Very Well Developed) score was 3 children or 20%. There were 4 children who received BSH (Developing According to Expectations) or 26.67%. There were 5 children who got the MB (Starting to Develop) score or 33.33%, and 3 children who got the BB (Not Yet Developing) score or 20%. So based on the student scores in Table 3, it is stated that activities to increase children's kinesthetic intelligence through rhythmic gymnastics games in cycle I achieved a success rate of 46.67%. Based on the success indicator or KKM which is set at 75%, the actions that have been completed in Cycle I indicate that they have not been completed and this will continue until the next cycle stage, namely Cycle II.

In cycle II, the data in Table 3 shows that the scores of classical students in improving children's kinesthetic intelligence by playing rhythmic gymnastics increased. There are 6 children with a BSB (Very Well Developing) score of approximately 40%, 7 children with a BSH (Developing according to expectations) score of approximately 46.67%, and 2 children with an MB (Starting to Develop) score.) about 13.3%. Meanwhile, children with a BB score (Not Developing) were no longer found in cycle II. It was stated that activities to increase children's kinesthetic intelligence through rhythmic gymnastics games in cycle II achieved a success rate of 86.67%. Based on the success indicator of 75%, the Cycle II actions that have been completed are said to be completed or complete and do not need to be continued in the next cycle.

The results of the assessment of children's kinesthetic intelligence after the first cycle of action were: several weaknesses were still found, for example in children, namely that the majority of children seemed less active in activities, especially rhythmic gymnastics activities and teachers did not receive full guidance. given in rhythmic gymnastics games. Meanwhile, the classical success score reached 46.67%. Looking at the success indicators mentioned (minimum 75%), cycle I research has not been completed. Therefore, researchers and teachers need to prepare themselves to make plans that can be improved and implemented in the next cycle. Meanwhile, in cycle II it reached a value of 86.67%. This means that the classic success indicators have been met. However, there were still 2 children who were not ready and were handed over to Gurung to be guided. Therefore, the teacher and researcher agreed not to proceed to the next stage or the research action would be stopped.

DISCUSSION

Games were chosen by researchers and teachers as one of the actions to improve children's kinesthetic intelligence, because games are a powerful tool in education, because through games children gain knowledge, enrich their experiences and develop skills and habits (Pahenra et al., 2021).

Games are an important form of entertainment for children and even adults. Through play, children regulate themselves independently (Behnamnia et al., 2022; Petrovska et al., 2013). The rhythmic gymnastics game is a creative game between teachers and researchers. Referring to (Fatmawati, 2020). It is explained that the basic movements of gymnastics are: 1. Foot steps, 2. Both arms straight, 3. Looking forward, 4. Standing straight, step to the left, 5. Both arms straight forward, 6. Control yourself first. Based on the researcher's analysis, the success of the chosen "action" in increasing children's kinesthetic intelligence is due to the fact that rhythmic gymnastics games are activities in the child's surrounding environment that involve the child's traits, traits and characteristics. , and the role was offered. games that strengthen children's self-existence, are dynamic and create a mood, are comfortable, meaningful, collaborative, stimulate children's creativity, and bring joy to children

Based on the belief in the Montessori learning concept, the learning activities that are first introduced to children in class are material consisting of a practical life curriculum. Apart from strengthening children's gross and fine motor skills, early childhood games also function in the classroom social environment and develop children's skills for living independently. Eye-hand coordination is trained through games with physical movements (Marshall, 2017; Phillips-Silver & Daza, 2018). To meet the criteria for early childhood games, the most important thing to pay attention to is recognizing and adapting to the character and psychology of the user. This needs to be emphasized because children are different from adults in several aspects, such as physical, social and cognitive development (Pahenra et al., 2021; Sudarmilah et al., 2017). Meanwhile, rhythmic gymnastics games to improve children's kinesthetic intelligence involve the child's character, traits and characteristics. In accordance with the formulation of the Directorate of Early Childhood Education Development in (Aghnaita, 2017), that the principles of children's learning are: learning while playing, focus on children's growth and development, focus on children's needs, child-centered, active learning, focus on developing character values.

