



The Influence of the Make a Match Type Cooperative Learning Model on Symbolic Thinking Ability

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ABSTRACT :

One of the most important skills to develop in preparation for the future in further education is cognitive development , especially symbolic thinking skills . A learning model that can improve these skills aims to determine the effect of the make a match cooperative learning model on symbolic thinking skills . This study uses a quantitative approach using an experimental method with a pre-experimental design , one-group pretest-posttest . The sample size was 14 children in group B, with data collection techniques using participant observation and documentation in the form of photos of activities and daily learning activity plans . Data processing used Wilcoxon signed rank test data analysis . The results of the data analysis obtained a T- value (<21) and Ha was accepted . Based on the data analysis , it shows that there is a significant influence between the make a match cooperative learning model on symbolic thinking skills in group B.

Keywords: Cooperative Learning Model, Make a Match Type, Symbolic Thinking Ability, Children Aged 5-6 Years

INTRODUCTION

Children are a gift from the Creator entrusted to be cared for, guided, and educated who will later become human resources in the future to continue the nation's struggle in realizing the nation's ideals. Early childhood is preschool age children who must be given the right education, as stated by (**Ulfah, 2015**) PAUD is the level of education before entering elementary school, intended as a development effort for children from birth to 6 years old by providing stimulation for their spiritual and physical growth. The goal is for children to have provisions in facing the next level of education. Including form education as basis for development as well as growth children who can adjust in accordance grow flower child . Children's education age early must emphasize placement foundation for growth and development physical (fine and gross motor coordination), intelligence (cognitive , creativity , intelligence) emotional , spiritual intelligence), socio-emotional (attitudes and behavior) and religion), language and communication , according to with uniqueness and stages its development (**Arminiati et al., 2024**) .

The developmental aspects of early childhood play a crucial role in their future development. One aspect that can be developed is cognitive development. The ability that is developing at an early age is cognitive. Simply put, cognitive is an activity that involves thinking activities such as remembering , symbolizing , categorizing, planning, solving problems, creating, and even fantasizing (**Sutisna & Laiya, 2020**) . The stages of cognitive development according to Piaget consist of four stages: the sensorimotor stage , the preoperational stage , the concrete preoperational stage , and the formal operational stage (**Nadlifah et al., 2022**) . The second stage of cognitive development begins at the age of 2-7 years. In line with the Child Development Achievement Level Standards (STTPA), early childhood education in the cognitive domain includes learning and problem solving, logical thinking, and symbolic thinking. The third aspect is

about **symbolic thinking** , which includes the ability to recognize, name, and use number concepts, as well as recognizing letter symbols. The third aspect is a very important ability for children that needs to be developed to equip them for their future and current lives, namely providing provisions for further education. Symbolic thinking is part of cognitive development, the sensitive period of symbolic thinking must be trained and adapted to the child's development. So that children learn about concepts that are easy to start from the child's environment so that in time they will be better prepared to participate in more complex learning as the child's ability to progress to a broader level of understanding. Like the understanding of symbolic thinking, it has a function, namely the individual's ability to use mental representations or use symbols such as words, numbers and pictures (**Hapsari, 2016**) . The ability to think symbolically is part of cognitive development. The symbolic function is the first stage of preoperational thinking in early childhood. At this stage, children develop the ability to mentally imagine objects that do not exist. The symbolic stage is included in the stage of learning to recognize concepts. Concepts are learned so that children recognize an object but do not depend on real objects (**Anggraini et al., 2024**) . Piaget (1950) also argued that symbolic thinking is when children begin to be able to represent an object that is not present by scribbling a picture of a house, person, car, cloud, or other objects (**Priyono et al., 2021**).

