



## **GAME MEDIA MANAGEMENT: IMPROVING ABILITY TO KNOW THE CONCEPT OF NUMBERS THROUGH NUMBERS GAMES AT “PAUD ASMAUL HUSNA”**

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### **Abstract:**

Developing the ability to think in children needs to be done from an early age to provide stimulation so that children can think logically and critically and develop the ability to recognize the concept of numbers. They can use various media and methods, such as game media, to stimulate children's development. The game can produce children's thinking development because by playing indirectly, children also learn. This study aims to analyze the management of game media, which focuses on number ball media games in improving the ability to recognize numbers in early childhood. The research method used is a qualitative case study type method. This research was conducted at the Asmaul Husna PAUD institution, Sogaan, Pakuniran Probolinggo. To get a direct description, the researcher made field observations and collected data from several informants, including; school principals, bud group teachers and bloom group teachers at Asmaul Husna PAUD. The study results show that the management of the number ball game in improving the ability to recognize the concept of numbers is carried out using; analysis preparation, presentation and evaluation. Implementation obtained from the research: Children can pronounce number symbols, show number symbols, and distinguish number symbols and group number symbols.

**Keywords:** *Number Ball Game Media, Number Concept, Early Childhood*

### **INTRODUCTION**

During the golden age of children, it is essential to be given stimulation so that their brain development develops optimally (Nofitasari & Maryani, 2018). The golden age or golden age in early childhood is at the age of 0-5 years. At this time, children easily absorb and receive information from the surrounding environment. This period is the right time to lay the foundations for developing various aspects of development as provisions for later life (Sumardi, Taopik Rahman, 2017). Thus, various aspects of development optimized in early childhood education can be physical or psychological, including intellectual or cognitive development, language, motor, and social-emotional.

Education aims to improve the intelligence of the nation so that we staying caught up to other developed nations (Yulianti et al., 2009). Children's education at an early age is an effort to provide guidance, care, and stimulation so that it will produce children's abilities and skills (Baharun et al., 2021). Learning in young children Early learning is done by playing while learning. The game is a severe and productive activity for children; play can improve their development. Through play, children can discover new things and reinforce things they already know through expression and exploration, which reveal their identity, fantasy and liveliness. The success of the educational process at that time became the basis for other educational processes (Hasanah, 2019).

The concept of numbers is one of cognitive development. Cognitive abilities will

play an essential role in helping children solve a problem. In addition, cognitive abilities are not only beneficial at the age of children but will also affect later life (Damanik & Sumarni, 2019). By understanding the concept of simple numbers, understanding mathematics will open up to the next level. The concept that children understand aligns with the increasing experience that children observe. The more experience children have, the more concepts they understand. (Amalia et al., 2019) Mathematics is considered necessary; it can also be proven by the existence of learning materials in Early Childhood Education (PAUD) issued by the government (Maragustam, 2017). Seeing the importance of knowing the concept of number symbols, the teacher has a vital role in providing stimulation according to the needs and development of children (Syafitri et al., 2019). Children will know and understand a lesson through fun activities or play and when applying children's understanding of the concept of numbers (Rahman et al., 2017).

Phenomena that occur in the field, especially in PAUD Asmaul Husna, Sogaan, Pakuniran Probolinggo, namely, introducing the concept of numbers used in early childhood is less varied and the lack of media used. Educators dominate learning activities as learning centres (teacher-centred), so they do not stimulate children to be active in the learning process (student-centred). Learning still uses LKA (Children's Worksheets) and recognizes number symbols on blackboards, so recognizing number symbols is not optimal.

To overcome these learning problems, educators at PAUD Asmaul Husna, Sogaan, and Pakuniran Probolinggo, designed game management in the application of learning in such a way through learning media that was considered appropriate and suitable for children's needs and characteristics, namely the use of number ball game media to introduce the concept of numbers 1-10 and the application of strategies to make it easier for teachers to convey their learning material. The development of the era in the world of education continues to change significantly, changing educators' mindsets. (Purnamasari & Ningrum, 2018).

Many studies on the effectiveness of using media on the ability to recognize the concept of numbers 1-10 have been carried out by researchers, including; Introduction to the concept of numbers in early childhood is critical because it will make it easier for children to take part in other educational processes, especially in mathematics. (Roliana, 2018).