4. CONCLUSION

Rhythmic gymnastics games have succeeded in increasing the kinesthetic intelligence of young children in the Darussalam Kindergarten, Kendari City. The most dominant factor is that this game adheres to the principles of games as a learning medium for PAUD children. The principles of play as a learning medium are: it is an activity in the environment around the child, involves the child's character, character and nature, provides role play that strengthens the child's self-existence, is dynamic, creates a comfortable atmosphere. mood, means cooperation and involves children's creativity and brings joy to children. Thus, this game can be used as an alternative solution to improve kinesthetic intelligence in early childhood.

REFERENCES

- Abbas, E. W., Jumriani, J., Handy, M. R. N., Syaharuddin, S., & Izmi, N. (2021). Actualization of Religious Values through Religious Tourism on the River As a Source of Social Studies Learning. *AL-ISHLAH: Jurnal Pendidikan*, 13(3), 1663–1669. <https://doi.org/10.35445/alishlah.v13i3.1013>
- Aghnaita, A. (2017). Perkembangan Fisik-Motorik Anak 4-5 Tahun Pada Permendikbud no. 137 Tahun 2014 (Kajian Konsep Perkembangan Anak). *Al-Athfal: Jurnal Pendidikan Anak*, 3(2), 219–234. <https://doi.org/10.14421/al-athfal.2017.32-09>

- Ahmad Susanto. (2021). *Pendidikan anak usia dini: Konsep dan teori*. Bumi Aksara.
- Alfath, K. (2019). Teknik Pengolahan Hasil Asesmen: Teknik Pengolahan Dengan Menggunakan Pendekatan Acuan Norma (Pan) Dan Pendekatan Acuan Patokan (Pap). *Al-Manar*, 8(1), 1–28. <https://doi.org/10.36668/jal.v8i1.105>
- Aprinawati, I. (2017). Penggunaan Media Gambar Seri Untuk Meningkatkan Kemampuan Berbicara Anak Usia Dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 1(1), 72. <https://doi.org/10.31004/obsesi.v1i1.33>
- Arikunto, suharsini,. (2021). *Penelitian Tindakan Kelas* (Suryani, Ed.; Revisi). PT Bumi Aksara. <https://www.google.co.id/books/>
- Aryanti, S., Destriana, D., & Pratama, R. (2021). Sosialisasi Pengembangan Model Pembelajaran Berbasis Video Pada Guru Pendidikan Jasmani, Olahraga, dan Kesehatan (PJOK) di Kabupaten Ogan Ilir. *Jurnal Berkarya Pengabdian* <http://jba.ppj.unp.ac.id/index.php/jba/article/view/87>
- Bahodirovna, X. B., & Ilxomjonovich, I. I. (2022). The Use Of Rhythmic Gymnastics In The Physical Education Of Schoolchildren On The Example Of The City Of Fergana. *International Journal of Pedagogics*, 02(05), 9–12. <https://doi.org/10.37547/ijp/Volume02Issue05-03>
- Connor, S. M. (2003). “They’re too smart for that”: predicting what children would do in the presence of guns. *Pediatrics*, 111(2). <https://doi.org/10.1542/peds.111.2.e109>
- Faber, R. (2017). Dance and early childhood cognition: The Isadora Effect. *Arts Education Policy Review*, 118(3), 172–182. <https://doi.org/10.1080/10632913.2016.1245166>
- Farida, E., & Nugroho Sinung. (2022). *Pembelajaran Pra New Normal (Model Blended Learning Pola Komplementer Materi Senam Ritmik)* (Pertama). Widia Bakti Persada. <https://books.google.co.id/books?hl>
- Fatmawati, A. F. (2020). *Pengembangan Fisik Motorik Anak Usia Dini* (Pertama). Caremedia communication. <https://books.google.co.id/books>
- Febriyanto, B., Haryanti, Y. D., & Komalasari, O. (2018). Peningkatan Pemahaman Konsep Matematis Melalui Penggunaan Media Kantong Bergambar Pada Materi Perkalian Bilangan Di Kelas II Sekolah Dasar. *Jurnal Cakrawala Pendas*, 4(2), 32. <https://doi.org/10.31949/jcp.v4i2.1073>
- Gibbs, J. C. (2019). *Moral development and reality: Beyond the theories of Kohlberg, Hoffman, and Haidt*. Oxford University Press. <https://books.google.co.id/books>
- Hardasari, R., & Diana, D. (2020). The Application of Taiso Radio Gymnastic in Improving Gross Motor Ability of Children Aged 5-6 Years. *BELIA: Early Childhood Education Papers*, 9(1), 34–39. <https://doi.org/10.15294/belia.v9i1.30309>
- Hartini, S., & Winarsih, B. D. (2019). Perbedaan Tingkat Kecemasan Anak Usia Prasekolah Saat Hospitalisasi Sebelum Dan Setelah Dilakukan Terapi Bermain Mewarnai Gambar Di Ruang Bogenvile *Jurnal* <http://jurnal.stikescendekiautamakudus.ac.id/index.php/stikes/article/view/304>
- Hasibuan, N. R. F., Fauzi, T., & Novianti, R. (2020). Pengaruh kegiatan senam irama terhadap kecerdasan kinestetik pada anak kelompok b tk mustabaqul khoir Palembang. *Jurnal Pendidikan Anak*, 9(2), 118–123. <https://doi.org/10.21831/jpa.v9i2.33564>