Playing for children is very important, by playing the learning process will be more effective and fun and has benefits for developing cognitive (**Fadlillah, 2014**) This is in line with the opinion (**Wiyani, 2016**) that children's cognitive abilities can be demonstrated by implementing play methods using learning models that contain educational elements or values. A learning that is in accordance with the principles of early childhood is playing while learning so that children remain active and not bored with learning so that maximizing children's abilities can meet the needs of teaching and learning to create effective, optimal, and meaningful learning. Likewise with teachers, teachers are required to be able to create appropriate teaching and learning activities for children, innovative, well-received by children, and fun learning.

The cooperative learning model is one of the characteristics of 21st-century learning, children must learn with other people or peers. In reality, children are diverse, having differences including abilities, environment, culture, background and so on. Cooperative learning has a clear division of tasks between members (*team*), this skill is one of the 4 21st-century skills formulated by UNESCO (**Purnama & Hayati, 2023**) . Efforts to make children more active in all activities, especially in activities, require a learning model that has educational and fun value. Cooperative learning models have various models and types and structures, numbers and certain techniques. Activating all group members to participate in completing certain tasks and socializing between members. One type of cooperative learning model is *make a match* , where students learn about a concept or topic while looking for partners in a fun atmosphere (**Salamun et al., 2023**) .

Make a match (finding a partner) is a model first developed by Lorna Curran in 1994 developed learning using cards (**Sulistio & Haryanti, 2022**) . The main characteristic of the *make a match type of learning* is that children are asked to find pairs of cards that are answers or questions about certain materials or topics given by the teacher in a classroom lesson that is able to involve children's activeness in carrying out these learning activities. One of the advantages of this technique is that children find partners while learning to recognize a concept or topic in a fun atmosphere (**Duroah et al., 2019**) . Lie's opinion, the *Make a Match type* is a form of cooperative learning that is effective in developing students' social and academic skills. Interactions in small groups allow students to share knowledge, discuss, and work together to complete tasks. This

supports the social learning theory proposed by Vygotsky , where social interaction plays an important role in the learning process (Ningrum et al., 2025) . In addition, it involves matching cards with questions and answers from the material being taught. One component of the learning strategy that has the potential to improve children's cognitive abilities is the *make a match type of learning model* . Children are encouraged to memorize or remember material in a new and fun way with help Puzzles or matching cards (questions and answers). Children who have difficulty learning, especially in memorizing material, can benefit from this learning model. Assessments in cooperative learning are designed as authentic assessments that not only assess and evaluate academic achievement but also assess cooperation , cooperative skills, and so on. This assessment absolutely requires a complete rubric with detailed indicators that allow for the assessment to be carried out with the optimal degree of objectivity (Hayati, 2017) .

Observations conducted by researchers at Dharma Wanita Puhkerep 2 Kindergarten, Rejoso District, Nganjuk Regency, revealed that teachers have not yet fully understood the teaching method, which is the play method. The learning model used is group or *cooperative learning*. In *cooperative learning* , the teacher plays a more active role, while the children simply listen to the material presented. Teachers haven't yet realized that cooperative learning requires children to be actively involved in the learning process and not just be given assignments. Furthermore, the application is limited to forming small groups without considering rules or gameplay.

Teachers' understanding of learning models that are rarely applied during learning, causes children to have difficulty in receiving the material presented by the teacher. Researchers found that at the age of 5-6 years or group B, symbolic thinking skills have not developed optimally. Data from group B students totaling 14 children, there are 9 children who are not able to order 1-20, are not able to say numbers backwards 10-1, can say numbers but are not able to show the actual number, cannot match or pair numbers with number symbols up to 20, and are not able to say the results of addition or subtraction up to 10 and cannot distinguish number forms. It is not uncommon for children to ask for help from teachers when they cannot count correctly. It was seen when researchers conducted observations that teachers often used children's worksheets (LKA) in teaching and learning activities, children only thickened, wrote and added and subtracted numbers directly.

