

## **IMPROVING EARLY CHILDREN'S SOCIAL COGNITIVE ABILITY THROUGH ART LEARNING IN TERNATE, NORTH MALUKU**

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### **ABSTRACT**

This study aims to improve the social cognitive abilities developed by Bandura through art learning in early childhood. The research method uses action research developed by Lewin. Data collection techniques using observation sheets or observations. Data analysis techniques using t-test. The research sample of students was 30 children in group B. Cognitive abilities were not only developed by Piaget and Vygotsky, but also by Bandura. The cognitive theory developed by Bandura is known as social cognitive because it emphasizes more on the process of modeling and imitating to acquire knowledge. Early childhood cognitive development can be done through various methods and techniques as well as learning materials and resources. Art ability is developed in every curriculum in early childhood. The results showed that the end of the cycle obtained data  $t\text{-count } 3.98 > t\text{-table } 1.697$  at a significance level of 0.05. Thus it can be concluded that social cognitive abilities through art learning are effectively used. It is suggested, to improve social cognitive abilities can be done through art learning.

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## INTRODUCTION

Cognitive ability is one of the important things in the development and growth of children. Research on cognitive abilities has been carried out throughout the 20th century by experts. Piaget is one of the figures who developed research on cognitive abilities. The results of Piaget's research influence learning changes and further research on human brain development. Cognitive psychology is a real impact of the results of research conducted by Piaget. Developmental psychologists continue to test Piaget's findings to this day. Vygotsky was a Piaget student who studied the development of cognitive aspects in humans. There are fundamental differences in the theoretical concepts developed by Piaget and Vygotsky. Piaget states that the acquisition of knowledge is done using a schema, that is, three stages are starting from assimilation, accommodation, and equilibrium<sup>1</sup>. At the assimilation stage, children still have global or overall thinking. In the accommodation stage, thoughts change because of new knowledge, and in the equilibrium stage, thoughts result from the analysis of knowledge obtained through the processes of assimilation and accommodation. Equilibrium thinking can be said to be the conclusion of the two previous processes, namely assimilation, and accommodation.

Vygotsky<sup>2</sup> states that the acquisition of knowledge in a child is obtained through social interaction with more mature people or peers. This ability will continue to increase if adults or peers have more abilities. Vygotsky called it the Zone of Proximal Development. This is the zone of proximal development, i.e. the distance between the actual level of development determined by independent problem-solving and the level of potential development determined through problem-solving under adult guidance or in collaboration with more capable peers. According to Vygotsky, children's knowledge will continue to increase if they get direction and guidance from people who are more capable in the form of social interaction. This theory is often referred to as social cognitive or sociocultural because knowledge acquisition is carried out through social interaction with the surrounding environment.

Learning with an emphasis on social interaction skills is important to do early on because it can help the development and growth of children's thinking skills. Social interaction can also help children acquire language skills properly and correctly. When children interact, at that time communication occurs both verbally and nonverbal. Language ability is one of the benchmarks to determine the level of thinking ability.

Learning through art is one way of social interaction. Adults who have more abilities can help children who lack abilities so that actual development can develop into potential. Beetlestone states that art lessons provide a way for

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<sup>1</sup> Schunk, Dale H. (2012) *Learning Theories An Educational Perspective*, Pearson Education, New York.

<sup>2</sup> Crain, Williams ( 2014) *Theories of Development, Concept, and Applications*, Englewood Cliffs-New Jersey, Prencite-Hall.

teachers to give children an appreciative handle on the growth and direction of our civilization<sup>3</sup>. Learning through art can improve social cognitive abilities in children. This can happen when they learn to sing or dance, not only are they have given appreciative abilities, but also conceptual knowledge that must be mastered. Based on the results of this conceptual knowledge, the child will perform singing, dancing, or drawing skills.

In learning through dance, for example, motion is the main elements that must be mastered by children. This learning not only emphasizes movement skills but also learns the culture of the local area. Ismail<sup>4</sup> states that motion learning can be taken from local traditional game forms. Learning materials with the richness of local culture apart from helping to preserve it are also full of meaning and symbolism. Children are also not uprooted from their cultural roots. Teachers together with children can explore the wealth that is around as learning material. Knowledge of motion is not only related to aesthetics but also to the supporting culture in which the child lives.

This research is important because so far the improvement of social cognitive abilities has not been given enough attention by teachers. The research was conducted using an art learning approach so that teachers have adequate references that improving cognitive abilities can only be done through science learning, but can also be done through art learning. This learning is not only appreciative but at the same time improves cognitive abilities. Based on the theoretical concepts and results of the research that has been done, a question arises in this study, "Can social cognitive abilities be improved through art learning?" Based on this research question, scientific research steps were carried out using the action research approach developed by Lewin.

## METHODS

This research uses an action research design. This design is also a research method used. The action research design used was developed by Lewin. The action research steps developed by Lewin<sup>5</sup>. This approach is used with several considerations, including; (1) the research sample is early childhood which in learning is still full of using play and game methods; (2) the abilities possessed will always develop according to mental development and age; (3) the research approach must be more humane. The research was carried out by following the design that had been developed by Lewin, in the early stages of identifying learning problems regarding cognitive abilities carried out by the teacher. The results of the initial observations were then carried out to identify the facts found.

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<sup>3</sup> Beetlestone, Florence (2013) *Creative Learning*, translation by Narulita Yusron, Nusa Media, Bandung.

<sup>4</sup> Ismail, Radjiman (2016) *The Perspective of Early Childhood Learning Development*, Bogor, Indraprasta Gemilang.

<sup>5</sup> Mertler, Craig A. (2009) *Action Research Teacher as Researcher in The Classroom*, Sage, Los Angles.

The third stage is carrying out learning planning for improvement. The fourth stage is doing the first action according to the plan. The fifth stage is to evaluate and reflect on the first action. If there are still deficiencies or not the objectives, then proceed with the second action.

The research population was early childhood from four schools totaling 50 students. The sample was taken using a random technique or random as many as 30 students, who came from two Radhatul Athal (RA) schools in the city of Ternate. The instrument was developed in the form of an observation sheet. The instrument is divided into four observation sheets, namely; (1) the observation process; (2) the retention process; (3) the motor reproduction processes; and (4) the process of strengthening motivation. Each research instrument uses a Likert scale of 1 – 3, with criteria 1 = Poor, 2 = Enough, and 3 = Good.

This study has two data, namely those from the Likert Scale in a quantitative form and the results of focus group discussions (FGD) in a qualitative form. Quantitative data was calculated using the t-test, while the FGD results were used to explain quantitative data. So the data analysis technique uses the mixed method technique.

