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Improving Children's Cognitive Skills Through The Stone In Early Childhood

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ABSTRACT

This study aims to determine whether cognitive abilities be increased through stone media in early childhood. The formulation of the problem in this study is whether cognitive ability can be increased through stone media in Fathina Kindergarten. The subjects or informants of the study were children from the Fathina Kindergarten, Majene Regency, as many as 20 people. This research was carried out in the odd semester of the 2021/2022 academic year, which took place from August to October and was carried out at Fathina Kindergarten, Majene Regency. The Concept of addition and subtraction through stone media at Fathina Kindergarten, Majene Regency, is experimental classroom action research (CAR). Experimental classroom action research is classroom action research conducted by trying to apply various techniques/strategies effectively and efficiently in a teaching and learning process activity, in this case, through the assignment method. Based on the results of research that has been carried out in Group B of Fathina Kindergarten with 20 students, increasing the ability through stone media has increased with the percentage value of 80%. From the results of the Classroom Action Research conducted by the researcher, namely increasing the ability through stone media, it can increase in Group B in Fathina Kindergarten.

Keywords: cognitive abilities, loose part, stone media

INTRODUCTION

The Law on the National Education System Number 20 of 2003 states that national education aims to develop the potential of students to become human beings who believe and are devoted to God Almighty, have a noble character, are healthy,

knowledgeable, capable, and creative, independent and become good citizens.. Kindergarten as a form of early childhood education institution is in the formal education path as stated in the Article 28 and paragraph (3) that early childhood education in the traditional education path is in the form of *Raudhatul Athfal* (RA) Kindergarten or other forms equal. Early childhood education is a level of education before primary education that focuses on laying the foundation for physical growth and development (gross and fine motor skills), intelligence (thinking power, creativity, emotional intelligence, spiritual intelligence), social-emotional (behavioral attitudes and religion), language and communication as stated in Law No. 20/2008 article 28 that early childhood education is held before the basic education level and can be held through formal, non-formal and informal education.

Early childhood is an individual figure who is undergoing a process of rapid and fundamental development. Early childhood is in the age range of 0-6 years. Media for early childhood learning is generally a game tool. In principle, learning media is helpful to make it easier for students to learn to understand something that may be difficult or simplify something complex. Children's learning media does not have to be expensive and can even be obtained from objects that are not used. Therefore, the teacher must be creative in making a teaching aid that will be used for learning activities so that students do not feel boring learning.

Teachers as facilitators and responsible should be able to use activity strategies that can create situations that can foster initiative and are good at motivating students to be open, creative, responsive and interactive in learning. The method is part of the activity strategy. Thus the teacher must be able to use the suitable technique for the characteristics of the development of students-the availability of educational facilities and infrastructure, and the condition of the kindergarten itself. Lawson (2011) said that educators need to provide learning environments that will allow students to adopt lower levels of fixed beliefs about ability, the link to this study is that when teachers use interesting media will help children learn more fun. In line with the research of the Robinson Katherine and Adam (2009) who suggest that how cognitive psychologists conceive of children's development of arithmetic knowledge and skills must take into consideration children's attitudes toward how arithmetic problems should be approached and solved as well as the role of formal schooling in the development of these attitudes while Kusumadewi (2020) states that the use of teaching materials digital-based comics is very effective and becomes an alternative in increasing the ability to understand mathematical concepts in elementary school students.

Additionally, Kurniawati and Dwiyantri (2016) said that the results of data analysis showed an increase in cognitive abilities through the use of manipulatives media "Life Cycle of a Butterfly" for the kindergarten children on cycle 1 gained an average of 60% and on cycle 2 increased being averaged 82%, while this study used stone media. Also, Wang and Wang (2015) said the learning process is inseparable from child development. Learning is a process of hypothesis testing based on probabilistic models. Children learn through play, observation, and through explicit teaching, during which children are constantly. Children's learning strategies show great variability, both within and across individuals. Education should provide children with opportunities of supported exploration and experimentation, intentional demonstration and instruction, as well as guided discovery.