Understanding the concept of a number is essential and fundamental, especially in early childhood. Intellectually, children still need to understand the concept of numbers. However, they already intuitively understand this and are slowly being led to an intellectual understanding symbolically. (Isabella Hasiana, 2017).

With media, children can develop a concept when they can classify or group objects, associate a name with a group of objects or pair them, and connect numbers with objects (Iswanti, 2014). Using the number ball game media, children can group balls with numbers in the same way that the child will more easily remember the numbers on the ball. The benefits of using learning media are; 1. Learning will attract more attention to foster learning motivation, 2. Learning materials will have more apparent meaning so that students can better understand them and allow them to master and achieve learning objectives, 3. Teaching methods will be more varied, 4. Students will do more activities and learn by observing, doing and demonstrating (Primaningsih & Purwanti, 2017).

Some of these researchers explained the importance of innovation in order to create a conducive atmosphere and learning process for students, learning innovations that had to be carried out by PAUD Asmaul Husna, Sogaan, Pakuniran Probolinggo, namely creating game media that could improve the concept of numbers by using number balls.

Departing from the above, the researcher is interested in integrating the number ball game media with introducing the concept of numbers 1-10 in early childhood. This research focuses on analyzing and understanding how the teacher manages games using the media to improve the ability to recognize numbers in PAUD

Asmaul Husna, Sogaan, and Pakuniran Probolinggo.

## **RESEARCH METHODS**

This research was conducted at early childhood education institutions (PAUD), namely PAUD Asmaul Husna, Sogaan, Pakuniran Probolinggo, using a qualitative case study approach. The researcher chose the PAUD Asmaul Husna, Sogaan, Pakuniran Probolinggo institution because the institution has implemented the number ball game media in introducing the concept of numbers to their students so that researchers are interested in knowing the management of game media carried out in institutions. Other data to strengthen the results are taken from documents that can support and strengthen the research. All data obtained is classified, taxonomically made and reduced according to needs.

Sources of informants in the study were interviews with school principals, budding group teachers and blooming group teachers. Sources of data are accompanied by data analysis in the form of data reduction, data display, and descriptions or conclusions. In the early stages of data reduction, selecting raw data in notes displays the data by providing an understanding to determine the next step and then concludes the data studied.

## **RESULTS AND DISCUSSION**

The research results show that; Management of Number Ball Game Media on the Ability to Recognize Number Concepts in early childhood at Asmaul Husna PAUD, Sogaan, Pakuniran Probolinggo, through the following stages; PREPARATION ANALYSIS

Activity will run well if it is adequately prepared. The initial framework for managing game media to implement learning activities for students is a preliminary analysis; this activity is carried out to achieve achievable targets (Saleha et al., 2022). Preliminary analysis can meet the needs required to implement the planned activities. Especially in early childhood does require a variety of mature preparations because early childhood has unique characteristics.

A sensitive period in a person occurs at an early age; this is the basis for providing maximum education to children according to their age level. Education is not only from school but also obtained from the environment around the child, and the stimulation given from an early age can affect the child's life in the future (Fitriyanti, 2015). The most prioritized by parents, teachers, educational institutions, and even the government is children's education which starts early. To maximize early childhood education, there must be assimilation for all aspects of the child's environment with a vision and mission in providing educational services (Widayati et al., 2021).

Early childhood education, or PAUD, is the most significant source of investment for a family and nation. Educating and making children with piety, intelligence, fun, and a good personality that will lead to success in the future is the greatest hope for children (Ariani et al., 2020). Special education for children aged 0 to 6 years, namely early childhood education (PAUD). The primary purpose of this education is to stimulate early childhood growth and development so that it is a more optimal and ready-to-face education that will be carried out at the next level.

As explained by the head of PAUD Asmaul Husna, added several preparations made by the Asmaul Husna PAUD teacher in learning, namely, the teacher prepares the lesson according to the daily learning implementation plan that has been made, the teacher also prepares the media as needed, of course, the media that is inserted is engaging media and will spark the curiosity of students so that children are stimulated to carry out playing activities while learning.

Based on observations made by researchers, the preparatory stages carried out by PAUD Asmaul Husna teachers include; First, the teacher has a lesson plan according to preschool procedures. Second, the teacher prepares number ball media that will be used in the learning process so that it is easier for the teacher to convey the material and students are more interested in learning the concept of numbers. Third, the teacher has prepared the learning method that will be used when giving the material.

