



## **Improving Children's Cognitive Abilities Through Pattern Play Activities Using Simple Media In Class B1 TK Aba Segajih Hargo Tirto Kokap Kulon Progo In 2024**

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### **Abstract**

Research on cognitive development in early childhood through pattern playing activities with simple media is expected to improve the cognitive abilities of class B1 children at Segajih ABA Kindergarten. In this research using cycle I, there were seven children who could sort patterns correctly and neatly (46.67 %). Meanwhile, for cycle II, 13 children could sort the patterns correctly and neatly, there were 13 children (86.67%), there were two children who did the work but not correctly and neatly (13.33%), and there were none (13.33%) who did not do the task ( 0%). The results from cycle I and cycle II showed a significant increase in the ability of children to sort patterns correctly and neatly, namely from 7 children (46.67%) to 13 children (86.67). The increase is six children or 20%.

**Kata Kunci : Cognitive, Play patterns, Simple media**

### **A. Introduction**

Education is an effort to educate the nation and improve the quality of Indonesian people (Roslina, 2024) and who have faith, piety and noble character and master science, technology and art in creating an advanced, just, prosperous and civilized society based on Pancasila and the 1945 Constitution of the Republic of Indonesia. As stated in Republic of Indonesia Law Number 20 of 2003, concerning the National Education System, article 28, paragraph 3 states that Kindergarten (TK) is early childhood education on the formal education route, which aims to help students develop various good potentials. Psychological and physical, moral and religious values, social, emotional, independence, cognitive, language, physical/motor, and arts to be ready to enter elementary school.

Early childhood education is a form of education that focuses on laying the foundation for physical growth and development (fine and gross motor coordination), intelligence, thinking, creativity, emotional intelligence, spiritual intelligence), and socio-emotional (attitudes and, behaviour and religion). ) language and communication, according to the uniqueness and stage of the child's development.

4-6 years is a sensitive period in developing aspects of children's logical thinking. The sensitive period is a period of maturation of functions and psychology, ready to respond to stimulation and assimilate/internalize it into the person. This period is the initial period of development of physical, cognitive, language, social-emotional abilities, self-concept, discipline, independence, art, morals and religious values (Ministry of National Education, 2007: 1)

Kindergarten education is also the foundation of education for a child. Many teacher behaviours can kill a child's character by making the child feel inferior. A teacher who never gives praise or positive words will make his students less confident. This self-confidence formed from an early age will carry over into adulthood. The role of teachers in building a positive self-image in children is huge (Megawangi R., 2004: 152).

ABA Segajih Kindergarten is one of the kindergarten educational institutions in the Kokap sub-district, Kulon Progo district, located in a rural area in the midst of a community lacking education and school facilities and infrastructure. Hence, various problems arise, especially in

the learning process. Based on observations at ABA Segajih Kindergarten in group B, children's cognitive abilities are still meager. Of the 16 students, there are not yet any cognitive abilities of children who have developed very well (BSB) or received four stars, who have developed according to expectations (BSH) or received three stars (27.78%), who are starting to develop (MB) or received two stars totalling (72.22%), and there were none that had not developed (BB) or received 1 star.

According to Vygotsky, play has a direct role in developing a child's cognition. According to Smith, games contribute to children's learning concepts and actual activities because playing is a variety of activities that give children self-satisfaction that is not too binding or flexible.

Because of the great value of play in children's lives, using play activities in implementing early childhood activity programs is an absolute requirement that cannot be ignored. For young children, learning is playing because they learn through playing (Sujiono & Sujiono, 2010).

This can guide researchers in determining effective and promising learning methods to improve their ability to recognize patterns by playing. Researchers use the play method to improve children's cognitive abilities in ABA Segajih Kindergarten Group B. The media used are natural materials in the play activities carried out here. Apart from the materials being easy to find and available around the kindergarten location, children also enjoy them.

Problem identification and problem analysis, the author can formulate the problem as follows "Can pattern games using simple media improve children's cognitive abilities in Class B TK ABA Segajih?".

## **B. Methodology**

Observation is when the teacher observes ongoing learning activities. In this observation, researchers directly observed children's activities when children carried out learning activities.