In addition, in selecting methods, of course, adapting to the characteristics of kindergarten children who are always on the move, able to express themselves creatively and have imagination. In determining the method, it is necessary to also pay

attention to the characteristics of the activity objectives and the features of the children being taught. Based on observations made by researchers in the field, the concept of addition and subtraction in children is less than optimal. Many children are not able to recognize the concept of addition and subtraction of numbers 1-10. This is because the use of inappropriate methods in learning the concept of addition and subtraction of numbers 1-10 makes children confused and depressed. The teacher uses worksheets to understand the addition and subtraction of numbers 1-10. This method is considered less effective and optimal and tends to make children confused and learning less meaningful.

The author's background raises this paper because it remembers the importance of media in learning activities. Early childhood learning will be successful if learning is by the needs and stages of child development. The obstacles teachers face are usually due to the limited media available in schools, and sometimes it can also be due to limited funds. Teachers must be creative in developing learning media by utilizing media that are close to children and easy to obtain by teachers, one of which is pebble media.

Various activities can be done with gravel media to improve children's cognitive abilities. Among them is grouping, compiling patterns, making shapes, recognizing summation and the concept of numbers. It is hoped that this article can provide new inspiration for kindergarten teachers in developing the use of learning media and utilizing materials from nature. And it can also be a solution to get learning media that are cheap, environmentally friendly, close to children and readily available in the environment around children.

The role of the media in learning, especially in early childhood education, is increasingly important, considering that the development of children at that time was in a period of concrete thinking. Therefore, one of the early childhood education principles must be based on reality, meaning that children are expected to learn something for real. Thus education for early childhood must use something that allows children to learn concretely. This principle implies the need to use the media as a channel for delivering education for early childhood. The method used is a method that can move children to grow their logical thinking, draw conclusions and drive them to increase curiosity and develop imagination, encourage them to seek and find answers or solutions to a problem, rethink and find new relationships. Through this research, the institution can produce children who have a balance of abilities between the left and right hemispheres of the brain. This study aims to determine whether cognitive abilities be increased through stone media at Fathina Kindergarten. The formulation of the problem in this study is whether cognitive ability can be increased through stone media in Fathina Kindergarten? While the research action hypothesis is that using stone media can improve cognitive abilities in addition and subtraction in Fathina Kindergarten, Majene Regency.

LITERATURE REVIEW

The Cognitive Concept of Addition and Subtraction

Vygotsky (2001) posits that the improvement of a person's mental functions comes primarily from his social or group life and not just from the individual himself or commonly called the process of constructing new knowledge together between all parties involved in the region. Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 137 of 2014 within the scope of cognitive development, including the following: classifying, matching, sorting, comparing, numbering, and introducing patterns. Rosyadi, (2020) stated that the field of cognitive development of early childhood is divided into 7 areas, namely: auditory development (listener's senses), visual, tactile (sense of touch), kinesthetic, arithmetic or

mathematics, geometry and science. Morison (2012) states that the cognitive development of preschoolers is in the preoperative stage in the development of intelligence. Sujiono (2004) suggests that Bloom's taxonomy is widely used to plan and evaluate learning activities in such a way that children can fully develop their cognitive abilities.

Cognitive development is a thought process, namely the individual's ability to relate, assess and consider an event or events. It can also be interpreted as the ability to solve problems or create works valued in a culture. A person's cognitive potential is reflected in his ability to complete tasks involving understanding and reasoning. The realization of human cognitive potential must be understood as a primary cognitive activity or behaviour, especially research understanding and understanding both language skills and motor skills. Cognitive development in kindergarten is significant, and children's cognitive development at this time is an excellent golden period to develop. Based on the above understanding, it can be concluded that the purpose of cognitive development is for students to connect the knowledge already known to the knowledge that has just been obtained.