Teaching and learning activities will be more conducive if learning needs and tools are prepared. Before teaching and learning activities are started, a teacher must prepare complete and systematic subject matter that will be delivered to students; in addition to material, the teacher must also prepare interesting, innovative, and fun learning methods that can use learning media. Learning media contains information about lessons that the teacher will use to deliver a lesson (Siswanto, 2017).

In several interviews with Asmaul Husna's PAUD teacher council, namely, the teacher of the budding group at PAUD, Asmaul Husna conveyed that he prepared lessons by referring to the daily lesson plans that were made. The things that Asmaul Husna's PAUD teacher prepared before implementing the number ball game were; first, number ball media that is by the legal needs of early childhood; second, learning methods to make it more exciting and not monotonous; third, game patterns that will be carried out in playing number balls.

Furthermore, the blooming teacher group also revealed that the preparation of the teacher before implementing the number ball game could help the teacher in implementing learning so that the teacher is not confused about which media or learning method to choose, bearing in mind that early childhood whose moods sometimes change (bored) are also teachers. Prepare backup learning methods to control children's moods to make learning more effective and conducive.

#### Presentation (Presentation)

The presentation of learning in early childhood must be engaging, especially learning about recognizing the concept of numbers. Teachers must be creative and innovative in implementing learning with the intention that early childhood is more interested in participating in learning.

In the media for presenting number balls to introduce the concept of counting, there are four methods applied in Asmaul Husna PAUD, namely;

#### Group balls with the same number

In applying this method, ten children were instructed to group balls with the same number, whereas the teacher had prepared five balls with the same number. Each child groups the same number of 5 balls, then names the number they group. Based on information from the school principal with the number ball game method, children focus more on the numbers they choose to group, making it easier for children to remember the numbers they choose.

#### Sort the balls from numbers 1-10

In this method, five children are assigned to sort the number of balls from 1-10. Previously, the teacher had written numbers 1-10 on the blackboard so that it was easier for children to imitate and match the numbers on the blackboard with the number balls. With this method, children can recognize numbers 1-10 by matching the numbers on the board.

#### Group balls of the same colour

Grouping is more accessible because children can only see the colour and then group it. However, recognizing numbers requires memory because after grouping colours, the teacher asks the child to look at the numbers on the ball and then to name the number.

#### Randomize the balls and choose one.

The last method is the teacher randomizes the number balls, invites the child to choose one of the number balls, and then asks the child to name the number in the ball. To realize the dream of having a brilliant child who develops optimally is independent, has stable emotions, and can quickly adapt to the environment, he can be trained with continuous stimulation.

Bloom group teachers say learning is more accessible and fun when students focus more on applying to learn. Number ball media is proven to simplify and assist teachers in introducing the concept of numbers in an exciting and right-on-target way. Especially in early childhood, who tend to be picky and get bored quickly with one media, so the variety of media and the teacher's expertise in engaging students in the application of learning needs to be done in a balanced, directed and regular manner

(Wahyuni, 2020).

The use of number ball game media was obtained by observing the number ball playing activities at Hidayatul Muttaqin PAUD. Based on the identification of the research results that the researchers have done, the results show significant achievement in understanding children's number symbols. Before using number ball media, children's understanding of number symbols still needed to improve. After being introduced to using the number ball game media, children's understanding of the number symbols began to grow. At first, the child experienced difficulties pronouncing, showing, distinguishing, and arranging number symbols without the help of the teacher and the help of friends. After being assisted by the number ball media, children began to be able to pronounce, show, distinguish, and arrange number symbols without the help of educators and the help of friends.

## CONCLUSION

Recognizing the concept of numbers for early childhood is necessary to support their future life. The results of the research data analysis show that the ability to recognize number symbols in early childhood can be increased by using the number ball game as media. The implications obtained based on the results of hypothesis testing, it can be concluded that PAUD students Asmaul Husna, Sogaan, and Pakuniran Probolinggo, with the management of the number ball game media used as a trick by the teacher, can stimulate children to get to know the concept of numbers faster, children can recite number symbols, show number symbols, distinguish number symbols and group number symbols. The management of number ball game media at Asmaul Husna, Sogaan, Pakuniran Probolinggo PAUD institutions are included in the booming category because it can improve children's ability to recognize number symbols. However, this method can only be generalized to some institutions because each has a different character and environment. After all, Therefore, the researcher hopes that there will be further research on the same theme and can be explored from a different perspective so that it can be used as a completeness and addition to knowledge.

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