



Cooperative play: a strategy for increasing environment care of the early childhood

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ABSTRACT

Environment care is a behavior should belong to children from an early age, because this period is a milestone that will shape and color the development of the next age. One of the strategies to increase awareness and care of for the environment is through a process of habituation with a cooperative play approach. The cooperative play through habituation carried out in this study such as: disposing of trash into its place by playing maze where the children look for trash bins, sort the stages of planting ornamental plants and collage using plants, forming plants with plasticine, and playing colors by stamping and coloring plants. This research aims to describe the efforts to instill and improve an attitude of environment care for children. This research is an action research with 16 children as the subject. In connection with the condition of the Covid-19 pandemic, data was collected through video observations and notes based on documentation of activities. The action was carried out in 2 cycles with the results of 81.25%. The success of children appears where they are able to dispose trash into its place, to conserve plants by watering them, to grow plants, and to save water.

Keywords: cooperative play, environment care, habituation.

INTRODUCTION

Environment (Neolaka, 2008) is everything outside of being, either in the form of the living or natural environment. The natural environment is an environment that is outside of creatures consisting of inanimate natural factors or inanimate objects. The living environment is an environment that is outside of creatures consisting of living things such as humans, animals and plants. The natural environment and the living environment are very influential on the creature itself. Because of this, the environment needs to be maintained and preserved.

Preserving the environment is closely related to environment care behavior. The environment care behavior is a form of conscious action because of a sense of concern for circumstances outside, both natural conditions and social environment (Rianawati, 2014). The behavior of environment care is expected to exist in every human being. By caring the environment, behavior will be created to always protect and care for the environment. The cultivation of environment care behavior should be instilled from an early age. The application can be done at Early Childhood Education (ECE) institutions and at home. An ECE, of this

research Darus Salam Playgroup, has started implementing it. Darus Salam Playgroup is a school in a rural area, located in the same neighborhood as Darus Salam mosque, namely Masjid Jami' Dusun Sumberkanco. In the neighborhood there are mango trees, cherry fruit trees and several ornamental plants.

From the interview with the teacher, it was found that in the learning process the teacher had taught and instilled behavior of the environment care. The teacher instilled environment care behavior using the storytelling method (Harlistyarintica et al., 2017). Occasionally the teacher tells about the importance of protecting and caring for the environment. One of the stories taught or told to children is the story about the importance of disposing of trash properly. The media used by the teacher to tell stories is full picture story books. The storytelling process is carried out before the children play activities at the play center.

The cultivation of environment care behavior is also carried out by protecting the environment and not throwing trash anywhere. By disposing of trash in its proper place, the environment becomes clean and beautiful. The teacher continued to practice this habit. The teacher also always reminds the children not to damage existing plants. Greening activity is also carried out by school for the environment care. This activity is carried out as an effort to create a beautiful school environment. This activity involves the principal, teachers and guardians but does not involve children. From the interviews with the teachers, it was found that they did not involve children for practical reasons. Children are not involved in reforestation activities because they are considered unable to plant, children's work is messy and they think it will be completed faster and tidy if it is done by adults. What the teachers do certainly has an impact on the children, they will not respect and care for plants because they have less sense of belonging to these plants.

Initial observation in Darus Salam Playgroup, at the village of Walidono Village, district of Prajekan, regency of Bondowoso, showed that even though they have been given an understanding through stories, there are still children who do not fully understand and know the importance of preserving the surrounding environment. Researchers saw 13 out of 16 children aged 3-4 years, seemed to lack environment care behavior, they sometimes damage their surroundings. For example, when playing they don't pay attention to the presence of ornamental plants around them. They sometimes do damage by stepping on flower plants near the fence while playing. They also pick ornamental flowers that they find, but they throw them away after they are picked. Another example was playing in an outdoor APE where near the APE the "Baleci" (cherry) trees were planted. The children like the fruit and when playing they

like to pick it. But when they pick it, they do not only pick up the fruit but also pull and break the stalk. What the children do would destroy the tree. The unfavorable behavior that children often do is throwing food wrappers in any place. From this incident, it can be concluded that the environment care behavior of children is still low and this is supported by the findings of Oktamarina (2021).

The lack feel of the environment care among the children occur because of the lack of knowledge provided by their parents and examples from them in the environment care because the school, especially teachers, has facilitated learning to take care with the environment. The researchers looked at when parents looked after children at school. The old man is sitting in the waiting room. While waiting for their children to learn and play, there are some parents who sometimes litter. They subconsciously threw their food wrappers around the waiting room. This happened not because of the lack of trash facilities, for the school has provided a trash can near the waiting room. This occurs due to the lack of awareness of parents about the importance of environment care behavior which has an impact on children's environment care behavior. The children will look for examples from the environment around them.