The function of cognitive development in kindergarten is to introduce children to the surrounding environment and train the five senses, allowing children to observe and actively process their environment and providing opportunities for children to carry out activities to think logically. Familiarizing children to think logically in dealing with problems is very important because after he enters society, they will face several issues that must be solved alone or together. Cognitive development aims to develop children's thinking abilities. They can process their acquired learning knowledge and find various alternatives of problem-solving. They help children develop their mathematical logic skills and knowledge of space and time and have the ability to sort out, classify and prepare for the development of thinking skills. In this study, the ability to recognize number symbols will be improved according to the cognitive development aspects of children aged four years: Concrete, give children actual material to touch, see and express through children's verbal abilities b. Visually, show the child the pictures that represent the concept c. Symbols introduce symbols that represent concepts d. Abstract, children understand the concept of numbers. In Early Childhood Education (ECE), there are 6 (six) aspects of development must be developed. There are 6 (six) aspects. These developments include aspects of religious and moral values, social, emotional, language, cognitive, physical, motor and artistic.

Advances in science and technology have resulted in changes and demands for new demands such as potential human resources in facing challenges in the future, the inculcation of moral values is one of the first aspects in the child's growth and development process, Nurma (2022). In contrast to this study, it discusses children's cognitive development.

Overview of Stone Media

Based on the results of research that has been conducted by Widyaningty, Shari, Saleh, Asmara (2021) that the natural material media of rainbow stones is used to improve cognitive abilities in recognizing geometric shapes in children aged 3-4 years at PPT Tunas Bangsa Surabaya. Stone media is part of Loose parts. Loose parts according to Siantajani (2020) are items, which are easy to find around us. Our nature or environment is full of loose parts such as twigs, grains, stones, shells, dried leaves, flowers, other natural objects. Kiewra and Vaselek (2016) argue that loose parts are a piece that is free to play and cannot be predicted what it will become. Loose parts

support the development of a different and unique child's mindset. This is because loose parts do not have rules bound to use, the possibilities they have are endless and can continue to be explored by children. Haughey & Hill 2017 (2017) states that loose parts are a collection of natural objects or artificial objects that can be used to provoke ideas in children's games. These objects are open so that they support the development of children to work. The process of using loose parts encourages children to make observations and research. Putri, Khasanah, & Kusumaningtyas (2019) loose parts are materials that can be used independently or combined with other materials such as stones, stumps, sand, gravel, cloth, twigs, wood, pallets, balls, buckets, baskets, crates, boxes, wooden bars, stones, flowers, ropes, tires, balls, shells and seeds of pods.

The Ministry of National Education (2005) suggests that "The method of assigning assignments is a method that provides opportunities for children to carry out tasks prepared by the teacher". Kindergarten children give the task to allow them to complete tasks based on direct instructions from the teacher who have been prepared so that children can live it for real and carry it out from start to finish. According to Badru Zaman (2019), the benefits of using learning media are as follows:

- 1) The use of media is not an additional function but has its role as a means of assisting in creating a more effective learning situation
- 2) Learning media is an integral part of the whole learning process
- 3) Learning media in its use must be relevant to the objectives and content of learning
- 4) Learning media serves to accelerate the learning process
- 5) Learning media serves to improve the quality of the learning process
- 6) Learning media lays concrete foundations for thinking.

Heinich, Molenda, and Russel also convey the definition of media in Badrur Zaman (2019). The word media is the plural form of the word medium, which means an intermediary or introduction. Thus media is a vehicle for channelling learning information or distributing messages. According to Muchtar Latif (2013), there are several principles in making learning media, including:

- 1) The learning media created should have more than one use. Having more than one use means not only in one use but developing other aspects of development
- 2) The materials used are easy to get, either in the form of used goods or materials found around Early Childhood Education (ECE)
- 3) The materials used are safe for children. The aspect of child safety is one of the things that teachers need to pay attention it. So the media must be safe
- 4) Can be used to train children's imagination and creativity.

The definition found that natural material media is a means of interaction or communication using materials that are in nature around children. Utilizing what is around the core as a medium allows children to learn concretely. Through the media of natural materials, children will be given accurate and direct examples in the learning activities they provide. Raw materials include stems, twigs, leaves, stones, seeds, sand, mud and water. Children can experiment and explore using natural materials (Isenberg & Jalongo, 2010). Children will indirectly recognize objects or materials around them, such as sand, soil, corn husks, seeds from pine trees, bricks, various grasses, native plants and flowers. Children can interact through nature songs and walk through parks and trees. Many things can be introduced to children about nature (Miller, 2009).