In reality, cognitive learning has been implemented by schools, but teachers are not implementing it appropriately, such as using the whiteboard as the primary medium. Furthermore, teachers use group learning models, but their use is not appropriate. Games are only shown to children, and some are even used as displays, not applied during the lesson. This is despite the cooperative learning model (*learning*) which is applied in children's learning is more active and the teacher acts as a confirmation or facilitator of truth and the teacher can create questions and answers in the puzzle , the child gets a *puzzle piece and looks for a partner (answer or question) which is conceptualized with a fun play atmosphere*. Based on the problems above, the researcher is interested in knowing the effect of the *make a match* type cooperative learning model on symbolic thinking skills that focus on group B children at Dharma Wanita Puhkerep 2 Rejoso Kindergarten, Nganjuk Regency.

Methods

This research uses a **quantitative approach** with a *pre-test research design. experimental type one group pre-test post-test design* . Before the research was conducted, a *pre-test* was conducted , and after the research, a *post-test* was applied . Results will be more accurate if we compare the conditions or values before and after *the treatment* was given . (Sugiyono, 2019)

1.1 Research design table

O ₁	X	O ₂
<i>Pre-test</i>	<i>Treatment</i>	<i>Post-test</i>

Description of the table above:

O₁: *Pre-test value of symbolic thinking ability*

X: *Treatment in the form of a cooperative learning model, make a match type*

O₂: *Posttest value of symbolic thinking ability*

This research was conducted at Dharma Wanita Puhkerep 2 Kindergarten, located in Puhkerep Village, Rejoso District, Nganjuk Regency. **A population** is a generalization area consisting of objects/subjects that have certain qualities and characteristics determined by the researcher to be studied and then conclusions drawn (**Sugiyono, 2010**). The population in this study was all students of Dharma Wanita Puhkerep 2 Kindergarten. The sampling of this study used a *nonprobability technique*. The saturated sampling method used was a sample size of 14 children, meaning the entire population was used as the research sample. During **data collection**, **the researcher used participant observation** and **documentation** techniques in the form of activity photographs and daily learning implementation plans (RPPH). The observation guidelines used by the researcher were in the form of a *checklist*, using benchmarks that had been compiled from the standard levels of developmental achievement of children aged 5-6 years in the aspect of cognitive abilities with a focus on symbolic thinking.

Discussion

Subsection 1

Observational data collection by observers on symbolic thinking skills using a *make-a-match learning model* designed with questions and answers. The observations of the two observers will be averaged and then processed into research variables. Observations conducted before treatment (*pretest*) and after treatment (*posttest*) yielded the following results:

Table 1.2 Summary Score Data of Results Before Treatment (*Pretest*)
Symbolic Thinking in Group B

NAMA	INDIKATOR																JUMLAH	RATA-RATA	KRITERIA	
	PENGAMAT I								PENGAMAT II											
	A		B		C		D		A		B		C		D					
1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2					
Sisw a 1	3	2	2	2	1	2	2	2	2	3	2	2	2	1	2	3	2	33	2,06	MB
Sisw a 2	3	3	2	2	2	2	3	2	3	2	3	3	2	2	3	2	39	2,44	MB	
Sisw a 3	3	2	3	2	2	2	3	3	3	2	2	2	1	2	3	2	37	2,31	MB	
Sisw a 4	3	3	3	2	2	2	3	3	3	2	2	2	2	3	3	2	40	2,50	MB	
Sisw a 5	2	2	1	1	2	2	2	2	2	1	2	1	1	2	3	3	29	1,81	MB	
Sisw a 6	3	3	3	2	2	2	3	2	3	3	3	2	2	2	3	2	40	2,50	MB	
Sisw a 7	3	2	2	2	2	3	3	2	3	3	2	2	2	3	3	2	39	2,44	MB	
Sisw a 8	3	3	2	2	2	3	3	2	3	3	3	2	2	3	2	2	40	2,50	MB	
Sisw a 9	2	2	2	2	1	2	3	2	3	2	2	2	2	2	3	2	34	2,13	MB	
Sisw a 10	3	3	2	2	2	3	3	2	3	2	2	2	2	3	3	3	40	2,50	MB	
Sisw a 11	3	2	3	2	1	2	2	2	2	2	2	1	1	2	2	2	31	1,94	MB	
Sisw a 12	3	3	3	2	2	2	3	3	3	2	2	2	2	3	3	2	40	2,50	MB	
Sisw a 13	3	3	2	2	3	2	3	3	3	3	2	2	3	2	3	2	41	2,56	BSH	
Sisw a 14	3	2	2	2	1	3	3	2	3	2	3	2	2	3	3	2	38	2,38	MB	

