



**The Influence Of Gemu Famire Gymnastics On Early
Childhoods's Rhythmic Movement Ability In Kampong Bharu
Guidance Center, Kuala Lumpur, Malaysia**



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Abstrak

Kemampuan gerak ritmik merupakan salah satu komponen penting dalam perkembangan motoric anak usia dini. Di dalamnya terkandung unsur fleksibilitas, irama, ketepatan gerak dan bergerak secara kontinu. Kurangnya stimulasi dan belum difokuskannya pengembangan kemampuan gerak, khususnya gerak ritmik, membuat sebagian anak kesulitan bergerak sesuai irama serta kesulitan mengkoordinasikan gerak tangan dan kaki. Salah satu upaya yang dapat dilakukan adalah menggunakan senam Irama. Penelitian ini bertujuan mengetahui pengaruh Senam Gemu Famire terhadap kemampuan gerak ritmik anak usia dini di Sanggar Bimbingan Kampong Bharu. jenis penelitian yang digunakan adalah penelitian eksperimen dengan desain *pretest – posttest control group*. Sampel diambil dari anak pra – SB dengan rentang usia 5 – 7 tahun sejumlah 20 anak (10 anak menjadi kelas eksperimen dan 10 anak menjadi kelas kontrol). Data dikumpulkan menggunakan metode observasi untuk kemudian diolah dan dianalisis menggunakan uji t. Berdasarkan hasil analisis, didapatkan hasil data berdistribusi normal dengan nilai varians yang sama. Kemudian berdasarkan hasil uji hipotesis dengan uji t, diperoleh skor $t_{hitung} = 2,653$ dan $t_{tabel} 2,100$. Jika keduanya dibandingkan, maka diperoleh kesimpulan $t_{hitung} > t_{tabel}$ yang artinya ada pengaruh senam Gemu Famire terhadap kemampuan gerak ritmik anak usia dini di Sanggar Bimbingan Kampong Bharu, Kuala Lumpur, Malaysia

Abstract

Rhythmic movement ability is an essential component in the motor development of early childhood. It contains elements of flexibility, rhythm, movement accuracy, and continuous movement. The lack of stimulation and the lack of focus on developing motor skills, especially rhythmic movements, makes it difficult for some children to move according to the rhythm and coordinate the movements of their hands and feet. One effort that can be done is to use rhythmic gymnastics. This study aimed to determine the effect of Gemu

Famire Gymnastics on the ability of early childhood rhythmic movements in the Kampong Bharu Guidance Center. The type of research used was experimental research with a pretest–posttest control group design. Samples were taken from pre-GC children with an age range of 5 - 7 years with 20 children (10 children in the experiment class and 10 children in the control class). Data were collected using observation and then processed and analyzed using the t-test. Based on the analysis results, the data results are normally distributed with the same variance value. Then, based on the results of testing the hypothesis with the t-test, the t_{count} score = 2.653 and t_{table} 2.100 were obtained. If the two were compared, it can be concluded that $t_{\text{count}} > t_{\text{table}}$, which means that Gemu Famire gymnastics affected the ability of early childhood rhythmic movements at the Kampong Bharu Guidance Center, Kuala Lumpur, Malaysia.



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INTRODUCTION

Early childhood has unique characteristics. One of them is innocent, has great curiosity, and has a pattern of growth and development appropriate to the age stages being passed. At least 6 aspects of development need to be developed from Early Childhood (AUD) in a planned and optimal manner. All of these developments are interrelated and integrated. The failure of growth and development at this age has an impact on the next period. One of them is physical motor development. This development takes place quickly in line with the maturity of the nerves and brain. No matter how simple the movements performed, they result from complex nervous system interactions controlled by the central brain.