The natural materials used are very diverse, and the use is expected to be appropriate to the state of the environment around the child. Many steps are used in the use of natural materials. The steps for using natural materials, namely natural materials,

are carried out by grouping raw materials based on type, colour, size and shape. Next are matches which look the same in size or colour. Various materials of natural origin are used and have multiple types. The advantage of using material media is that it does not incur expensive costs or even costs nothing. In addition, the materials needed are readily available. Using this media supports children to start learning, stimulates imagination, is easy to remember meaningful experiences and builds communication (Isenberg & Jalongo, 2010).

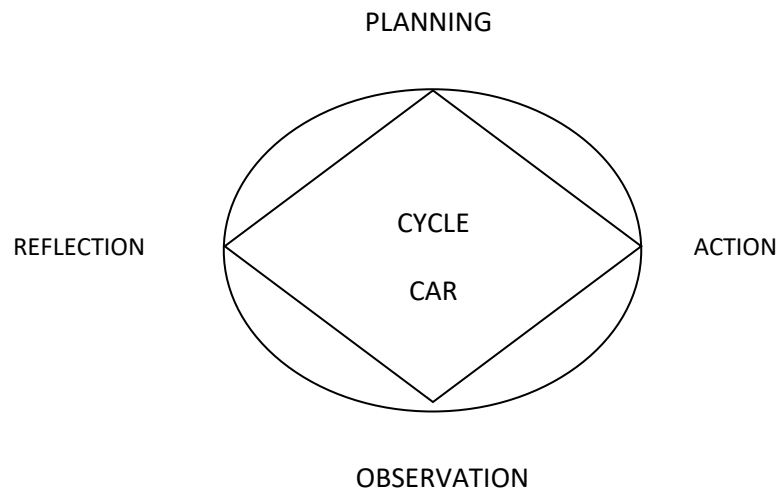
The benefits of natural materials, namely early childhood, can explore and improve all aspects of his ability. For example, stones can be used for counting, musical instruments, and forming animals. Wood is made of puzzles beneficial for cognitive, language, physical, and psychosocial development. Dried leaves can be used for painting, stamping, making hats, puppets from leaves, measuring leaves, distinguishing between coarse and fine, classifying various leaf shapes, and so on. Media in early childhood learning is not limited to media or teaching aids available at school, but all materials around us can be used as learning media. Cognitive aspects of children will develop through playing with nature. One of the natural objects that can be used is stone. Nature has all the things needed in the early childhood learning process. Raw materials can be obtained easily in the surrounding environment, such as plants, water, rocks, soil, tubers, leaves, flowers, midrib, wood, sand, shells and others. This time the author wants to develop natural material media from rocks that will be developed based on essential competencies and materials as a medium that can be developed cognitive aspects in early childhood.

Planning is essential in every activity. Regardless of the type of activity, this planning factor is significant to consider considering that many activities end up being less successful or even failing and not achieving maximum results due to not being appropriately planned. Many experts say that good planning is fifty per cent successful. This opinion shows that planning should not be ignored or taken lightly. Planning for learning media begins with identifying media needs in an early childhood environment. This need is formulated through observations or observations, interviews or discussions about educational problems, especially problems related to the learning process and the use of learning media to improve the quality of early childhood learning processes and outcomes.

RESEARCH METHOD

The type of research used in carrying out research on cognitive abilities in the concept of addition and subtraction through stone media at Fathina Kindergarten, Majene Regency, is experimental classroom action research (CAR). Experimental classroom action research is classroom action research conducted by trying to apply various techniques/strategies effectively and efficiently in a teaching and learning process activity, in this case, through the assignment method. This research was carried out in the odd semester of the 2021/2022 academic year, which took place from August to October and was carried out at Fathina Kindergarten, Majene Regency. The subjects in this study were 20 people in group B. The unit of analysis of this research is the development of children's cognitive abilities, especially in addition and subtraction. The subjects or informants of the study were children from the Fathina Kindergarten, Majene Regency, as many as 20 people. The research design used is classroom action research, which consists of four stages: planning, action, observation and reflection. The four stages will be described in terms of the Kurt Lewin model, which is as follows

Figure 1
The Class Action Implementation Cycle Model



Based on the steps of classroom action research as in the picture above, it can be further described into several cycles which eventually become a collection of several cycles.