Cultivating the values of environment care behavior can be done through habituation and environmental conditioning. Habits designed by the environment around the children will stick until the children become adult. According to Bandura (Anwar, 2017) children will learn through the social environment they see and pay attention to directly. Children imitate the environmental behavior they see without first considering the consequences of the behavior they imitate. The good behavior they imitate will become the basis for them to behave in their environment. According to Savin-Baden (Wardhani, 2015) states that meaningful learning can be seen in constructivist theory. Children construct concepts based on learning experiences and social interactions in solving problems. By interacting with the environment, a learning process occurs in children.

Learning through interaction with the environment will be meaningful if it leads to fun way. The fun learning can be done with playing. Playing is a fun activity and is a daily activity for children, while they cannot be separated from playing activities. Playing is the right method for learning in ECE. Playing is a fun activity whether with objects or without objects. Piaget argues (Khadijah, 2016) that play is an exercise in connecting to various knowledge with newly mastered cognitive skills so that they function effectively. Through playing, the knowledge provided will be more absorbent, in accordance with what educators hope the child can bring

up. Through play activities, educators have the opportunity to teach various things related to aspects of child development, including learning behavior.

By playing, children can learn many things including socializing, knowing rules, working together, holding back emotions and learning about their environment (Kusuma & Abdullah, 2021; Prabandari & Fidesrinur, 2019; Siregar et al., 2019). In addition to the emotional social aspect, playing also develops other aspects of children's development, such as language, physical motor, spiritual and mental intelligence or moral and behavioral development. This is confirmed in the Regulation of the Indonesian Minister of Education and Culture, Number 146 of 2014 on the 2013 Curriculum for Early Childhood Education, attachment 4, which is one of the principles of early childhood learning is learning through play. The right stimulation in providing education to children is through play. Playing can provide meaningful learning to children. Playing indirectly develops and shapes children's behavior, but meaningful play helps develop children's knowledge and skills which, if consistently done, will form new behaviors in children.

Social play activity is a method of developing behavior. In this activity, children are used to communicate and interact with others, including friends, family and adults. There are four benefits of this activity (Wiyani, 2014), namely the first benefit of helping children develop and solve problems, during activities they will learn about themselves, other people and their environment. The benefits of the two children will be social interaction, cooperation and care for others and their environment. The third benefit is that children will learn to absorb, express and understand their roles in a positive and constructive way. The fourth benefit is that by playing socially they will learn to recognize themselves.

One of the types of social play is cooperative play. Knowledge, skills and attitudes will be constructed socially by two or more people. In cooperative play activities, children will be involved in playing activities with their friends. Through this collaboration, children will learn together about loving behavior for their environment. They will learn how to care for and care for plants with their friends.

METHOD

This study has been designed as an action research. Kemmis and Taggart (1988) state that action research is an attempt to test and try ideas into practice to improve or change something in order to get a real impact from a thing. Action research is a form of self-reflection research conducted jointly by researchers in social situations in order to improve reasoning and justice in educational and social practices, as well as understanding of practice.

The research design used was the model of self-reflection spiral (Sumadoyo, 2013) developed by Stephen Kemmis and Robbin Mc Taggart.

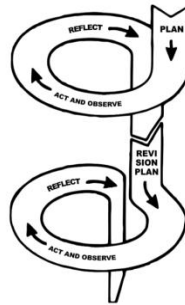


Fig 1: The model of self-reflection spiral in Action Research (Kemmis & Taggart, 1988)

This research will initially be carried out in Darus Salam Playgroup. Because in April 2020 learning was carried out at home during the Covid-19 pandemics, the research location was transferred to homes of each student who was around the school environment. The subjects in this study were children aged 3-4 years, namely students of Darus Salam Playgroup, Walidono, Prajekan, Bondowoso, with a total of 16 children, consists of 6 boys and 10 girls.

This preliminary study was conducted in mid-January 2020. Initially, the first action was to be carried out on Monday 16 March 2020 at Darus Salam Playgroup. However, on that date, precisely at 05.00 AM (local time), there was an instruction from Mrs. Khofifah Indar Parawansa as the Governor of East Java Province which was forwarded to the Whatsapp group for the Integrated ECE teachers of Darus Salam. She instructed learning at schools to be closed due to the Covid-19 pandemics. Teaching and learning activities must be stopped until the deadline for the next two weeks.