In general, physical motor development includes gross motor development (movement activities that involve all the movement muscles in the body, such as running, jumping, etc.) and fine motor development (movement activities that involve a small portion of the movement muscles such as writing, cutting and so on). Djoko Adi (2017, p. 22) argued that the gross motor physical development of children aged 5-6 years includes: (a) making coordinated movements to train flexibility, balance, and agility, (b) imitating dances or gymnastics, and (c) playing physical games with rules.

Children aged 5 years and over are expected to have mastered several movement skills such as sticking, doing puzzles, matching, buttoning clothes, drawing, expressing movements with rhythm, throwing and catching balls, exercising with their own creativity, and many more. If it is well developed, optimal basic movement abilities will be created. That way, the child is expected to be able to move rhythmically.

Rhythmic motion is part of physical-motor development. Quoting from the journal Physical Education Faculty of Sports Science, Universitas Negeri Yogyakarta, rhythmic movement is a combination of a form of movement and the rhythm that accompanies it, using the rhythm used by music and singing. Conformity between body movements and rhythm is significant in rhythmic movements. The application of rhythmic motion is intended to increase students' sensitivity to rhythm and encourage them to move through the dance.

Based on the results of observations at the Kampong Bharu Guidance Center, Malaysia, it was found that the children's ability to carry out rhythmic activities was still relatively low. This is because, in their daily lives, children stay at home more and only leave the house when their parents return from work. Many Guidance Center students, mostly of Indonesian-Malaysian descent, still need residence documents such as passports, visas, or permits. They are illegal residents in Malaysia. In addition, the Guidance Center as a provider of non-formal education services for Indonesian migrant children in Malaysia, has not maximized the provision of stimulation of rhythmic movement abilities. Learning focuses more on improving cognitive and language abilities.

As a result, children's rhythmic movement abilities are still lacking. They still have difficulty imitating the movement of swinging their bodies, coordinating their hands and feet, moving to the beat of the music, and even walking in place, as the basic movement in rhythmic gymnastics is still quite stiff. It contrasts with most children of Indonesian legal migrants and native Malaysians who can study formally in national schools. They could perform the basic movements of gymnastics well and seem more flexible in following the movements according to the rhythm of the music. The data were obtained based on direct observation at Malaysian formal educational institutions.

Compared with the rhythmic movement abilities of early childhood in Indonesia (in this case, the majority have received early childhood education services), it looks

very different. The provision of stimulation of rhythmic movement abilities has been intensively carried out through gymnastic activities both within the internal scope of the institution regularly to national-scale gymnastic festivals, which result in the development of children's rhythmic movements getting better. Children can create motion independently when they hear the sound of music. This is in line with what was conveyed by Eri Dwi Yulianti, an educator at ABA 1 Kutawis. She said that class B children could create movements independently and move according to the beat well because they were stimulated by doing baby shark gymnastics, rocking dipper gymnastics, pious children gymnastics, and others alternately every day.

The problem of lack of ability to perform rhythmic movements can be overcome through Early Childhood Education (PAUD). PAUD is defined as a conscious effort to foster, prepare and assist the physical and spiritual growth and development of children entering a further level of education (Ministry of National Education in the Journal of Recreational Health Education 2016). Education at this stage focuses on the physical, cognitive, social-emotional development, religious values, morals, language, and artistic abilities of children aged 3-7 years. PAUD educators can provide appropriate stimulation so that children's abilities develop well. One of the efforts to develop rhythmic motion in children aged 5-6 is through rhythmic gymnastics. Children can be introduced first by sounding music and allowed to move according to their creativity.

Rhythmic gymnastics is defined as a series of gymnastic movements that are integrated with the rhythm of music or rhythmic and continuous free motion to form beautiful movements. Rhythmic gymnastics can be done with or without equipment. Giving children the opportunity to move through rhythmic motion activities will foster creativity in children and allow children to find themselves through self-actualization.