Planning, the planning that will be carried out in this research can be described as follows:

- a) Make a lesson plan in the form of a weekly lesson plan and a lesson plan for addition and subtraction activities
- b) Making observation sheets for children's behaviour and learning conditions in class
- c) Designing initial and final assessments carried out by giving assignments to children through worksheets
- d) Determine the parties involved
- e) Subjects: children aged 5-6 years (group B) Fathina Kindergarten, Majene Regency: (1) consisting of 11 men and nine women, (2) peers and collaborators, (3) discuss with the teacher (colleagues) the classroom action research that will be carried out, and (4) discuss with the head of the Kindergarten to see the implementation of comprehensive classroom action research from both the student and teacher perspectives.

Action Implementation, that is the implementation of the plans that have been prepared. While actions are carried out by recording data, ideas and impressions in the research. Actions to be taken at this stage are:

- a) Implement the lesson plans that have been made in a conducive learning situation
- b) Practicing the action of the researcher in this action using stone media
- c) Conducting assessments to determine the child's understanding of the concepts of addition and subtraction. In this case, the teacher is assisted by colleagues (collaborators) in observing each child during learning. Furthermore, from the observations made, the teacher determines the average value of each child.

Observation is an effort to observe and document things that happen during the action. At this stage, the implementation of the action was monitored using an observation

sheet. Researchers only record what is made and heard without entering personal interpretations of what is observed.

Reflection, based on the observation stage that has been carried out, the results are collected and analyzed together. Then from the results of this analysis, the teacher can reflect by looking at the observation data on whether the activities carried out can develop the ability to add children through natural stone media. The analysis results carried out in the first cycle will be used as a reference for planning the next cycle, especially for rudimentary rights. This classroom action research is successful if:

- a) Most (75% of children) can add and subtract
- b) Most (75% of children) showed a positive attitude in learning activities

Data Collection and analysis

In order to capture various types of information from various sources, various methods and data collection tools will be used, as follows: Interviews were conducted between researchers and educators of Fathinah Kindergarten, Majene Regency. The interview activity requires to get preliminary information about the conditions and characteristics of students in depth. The results of the interviews showed that some learners were lacking in cognitive terms. This is strongly suspected because educators in Fathinah Kindergarten still use children's worksheets. Observation is a way to conduct an assessment by observing all the activities of learners directly and systematically. Direct observation is a data collection technique carried out by researchers by first determining the behavior to be studied, then thinking of systematic procedures for establishing, classifying, and recording the behavior in both reasonable and artificial situations. Documents, this method is used to capture information presented in the form of documents, such as written policies or school rules on the implementation of learning, reports on teacher activities, photos, sample formats, and instrumentation used in the implementation of learning in the classroom. Sugiyono (2015), the method used in this study is a des cryptive theory method with qualitative data analysis or what is often called naturalistic research because the research is carried out in natural conditions / natural settings.

RESULTS AND DISCUSSION

In the initial conditions before the research was conducted, the ability of the children of group B at Fathina Kindergarten to solve problems, especially in recognizing the concepts of addition and subtraction, was still lacking. This is proven by most of the children in group B experiencing difficulty learning the concept of addition and subtraction. Furthermore, it can be seen in table 1.

Table 1
Children's ability in the process of learning the concept of addition and subtraction
(Before action)

No	Aspect	Score I			
		Able		Able to Need Guidance	
		Number of children	%	Number of children	%
1.	Get to know the concept of addition	8	40	12	60

2.	Get to know the concept of subtraction	8	40	12	60
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Children's interest when expressing themselves in learning the concept of addition and subtraction is still lacking. This can be seen from the attitude of children who are still less enthusiastic and less confident in carrying out these activities, as seen in table 2 below about the child's mood.