- Imrah Dewi, A., Syahrir, M., Ardiansyah, A., & Rejeki, H. S. (2021). Students' Kinesthetic Intelligence in Physical Education: Garnering Indonesian Literatures. *AL-ISHLAH: Jurnal Pendidikan*, 13(3). <https://doi.org/10.35445/alishlah.v13i3.1410>
- Ishar, A. A., Hasnah, H., Walinga, A. N. T., & Mappaompo, M. A. (2023). Hubungan Kecerdasan Kinestetik dan Motivasi Belajar dengan Hasil Belajar PJOK di SMA negeri 6 Sinjai. *Riyadhoh : Jurnal Pendidikan Olahraga*, 6(1), 58. <https://doi.org/10.31602/rjpo.v6i1.10915>
- Khuluqo, I. El. (2020). Brain Gym Optimization Methods in Improving Early Age Child Fine Motor Skills. *Proceedings of the 1st International Conference on Early Childhood Care Education and Parenting (ICECCEP 2019)*. <https://doi.org/10.2991/assehr.k.201205.082>
- Kohlberg, L. (1968). Early Education: A Cognitive-Developmental View. *Child Development*, 39(4), 1013. <https://doi.org/10.2307/1127272>
- Komarudin, K., Nurcahya, Y., Nurmansyah, P., & Kusumah, W. (2020). The Influence of Life Kinetic Training Method and Motor Educability on Improvement of Football Playing Performance. *Proceedings of the 4th International Conference on Sport Science, Health, and Physical Education (ICSSHPE 2019)*. <https://doi.org/10.2991/ahsr.k.200214.073>
- Larasati, A., Alsaudi, A., & ... (2019). Upaya Meningkatkan Kemampuan Motorik Kasar melalui Bermain Gerak dan Lagu. *Prosiding ...* <http://jurnal.stkipkusumanegara.ac.id/index.php/semnara2019/article/view/259>
- Larasati, P., Mujahidah, M., & Sunanik, S. (2021). Implementasi Senam Irama dalam Pembelajaran Anak di Masa Pandemi Covid-19 di TK Nurul Iman Loa Janan Ilir Samarinda. *Jurnal Tarbiyah Dan Ilmu Keguruan Borneo*, 2(2), 115–121. <https://doi.org/10.21093/jtikborneo.v2i2.4374>
- Mad Sa'i, & Chairul Anwar. (2023). Penerapan Penilaian Beracuan Norma dan Penilaian Beracuan Kriteria Pada Mata Pelajaran Pendidikan Agama Islam Di Sdn Ganding I Sumenep. *Mubtadi: Jurnal Pendidikan Ibtidaiyah*, 4(2), 177–185. <https://doi.org/10.19105/mubtadi.v4i2.7629>
- Magfiroh, & Siti Tsaliska. (2020). Upaya Meningkatkan Motorik Kasar Anak Melalui Kegiatan Senam Irama. *Jurnal CARE (Children Advisory Research and Education)*, 8(1). <https://doi.org/http://e-journal.unipma.ac.id/index.php/JPAUD/article/view/6875/2778>
- Mahendra, M. Y., Ridwan, M., & Juheri. (2023). Improving Learning Outcomes of Rhythmic Movement Activity Learning through Utilization of the TikTok Media Model Project Based Learning. *Jurnal Pendidikan Jasmani*, 4(1). <https://doi.org/https://doi.org/10.55081/jpj.v4i1.1030>
- Mardikaningsih, A., & Kurniasari, P. (2019). Pengembangan Model Pembelajaran Blended Learning (Synchronous vs Asynchronous) Pendidikan Jasmani Kesehatan Dan Rekreasi. *Madrosatuna: Journal of Islamic ...* <http://ojs.umsida.ac.id/index.php/madrosatuna/article/view/1997>
- Marshall, C. (2017). Montessori education: a review of the evidence base. *Npj Science of Learning*, 2(1), 11. <https://doi.org/10.1038/s41539-017-0012-7>
- Maryani, A., Fachrezzy, F., & Pelana, R. (2022). The effect of coordination, concentration, and motivation on the skills of scoop and chair rhythmic gymnastics on students of sman 39 jakarta. *Gladi : Jurnal Ilmu Keolahragaan*, 13(04), 388–399. <https://doi.org/10.21009/GJIK.134.04>
- Meitarani, L. (2019). Peningkatan Kecerdasan Kinestetik Melalui Tari Kreatif di Taman Kanak Kanak Assaid Larangan. *Instruksional*, 1(1), 32. <https://doi.org/10.24853/instruksional.1.1.32-42>