## RESULT AND DISCUSSION

The research was conducted for two cycles. Each cycle consists of four processes developed by Bandura, namely the observation process, the retention process, the motor reproduction process, and the motivation strengthening process. Every process is observed and is a form of ability that must be mastered by students. The research step requires carrying out these four processes before intervening in both the first and second cycles.

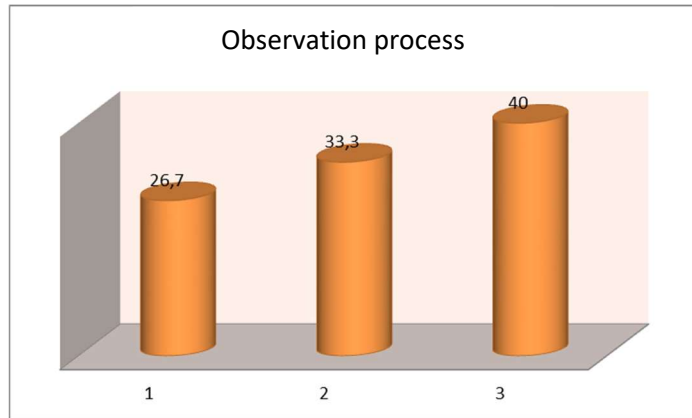
### *Pre-cycle Results*

Observations were made before the research intervention was carried out. Based on the results of pre-research observations, the observation begins at the initial stage, namely the observation process. The results of the observation process can be seen in the following table:

**Table 1 Pre-cycle Observation Process Results**

Category	Number of Students	In Percentage (%)
<b>Good</b>	8	26,7
	10	33,3
<b>Poor</b>	8	40.0
<b>Total</b>	30	100

The results of data analysis before the intervention in the first cycle show the process of observing students who belong to the Good category is 8 children or 26.7% , the Enough category is 10 students, or 33.3%, and the less category is 12 students or by 40%. Based on the results of calculating the ability of the student's observation process in the observation process, it can be illustrated through the following graph.



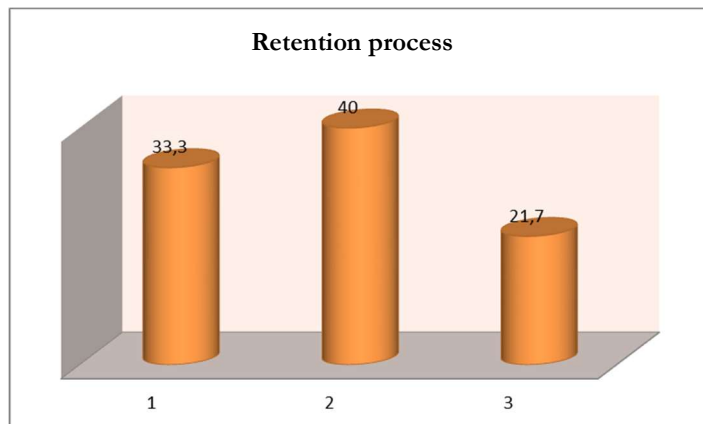
**Figure 1 Pre-cycle results of the observation**

Observations were also made on the retention process and obtained data as shown in the following table.

**Table 2 Pre-cycle Retention Process Results**

Category	Number of Students	In Percentage (%)
<b>Good</b>	10	33,3
	12	40,0
<b>Poor</b>	8	26,7
<b>Total</b>	30	100%

The results of data analysis before the intervention in the first cycle, the retention process of students who belong to the Good category is 10 children or 33.3%, the Enough category is 12 students, or 40.0%, and the less category is 8, or equal to 26.7%. Based on the results of calculating students' abilities in the retention process, it can be illustrated through the following graph.



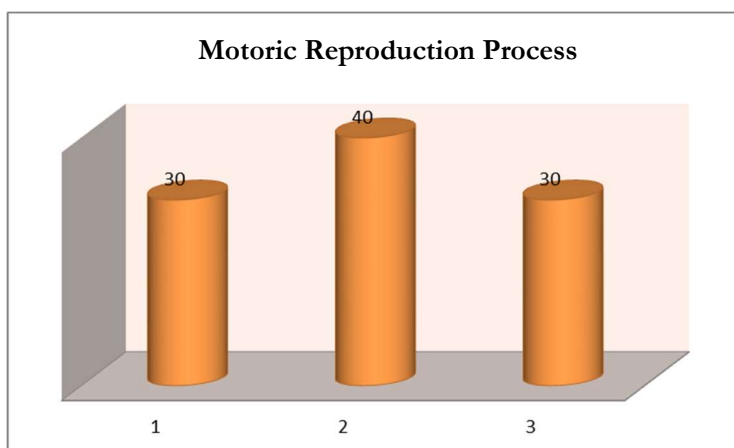
**Figure 2 Pre-cycle results of the retention process**

Observations were also made on the process of motor reproduction. The results of observations on the process of motor reproduction are shown in the following table.

**Table 3 Results of the Motor Reproduction Process Precycle**

Category	Number of Students	In Percentage (%)
<b>Good</b>	9	30.0
	12	40.0
<b>Poor</b>	9	30.0
<b>Total</b>	30	100%

The results of data analysis before the intervention in the first cycle, the motor reproduction process of students who belonged to the Good category was 9 children or 30.0%, the Enough category was 12 students, or 40.0%, and the less category was 9, or by 30.0%. Based on the results of calculating students' abilities in the process of motor reproduction, it can be illustrated through the following graph.



**Figure 3 Pre-Cycle Results of Motoric Reproduction Process**

Observations were also made on the process of strengthening motivation and obtained data as shown in the following table.

**Table 4 Pre-cycle Results of the Strengthening Motivation Process**

Category	Number of Students	In Percentage (%)
<b>Good</b>	7	23,3
	10	33,3
<b>Poor</b>	13	43,4
<b>Total</b>	30	100%

The results of data analysis before the intervention in the first cycle, the motor reproduction process of students who belonged to the Good category was 7 children or 23.3%, the category was 10 students, or 33.3%, and the less

category was 13, or by 43.4%. Based on the results of calculating students' abilities in the process of strengthening motivation, it can be illustrated through the following graph

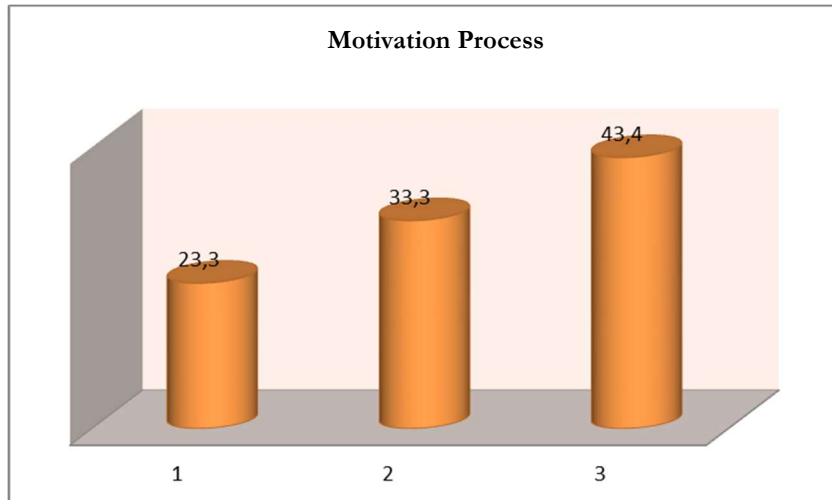


Figure 4 Pre-Cycle Results of Motivation Process

Based on the pre-cycle results for each process, learning planning is then carried out and carried out in the first cycle. The final results of the first cycle can be seen in each of the following processes.