Table 2
Children's attitude in the process of learning the concept of addition and subtraction (before the action)

No	Aspect	Score I			
		High		Low	
		Number of children	%	Number of children	%
1.	Enthusiastic in participating in activities	10	50	10	50
2.	Confident in completing activities	7	35	13	65

Description of research results

The research results are described in stages in the form of cycles carried out. In this study, learning is carried out in 2 cycles as follows:

1. The first cycle (2 meetings)

a. Planning

- 1) The teacher prepares the RPPH based on the learning program (curriculum) to determine the indicators that will be conveyed to the children.
- 2) Implement the lesson plans that have been made in a conducive learning situation.
- 3) Develop research instruments (grid).
- 4) Prepare observation sheets for children.

Meeting 1 (cycle 1)

- a) The teacher explains to the child how to learn the concept of addition and subtraction through stone media.
- b) Children are given worksheets to complete the tasks assigned by the teacher.

Meeting 2 (cycle 2)

At the second meeting in cycle one, there are still some children who need guidance:

- a) Before the child does the task given, the teacher first does remedial or repetition at the first meeting
- b) The teacher uses the existing worksheets to test the children's understanding.

Observation

The teacher observes the learning process that takes place using an observation format. This observation can be seen from the results of filling out the observation and interview sheets in table 3

Table 3
Children's ability in the process of learning the concept of addition and subtraction in the first cycle (After the action)

No	Aspect	Nilai 1			
		Able		Able to Need Guidance	
		Number of children	%	Number of children	%
1.	Get to know the concept of addition	10	50	10	50
2.	Get to know the concept of subtraction	12	60	8	40

Table 4
Children's attitude in the process of learning the concept of addition and subtraction in the first cycle (After the action)

No	Aspect	Nilai			
		High		Low	
		Number of children	%	Number of children	%
1.	Enthusiastic in participating in activities	15	75	5	25
2.	Confidence in completing tasks	12	60	8	40

Reflection

In the first cycle, the teacher evaluates/improves to determine the success of the Action. Reflection I plan the following Action in cycle II. The implementation in cycle I is by the plan. Based on the results of observations, it has been quite successful. It can be seen from:

- 1) There has been an improvement in the attitude of children participating in activities, namely:
 - a) Children who are highly enthusiastic about participating in activities increase from 50% in the initial conditions to 75%, while children who are less enthusiastic than 50% in the initial conditions decrease to 25%.
 - b) Children with high self-confidence in completing tasks from 35% in the initial condition rose to 60%, while children who lacked confidence from 65% in the initial state decreased to 40%.
- 2) The ability of children in the learning process increases:
 - a) Know the concept of addition from 40% to 50%
 - b) Know the concept of reducing from 40% to 60%

To achieve the expected target, teachers need to address the following:

- a) Motivate and guide children whose attitude in participating in activities is still lacking so that in the second cycle, their attitude can be improved.
- b) Guiding children who still have difficulty in expressing body movements.

Cycle 2 (2 x meetings)

a. Planning

Improving the weaknesses and maintaining the success achieved in the first cycle and the second cycle, the following plans are made:

- a) Arranging the position of the child to be given an explanation of the task to be given, namely the concept of addition and subtraction.
- b) Using natural material media, namely rocks
- c) Action

The activity process in the second cycle was better and smoother after the less successful children were guided by the teacher, compared to the first cycle. Children were able to learn on their own without being watched by the teacher.

b. Observation

At the end of the second cycle, the teacher made observations during the activity by filling out the observation sheet. The results of each aspect can be seen in the improvement. More details can be seen in table 5.

Table 5
The ability of children in learning process to recognize the concept of addition and subtraction in cycle 2 (After the action)

No	Aspect	Nilai 1			
		Able		Able to need guidance	
		Number of children	%	Number of children	%
1.	Get to know the concept of addition	15	75	5	25
2.	Get to know the concept of subtraction	16	80	4	20

Table 6
The children’s attitude in the learning process recognize the concept of addition and subtraction in cycle 2 (After the action)

No	Aspect	Nilai			
		High		Low	
		Number of children	%	Number of children	%
1.	Enthusiastic in participating in activities	18	90	2	10
2.	Confidence in completing tasks	15	80	5	20

d. Reflection

The successes that have been obtained during the second cycle are as follows:

- 1) The child’s ability to recognize the concepts of addition and subtraction is more improved than in the first cycle
- 2) The child’s positive attitude also increases.