During these two weeks the researchers found difficulties to organize and modify the implementation of the action plan. What has been ongoing and the results of preliminary studies cannot be continued. The researchers have to modify the next research design, and are concerned about implementation constraints, namely the type of research, research design and planning procedures that have been carefully prepared. They must be completely overhauled because there is no certain policy from the local government. The uncertain government policy regarding the learning process in schools becomes problem in determining the continuation of this research.

Changes have been done in design of the research implementation before and after the Covid-19 pandemic, namely:

1. The type of this research was originally classroom action research transformed into action research without changing the preliminary studies that had been conducted.

2. The research location will initially be carried out in schools but because of the pandemic it will be carried out at homes of each child.
3. The research collaborators are changed from teachers to families. Here the researchers do not limit only mothers, fathers, grandmothers, grandfathers, siblings, but may anyone who lives with the children who have been studied in the preliminary study.
4. The Cooperative play originally planned to be done with friends is changed to be with family. Apart from acting as playmates for children, families also become research collaborators.
5. The research design still uses the “self-reflection spiral” model.
6. The variety of play which initially was only the activity of planting ornamental plants and cleaning the school environment added to the activities of playing maze looking for trash bins, playing colors by tasting and coloring plants, grouping recycled and compost waste, sorting the stages of planting, collage using plants and forming plants using plasticine. This is done because of the intensity of meeting with family more often. Student sheet is only a reference for families in playing activities, families are allowed to increase or decrease according to children’s interests.
7. The assessment rubric is made simpler because it is done by the family, and there is an assessment rubric by the researcher. Initially, only the researchers assessed activities, but now it is increasing with the assessment of children from their families.
8. The instruments used in this study included observation sheets, interview guidelines and documentation. The observation guidelines used were assessment using a developmental achievement scale. The results of observations by the family can be filled in on the observation sheet in the following table.

Table 1. Observation Sheet of Environment Care Behavior

No	Indicator	Evaluation of Development			
		BA	A	AA	E
1	The child is able to throw trash in its place				
2	The child is able to keep plant by watering and not destroying				
3	The child is able to grow plant				
4	The child is able to save water				

Results: (BA = Below Average; A = Average; AA = Above Average; E = Excellent)

Achievements in the development of children’s environment care behavior, the achievement scales are as follows:

a. Indicator of throwing trash in its place:

BA = if the child throws trash in any place.

A = if the child is always remembered to throw trash in its place.

AA = if the child occasionally needs to remember to throw trash in its place.

E = if the child consistently throws trash in its place.

b. Indicators of taking care of the plant by watering and not damaging the plant:

BA = if the child always destroys plants.

A = if the child can do either watering or not destroying the plants.

AA = if the child can do watering activities and does not damage plants

E = if the child is consistent in looking after plants.

c. Indicators of planting crops:

BA = if the child is not able to plant

A = if the child knows the stages of planting (hoeing the soil, placing the plant and covering the soil again).

AA = if the child can do one or three of the planting stages

E = if the child is able to plant according to the correct stages.

d. Water saving indicator:

BA = when the child is wasting water

A = if the child knows how to save water.

AA = if the child occasionally needs to be reminded to save water.

E = if the child is able to consistently use enough water.

The formula used to calculate the success of the research action is as follows:

$$E = \frac{n}{N} \times 100\%$$

Notes:

E = Presentation of children's success

n = The number of children who have finished studying

N = The number of all children

This study is considered to be successful if among 16 children, when 12 children or 75% of them reach the indicators of developing as expected.

RESULTS AND DISCUSSION

The implementation of the first action in the first week starts on Wednesday, April 1, 2020 until April 4, 2020. The action carried out in the form of cooperative play activities. Each child carries out different activities according to his/her interest. This cooperative play activity with family is intended to introduce knowledge about the natural environment. The transfer of knowledge from the family: father, mother, grandmother or other family members to the child

is built as often as possible so that the child has knowledge of the natural environment. Games that were carried out for 4 days included playing maze looking for trash bins, playing colors by stamping and coloring plants, grouping recycled and compost waste, sorting the stages of planting, collage using plants and forming plants using plasticine.