There are many types of rhythmic gymnastics in Indonesia, using ribbons, balls, ropes, hoops, maces, music, and dance. Many innovations have been made in rhythmic gymnastics, such as composing folk songs as a component of rhythmic gymnastics. Apart from functioning to improve physical motor skills, folk songs play a role in introducing Indonesian culture so that a high sense of nationalism arises. Therefore, researchers will use the folk song "Gemu Famire" created by Nyong Franco from Nusa Tenggara. The song's rhythm is slightly faster, bringing joy and enthusiasm to join in the typical screams of the people of Nusa Tenggara.

According to research conducted by Siti Aisha in 2017, group A children at TK Kemala Bhayangkari 4 Serang-Banten showed an increase in gross motor skills by 73% after being stimulated with cheerful rhythmic gymnastics. In 2021, a similar study was conducted at the Harapan Bangsa Aremanta KB PAUD in Muara Enim Regency. It was found that children's gross motor skills increased by 50% after being stimulated with Senam Cinta Indonesia (Indonesian Love Gymnastics). It was not much different. Research conducted by fifth-grade students at SDN Musuk 1 Sragen Regency showed that rhythmic gymnastics with the application of music and folk songs "Apuse" can improve the ability to perform rhythmic activities.

Judging from the problems and results of previous studies, the researchers were interested in examining the effect of Gemu Famire gymnastics on the ability of early childhood rhythmic movements at the Kampong Bharu Guidance Center, Kuala Lumpur, Malaysia.

LITERATURE REVIEWS

According to the Indonesian Dictionary (KBBI), rhythmic movement is a rhythmic movement of places. A similar definition also states that rhythmic movement is the activity of changing body movements rhythmically using music or beats outside of music. According to (Anies, 2017), rhythmic movements indirectly benefit physiological aspects, motor development, cognitive abilities, and language. The rhythmic movement contains the main elements and principles, namely rhythm, flexibility, continuity of movement, and the accuracy between motion and rhythm. Rhythmic movement ability can be developed through rhythmic gymnastics.

Rhythmic gymnastics are gymnastic movements performed to the rhythm of music or free exercises carried out rhythmically (Adi, 2018). Sutisna (Renza N, 2020) defined rhythmic gymnastics as the integration of sports and dance movements. Rhythmic gymnastics emphasizes beautiful movements. Rhythmic gymnastic movements must be in harmony with the rhythm of the music used so that it looks harmonious and the people who see it can be carried away in the atmosphere of the song. In Indonesia, there are many types of rhythmic gymnastics, both using tools and without tools. The use of regional music in rhythmic gymnastics has been widely practiced. One of them uses the song Gemu Famire due to a modification of the

Maumere dance from East Nusa Tenggara (NTT). The basic movements of the Gemu Famire gymnastics include:

- 1) Walk in place:
 - a) The left and right legs are lifted alternately, the tempo of the steps is in accordance with the usual steps, the body is straight, and the eyes are straight ahead.
 - b) The position of both hands swings slowly alternately.
 - c) Perform 3 x 8 counts.
- 2) Step back and forth
 - a) Walk forward 2 steps, swing arms.
 - b) Clap your hands once while raising your left foot.
 - c) Walk backward 2 steps, swing arms.
 - d) Clap once accompanied by raising the right leg.
 - e) Do 5x each alternately.
- 3) Hands swing to the right and left 4 times each.
 - a) Right hand straight, left hand crossed to the right, accompanied by left leg crossed to the right (done 4 times).
 - b) Left hand straight, right hand crossed to the left, accompanied by the right leg crossed to the left (done 4 times).
- 4) Walk sideways
 - a) Walk sideways 2 steps to the right. The forearm rotates to the right.
 - b) Walk sideways 2 steps to the left. The forearm rotates to the left.
- 5) *Enjot* Movement
 - a) The wrist is moved up and down.
 - b) The body is moved statically to the right and left. Rotate the body to the left.
- 6) Circular motion
 - a. Body rotates to the left. The position of the hands is stretched out with the left hand above and the right hand below.
 - b. Do it respectively. Each movement is performed in 2 x 8 counts.