- Mogelea, B. (2023). Meningkatkan Kemampuan Kinestetik melalui Senam Irama dan Tarian Yosim Pancar Irama pada Anak Usia 5-6 Tahun. *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, 6(6), 4525–4530. <https://doi.org/10.54371/jiip.v6i6.2429>
- Nopiyanto, Y. E. (2020). Hambatan Guru Pendidikan Jasmani Generasi 80-an dalam Pembelajaran Daring di Tengah Pandemi Covid-19. In *Jurnal Sporta Saintika*. sportasaintika.ppj.unp.ac.id. <http://sportasaintika.ppj.unp.ac.id/index.php/sporta/article/download/140/85>
- Pahenra, P., Selman, H., Rohmania, R., Nasir, N., Said, H., Sasnita, U., & Rusli, T. I. (2021). Sirkuit Bola Keranjang: Permainan untuk Meningkatkan Kemampuan Motorik Kasar Anak Usia Dini. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 5(2). <https://doi.org/10.31004/obsesi.v5i2.1077>
- Phillips-Silver, J., & Daza, M. T. (2018). Cognitive Control at Age 3: Evaluating Executive Functions in an Equitable Montessori Preschool. *Frontiers in Education*, 3. <https://doi.org/10.3389/educ.2018.00106>
- Polat, S. Ç. (2018). The Effect of Technical Competence in Balance Elements of Rhythmic Gymnastics on the Sportive Success of Taekwondo Poomsae Athletes. *Journal of Education and Training Studies*, 6(9), 136. <https://doi.org/10.11114/jets.v6i9.3375>
- Rahmatunnisa, S., & Halimah, S. (2018). Upaya Meningkatkan Kecerdasan Naturalis Anak Usia 4–5 Tahun Melalui Bermain Pasir. ... : *Jurnal Pendidikan Anak Usia Dini*. <https://jurnal.umj.ac.id/index.php/YaaBunayya/article/view/2813>
- Rofiqoh, A., & Rasidi, R. (2021). Kemampuan Olahraga Dan Aktivitas Ekstrakurikuler Pasukan Baris Berbaris Dengan Kecerdasan Kinestetik. *Borobudur Educational Review*, 1(01), 13–21. <https://doi.org/10.31603/bedr.4791>
- Rosalia Yunita, Amilda, & Izza Fitri. (2023). Pengaruh Kegiatan Senam Irama Terhadap Motorik Kasar Pada Anak Didik Kelompok B TK Dharma Kumara di Desa Air Talas. *Jurnal Pendidikan Dan Konseling (JPDK)*, 5(1).
- Sadaruddin, S., Intisari, I., Hajerah, H., Amri, N. A., & Mariyani, M. (2022). *Kinesthetic Learning Development Methods to Train Fine Motors for Early Childhood*. <https://doi.org/10.2991/assehr.k.220402.049>
- Salwiah, Asmuddin, Saranani, Muh. S., & Mansyur, M. (2020). The Improvement of Gross Motor Skill on Rhythmic Gymnastics Activities of Kindergarten Student. *Proceedings of the 3rd International Conference on Education, Science, and Technology (ICEST 2019)*. <https://doi.org/10.2991/assehr.k.201027.052>
- Saripudin, A. (2017). Strategi pengembangan kecerdasan naturalis pada anak usia dini. *AWLADY: Jurnal Pendidikan Anak*. <http://www.syekhnrjati.ac.id/jurnal/index.php/awladly/article/view/1394>
- Simanjuntak, L., & Hasanuddin, H. (2022). The Effect of Project Method and Self-Concept on Emotional Intelligence of Children Age 5-6 Years. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 6(6), 6006–6016. <https://doi.org/10.31004/obsesi.v6i6.2819>
- Sudarmilah, E., Susanto, A., Ferdiana, R., & Ramdhani, N. (2017). Preschoolers' cognitive game prototype. *2017 International Conference on Applied System Innovation (ICASI)*, 1875–1878. <https://doi.org/10.1109/ICASI.2017.7988313>
- Sukmawati, N., Dlis, F., & Pelana, R. (2020). Kindergarten Teachers' Perception on Basic Movement Skills Understanding Through Rhythmic Gymnastics Movement. *Proceedings of*