From the results of this study and from the achievement of the final results of the first and second cycles, the researchers believe that the application of cognitive abilities in the concept of addition and subtraction can be increased through stone media in Fathina Kindergarten, Majene Regency.

Inter-cycle Discussion

Based on the research above, cognitive ability in the concept of addition and subtraction can be increased through stone media. Its success can be described as follows:

- a. The attitude of children to participate in activities is increasing, namely:
 - 1) Children with high enthusiasm for participating in activities increased from 75% in the first cycle to 90%, while children who were less enthusiastic than 25% in the first cycle decreased to 10%
 - 2) Children with high self-confidence in expressing body movements from 60% in the first cycle rose to 80%, while children who lacked confidence from 40% in the first cycle decreased to 20%.
 - b. The ability of children in the learning process increases to:
 - 1) Know the concept of addition from 50% in the first cycle to 75%
 - 2) Doing maze (looking for traces) from 60% in the first cycle to 80%
 - c. The ability of children in the learning process increases to:
 - 1) Know the concept of addition from 50% in the first cycle to 75%
 - 2) Doing maze (looking for traces), which from 60% in the first cycle to 80%
- For more clarity, it can be seen in table 7 and table 8.

Table 7

The development of children's abilities in the learning process to recognize the concept of addition and subtraction (Children in the capable category)

No	Aspect	Before action	Cycle I	Cycle II	Description
1.	Get to know the concept of addition	40	50	75	Increase
2.	Get to know the concept of subtraction	40	60	80	Increase

Table 8

The development of children's attitudes in the learning process to recognize the concept of addition and subtraction (High category children)

No	Aspect	Before Action	Cycle I	Cycle II	Description
1	Get to know the concept of addition	50	75	90	Increase
2	Get to know the concept of subtraction	35	60	80	Increase

Table 9

The development of children's attitudes in the learning process to express themselves in the form of simple movements (Children in the less category)

No	Aspect	Before Action	Cycle I	Cycle II	Description
1.	Enthusiastic in participating in activities	50	25	10	Decrease
2.	Confident in expressing body movements	65	40	20	Decrease

In order to capture various types of information from various sources, various methods and data collection tools will be used, as follows: Interviews were conducted between researchers and educators of Fathinah Kindergarten, Majene Regency. The

interview activity requires to get preliminary information about the conditions and characteristics of students in depth. The results of the interviews showed that some learners were lacking in cognitive terms. This is strongly suspected because educators in Fathinah Kindergarten still use children's worksheets. The findings in this study are that the existence of stone media can make children more interested and easier to understand the concept of addition and subtraction without having to use assignment methods such as elementary school children. This research corresponds to the statement of the article Suratman and Maemunah (2021) that play is an early childhood in its developmental stage even the game is expected to give birth to healthy children, both physical and spiritual. As is known every early childhood educational institution provides games and various game models to stimulate the development of children.

The limitation in this study is to use materials that are easy to find and cheap as a learning medium such as stone media around the school. Children use stone media in recognizing addition and subtraction facilitated by the teacher. Therefore, through the medium of stone children learn while playing. Through the use of stone media, children are more interested in knowing and understanding the concept of addition and reduction. Teachers are not overwhelmed in improving the concept of adding and subtraction in early childhood.

CONCLUSION

Based on the results of research that has been carried out in Group B of Fathina Kindergarten with 20 students, increasing the ability through stone media has increased with the percentage value of 80%. From the results of the Classroom Action Research conducted by the researcher, namely increasing the ability through stone media, it can increase in Group B in Fathina Kindergarten. Based on the results of the research that can be seen from the discussions that have been carried out, the researchers propose recommendations or suggestions that the results of this study should be knowledge for Early Childhood Education (ECE) teachers that stone media can be used as a way to improve the ability to recognize the concept of addition and subtraction in kindergarten age children. With the results of this study, teachers should always look for new things or methods that can make the learning atmosphere fun for children. Cognitive abilities can be improved through the medium of stone, in the concept of addition and subtraction. This research can be a reference for other researchers in early childhood learning. In addition to using factory-made media, teachers can also use media in the surrounding environment such as stone media.

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