METHODS

This study used an experimental method with a pretest-posttest control group design involving two classes, namely the experimental and control classes. The study was started by conducting a pretest on the experimental and control group samples. This was done to determine the extent to which children's rhythmic movement abilities were carried out and as a comparison of the results before and after treatment in the experimental group. Meanwhile, the posttest was given to the two research classes, and the results were compared between the control and experiment classes (Purnama, 2021). The research design can be described as follows:

Table 1. Pretest-Posttest Control Group Design

	Group	Pretest	Treatment	Posttest
(R)	Experiment	Y1	X	Y2
(R)	Control	Y1	-	Y2

Data were collected using observation and documentation techniques in a research sample of pre-GC children at the Kampong Bharu Guidance Center, Kuala Lumpur, Malaysia, which were in the age range of 5-7 years as many as 20 children (10 children became the experiment class and 10 children became the control class). Assessment in this observation was carried out by direct researchers using a Likert scale with a score of 3 for an able indicator, a score of 2 for an incapacitated indicator, and a score of 1 for an incapable indicator. The maximum score = is 30 and the minimum score is 10. The instruments used in this study have the following grids:

Table 2. Observation Sheet for Children's Rhythmic Movement Ability

Variable 1	Statement Item	Score		
		Able	Less Able	Unable
		Score: 3	Score: 2	Score : 1
Rhythmic Movement Ability	Able to walk in place			
	Do a step back and forth			
	Compatibility of hand and foot movements			
	Swing the hands to the right and left alternately			
	Walk to the right and left			
	Able to perform static enjot movements			

Variable 1	Statement Item	Score		
		Able	Less Able	Unable
		Score: 3	Score: 2	Score : 1
	Flexible in <i>enjot</i> movements			
	Able to move according to the number of counts			
	Able to move to the beat			
	Swing the body flexibly accompanied by a twisting motion of the body			
Total				
Final Score		Total of Final Score:		
24 – 30 : Able				
17 – 23 : Less Able				
10 – 16 : Unable				

The design analysis was carried out by calculating the normality value using the Kolmogorov-Smirnov method and testing the homogeneity of the data using the Levene test. To test the hypothesis in this study, the authors used the Paired Sample t-test formula by comparing the Gain Score in the experimental and control classes.

RESULTS AND DISCUSSION

A. Research Results

Guidance Center (GC) Kampong Bharu is the first and oldest guidance center formed by the Indonesian Embassy's Education and Culture Attaché (Attico of Education and Culture) for Malaysia. This guidance center is located at Wisma Sabaruddin, Jalan Raja Alang, Chow Kit, Kuala Lumpur, Malaysia. The studio's location is very strategic and is only 20 minutes away from KLCC (Kuala Lumpur City Center). The implementation of learning at GC Kampong Bharu is still not optimal. One of the factors that cause it is the limited duration of learning every day, the limited ability and time of educators, and limited space. Learning still focuses on cognitive development, language, and general knowledge.

The research began by testing the children's rhythmic movement abilities in experiment and control classes using baby shark song movements. In the initial test, in the experiment class, data were obtained from as many as 3 children who were unable to perform rhythmic movements and 7 children who could not. The highest percentage score was 67% and the lowest percentage score was 40% with an

average of 53% and a standard deviation of 8.527. The experiment class pretest results can be seen in the graph below:

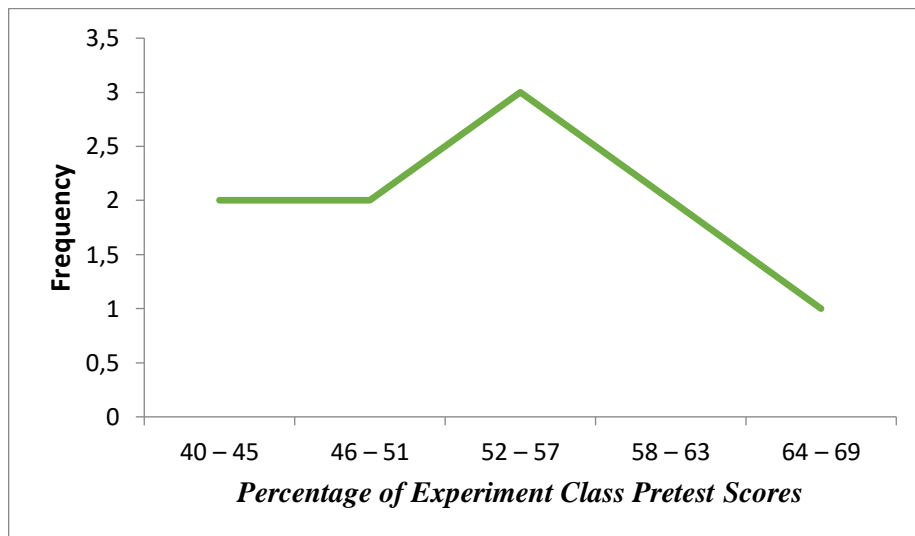


Figure 1. Graph of Experiment Class Pretest Score Percentage

Meanwhile, in the control class, 3 children were less able to perform rhythmic movements, and 7 children could not. The highest percentage score was 67%, and the lowest percentage score was 43%, with an average of 51.67% and a standard deviation of 7.73. The results of the control class pretest can be seen in the graph below:

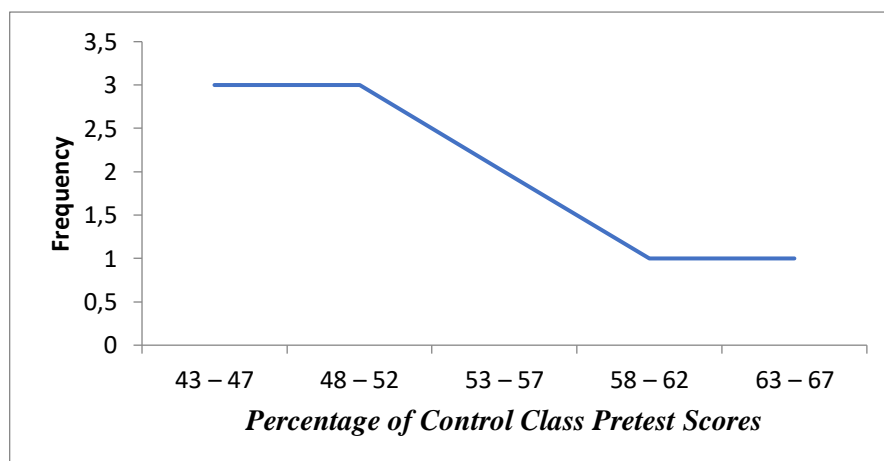


Figure 2. Graph of Control Class Pretest Score Percentage

Meanwhile, after being given treatment in the form of Gemu Famire gymnastics in the experiment class, data were obtained indicating 1 child could perform rhythmic

movements, 8 children were less able, and 1 child was unable. The highest percentage score was 80%, and the lowest percentage score was 53.3%, with an average of 67 and a standard deviation of 7.698. The experiment class posttest results can be seen in the graph below:

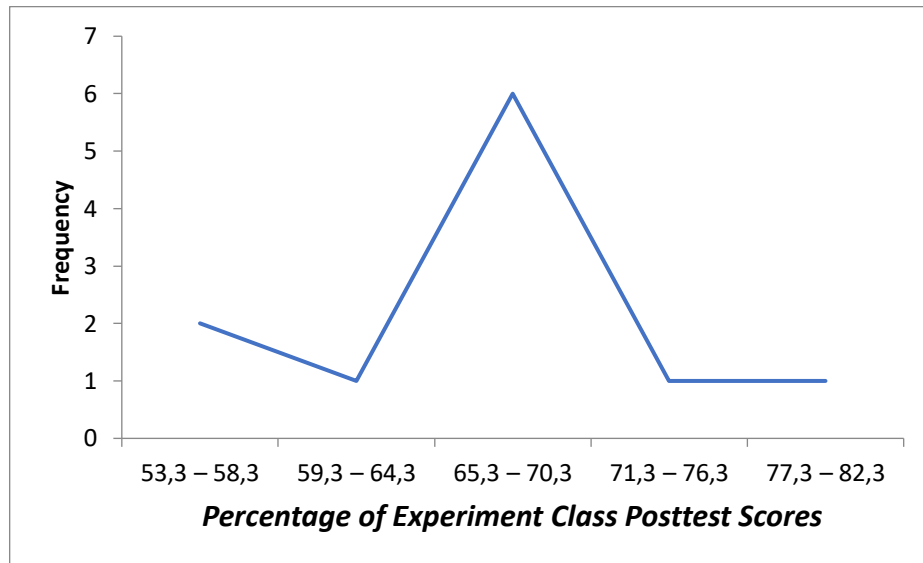


Figure 3. Graph of the Percentage of Experiment Class Posttest Scores

In the control class, after the posttest, data were obtained for 5 less and 5 unable children. The highest percentage score was 67%, and the lowest percentage score was 50%, with an average of 56.33 and a standard deviation of 5.317. The results of the control class posttest can be seen in the graph below:

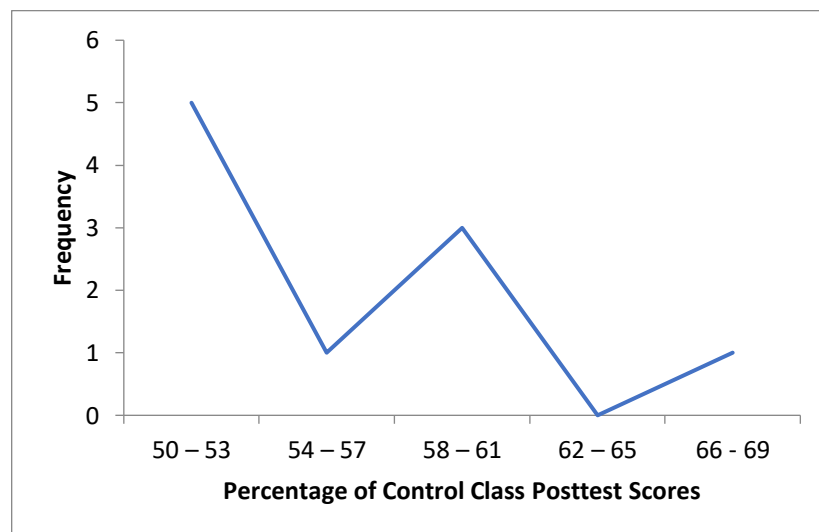


Figure 4. Graph of the Percentage of Control Class Posttest Scores

B. Analysis Prerequisite Test

1. Normality Test

The normality test was carried out on each class's data from the pretest and posttest results. If the value of D is less than the KS table, then the data is normally distributed, and if the value of D is more than the KS table, it can be said that it is not normal.

Table 3. Summary of Normality Test

No.	Class	Total of Data (n)	Score of D_{maks}	KS table	Conclusion
1.	Pretest of experiment class	10	0.200	0.409	Normal
2.	Posttest of experiment class		0.133		Normal
3.	Pretest of control class	10	0.185		Normal
4.	Posttest of control class		0.235		Normal

2. Homogeneity Test

The results of the homogeneity test of rhythmic movement abilities for early childhood in the experiment class and control class using the Bartlett test (F test) obtained an F_{count} of 1.22 and a F_{table} of 3.178. Because the score of $F_{count} < F_{table}$, it can be concluded that the rhythmic movement abilities of early childhood in the experiment class and control class are the same or homogeneous.