- the 1st South Borneo International Conference on Sport Science and Education (SBICSSE 2019)*. <https://doi.org/10.2991/assehr.k.200219.029>
- Sulistiyowati, E. M., Suherman, W. S., Sukamti, E. R., Rahmatullah, M. I., & Mitsalina, D. (2022). *Specifics of Basic Biomotor Components for Rhythmic Gymnastics*. <https://doi.org/10.2991/ahsr.k.220106.004>
- Syauki, A., Bening, T. P., Aisyah, S. N., & Sukiman, S. (2022). Inovasi Kurikulum dalam Aspek Tujuan dan Materi Kurikulum PAUD. *EDUKATIF : JURNAL ILMU PENDIDIKAN*, 4(3), 4783–4793. <https://doi.org/10.31004/edukatif.v4i3.2870>
- Tussubha, N., & Hadiyanto. (2020). Integrated Character Education Model in Early Childhood Education Based on Minangkabau Local Culture: Randai. *Proceedings of the International Conference of Early Childhood Education (ICECE 2019)*. <https://doi.org/10.2991/assehr.k.200715.002>
- Ulfah, A. A., Dimiyati, D., & Putra, A. J. A. (2021). Analisis Penerapan Senam Irama dalam Meningkatkan Kemampuan Motorik Kasar Anak Usia Dini. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 5(2), 1844–1852. <https://doi.org/10.31004/obsesi.v5i2.993>
- Ulfah, M., & Khoerunnisa, Y. (2018). Pengaruh Penggunaan Strategi Pembelajaran Inquiry terhadap Kecerdasan Naturalis Anak Usia Dini di Kabupaten Majalengka. In *Al-Athfal: Jurnal Pendidikan Anak*. core.ac.uk. <https://core.ac.uk/download/pdf/230724646.pdf>
- Untung, S. H., Pramono, I. A., Khasanah, L., Awwaluddin, A., Kholis, N., Muddin, M. I., Asnawi, A. R., & Maulana, A. R. M. (2023). *The Gold Age of Childhood: Maximizing Education Efforts for Optimal Development* (pp. 261–269). https://doi.org/10.2991/978-2-38476-052-7_30
- Watini, S., & Efendy, H. (2018). The playing method “ASYIK” based on multiple intelligence in learning science process at the early childhood education program (PAUD) age 5-6 years. *Journal of Studies in Education*, 8(1), 51. <https://doi.org/https://journals.sagepub.com/doi/10.1177/146394911771>
- Yuningsih, R., Akmariani, C., & Fitriani, W. (2019). Pengaruh Senam Irama Terhadap Kinestetik Kinestetik Pada Anak Di Tk Kurnia Illahi Kabupaten Tanah Datar *Tumbuh Kembang: Kajian Teori Dan Pembelajaran PAUD*, 6(1), 11–18. <https://doi.org/10.36706/jtk.v6i1.834>