

THE RELATIONSHIP OF PLAYING BALL BEKEL METHOD ON IMPROVING COGNITIVE DEVELOPMENT IN EARLY CHILDHOOD

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ABSTRAK

Background: children must remember information in the learning process in class, because it still often comes from the teacher, and this causes children to be lazy in thinking skills and when solving problems less than ideal. Teachers rarely use interesting media such as playing methods that make children not interested in following the learning process.

Purpose: this study aims to determine the relationship of the bekel ball playing method on increasing cognitive development in early childhood.

Methods: the research method used is analytic method with cross sectional approach. The population used in this study were all 41 children of Dewi Sartika 3 Kindergarten. The sampling technique used was a accidental sampling method of 30 people. Data were analyzed using the chi-square computerized technique and the research instruments used observation sheets and bekel balls .

Results: the results showed that there was an effect of the bekel ball playing method on increasing cognitive development in early childhood at Dewi Sartika 3 Kindergarten because the p value $< (0.02 < 0.05)$.

Conclusion: the conclusion in this study is that there is an relationship of the bekel ball playing method on increasing cognitive development in early childhood at Dewi Sartika 3 Kindergarten.

Kata kunci:

Bekel Ball Playing Method; Cognitive Development; Early Childhood.

BACKGROUND

At present, kindergarten is a level of early childhood education has become an official pathway for all aspects of child development, good personality, fine motor skills and gross motor skills, from child language development, cognitive, scientific, and so on (Hasendra, 2019). However, in education, the case of weakness in the learning process is a case faced in the world of education, especially education in Indonesia. Learning still often comes from the teacher, and this makes children lazy in thinking skills and when solving problems is less than ideal (Paramitha et al., 2016). Teachers rarely use interesting media through play methods that make children uninterested in the learning process. Therefore, monotonous learning results in minimal feed back on children's cognitive development (Dewi et al., 2016).

According to the United Nations Children's Fund published its findings on the high incidence of growth and development disorders in children under five. According to the World Health Organisation, 5-25% of young children suffered from mild brain dysfunction, including impaired fine motor development in 2012 (WHO, 2012). In Indonesia, inhibited growth and development of children in 2010 reached 35.7% (Wiradnyana & Surasena, 2016). According to data from Riskeudas 2013, the incidence of children's developmental disabilities was 33.5%, of which children with stunted development were 22.1% and children with suspicious development were 11.4%. Then in West Java children experience developmental disorders as much as 30%. In Kertasari there are 307 children whose development is inhibited in the top order and in Maleber there are 11 children whose development is inhibited in the bottom order (Srinayanti et al., 2017).

The impact if the child's cognitive development has not developed, then the child will have problems when doing daily activities. Children will feel bored quickly, in learning children become less interested and children's learning achievement decreases. Then the child will be silent during learning, has not been able to recognise numbers well and when the child colours and forms a shape (circle) is still guided by the teacher. The importance of sharpening children's cognitive development because it will make it easier for children in school activities (Yus & Thahir, 2018). Modern children today prefer to use gadget games, online games, video games, and other games. Children in the past were not familiar with gadgets and sophisticated games, but the reality is that children aged 5 or 6 years old, children who are still in elementary school and kindergarten know these modern games. Unfortunately, parents are happy to provide mobile phones and tablets to their children. Gadgets, tablets or other modern equipment is not good, because it will affect the body, mind and brain of children and children's communication with their peers will be hampered (Deona, 2020).

One of the principles of early childhood education is learning through play. Children in general are very fond of playing and will continue to do so every opportunity so that play is one way of learning in early childhood because through play children learn what they want to know and eventually recognise all these events that occur around them (Paramitha et al., 2016). Play is a repeated activity that creates pleasure/satisfaction for the individual. Through play the child acquires and reviews new skills and learning, when these skills are performed, and to fulfil his/her needs. Encourage the child through play to explore, acquire and use the objects around them (Artini et al., 2016).

As for children's games, one of them is playing bekel ball. Games that use bekel balls can be used to improve children's skills from an early age. The bekel ball game uses a rubber

ball and bekel seeds, this game is played in turn by hompimpah first when determining the first player and the other children wait for their turn to play according to the order. In this game, children learn to instil honesty, sportsmanship and foresight when playing (Syamsurrijal, 2020). Without realising it, through play children can grow and develop, one of which is cognitive development (Paramitha et al., 2016).

Cognitive development is also called thinking ability or intellectual development Every child learns a number of things that are intended to enhance and develop the child's ability to prepare for life in the community (Hanita, 2020). Based on the results of interviews with the child's mother, the author took 5 samples. Based on the initial survey conducted, children are more likely to play passively. Then 4 children know the game of bekel ball and 3 have played it, then 1 person does not know the game of bekel ball and 2 people have never played it. Children are familiar with numbers 1-10 but 3 children can sort numbers in reverse and 2 children cannot sort numbers in reverse. Therefore, researchers are interested in conducting research on "The Relationship of the Bekel Ball Play Method on Improving Cognitive Development in Early Childhood at Dewi Sartika 3 Kindergarten"..

OBJECTIVE

This study aims to determine the relationship of the bekel ball playing method on increasing cognitive development in early childhood.

METHODS

This research method uses an analytical method. The population in this study were all 41 children of Dewi Sartika 3 Kindergarten. The sampling technique used accidental sampling method as many as 30 people. This research was conducted at Dewi Sartika 3 Kindergarten on 21 April - 4 May 2021.

At the research implementation stage, the researcher obtains permission to conduct research, explains the purpose and objectives of the research to the respondent, then the respondent fills in the willingness to become a respondent through a consent sheet to become a respondent, collects data with an observation sheet, after the data is collected, data processing and data analysis are carried out using computerised techniques.