Based on table 1.2 above is a table of value data before treatment on symbolic thinking ability in group B, in this study using *purposive sampling* because when taking samples consider

certain. As for group B TK Dharma Wanita 2 Puhkerep Rejoso Nganjuk which is included in the *purposive sample* consists of 14 children, namely 8 girls and 6 boys. The data that has been exposed in the table above is the value of the number of indicators that have been determined by the researcher, the number determined by the researcher is 8 indicators including being able to count the number sequence 1-20, being able to say numbers backwards 10-1, being able to show the number symbol 1-20, being able to say the number symbol 1-20, being able to pair the number symbol with the picture 1-20, being able to match the number with the number symbol 1-20, being able to count using the picture 1-20, stating the result of counting using the picture.

Based on table 1.2, the results of the symbolic thinking ability scores before treatment *with* the cooperative learning model of the make a match type cumulatively show that there are 13 children who are classified as starting to develop (MB) criteria, and 1 child who is included in the criteria for developing according to expectations (BSH) with an average of 2.56, there are no children who are included in the criteria for not yet developing (BB) and the category of developing very well (BSB). Based on observations that have been carried out after treatment (*posttest*), data has been obtained as presented in the following:

Table 1.3 Summary Score Data of Results After Treatment (*Posttest*) of Symbolic Thinking Ability in Group B

NAMA	INDIKATOR																JUMLAH	RATA-RATA	KRITERIA	
	PENGAMATI I								PENGAMATI II											
	A		B		C		D		A		B		C		D					
Siswa 1	4	3	3	3	3	3	3	3	2	4	3	3	2	2	3	3	3	47	2,94	BSH
Siswa 2	4	4	3	3	3	4	3	3	4	3	4	3	4	3	3	3	3	53	3,31	BSB
Siswa 3	4	3	3	3	3	4	4	3	4	3	3	3	2	3	3	2	3	50	3,13	BSH
Siswa 4	4	4	4	3	3	4	4	3	4	3	3	3	3	4	3	3	3	55	3,44	BSB
Siswa 5	3	3	2	2	2	3	3	2	3	2	2	2	2	2	3	3	3	40	2,50	MB
Siswa 6	4	4	3	3	3	4	4	3	4	4	4	3	3	4	4	3	3	57	3,56	BSB
Siswa 7	4	3	3	3	3	4	3	3	4	4	3	3	3	4	4	3	3	54	3,38	BSB
Siswa 8	4	3	3	3	3	4	4	3	4	4	4	3	3	4	3	3	3	55	3,44	BSB
Siswa 9	3	3	2	2	2	3	3	2	4	3	3	2	3	4	4	3	3	46	2,88	BSH
Siswa 10	4	3	3	3	3	4	4	3	4	3	3	2	3	4	4	3	3	53	3,31	BSB
Siswa 11	3	2	3	3	2	3	3	2	3	3	2	2	2	3	3	2	3	41	2,56	BSH
Siswa 12	4	4	3	3	3	4	3	3	4	3	3	2	3	4	4	3	3	53	3,31	BSB
Siswa 13	4	4	3	3	3	4	4	3	4	4	3	3	3	4	4	4	3	57	3,56	BSB
Siswa 14	4	3	3	2	2	4	4	2	4	3	3	3	3	4	4	4	3	52	3,25	BSH