Data collection In data collection, researchers can collect data in the form of qualitative and quantitative. Qualitative data in the form of children's behavior data in learning interaction activities. Meanwhile, quantitative data is obtained through analysis of children's work. Instruments are tools for collecting both qualitative and quantitative data. Filling in quantitative data instruments is carried out during observations at each meeting using a checklist (Roslina, et al. 2024).

## **C. Findings and Discussion**

### *1. Findings*

Discussion of Cycle I day 1 to day 5

On the first day of making patterns using seeds, the children felt happy, but some children were not interested because some seeds were too small, making it difficult for them to pick them up. Apart from that, two children were crying. They did not want to do the activity because they were bored. There was also one child who just walked back and forth and did not want to do the activity and another who arranged it upside down. Therefore, the researcher will provide other media that will interest children.

The children were very interested in the second day of the pattern-making activity, namely making flower bracelets, so many wanted to do this. However, two children did not want to do their homework because they were afraid of needles. One child was busy playing alone. Apart from that, one child made his bracelets upside down. Therefore, the researcher will look for other media to motivate children to do their assignments.

On the third day of the activity of arranging patterns with fruit, the children were very interested and happy. However, one child was reluctant to do it because he chose to eat the fruit rather than arrange it. Apart from that, two children were fighting over oranges, so they cried and did not want to put them together. From this activity, the researcher will look for other media that prevent children from fighting over each other, which will create a chaotic classroom atmosphere.

On the fourth day of the activity of sorting patterns with leaves, the children were less interested because there were soft leaves, so some children wanted to avoid doing this activity because they were afraid of getting their hands dirty. Some children are busy telling their stories and want to refrain from listening to their teacher convey the game's rules. Apart from that, one child arranged it in a confused and upside-down manner. With this, the researcher will use other media so that children will be more interested and enthusiastic about doing their work.

On the fifth day of making patterns with vegetables, the children were thrilled and enthusiastic because the media was exciting so that several children could complete the task well and correctly. It can be seen from the 15 children who arranged patterns with vegetables, there were seven children. However, two children were crying because they were afraid of the sticks. Then, some just walked around in the classroom and did not want to do the activity of arranging patterns with vegetables for three children, and the other three children needed to arrange them correctly. In this case, the researcher was unsuccessful in cycle one and will continue in cycle 2.

#### Discussion of Cycle II days 1 to 5

On the first day of sorting patterns using matchsticks, the children felt happy because matchsticks could be used for playing with the caveat that children had to be alert. However, in this activity, there was one child who was afraid of matches because he was afraid of fire. 2 children wanted to try lighting the matches. Apart from that, one child put it together, confused because he did not know the colours. Therefore, the researcher will replace it with other media, making it easier for children to arrange patterns.

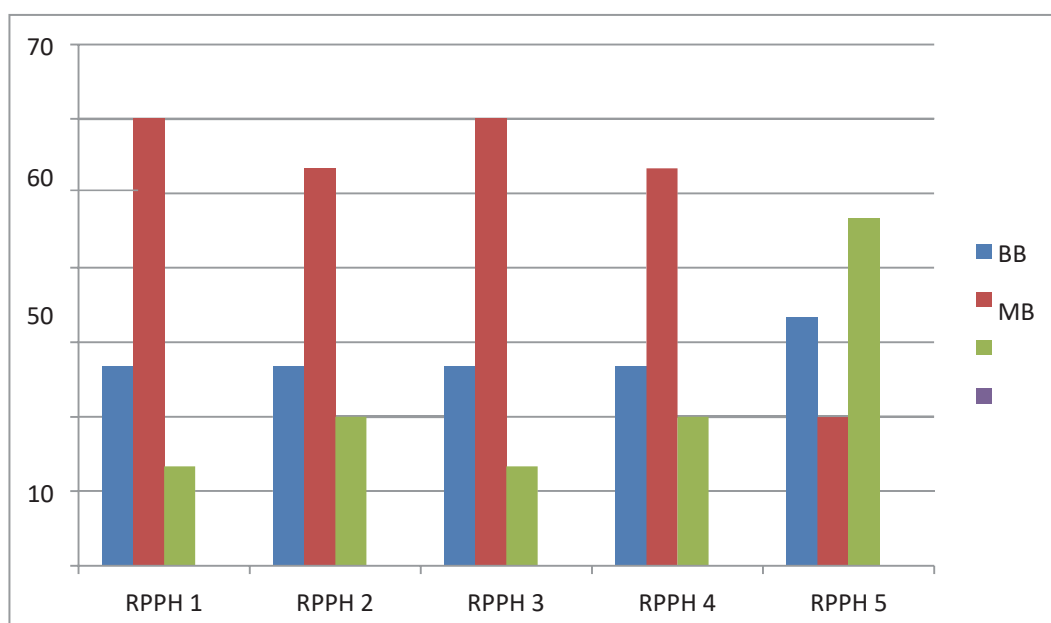
On the second day of sorting the candles from highest to lowest, the children were still less interested because they needed to stand up when arranging them. After all, the candles had to be turned on first if they wanted to stand up, which could be dangerous for the children, so they got bored quickly. 2 children asked to have their candles lit, and there was also a child who wanted to blow out the candles. In this case, the researcher will be careful when choosing learning media so that it is safe for children.