#### *Final Results of the First Cycle*

At the end of the first cycle, four processes were observed, namely observation, retention, motor reproduction, and motor strengthening. Based on the results of observations at the end of the first cycle of the observation process, the following data were obtained.

Table 5 The final results of the first cycle of the observation process

Category	Number of Students	In Percentage (%)
<b>Good</b>	18	60.0
	8	26,7
<b>Poor</b>	4	13,3
<b>Total</b>	30	100%

Based on the final results of the first cycle, 18 students were found in the Good category, or 60%, the category was 8 students, or 26.7%, the Less category was 4 students, or 13.3%. The final results of the first cycle can be described through the graph as follows.

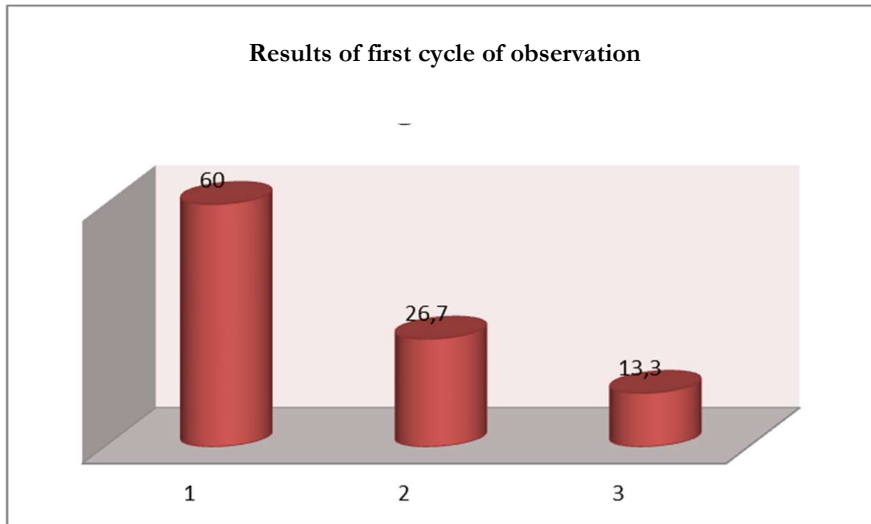


Figure 5 Final Results of first cycle of observation.

The results of the first pre-cycle with the final results of the first cycle there is an increase in ability in the observation process. These results can be illustrated through the following graph.

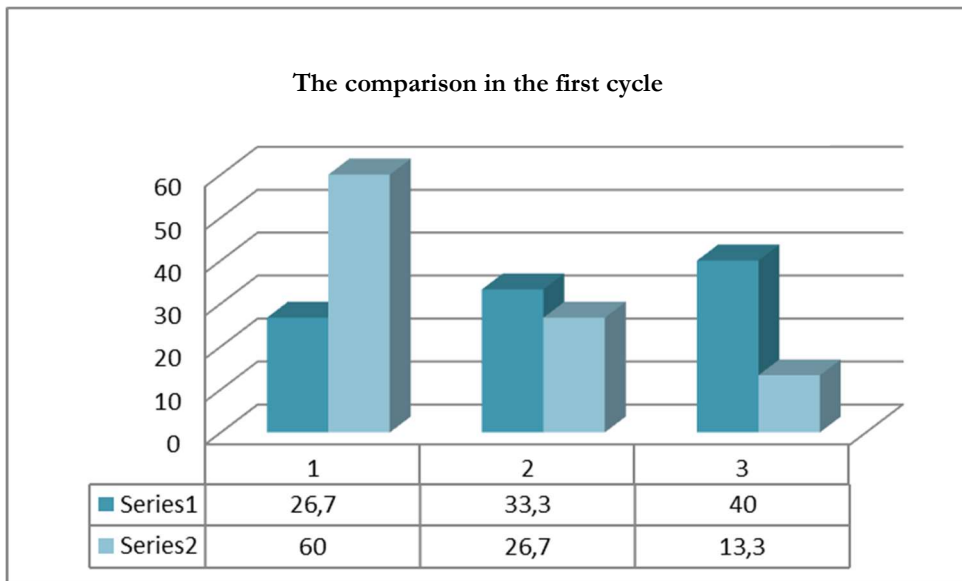


Figure 6 Final results of first cycle and post cycle of observation

Comparison of pre-cycle results with the end of the first cycle there is an increase in the observation process. In the pre-cycle, the Good category was 26.7%, at the end of the cycle it rose to 60%, in the Enough category 38.3%, at



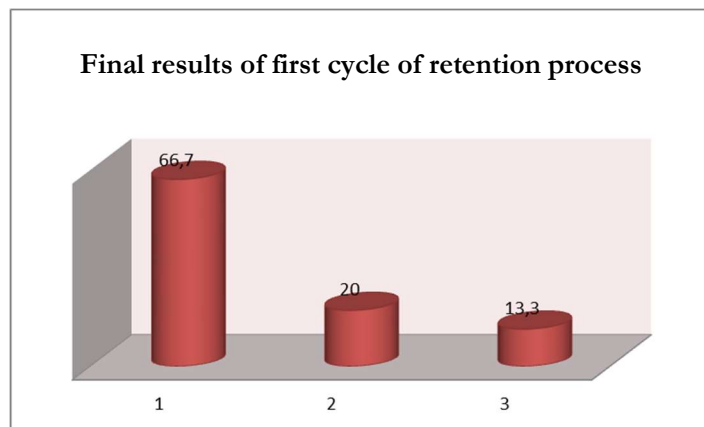
the end of the first cycle it fell to 26.7%, as well as in the Less pre-cycle of 40%, at the end of the cycle first fell to 13.3%. This shows that art learning can improve social cognitive abilities.

The next step, observation is carried out by the retention process. The results of the retention process at the end of the first cycle can be seen in the following table.