A boy named KK, while playing maze looked for a trash can, showed a displeased face, was sullen and occasionally crosses his picture. This happened because when his mother shared knowledge she did as a playmate too fast telling stories with directing, so that KK wanted to quickly end the game. In contrast to a boy AL, while playing recycled and compost waste, even though the media uses pictures that are not the real thing, AL seems enthusiastic about listening to her mother talk about things that can be recycled and things that can be composted. When telling the story, AL's mother used a low voice, did not hurry and answered when AL in the middle of the story asked questions. So, when classifying, AL can classify these items appropriately, although occasionally it needs to be reminded. When asked to group the bottles into bins, it is necessary to be directed to put the picture of the bottles in the AL's recycling basket. When asked to paste the picture, AL said that she wanted to drink first while practicing drinking from a bottle.

ZZ a girl, in the first week chose to play grouping pictures of recycled and compostable items. ZZ played with his grandmother, the one who showed active play was the grandmother. ZZ only listened and occasionally carried out his grandmother's instructions. The grandmother said that compost trash can rot. When ZZ was asked to find pictures that can be grouped in the picture of compost basket, by an innocent face and not saying much, ZZ kissed the paper with picture of a cake. The result of an interview with his grandmother, ZZ thought that compost smells bad. A girl, QQ very interested to draw. When asked to play with her mother, QQ liked the pictures of flowers. QQ asked her mother to add a different picture of flower from her. QQ draw a circle flower with 5 petals. She asked her mother to draw a red flower. While coloring, QQ said that she wanted to have a garden of flowers.

On Sunday, April 5, 2020, the first week of all the children planted ornamental plants. KK did not want to plant because he was afraid of his hands being dirty. KK's mother asked him to plant immediately. Because urged, KK finally cried and didn't want to do it. When planting, ZZ was helped by her grandmother. Although unable to do it himself, ZZ showed her interest in plants. She asked her grandmother what flowers she planted. AL at the time of planting was able to show the correct planting stages, but it was the mother did. She told his mother to carry out the planting process according to the instructions. QQ can plant the flowers by herself. She

occasionally smiled and asked her mother whether what she did was right or not. The mother only confirmed that what she has done is correct.

On the second week, Monday to Saturday, April 6 to 11, 2020, the children freely to choose play. KK chose to play together with mothers playing grouping recycled and compost waste, telling stories, maze, free drawing, collage and playing plasticine. KK chose to play plasticine. KK was very interested and enthusiastic to plasticine. KK formed a tree from plasticine. Her mother set an example and KK followed what her mother did. AL selected play sorting plant order. AL was able to sort plant images in sequence. But AL was not happy to stick, he looked disgusted with glue. Finally, his mother smeared the glue, AL just put it on the paper. ZZ this week liked to water her flower plants. She used spray to water the flowers. Every afternoon she used to water the flowers on the terrace. QQ sat in front of the picture while listening to her mother telling the story with a picture. QQ listened to her mother's story calmly. At the end of the story, QQ was able to recount the planting process, although occasionally needed guidance. On Sunday, the children were scheduled to carry out activities to clean the school environment. The children needed to be informed and directed how to use cleaning tools.

On the 3rd week, Monday to Saturday, April 13 to 18, 2020. The children continue to play cooperatively with their families. During the pandemic, children are not too free to play in their environment, but they still play with their families. This week most of the children chose to play with colors. KK chose to play the colors using crayons and picture of watering flower. KK did coloring according to the actual situation. KK's mother always directs him to color according to the actual situation, for example with of green leaves, brown stems and so on. AL for this week was interested in color mixing, he made a tree using liquid dye. AL actively asked his mother how to mix colors, how to make a leaf from a hand stamp. AL mixed different colors to find new colors. He mixed red, yellow and green, so that they turned brown. QQ for this week played colors, coloring a picture of man watering flowers, she used cotton bud. QQ didn't like coloring with crayons. QQ preferred liquid dyes and used cotton bud. When playing, QQ was very enthusiastic. She first tried the dye mixture on unused paper and then used it on his drawing paper. This week the children returned to planting flowers. On average, children are able to plant on their own, although there were still many directions from their mothers. The mothers seemed impatient in waiting for their children to plant. The mothers always tell the children to finish their activities soon.