Description :

A: Understand draft number

B: Get to know Number

C: Connecting draft number with symbol number

D: Understanding number For count

Meanwhile, for the results of the value of symbolic thinking in group B in children who have been given treatment *with* the cooperative learning model type *make a match* cumulatively there are 5 students who are included in developing according to expectations (BSH), and there are 8 students who are included in developing very well (BSB) and 1 student who is starting to develop (MB). Based on table 1.2 that the sample selected by the researcher experienced an increase after treatment *using* the cooperative learning model type *make a match*. In addition, the table above can also be used to compile calculations in testing the truth of the hypothesis regarding "The effect of the cooperative learning model type *make a match* on symbolic thinking skills in group B.

Subsection 2

The data analysis requirements were tested using the *Liliefors* test for normality. The reason the researchers used this test was because the data used were in single-item data. The normality test was applied to the data before and after treatment. The results of the data normality test calculated by the researchers are presented in Table 1.4 as follows:

Liliefors Data Normality Test Results (*Pretest*)



No	Yi	fi	fkum ≤	fi.Yi	Yi- \bar{Y}	(Yi- \bar{Y}) ²	fi.(Yi- \bar{Y}) ²	Zi	Ztabel	F[Zi]	S[Zi]	F[Zi]-S[Zi]
1	1,81	1	1	1,81	-0,43	0,18	0,18	-2,07	0,4808	0,0192	0,0714	0,0522
2	1,94	1	2	1,94	-0,30	0,09	0,09	-1,44	0,4251	0,0749	0,1429	0,0680
3	2,06	1	3	2,06	-0,18	0,03	0,03	-0,86	0,3051	0,1949	0,2143	0,0194
4	2,13	1	4	2,13	-0,11	0,01	0,01	-0,52	0,1985	0,3015	0,2857	0,0158
5	2,31	1	5	2,31	0,07	0,01	0,01	0,36	0,1406	0,6406	0,3571	0,2835
6	2,38	1	6	2,38	0,14	0,02	0,02	0,69	0,2549	0,7549	0,4286	0,3263
7	2,44	2	8	4,88	0,20	0,04	0,08	0,99	0,3389	0,8389	0,5714	0,2675
8	2,50	5	13	12,5	0,26	0,07	0,35	1,28	0,3997	0,8997	0,9286	0,0289
9	2,56	1	14	2,56	0,32	0,10	0,10	1,57	0,4418	0,9418	1,0000	0,0582
Σ		14		32,57		0,55	0,87					



Liliefors Data Normality Test Results (Posttest)

No	Yi	fi	fkum ≤	fi.Yi	Yi- \bar{Y}	(Yi- \bar{Y}) ²	fi.(Yi- \bar{Y}) ²	Zi	Ztabel	F[Zi]	S[Zi]	F[Zi]-S[Zi]
1	2,50	1	1	2,5	-0,60	0,35	0,35	1,96	0,4744	0,0256	0,0714	0,0458
2	2,56	1	2	2,56	-0,54	0,29	0,29	1,76	0,4599	0,0401	0,1429	0,1028
3	2,88	1	3	2,88	-0,22	0,05	0,05	0,71	0,2549	0,2451	0,2143	0,0308
4	2,94	1	4	2,94	-0,16	0,02	0,02	0,51	0,1879	0,3121	0,2857	0,0264
5	3,13	1	5	3,13	0,04	0,00	0,00	0,12	0,0557	0,5557	0,3571	0,1986
6	3,25	1	6	3,25	0,16	0,02	0,02	0,51	0,1950	0,6950	0,4286	0,2664
7	3,31	3	9	9,93	0,22	0,05	0,14	0,71	0,2673	0,7673	0,6429	0,1244
8	3,38	1	10	3,38	0,29	0,08	0,08	0,94	0,3315	0,8315	0,7143	0,1172
9	3,44	2	12	6,88	0,35	0,12	0,24	1,14	0,3770	0,8770	0,8571	0,0199
10	3,56	2	14	7,12	0,47	0,22	0,43	1,53	0,4406	0,9406	1,0000	0,0594
Σ		14		44,57		1,20	1,63					

normality test hypothesis is as follows:

H_o : Data is normally distributed

H_a : Data is not normally distributed

With testing criteria:

If L_o : L count < L table (accept H_a)

If L_o : L count > L table (reject H_a)

α : Real level with significance level (α) = 0.05 (5%/)

Based on the calculation of the results of the normality test that has been carried out by the researcher, it is known that the *pretest* and *posttest* data is not normally distributed , as evidenced by the *pretest* significance figure (0.3263 > 0.227), while the *posttest* significance figure is (0.2664 > 0.227). This confirms that the data obtained by the researcher has been proven to be non -normally distributed . Because the data is known to be non- normally distributed , it does not meet the requirements for conducting parametric statistical tests and hypothesis testing is changed to using *non-parametric tests* .

Hypothesis testing in this study aims to determine the difference in children's initial numeracy ability scores before and after treatment, whether there is an influence or not when the *make a match type cooperative learning model* is applied to symbolic thinking abilities in group B. In this study, a nonparametric test was used, namely the multiple level test. *Wilcoxon* , because in this study the same sample was measured, all samples were given two types of treatment, namely *pretest-posttest* , and the data were not normally distributed . The results of the *Wilcoxon rank test* can be presented in Table 1.5 as follows:

Table 1.4 Results of the Wilcoxon Signed Rank Test

Nama	Pretest (Xa1)	Postest (XB1)	Beda (Xb1-Xa1)	Tanda Jenjang		
				Jenjang	+	-
Siswa 1	1,81	2,50	0,69	2	2	0
Siswa 2	1,94	2,56	0,62	1	1	0
Siswa 3	2,06	2,88	0,82	6,5	6,5	0
Siswa 4	2,13	2,94	0,81	4	4	0
Siswa 5	2,31	3,13	0,82	6,5	6,5	0
Siswa 6	2,38	3,19	0,81	4	4	0
Siswa 7	2,44	3,31	0,87	8,5	8,5	0
Siswa 8	2,44	3,31	0,87	8,5	8,5	0
Siswa 9	2,50	3,31	0,81	4	4	0
Siswa 10	2,50	3,38	0,88	10	10	0
Siswa 11	2,50	3,44	0,94	11,5	11,5	0
Siswa 12	2,50	3,44	0,94	11,5	11,5	0
Siswa 13	2,50	3,56	1,06	13	13	0
Siswa 14	2,56	3,56	1,00	14	14	0
					T = 105	0

The method of decision making in the Wilcoxon hierarchy test with an error level of 0.05 (5%) according to Sugiono is as follows:

- a. if $T_{\text{count}} < T_{\text{table}}$, then the alternative hypothesis (H_a) is accepted
- b. if $T_{\text{count}} > T_{\text{table}}$, then the alternative hypothesis (H_a) is rejected.

The hypotheses in this study are:

H_o : There is no influence between the make a match type cooperative learning model on symbolic thinking skills in group B.

H_a : There is an influence between the make a match type cooperative learning model on symbolic thinking skills in group B.

Based on the results of data calculations in this study using the *Wilcoxon signed rank test*, it can be seen that the calculated T value $< T_{\text{table}}$ ($0 < 21$). This shows that the value of 0 is far below 21. Based on the decision criteria in the *Wilcoxon signed rank test* that has been explained above, it can be concluded that H_a is accepted. This means that there is an influence between the influence of the *make a match type cooperative learning model* on the symbolic thinking ability in group B.