**Table 6 Final results of the first cycle of the retention process**

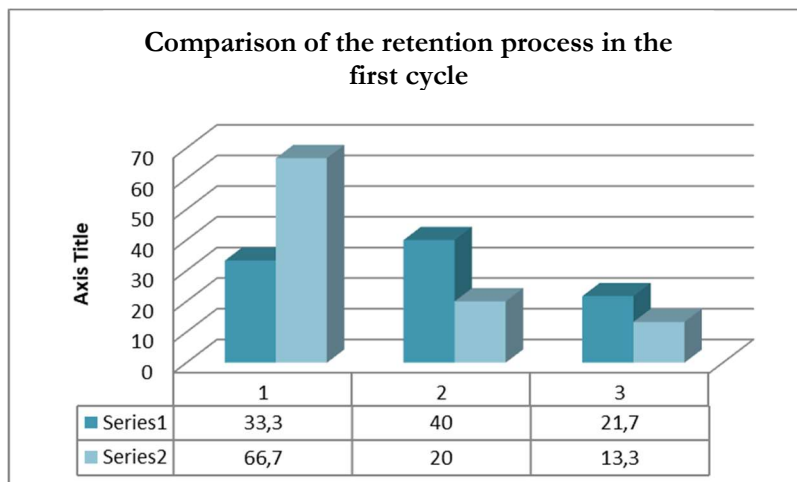
Category	Number of Students	In Percentage (%)
<b>Good</b>	20	66,7
	6	20.0
<b>Poor</b>	4	13,3
<b>Total</b>	30	100%

Based on the final results of the first cycle, 20 students were found in the Good category, or 66.7%, the Enough category was 6 students, or 20%, the Less category was 4 students, or 13.3%. The end result of the first cycle of the retention process can be illustrated through the graph as follows.



**Figure 7 Final results of first cycle of retention process**

There is a difference in the results between the pre-cycle and the end of the first cycle in the retention process. The results of the retention process between the pre-cycle and the final results of the first cycle can be illustrated in the following graph.



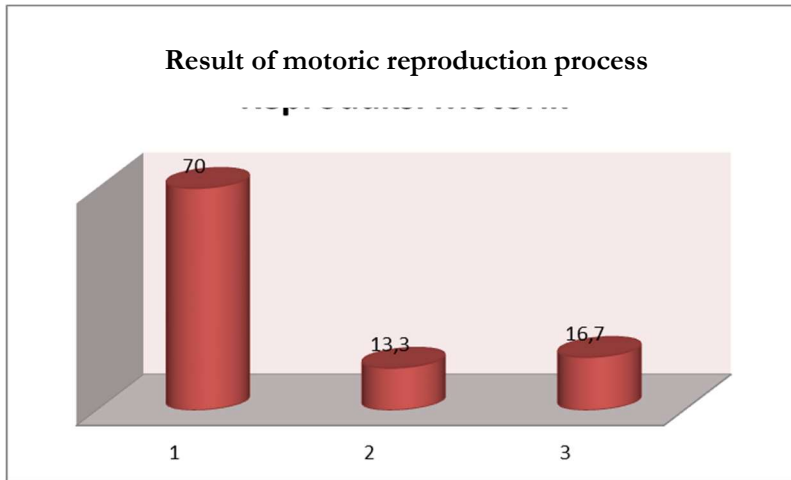
**Figure 8 Final results of first cycle with post retention cycle process**

The results at the end of the first cycle were an increase in the retention process when compared to the pre-cycle results. In the pre-cycle, the Good category was 33.3%, at the end of the cycle it rose to 66.7%, in the Enough category 40.0%, at the end of the first cycle it fell to 20.0%, as well as in the Less pre-cycle of 26.7% , at the end of the first cycle fell to 13.3%. This shows that art learning can improve social cognitive abilities. Observations were made on the process of motor reproduction at the end of the first cycle. The results of the motor reproduction process at the end of the first cycle can be seen in the following table.

**Table 7 Final results of the first cycle of motor reproduction process**

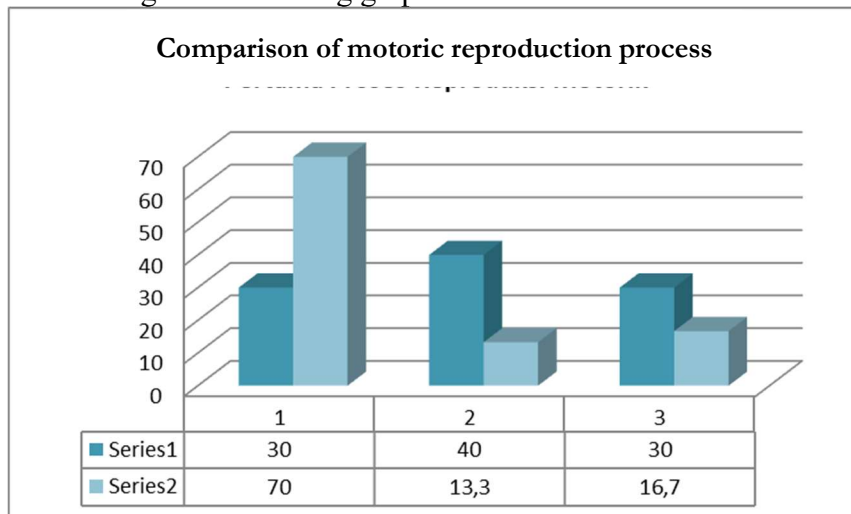
Category	Number of Students	In Percentage (%)
<b>Good</b>	21	70.0
	4	13,3
<b>Poor</b>	5	16,7
<b>Total</b>	30	100%

Based on the final results of the first cycle, 21 students were found in the Good category, or 70%, the category was 4 students, or 13.3%, the Poor category was 5 students, or 16.7%. The final results of the first cycle can be described through the graph below:



**Figure 8** Final results of first cycle of motoric reproduction process

The results of the first pre-cycle with the end result of the first cycle there is an increase in ability in the process of motor reproduction. These results can be illustrated through the following graph.