C. Hypothesis Test Results

Hypothesis testing was done by comparing the experiment and control classes' gain scores. Based on the results of the t-test, it was known that the average increase in the experiment class was 12.67 and 4.86 in the control class. It was also known that the t_{count} value was 2.65 with a significance of 0.0162. The t_{table} value of db 18 was 2.100. Thus, it can be concluded that $t_{count} > t_{table}$ ($2.6535 > 2.100$) and the significance value was less than 0.05 ($p = 0.0162 < 0.05$), so it can be stated that there was a significant difference in the increase in the score of rhythmic movement ability between the experiment class and control class.

Based on the test results above, the alternative research hypothesis, "There is an effect of Gemu Famire gymnastics on the ability of rhythmic movements," can be accepted.

D. Discussion

Rhythmic movement ability is the ability to move rhythmically according to the rhythm of music, clapping or tapping outside of music. This ability has the main elements of movement and rhythm with the main principles of rhythm, flexibility, continuity of movement, and accuracy of motion and rhythm. In rhythmic motion, there are basic motion elements such as locomotor, non-locomotor, and manipulative movements. Rhythmic movement ability is beneficial for children's health, gross motor development, and cognitive abilities and influences children's language development.

Rhythmic movement ability can be stimulated through rhythmic gymnastics. Rhythmic gymnastics is defined as the result of the integration of sports and dance movements that contain elements of beauty. Rhythmic gymnastics can be done with gymnastic movements or free movements with musical accompaniment.

In this study, the research subjects (experiment class) were given treatment in the form of Gemu Famire rhythmic gymnastics to test its effect on children's rhythmic movement abilities. As for the control class, they were given baby shark gymnastics lessons. From the analysis results, it was obtained that the average percentage of the experiment class pretest was 53%. This indicates that the initial ability of children's rhythmic movements is still quite low because children rarely get stimulation of rhythmic movements. In carrying out the initial test, most children observe and try to follow it. After being given treatment in the form of Gemu Famire gymnastics, an average score of 67% was obtained. This increase occurred because students began to master the main components of rhythmic motion and slowly began to be able to perform basic movements from the treatment given by the researchers.

The control group was given treatment through baby shark song movements. From the results of the data analysis, it was obtained that the average percentage of the initial score was 51.7%. Not much different from the experiment class, most of

the children observed and tried to move according to the example of the researcher. Whereas after the posttest, an average score percentage of 56% was obtained, which means there was an increase of 4.3%.

When compared to the average percentage of the initial scores of the two classes, the rhythmic movement ability of the experiment class was greater than that of the control class. This is because the experiment class was given the Gemu Famire gymnastics treatment, where the basic movements complexly contain all the main elements of rhythmic movements, such as rhythm, flexibility, continuity, and movement suitability. It's different if the control class is given the motion of the baby shark song. The content of the main elements of rhythmic movement is not as complex as in Gemu Famire gymnastics, especially the element of flexibility.

From the two treatments that have been discussed, it can be understood that Gemu Famire gymnastics contains the main elements of complex rhythmic movements so that they affect the ability of early childhood rhythmic movements. Apart from that, the rhythm of the Gemu Famire gymnastics is quite pleasing to the ear, which makes children interested in moving.

CONCLUSION

Based on the results of the research that the researchers have done, it can be concluded that from the data analysis using the Microsoft Excel 2010 application by comparing the t_{count} and t_{table} results of the posttest and the increase in the percentage of scores in the experiment class and control class. The t_{count} results were 3.653 and 2.6535, both were greater than the t_{table} values of 2.093 and 2.1009. Thus, there was a significant difference between the post-test scores of the experiment class and the control class and there was a significant increase in the experiment class. Then, the null hypothesis was rejected and the alternative hypothesis was accepted.

Gemu Famire rhythmic gymnastics is a medium that can influence children's rhythmic movement abilities. Therefore, this gymnastics can be used to improve children's rhythmic movement abilities, especially in the aspect of flexibility.

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