RESULT

Table 1. Overview of Respondents' Defender Ball Play

Defender Ball Play	Frecuency	Precentage (%)
Can play	16	53.3
Can't play	14	46.7
Total	30	100.0

Based on table 1. above, it can be seen that some children who are respondents in this study can play ball bekel as many as 16 children (53.3%).

Table 2. Overview of Respondents' Cognitive Development

Cognitive Development	Frequency	Percentage (%)
BB	2	6.7
MB	6	20.00
BSH	9	30.00
BSB	13	43.3

Based on table 2. above, it can be seen that most of the children who are respondents in this study have cognitive development that is Developing Very Well (BSB), namely 13 children (43.3%). Developing as expected (BSH) 9 children (30.0%), Starting to Develop (MB) 6 children (20.0%) and Not Developing (BB) there are 2 children (6.7%).

Table 3. The Effect of the Bekel Ball Play Method on Improving Cognitive Development in Early Childhood

Playing Cup Ball		Improved Cognitive Development				Total	P Value
		BB	MB	BSH	BSB		
Can play	f	0	0	6	10	16	0,005
	%	0	0	37,5	62,5		
Can't play	f	2	6	3	3	14	
	%	14,3	42,9	21,4	21,4		
Total	f	2	6	9	13	30	
	%	6,7	20	30	43,3		

Based on table 3 show that of the 16 respondents who can play ball bekel, as many as 6 children have cognitive development that develops as expected (37.5%) and as many as 10 children have very good cognitive development (62.5%). Of the 14 respondents, as many as 2 children have cognitive development that has not developed (14.3%), as many as 6 people have cognitive development that begins to develop (42.9%), as many as 3 children have cognitive development that develops as expected (21.4%) and as many as 3 children have excellent cognitive development (21.4%). Based on the results of data analysis, the value of statistical test results using Chi Square with p-value = 0.005

DISCUSSION

In table 1, 16 children were found to be able to play bekel ball. Ball bekel is a game that is easy to imitate. In accordance with research which states that children know the game of bekel ball from children whose age is above them by seeing how they play bekel ball, children are very enthusiastic about playing bekel ball. Whereas in boys almost all of

them cannot play bekel ball, because the dominant bekel ball game is played by girls. Table 2 shows that Developing Very Well (BSB) is 13 children (43.3%), but the rest are still in the category of Not Developing (BB). This is indicated by there are still some children who cannot count, sort numbers, add numbers and have not shown a creative attitude in solving problems (ideas, ideas, out of habit) and some children who are not shy to interact well with the environment and their friends. As for children who have not developed, then children are taught counting lessons using play objects or can also use abacus.

The results of table 3 show that of the 16 respondents who can play ball bekel, as many as 6 children have cognitive development that develops as expected (37.5%) and as many as 10 children have very good cognitive development (62.5%). Of the 14 respondents, as many as 2 children have cognitive development that has not developed (14.3%), as many as 6 people have cognitive development that begins to develop (42.9%), as many as 3 children have cognitive development that develops as expected (21.4%) and as many as 3 children have excellent cognitive development (21.4%).

Based on the results of data analysis, the value of statistical test results using Chi Square in table 4.5 with $p\text{-value} = 0.005$ is smaller than $\alpha = 0.05$, meaning that there is a difference in proportion between playing bekel ball with cognitive development in early childhood. So in other words, it shows that there is a significant relationship between the method of playing ball bekel to increase cognitive development in early childhood at Dewi Sartika 3 Kindergarten.

This research is in line with research conducted by Nursyah Rida Syanti Siregar and Dorlince Simatupang (2020) with the title "The Effect of Playing Congklak Activities on the Cognitive Ability of 4-5 Year Old Children at An-Nur Kindergarten" which shows a significant effect of congklak games on the cognitive abilities of children aged 4-5 years at AN NUR Kindergarten. The research equation with this study is on the indicators of children's cognitive assessment, namely sorting numbers and adding numbers. The type of game is almost the same, namely using dead shells (kuwuk) / plastic shells. The research conducted by (Afrianti, Daulay, & Asilestari, 2018), which revealed that there is a significant relationship between games and early childhood cognitive development. Play is very important for children's growth and development. Play should be done on the child's initiative and on the child's own decision. Play should be done with a sense of fun, so that all enjoyable play activities will result in a good learning process in children. Play is a means to achieve all early childhood development, from physical and motor skills to social and emotional skills. (Fadillah, 2017).

Other research states that the benefits of traditional games are, developing children's logical intelligence, some traditional games train children to count and determine the steps that must be passed. For example, cranglek, congklak, jump rope, encrak, bekel ball and others (Mulyani, 2016). One activity that can develop children's cognitive abilities (counting beginnings) is the bekel ball game. To play this game requires skill and agility to catch the ball after it is bounced, this game also requires proper timing and strategy. The values contained in this game are togetherness. The benefits of this game include developing children's kinesthetic intelligence, developing logical intelligence, and developing inter-personal emotional intelligence (Lindawati, 2019).

In addition to cognitive development, there are 4 aspects of development that will be stimulated by play, namely physical motor aspects, social aspects, emotional aspects, and language aspects. Through play, children learn how to solve problems, improve memory,

focus attention on an activity (Khadijah, 2016).

CONCLUSION

The dominant frequency of children who can play ball bekel is 16 children (53.3%). The highest frequency of cognitive development is Developing Very Well (BSB), namely 13 children (43.3%). There is an relationship of playing ball bekel method on improving cognitive development in early childhood at Dewi Sartika 3 Kindergarten.

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