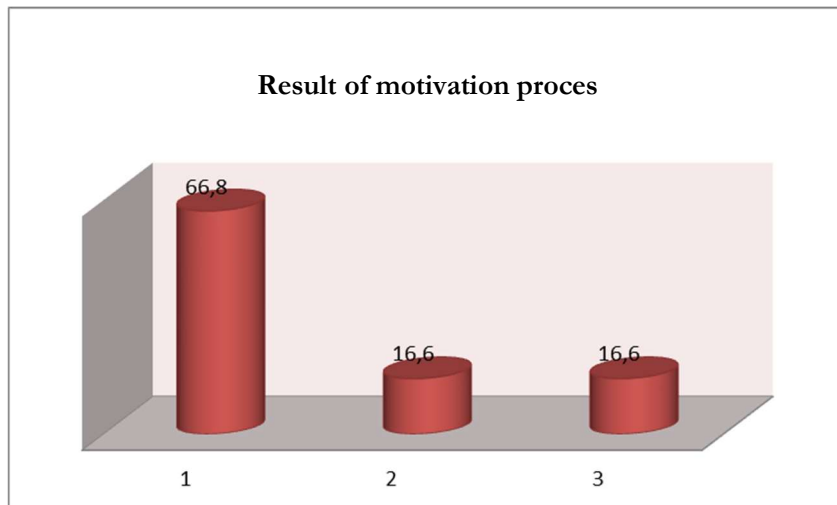
**Figure 10** the comparison of first cycle final results and motoric reproduction process of post-cycle

The results at the end of the first cycle were an increase in the retention process when compared to the pre-cycle results. In the pre-cycle, the Good category was 30.0%, at the end of the cycle it rose to 70.0%, in the Enough category it was 40.0%, at the end of the first cycle it fell to 13.3%, as well as in the Less pre-cycle of 30.0% , at the end of the first cycle fell to 16.7%. This shows that art learning can improve social cognitive abilities. The results of the process of strengthening motivation at the end of the first cycle can be seen in the following table.

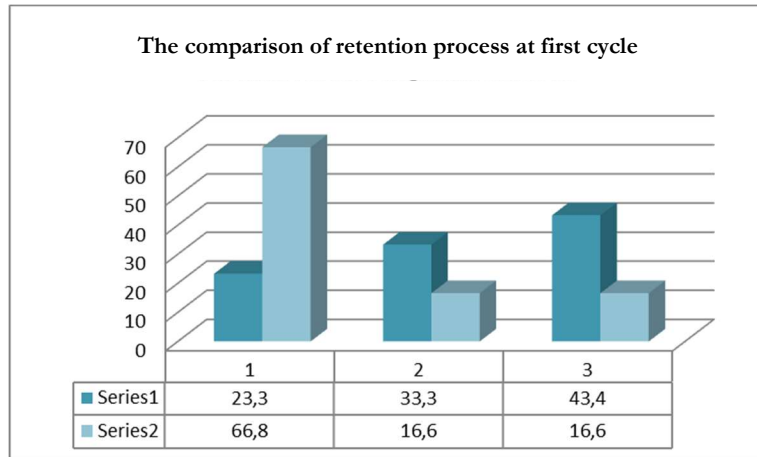
**Table 8 Final results of the first cycle of strengthening motivation**

Category	Number of Students	In Percentage (%)
<b>Good</b>	20	66,8
	5	16,6
<b>Poor</b>	5	16,6
<b>Total</b>	30	100%

Based on the final results of the first cycle, 20 students were found in the Good category, or 66.8%, the Enough category was 5 students, or 16.6%, the Less category was 5 students, or 16.6%. Based on the table above, the final results of the first cycle can be described through the graph as follows.

**Figure 11 Final results of first post-cycle of motivation proces**

The results of the first pre-cycle with the final results of the first cycle there is an increase in ability in the process of strengthening motivation. This shows that the art learning that is carried out has effectiveness to improve students' social cognitive abilities. These results can be illustrated through the following graph.



**Figure 12** The comparison of first cycle final results and post-cycle of retention process

The results at the end of the first cycle were an increase in the process of strengthening motivation when compared to the pre-cycle results. In the pre-cycle, the Good category was 23.3%, at the end of the cycle it rose to 66.8%, in the Enough category 33.3%, at the end of the first cycle it fell to 16.6%, as well as in the Less pre-cycle of 43.4% , at the end of the first cycle fell to 16.6%. This shows that art learning can improve social cognitive abilities.

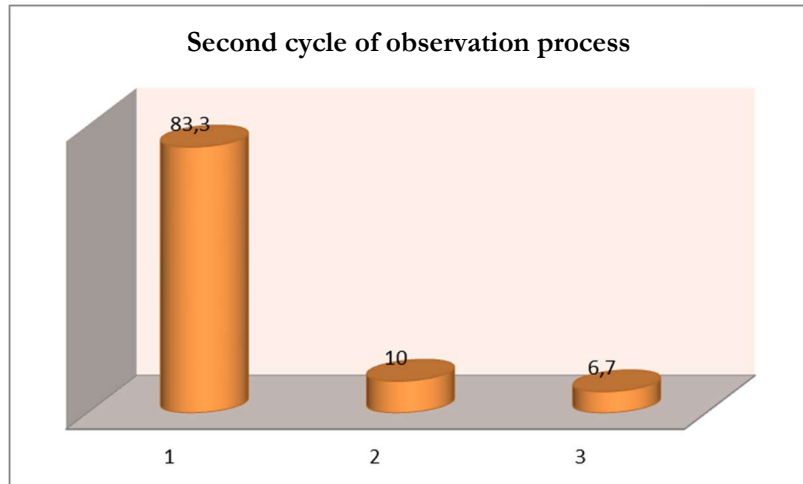
*Results of the Second Cycle*

At the end of the second cycle, four processes were observed, namely observation, retention, motor reproduction, and motor strengthening. Based on the results of observations at the end of the second cycle, the following data were obtained. The results of the observation process at the end of the second cycle can be seen in the following table.

**Table 9** The final results of the second cycle of the observation process

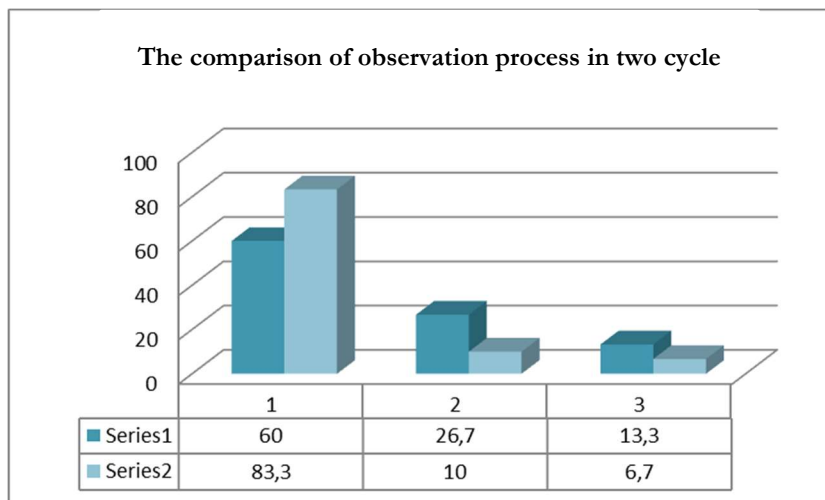
Category	Number of Students	In Percentage (%)
<b>Good</b>	25	83.3
	3	10.0
<b>Poor</b>	2	6,7
<b>Total</b>	30	100%

Based on the final results of the first cycle, 25 students were found in the Good category, or 83.3%, the Enough category was 3 students, or 10%, the Less category was 2 students, or 6.7%. The final results of the second cycle of the observation process can be described through the graph as follows.