On the 4th week, Monday to Saturday, April 20 to 25, 2020, children played free drawing and collages of natural materials. They played outside with their families. They observed the environment while drawing freely and looked for natural objects to be used as collage material. KK liked to play outside very much, he ran in his yard, picked up stones and arranged them on the porch of the house. KK told his mother that the stone was round and could be used to build a house. Later the house will be given flowers to make it beautiful and a fish pond will be built. Then KK draws a circle. According to KK it is a stone. While ZZ plays coloring with her grandmother, when coloring ZZ said that if the tomato garden which was colored always watered, there would be lots of tomatoes. ZZ invited her father and mother to cook together. AL played collage with his father. He made a tree shape using the branches of a mango, for the leaves AL uses the dry leaves of the mango. After the activity, AL's father taught that trees will thrive if they are cared for properly, watered sufficiently. QQ also played collage with her mother, they took the leaves around the house. QQ stuck the tiny leaves on the paper with glue. The leaves were pasted at will, QQ was happy to arrange the leaves. QQ said that she was planting grass to make the lawn green. Later the pages will be watered every evening so that the pages are green. For Sunday activities all children are invited to clean the house yard. QQ has been able to sweep the yard and throw trash in its place. QQ was able to imitate sweeping activities. While occasionally moving the broom using his right hand, even though the result was not very clean, QQ already knew where to dispose of the tree leaf litter in her yard.

The researchers observed the videos sent from the children's family, where the researchers could see the interactions occurred between children and adults who acted as learning companions. From the video, the researcher was able to see the extent of children's knowledge on the natural environment, how to teach parents and the skills the children already had. A child, KK began to understand knowledge of the natural environment, he began to show expected behavior with the help of others. ZZ understood the natural environment around him, understood that if he wants to grow plants he needs water. ZZ showed the expected behavior but sometimes needs any help or reminders for its implementation. AL already understood the natural environment around him, but in showing his behavior still needs help. QQ already had knowledge of natural environment, in practice QQ consistently did it. These data are supported by the results of interviews with parents.

At the beginning of the observation, AL did not know about the types of waste, but after the first action, AL was able to mention the types of waste such as trash that could be recycled and trash that became compost, but AL still needs to be reminded when disposing of the trash. At the time of initial observation, AL did damage plants, but after the first action AL was able to

protect the plants from damage and watered their flowers every day. Initially, AL was not able to plant his own plants, but after action AL could accompany his mother and follow the stages of planting. Even though, AL did not want to do his own planting of ornamental plants. When watering the plants, AL was not able to use just enough water.

Previously, ZZ had understood that disposing of trash had to be in its place but was not able to implement it. After the first action ZZ was able to dispose of the trash in its place although occasionally it still needed to be reminded. ZZ at the time of the initial interview already understood how to plant but was not able to do it. The first action was able to facilitate ZZ's ability to plant. At the time of initial observation, ZZ already understood how to look after plants after taking action. ZZ was able to do activities to keep plants such as sometimes watering plants every afternoon. When watering the flowers, ZZ has not been able to use enough water. ZZ sprayed a lot of water on her plants.

During initial observations, KK showed his attitude of destroying plants, throwing trash in random places, while playing he definitely pulled up plants and played with excess water. The first action has not been able to change many of KK's attitudes, but based on observations made by the researchers, KK already understood where to throw the trash. He started to want to water the plants and knew how to plant. To play water, KK didn't want to save water yet. Based on the interview with KK, it was known that KK liked to play water so he didn't want to save.

QQ from the initial observation and first action was able to dispose trash in its place. At the initial observation, QQ was able to take care of the plants, but QQ was easily attracted to flowers so that she picked flowers. With the action, QQ took care of her plants and took care of her flower by watering them. As for the indicator of saving water, QQ previously did not understand about water saving, but with the action he already understood that water needs to be preserved but she cannot implement it.

The children are considered to have completed learning if they met the three points of development according to the expectations of the 4 predefined indicators. The results of the assessment of the first action are:

Table 2. Result of Action I

No	Name	1	2	3	4	Notes
1	AL	A	AA	A	A	Not Completed
2	KE	A	A	A	A	Not Completed
3	AX	AA	AA	AA	A	Completed
4	NA	A	AA	A	A	Not Completed
5	ZZ	AA	AA	AA	A	Completed

6	SH	AA	AA	AA	A	Completed
7	KK	A	A	A	A	Not Completed
8	AF	A	A	A	A	Not Completed
9	AS	A	A	A	A	Not Completed
10	QQ	AA	AA	AA	A	Completed
11	SX	AA	AA	AA	A	Completed
12	GX	AA	AA	AA	A	Completed
13	AB	A	AA	AA	A	Not Completed
14	AR	A	AA	AA	A	Not Completed
15	AD	AA	AA	AA	A	Completed
16	OX	AA	AA	AA	A	Completed

Results: (BA = Below Average; A = Average; AA = Above Average; E = Excellent)

Based on the results of cycle I, it can be concluded that the children's environment care behavior has increased by using cooperative play. This can be seen from the increase from 18.75% to 50%. In the first action it does not meet the expected success criteria, namely 75%, it is necessary to have a second action to optimize the development of children's behavior.