The children were less interested in the third day of sorting patterns using blocks because they often used blocks to play. In this activity, many children sort the blocks correctly. However, two children still needed clarification about distinguishing between rectangular and rectangular shapes, so the arrangement was reversed. One child also arranged them upwards to form a tower. With this, the researcher will use other media that children are not usually used or exposed to so that children are more interested.

The children were thrilled and enthusiastic on the fourth day of assembling the guns because they encountered a unique medium. So many children carried out this activity well and correctly. However, there was one child who wanted his guns to be taken home to play with. 2 children were fighting over the guns because there was only a little media.

**Tabel 1 Recapitulation of Improvement Results of Cycle I**

| Kalsifikasi | Hari ke-1 | Hari ke-2 | Hari ke-3 | Hari ke-4 | Hari ke-5 |
|-------------|-----------|-----------|-----------|-----------|-----------|
| BB          | 26,67     | 26,67     | 26,67     | 26,67     | 33,33     |
| MB          | 60        | 53,33     | 60        | 53,33     | 20        |
| BSH         | 13,33     | 20        | 13,33     | 20        | 46,67     |
| BSB         | 0         | 0         | 0         | 0         | 0         |



## GRAFIK SIKLUS

Tabel 1 Recapitulation of Improvement Results of Cycle II

| Kalsifikasi | Hari ke-1 | Hari ke-2 | Hari ke-3 | Hari ke-4 | Hari ke-5 |
|-------------|-----------|-----------|-----------|-----------|-----------|
| BB          | 20        | 13,33     | 20        | 20        | 0         |
| MB          | 46,67     | 46,67     | 40        | 26,67     | 13,33     |
| BSH         | 7,5       | 40        | 26,67     | 13,33     | 86,67     |
| BSB         | 0         | 0         | 13,33     | 40        | 0         |

The child's improvement was seen on the 5th day of cycle II

By arranging patterns using various media, it is stated that they are by the author's expectations, so efforts to increase creativity in creating patterns using natural materials as media can be proven from 15 children; ten children can sort them well and correctly. Then 3 children sorted it for a while, and two more children sorted it guided by the teacher.

### D. Conclusion

Early childhood development through pattern play activities with simple media can improve the cognitive abilities of class B ABA Kindergarten children as much as it can improve cognitive abilities. In cycle I, seven children could sort the patterns correctly and neatly; there were seven children (46.67%), there were three children (20%) who did the work but not correctly and neatly, and there were five children who did not do the task (33, 33%). Meanwhile, for cycle II, 13 children could sort the patterns correctly and neatly, there were 13 children (86.67%), there were two children who did the work but not correctly and neatly (13.33%), and there were none (13.33%) who did not do the task ( 0%). The results from cycle I and cycle II showed a significant increase in the ability of children to sort patterns correctly and neatly, namely from 7 children (46.67%) to 13 children (86.67). The increase is six children or 20%.

The advice from the results of this research is that in developing the cognitive abilities of children aged 5-6 years, it is recommended to use appropriate methods and media to increase playing patterns in all aspects of development. Using various methods in playing makes children happy to learn without coercion, and everything becomes accessible. Arranging patterns using natural materials that are cheap and readily available in the surrounding environment makes learning activities run smoothly.

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