**Figure 13 Final results of second cycle of observation process**

The end result of the first cycle with the end result of the second cycle is an increase in ability in the observation process. These results can be illustrated through the following graph.



**Figure 14 The comparison of first cycle final results and second cycle of observation process**

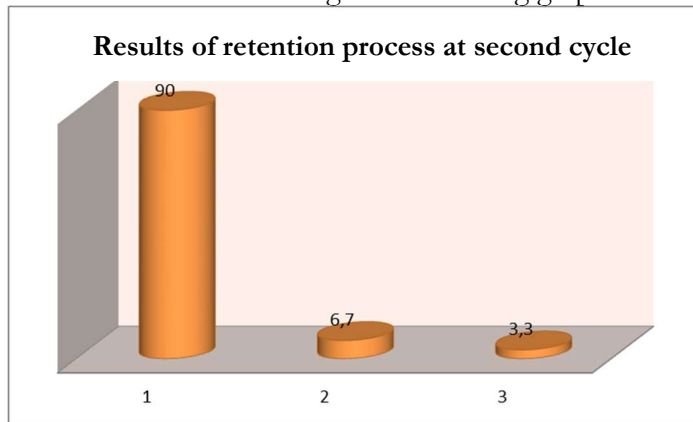
The second cycle was an increase in the observation process when compared to the final results of the first cycle. At the end of the first cycle, the Good category was 60.0%, at the end of the second cycle it rose to 83.3%, in the Enough category 26.7%, at the end of the first cycle it fell to 10.0% at the end of the second cycle, so did the the end of the first cycle Less by 13.3%, at the end of the first cycle it fell to 6.7% at the end of the second cycle. This shows that art learning can improve social cognitive abilities.

Observation of the retention process was carried out in the second cycle. The results of the retention process at the end of the second cycle can be seen in the following table.

**Table 10 The final results of the second cycle of the retention process**

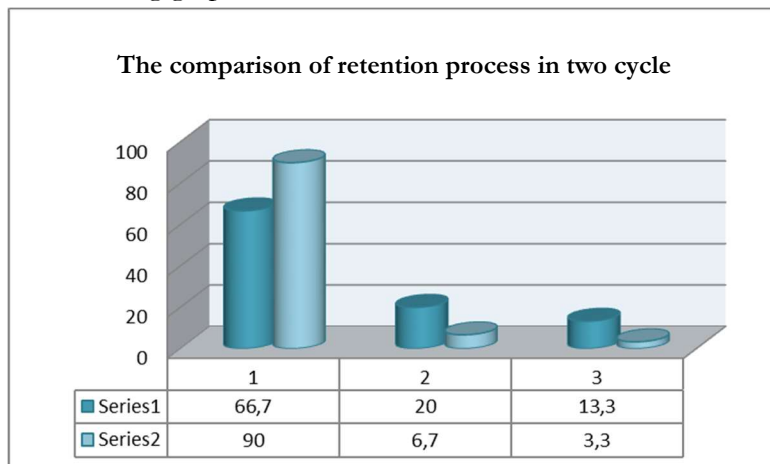
Category	Number of Students	In Percentage (%)
<b>Good</b>	27	90.0
	2	6,7
<b>Poor</b>	1	3,3
<b>Total</b>	30	100%

Based on the final results of the first cycle, 27 students were found in the Good category, or 90.0%, the Enough category was 2 students, or 6.7%, the Less category was 1 student, or 3.3%. The final results of the second cycle of the retention process can be illustrated through the following graph.



**Figure 15 Final results of second cycle of retention process**

The end result of the first cycle with the end result of the second cycle is an increase in ability in the retention process. These results can be illustrated through the following graph.



**Figure 16** The comparison of first cycle and second cycle of retention process

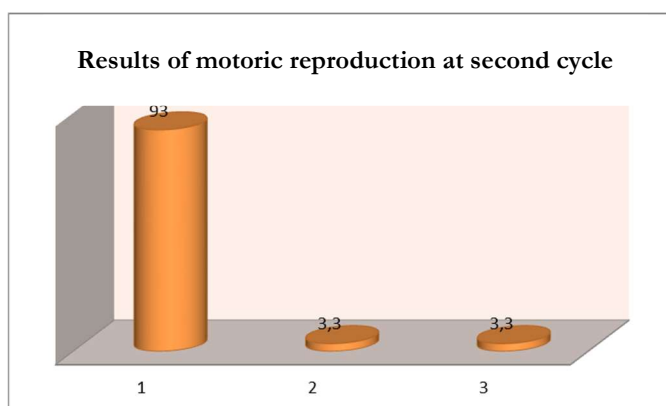
The second cycle was an increase in the retention process when compared to the end results of the first cycle. At the end of the first cycle, the Good category was 66.7%, at the end of the second cycle it rose to 90.0%, in the Enough category 20.0%, at the end of the first cycle it fell to 6.7% at the end of the second cycle, as well as in the the end of the first cycle Less by 13.3%, at the end of the first cycle it fell to 3.3% at the end of the second cycle. This shows that art learning can improve social cognitive abilities.

Observations were made on the process of motor reproduction in the second cycle. The results of the motor reproduction process at the end of the second cycle can be seen in the following table.

**Table 11** Final results of the second cycle of motor reproduction processes

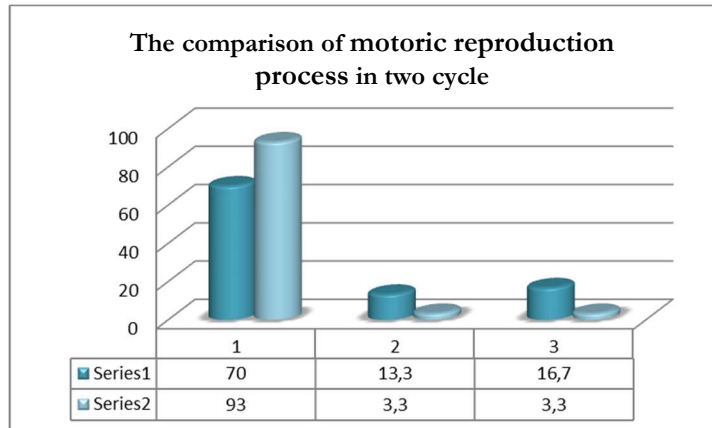
Category	Number of Students	In Percentage (%)
<b>Good</b>	28	93.4
	1	3,3
<b>Poor</b>	1	3,3
<b>Total</b>	30	100%

Based on the final results of the first cycle, 28 students were found in the Good category, or 93.4%, the Enough category was 1 student, or 3.3%, the Poor category was 1 student, or 3.3%. The final results of the second cycle of the motor reproduction process can be illustrated through the following graph.