The children who experienced incompleteness were caused by several things including:

1. The ability of the family to convey knowledge about environment care behavior lacks, because the family provides information too quickly, cuts children's questions beforehand and does not provide opportunities for children to express their opinions.
2. The families are too rushed when accompanying children in activities so that children do not find pleasure in doing activities
3. The media is not liked by children because it focuses on the student sheet references provided by the researchers, while the children are less interested in the media, causing boredom.
4. The family activities in conditioning activities so that what is done is not consistently done every day.
5. The family has not given freedom to children in choosing the games they are interested in.

The advantage of this action is that the family as the child's cooperative friend can always be a role model for the child at any time. The presence of a family is very helpful in demonstrating a loving environment in which children must always be accustomed and given the broadest possible knowledge of the natural environment. Families certainly understand more about the various children's games so that it is easy for families to provide knowledge through games that children like so that children's learning is more meaningful.

The playing activity above is in accordance with the study of Hurlock (1993) which classified the game into two: active play and passive play. The play in this study is suitable for active play, that is, activities that when carried out by children which causes joy, so the children

take role in games. The children's joy arises from what children do, whether they are happy because with the activity of running, making something with plasticine or drawing.

This increase is because the family as the children's cooperative friend can always be a role model any time. The presence of a family is very helpful in demonstrating an environment care in which children must always be accustomed and given the broadest possible knowledge of the natural environment. The family certainly understand more about the various children's games so that it is easy for families to provide knowledge through games that children like so that children's learning is more meaningful.

In accordance with the theory of Bronfenbrenner (1986), human development is influenced by the environmental context. The reciprocal relationship between humans and their environment will shape human behavior. Children's behavior will be shaped by the environment around. Information from the environment will help children in describing, organizing and clarifying the effects children receive from various environments.

Based on the first action, we can see a change in children's behavior in their daily life. Environment care behavior develops well by playing cooperatively with family. The role of the family in building knowledge and skills really supports the formation of children's behavior (Suryani & Setiawati, 2022). The family plays a very important role in the learning process, where children get information in building knowledge from. In accordance with the regulation of Indonesian Minister of Education and Culture 146 of 2014 learning attitudes or behaviors is not taught directly, it is carried out through the achievement of knowledge and skills as well as through habituation and exemplary. A child's positive behavior will be formed from the knowledge gained and the ability to manifest in the form of work or performance.

Family as a playmate for children helps them in finding information and knowledge about the natural environment. The family become teachers who help children to solve the problems they face and to maximize children's development. In accordance with Vygotsky's view (Morisson, 2015) it stated that Zone of Proximal Development (ZPD) is the range of cognitive and behavioral abilities that children can do through certain assistance, when the child is not able to do it on their own. The ZPD continues to move and change depending on the achievement of children's behavior, assistance and support provided by others.

The second action has been carried out from May 1 to May 15 2020. The main activities that will be carried out were playing outside the home to get to know the natural environment and gardening in the home page. In the next two weeks, families were expected to spend more time with their children. Playing activities that have been done outside home with gardening

activities included, cleaning weeds, watering the plants in the yard and daily activities as packaged fun for children.

In the first week, the activities carried out are playing outside the house. AF played in his ground yard. AF with a smiling face plays with soil and water, he mixed water and soil resembled clay, AF then plunged the clay into the plague and stirred it up. Occasionally AF turned to his mother and asked what could be formed from the soil. His mother replied that if the soil and water could be turned into bricks, they could be made like cement to make an earth furnace. After playing, the mother asked AF to wash his hands so that the germs going away. When washing his hands, AF's mother reminded his to use enough water. When soap foam is free from his hands, the water tap must be turned off.

AS helped his mother pulling out weeds and clean the bushes in the yard. AS felt pain when he can't pull it out then got angry with her mother and said that he cannot do it. AS's mother asked AS to remove only small grass. Then, AS pulled small leaves from the plants on the lawn. AS asked his mother for glue and paper and told her that he wants to stop pulling grass. The mother asked AS to wash hands first before giving what he asked. AS then wiped the leaves on the paper and told his mother that it was his garden. While showing the work on the garden, there was a conversation between AS and his mother. The mother asked AS what kind of garden AS wanted to have. AS answered that he wanted to have a flower garden planted in the ground, not in pots. The mother then asked again, how AS will take care of his garden. AS answered that if there is grass growing around the flower, it must be removed as his grandmother did, by pointing at his grandmother pulling the grass. While pulling grass, AS was accompanied by his mother and grandmother, when AS changed his grandmother's activity was still pulling weeds in the yard. AS also said the flowers need water every day.