Symbolic function is the first stage of *preoperational thinking* in early childhood. At this stage, children develop the ability to mentally imagine objects that do not exist. The symbolic stage is included in the stage of learning to recognize concepts. Concepts are learned so that children recognize an object without relying on real objects (Mutiah, 2015). Symbolic thinking is part of the cognitive component regarding the concept of numbers, number symbols, or numbers. Children recognize the concept of numbers, number symbols, or numbers, so they are able to count well and correctly. Furthermore, it is reinforced by the perspective of the Minister of National Education's regulation on the Standards for Achievement Levels of Early Childhood Education Development in the cognitive development domain, divided into: 1) learning and problem solving, 2) logical thinking, 3) symbolic thinking. Symbolic thinking includes the ability to recognize, name, and use number concepts, as well as recognizing letter symbols. This third developmental aspect can appear in the form of numeracy skills. One of the very important abilities for children that needs to be developed in order to equip them for their future and current lives is to provide provisions for further education.

From the theory above, it can be used as an indicator which is then developed and adjusted to the needs of researchers into four indicators and eight statements, namely counting the number sequence 1-20, saying numbers backwards 0-1, being able to show the number symbols 1-20, being able to say the number symbols 1-20, pairing number symbols with pictures 1-20, matching numbers with number symbols 1-20, being able to count using pictures 11-20, and being able to state the results of counting using pictures 1-10. The statement instrument is used as a reference

in the implementation of the initial assessment (*pretest*) and the final assessment after being given treatment (*posttest*).

Learning materials in the learning process that must be mastered by early childhood include the introduction of counting, naming, and demonstrating the concept of numbers for counting. Therefore, a cooperative learning model of the *make-a-match type is needed* that is able to actualize all aspects of learning while still maintaining the psychological state of early childhood. In addition, the ability to think symbolically at an early age is not the same as the way it is done by adults. Therefore, learning must be in a fun and memorable atmosphere, similar to the world of children, namely play. In line with **Permata's opinion (in Martuti, 2020), the benefits of the *make-a-match* type cooperative learning model state several benefits, namely: improving cognitive skills, improving fine motor skills, improving social skills, training eye-hand coordination, training logic, training patience, and expanding knowledge.**

Based on the description above, it can be concluded that during the post-treatment activities (*posttest*) there was 1 child in the category of not yet developing (MB), 5 children in the category of developing according to expectations (BSH), 8 and entered the category of developing very well (BSB). So that the average *posttest score* of children developed according to expectations. However, at this stage there was one child, namely the 5th child, who experienced a slight increase which was still in the criteria of starting to develop (MB). This was because the child experienced obstacles in counting. For example, the child had difficulty counting backward, showing number symbols and matching the number of pictures with numbers applied in the cooperative learning model of the *make a match* type. In this model, there is a paired Puzzle media (questions and answers) which is attractively designed, there are 2-3 pieces of puzzle pieces (question and answer pieces) with a focus on the content of the concept of symbolic thinking where the child gets one puzzle piece to find a developmentally appropriate puzzle pair and the child is easier to learn to recognize the concept of numbers, number symbols or numbers, so that they are able to count well and correctly. From the results of *the pretest* and *posttest*, there are significant differences between before and after being given *treatment*. So the cooperative learning model of the *make a match type* can stimulate and improve cognitive abilities, especially symbolic abilities, according to the standard level of child development achievement.

Conclusion

Based on the results of the research and discussion, it can be concluded that the hypothesis of the $t_{\text{calculated}} < t_{\text{table}}$ ($0 < 21$). This shows that the value of 0 is far below the 21 H_0 accepted, this shows that there is an influence that after being given the cooperative learning model of the *make a match type* on symbolic thinking skills in group B. This means that optimizing children's symbolic thinking skills is adapted in a fun way through the *make-a-match* cooperative learning model. This model uses paired *puzzles* (question and answer pieces) that contain themes and are packaged attractively to suit learning in early childhood education.

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