**Figure 17** Final results of second cycle of motoric reproduction

The final result of the first cycle with the end result of the second cycle is an increase in ability in the process of motor reproduction. These results can be illustrated through the following graph.





**Figure 18** The comparison of first cycle final result and second cycle of motoric reproduction process

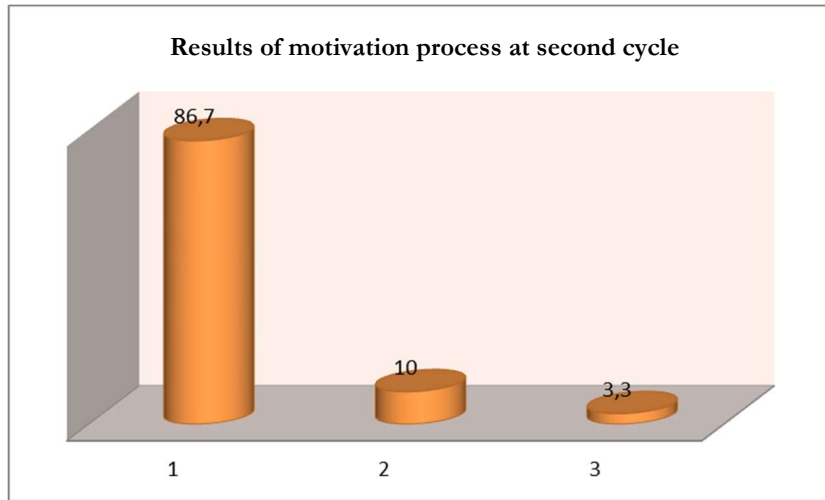
The second cycle was an increase in the motor reproduction process, when compared to the results of the first cycle. At the end of the first cycle, the Good category was 70.0%, at the end of the second cycle it rose to 93.4%, in the Enough category 13.3%, at the end of the first cycle it fell to 3.3% at the end of the second cycle, so did the the end of the first cycle Less by 16.7%, at the end of the first cycle it fell to 3.3% at the end of the second cycle. This shows that art learning can improve social cognitive abilities.

Observation of abilities in the process of strengthening motivation in the second cycle was also carried out. The results of the process of strengthening motivation at the end of the second cycle can be seen in the following table.

**Table 12** Final results of the second cycle of strengthening motivation

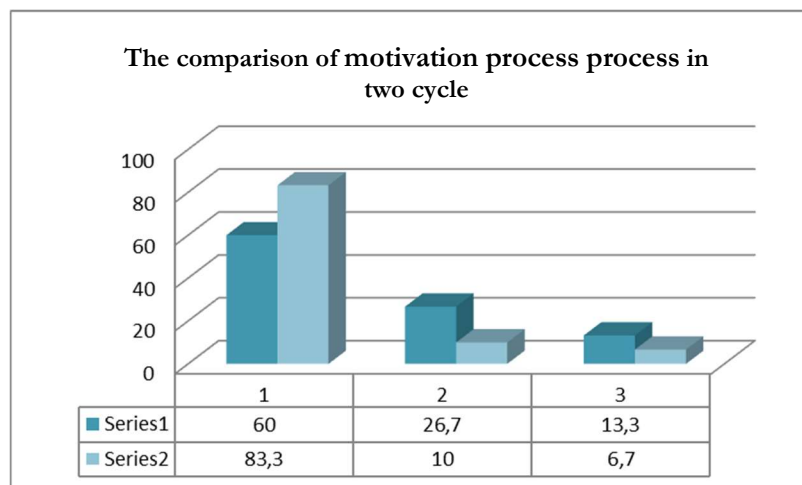
Category	Number of Students	In Percentage (%)
<b>Good</b>	26	86.7
	3	10.0
<b>Poor</b>	1	3,3
<b>Total</b>	30	100%

Based on the final results of the first cycle, data were obtained in the Good category as many as 26 students, or 86.7%, Enough category as many as 3 students, or 10.0%, Poor category as many as 1 student, or 3.3% . The end result of the second cycle of the process of strengthening motivation can be described through the graph as follows.



**Figure 19** Final result of second cycle of motivation process

The first final result with the final results of the second cycle is an increase in ability in the process of strengthening motivation. These results can be illustrated through the following graph.



**Figure 20** The comparison final results of first cycle with second cycle of motivation process

The second cycle was an increase in the process of strengthening motivation when compared to the results of the first cycle. At the end of the first cycle, the Good category was 66.8%, at the end of the second cycle it rose to 86.7%, in the Enough category 16.6%, at the end of the first cycle it fell to 10.0% at the end of the second cycle, so did the the end of the first cycle Less by 16.6%, at the end of the first cycle it fell to 3.3% at the end of the second cycle. This shows that art learning can improve social cognitive abilities.

At the end of the second cycle, above 85% was in the Good category, so it was not continued to the third cycle. At the end of the second cycle, a quantitative test was also carried out using the t-test. The results of the t-test showed that the  $t_{\text{count}}$  was  $3.98 > t_{\text{table}} 1.697$ . This shows that there is a significant effect of increasing social cognitive abilities through art learning.

Research on social cognitive abilities is very rarely done. The social cognitive research developed by Bandura and also Vygotsky, in principle, is no different from the cognitive developed by Piaget. The difference is only in the acquisition of knowledge. Bandura emphasizes four processes in acquiring knowledge. The four processes are a unified whole. Bandura put more emphasis on modeling and imitating in acquiring knowledge while Piaget put more emphasis on observations made by children. The principle of observation with the observation process has the same activity, namely researching the object being seen. The process of retention in Bandura actually has similarities with assimilation and accommodation. In this process, the child, through the retention process, identifies the strengths and weaknesses of the observed model object, while in assimilation and accommodation, the child identifies differences between objects that have been observed and new objects that have characteristics. Children acquire new knowledge. In Bandura's motor reproduction process it has similarities to Piaget's equilibrium. If in Bandura the child or learner performs the same behavior towards the observed object or model, while Piaget concludes between the acquisition of previous knowledge, through assimilation, and new knowledge, through accommodation. Both have the same principles, but differ in the expected behavior. Piaget put more emphasis on thinking skills, Bandura emphasized the same skills as the observed model.

Social cognitive abilities emphasize more on the approach of acquiring knowledge through interaction with others. Vygotsky also did this. The ability of the Zone of Proximal Development (ZPD), can develop from actual development to potential development if you get guidance from adults or peers who have more abilities. This shows that developing cognitive abilities can be done using a variety of approaches. Cognitive abilities are the basis of how a person has the ability to think.