AR's father invited him to play in the rice fields. AR smiles and said that he wants to see birds in rice fields. AR's father and his mother took AR to the rice fields to introduce the plants in the fields. In the fields, AR played with water while following the flow of water around his rice fields. AR liked to explore the irrigation channel. Occasionally AR asked about animals in the fields. While walking along the rice fields, AR's father talked about plants and water. The father explained that AR must use water as needed because water is needed by all humans.

This week, NA played cutting and pasting pictures of activities in the garden. NA earnestly cut straight out the grid with the stages of planting. NA cut slowly while biting her tongue. Her mother talked about the procedure for planting flower plants. Starting from sowing seeds in the field, watering, waiting for the seeds to grow and harvesting flowers. While directing NA, she stuck to the clipping according to the mother's story.

In the second week, NA asked her father to plant banana trees. NA was very enthusiastic even though according to her mother, NA did not want to dig up the land herself. NA was so disgusted by the ground that she didn't want to hoe or play with the ground. According to NA the land is dirty. She asked her father to dig the ground and look for banana trees. NA's father took a shoot of banana and explained that if you want to plant a banana, the planted is the shoot.

This week AR helped her mother sweeping. She took a broom and swept the yard. AR told her mother that the porch was dirty so she would clean it. While AS this week played with his grandmother, AS asked his mother for dyes and containers. AS applies dye to his hands then asked his grandmother to make tree trunks. AS put his hand over tree image and conveyed as a tree. Laughing he told his mother and grandmother that he wanted to make tree leaves from his feet. He asked his mother for help to put dye under his feet. AS then imprinted his foot on paper. He smiled as he said that the results were good.

AL at the end of this week carried out a flower planting activity with his mother. AL planted flowers while telling stories with his mother. When AL poured soil into a pot, AL saw worms in the soil. With a disgusted face, AL removed the worms from the pot. When she saw this, the mother told AL that the worms were useful for enriching the soil.

This week KK played with his brother and mother. KK's brother accompanied him to plant in the garden behind their house. KK was able to dig the ground even though the result was messy. When planting, KK was able to put a galangal shoot in the middle of the hole and closed it again. In the process, KK's brother always reminded and guided him. When watering, KK poured a bucket of water on his galangal plant.

In the second action, the researchers continued to make observations through videos and photos sent by the family. The researchers have observed changes in how families taught their children about eco-friendly behavior. The families became more patient in answering questions and directing children. In this second action, not only one family member was involved in the play but there were also other members.

AR in the first action still needs to be reminded to dispose of trash in its place. In the second action, AR was able to throw trash in its place when sweeping even though it needed to be directed by her mother. It also showed a new skill of sweeping to keep the house clean. AR could bring out environment care behavior.

AS has come up with creative ideas in creating using natural materials. His skills are well developed in generating ideas for playing in the development of environment care behavior.

However, AS needs to be reminded in displaying the environment care behavior. AS already understood the stages of planting.

AF started keeping his hands clean when she finished activities. AF was able to use sufficient water as the direction of his mother. In the second action AF was able to carry out the stages of planting crops. AF has also disposed of the trash in its place, although occasionally he needed to be reminded. AF protected the plants and not to damage them.

In the second action, AL experienced progress in three indicators: disposing of trash in its place, conserving water, although occasionally it needs to be reminded, and was able to plant by himself, although sometimes reminded by his mother. With his brother, KK has progressed quite well, although KK still needs to be reminded constantly in disposing of trash and conserving water use. In the activity of planting and looking after the plants, KK has been able to do, sometimes he was directed by his brother. With the addition of playing companions, even though the indicators of environment care behavior have not been fully completed, there have been good developments shown by KK.