This thinking ability experiences its golden age when it is 0-10 years old. At this age, children are enrolled in early childhood education (PAUD) and elementary school (SD). The ability to develop the brain and think will continue to decline if it is not stimulated according to mental development and age. Teachers, parents and adults can help develop children's thinking skills through various media and methods and approaches.

In this study using intervention through art learning. This approach was chosen because art learning provides space for children to explore as effectively and creatively as possible. In art learning carried out in accordance with the social cognitive developed by Bandura, it can be explained as follows.

The process of observation, carried out by looking at animals that have wings. The teacher provides examples of animals in cages in the form of birds and chickens. These two animals are around the child's life. The children were asked to observe the two animals. Observations were made starting from physical form, movements, number of legs, number of wings, and behavior to obtain food. Reinforcement in this process is done by asking the child to explain the number of legs, the number of wings, how the wings are moved, how to eat, and the movements of the birds.

The retention process is carried out by telling the strengths and weaknesses of the model that has been observed. The teacher explains that birds can soar high into the sky, but chickens cannot do this, even though they both have wings. Birds build nests in trees, but chickens build their homes on the ground. Chickens are kept by many people, while many birds live freely in the universe.

The teacher explains the strengths and weaknesses of the two models in great detail. Reinforcement is done by asking the child to explain again the two characteristics of the model, namely birds and chickens. The teacher assesses through the explanations given by the children about the knowledge they already have of these two objects. There are children who have the ability to explain well, but there are also children who are not good at explaining these two objects.

The process of motor reproduction is carried out by giving students choices to reproduce motor chickens or birds. The teacher gives keywords namely, moving wings, moving legs, moving heads, and moving movements while eating. Strengthening is done by carrying out wing movements using both hands, moving the head, legs, and movements while eating.

In the process of motor reproduction, the teacher asks children to make movements according to imagination when observing and retaining. Each child has a different flying style according to the perception when the observation and retention process is carried out. Children imitate the movements of birds or chickens. The teacher gives a count when the child is doing the bird or chicken movement.

The process of strengthening motivation is carried out by giving an assessment of the efforts that have been made by the child. Strengthening motivation is important so that children have the enthusiasm to carry out motor reproduction according to the model chosen. The implication is that children can dance with high self-confidence and imagine as if they are a bird that can fly high, or a chicken that wakes up the whole earth every morning.

These four stages were carried out in both the first and second cycles. There is a difference in the process of the first cycle with the second cycle. In the first cycle, children or students still looked shy and lacked confidence when strengthening both the observation and retention processes. When asked to explain, the child still stammers in using language to explain the strengths and weaknesses of the model being observed. This also occurs in the process of motor reproduction. The child looks stiff and embarrassed to make movements

according to the observations. In the process of strengthening motivation, children look happy when the teacher gives praise for the movements that have been made.

In the second cycle, every process has undergone changes and improvements. Children are no longer stuttered using language and are more confident. This condition certainly has an impact on children's thinking skills for the better. Likewise, the motor skills that are performed have more real dynamics and flexibility of motion. Children are more motivated than the previous cycle. In each cycle and process, strengthening is also done with other aspects of art. Children after completing the process of observing, retaining, motor reproduction, and strengthening motivation, carry out singing, drawing, and coloring activities. The coloring activity emphasizes the ability to use fine motor skills. Singing a song related to the model chosen, namely "Kutilang Bird", students are asked to draw a bird or chicken and give color.

## CONCLUSION

This research was conducted for two cycles. The learning theme used is "The Surrounding Environment." Based on the results of research data calculations using the t-test at the end of the second cycle, the t-count data is  $3.98 > t\text{-table } 1.697$ . This indicates a significant increase in social cognitive abilities according to predetermined indicators. Based on the results of the study it can be concluded that art learning is effectively used to improve social cognitive abilities in early childhood learning. The results of the study have shown a significant increase in cognitive abilities through art learning. This shows that to improve social cognitive abilities it is not necessary to use a scientific learning approach, but can also be done with an art learning approach. The results of this study can be used by teachers in early childhood as a reference in learning to improve children's cognitive abilities.

## REFERENCES

- Bandura, Albert (1976) *Social Learning Theory*, Prentice-Hall, Inc., New Jersey.
- Beetlestone, Florence (2013) *Creative Learning*, translation by Narulita Yusron, Nusa Media, Bandung.
- Bloom, Benjamin S, (2016) *Taxonomy of Educational Objectives The Classification of Educational Go*, Longman, USA.
- Busyro Karim, Muhammad, Siti Herlinah Wifroh, "Improving Cognitive Development in Early Childhood Through Educational Games," *Journal of PG-PAUD Trunojoyo*, Volume 1, Number 2, October 2014, pp. 76-146.
- Crain, Williams (2014) *Theories of Development, Concept, and Applications*, Englewood Cliffs-New Jersey, Prentice-Hall
- Fardiah, Santosa Murwani, Nurbiana Dhieni, with the title "Improving Early Childhood Cognitive Abilities through Learning Science." *Journal of*

- Obsession : Journal of Early Childhood Education, Volume 4 Issue 1 (2020) Pages 133-140. DOI: 10.31004/obsession.v4i1.25
- Gradini, Ega, Dahliana, "Improving Early Childhood Cognitive Ability to Sort Numbers Through Meronce." *As-Salam Journal*, Vol.1, No. 2, September - December 2016. 156-166.
- Ismail, Radjiman (2016) *The Perspective of Early Childhood Learning Development* , Bogor, Indraprasta Gemilang.
- Ismail, Radjiman (2021) *Learning Models and Strategies for Early Childhood Education in Elementary Schools*, Sinar Artha Pustaka Indonesia, Bogor.
- Mertler, Craig A. (2009 ) *Action Research Teacher as Researcher in The Classroom*, Sage, Los Angles.
- Nur, Lutfi, Anne Hafina, Nandang Rusmana "Early Childhood Cognitive Ability in Aquatic Learning." *Scholaria: Journal of Education and Culture*, Vol. 10 No. 1, January 2020: 42-50
- Purnomo, Eko, Junita Aslianty (2015) *Developing Multiple Intelligences Through Dance in Early Childhood*, Indraprasta Gemilang, Bogor.
- Schunk, Dale H. (2012) *Learning Theories An Educational Perspective*, Pearson Education, New York.
- Yetti, Elindra, Eko Purnomo (2022) *Educational Dance Boosts Children's Potential Early on* , Sinar Artha Pustaka Indonesia, Bogor.
- Yuandana, Tarich , Rizka Lailatul Rahmawati, Fitriannisa Ramadhani, "Improving Early Childhood Cognitive Abilities Through Learning Science in the New Normal Period." *JMECE: Journal of Modern Early Childhood Education*, Volume 01 Number 01 (2021) Pages 1-10.