Table 3. Result of Action II

No.	Name	1	2	3	4	Notes
1	AL	AA	AA	AA	AA	Completed
2	KE	A	AA	AA	A	Not Completed
3	AX	AA	AA	AA	AA	Completed
4	NA	AA	AA	A	AA	Completed
5	ZZ	AA	AA	AA	AA	Completed
6	SH	AA	AA	AA	AA	Completed
7	KK	A	AA	AA	A	Not Completed
8	AF	AA	AA	AA	AA	Completed
9	AS	A	A	A	A	Not Completed
10	QQ	AA	AA	AA	AA	Completed
11	SX	AA	AA	AA	AA	Completed
12	GX	AA	AA	AA	AA	Completed
13	AB	AA	AA	AA	AA	Completed
14	AR	AA	AA	AA	AA	Completed
15	AD	AA	AA	AA	A	Completed
16	OX	AA	AA	AA	A	Completed

Results: (BA = Below Average; A = Average; AA = Above Average; E = Excellent)

Based on the first action, we can see a change of children’s behavior in their daily life. Environment care behavior develops well by cooperative play with family. The role of the family in building knowledge and skills really supports the formation of children’s behavior. The family plays a very important role in the learning process, children get information in building knowledge from their families.

In the second action, it can be seen that the family as the children’s closest environment plays a very important role in building children’s behavior. With patience and diligence, the

children's behavior will be formed properly. It cannot be denied that what children do is imitate what their families do. Environment care behavior is formed by the existence of meaningful learning, namely learning through play. Playing is something that is fun for children, especially when it is done with family.

As for the results of the preliminary study there were 3 children who completed learning the behavior of environment care, namely 18.25%. In the first action, as many as 8 children or 50% of the children showed quite good development and were said to be complete in learning environment care behavior. In the second action, the children who experienced learning completeness was 81.25% or 13 children. This is more than the desired success criteria, which is 75%.

Table 4. Recapitulation of Research Results

Preliminary Study	Action I	Action II
18,75%	50%	81,25%

The results of the data recapitulation can be used as a reference to see if there are changes that are quite good in children's behavior. Of course, children's behavior can be improved by cooperative play (Fitria et al., 2020; Suryaningsih & Poerwati, 2021). The family's commitment and consistency are very supportive for the success of this action and environment care behavior (Permatasari et al., 2020).

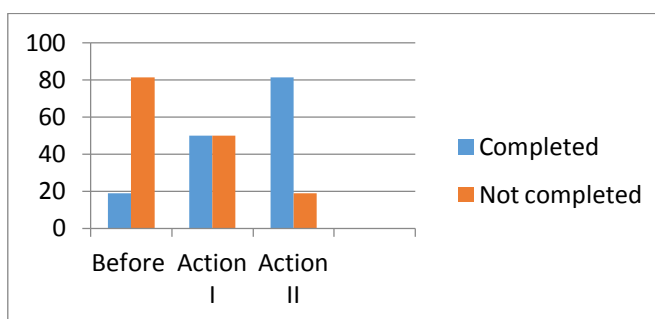


Fig. 2: Learning Completeness

Based on the results of the research above, it can prove that cooperative play can improve environment care behavior. It will be more conditioned because cooperative play here is done together with family. When the family meeting happens intensity more frequent so that the possibility of being well conditioned is greater. If done continuously, it will become a good habit for children. Learning on environment care behavior is done through cooperative play as meaningful learning. This is consistent with meaningful learning for early childhood according to Montessori. Through play, children learn to know many things. At home, school and around environment are places to play for children. They absorb, dedicate their energy and focus to play.

Playing on the second action was more diverse and meaningful because it was done outside or in the open. When studying in the open, children do not only learn about disposing of trash in its place, how to look after plants, how to plant, but also how to conserve water. In the open, children also learn many useful things to increase their knowledge. Similar to what Wardhani (2015) stated that learning for early childhood is not only designed and prepared to explain the type of learning to be carried out but also designed to guide and complete child development tasks.

Based on the description above, the purpose of this study has been completed. In other words, the implementation of cooperative play learning can increase the environment care behavior of children age 3-4 years.

CONCLUSION

The research has been conducted for approximately 45 days, concluded that environment care behavior can be increased through cooperative play. Cooperative play is a fun activity carried out with family. Cooperative play activities include planting ornamental plants, cleaning the school environment, playing maze looking for trash bins, playing colors with stamping and coloring plants, grouping recycled and compost waste, sorting the stages of planting, collage using plants, and shaping plants using plasticines. The completeness indicator used is when the children are able to dispose of trash in its place, to protect plants, to grow plants, and to save water.

The variety of games is tailored to the children's interests to play, and the family as a children's playmate provides knowledge about the natural environment. Behavior is not taught directly, but carried out through the acquisition of knowledge and skills, and strengthened through habituation and modeling.

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