



Brain Games and Gymnastics on Increasing Concentration Power of Early Childhood

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Abstract

This study aims to see the extent to which the level of concentration ability of early childhood after games and brain exercises are carried out in a period of 3 months. Brain games and exercises with simple body movements accompanied by songs to make students more excited. Brain exercise has many benefits, especially to balance the left and right brain, through brain exercise activities can foster enthusiasm and children's learning. This study describes brain exercise activities carried out at the Al-Kautsar Quran Kindergarten in Bandung. The method used is a descriptive approach. Data collection techniques are observation, interviews and documentation, while the data analysis technique is data triangulation technique. The results of research at Al-Kautsar Quran Kindergarten show that brain exercise activities have been carried out well, seen from semester and daily planning and evaluations carried out for each brain exercise activity. The implementation of this brain exercise provides many benefits for children to be more focused, improve memory and be more enthusiastic.

Keywords: *games; brain exercise; child's memory; early childhood.*

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Introduction

The high intensity of using gadgets in children has an effect on the decline in learning concentration. This was stated by the Director of Global Schools of Sevilla, Robertus Budi Setiono (Maria & Novianti, 2020). Plus, the concentration power of students' learning is increasingly visible, especially in distance learning during the pandemic, which requires students to use gadgets, whereas in the past, children's concentration time could be up to 30 minutes. This means that in one lesson they can fully concentrate. The decrease in concentration power has become the background for Al Kautsar Kindergarten in improving children's memory and concentration as a process of self-control so that learning at school is not carried out in one direction. Children's brain development has a strong relationship with other developmental aspects such as cognitive, language, social emotional, and physical motoric. Santrock (2010) states that the brain not only regulates behavior but also the brain regulates metabolism. The brain is the center that regulates all human daily activities both in behavior, thinking, and emotions (Khadijah, 2016). It's just right if the brain is referred to as the control center (control room) for humans to behave and also regulate body metabolism. As the control center of the brain, of course, it plays a very vital role for humans. Therefore, this one organ of the body must be maintained and maintained properly. The human brain is like

any other body part or organ, this organ experiences growth and development, even Kolber & Nelson (2011) states that the brain is one of the organs of the body that undergoes extraordinary development in the prenatal period. It is estimated that after birth the child's brain has about 100 billion nerve cells or neurons. The child's brain at birth is approximately 25% of the weight of the adult brain (Santrock, 2010). The child's brain will continue to grow along with the age of the child. Brain will develop well if it gets the right stimulation, but on the other hand the child's brain will not develop optimally if they do not get good stimulation. Development An anatomically good brain can be seen from the many propagation of connectivity between one cell with other cells, the more connections a cell makes, the better (Jensen, 2008). The environment has an influence on children's brain development. This is also why early stimulation or early childhood education is important, because at this age the growth and development of the brain is very fast. At the age of two it's heavy. Children's brains experience extraordinary growth, namely at this age the weight of the child's brain is about 75%. of adult brain weight (Santrock, 2010). This means that 75% brain growth in humans occurs at an early age.

Popular brain exercise programs in some countries can provide much-needed stimulation for effective learning. Great brain exercise has great benefits to overcome children's learning problems (Diana, Mafticha, & Adiesti, 2016). Benefits that can be obtained with brain exercises, such as improving cognitive abilities, alertness, concentration, speed, perception, problem solving and creativity. By doing exercise this brain makes it easier to concentrate in carrying out their duties and think properly about the situation, as well as the ability to solve the problem of the situation (Yosef & Vittorio, 2016). With brain exercise children will be creative, efficient, healthier, and learning achievement will increase (Eliasa, 2007). State Elementary School 1 Upai Kota Kotamobagu the number of students who registered as many as 89 people. There are 20 people from the number of students who cannot read properly. This is because students have difficulty receiving lessons.

Al Kautsar Kindergarten has 59 registered students with 3 classes, namely 11 people in the TKB group, 18 people in the TKA group, and 30 people in the play group. Al-Kautsar Kindergarten has 16 students who still have a focus disorder which can be seen from the activities carried out every day and neglected tasks because these students are easily distracted by other activities, this makes Al-Kautsar Kindergarten choose games and brain exercises to be done before studying with aims to improve children's memory and concentration.

Dennison argues (Jalilinasab, Saemi, & Abedanzadeh, 2021) brain exercise can balance between the brain related to physical and psychological. Brain exercise activities have an important role in children's education. Several reasons the importance of doing brain exercise between others, it is difficult to learn to try too hard, thus creating stress on children, performance brain integration slows down, and makes certain parts of the brain are not functioning well, the back of the brain receive information that is difficult to express, make less focus and stress resulting in reduced enthusiasm for learning, and less learning and trying to make decreased performance and feelings of not being successful is increasing, as a result it is difficult to get out of that negative environment (Sukri & Purwanti, 2016).

Methodology

Qualitative approach with method descriptive used in this study. The subjects of this study were TK A and TK B classes totaling 29 children. Instrument. This research uses the format observation, interview format and format documentation with research informants namely the principal and four classroom teachers as evidence that researchers have make observations about activities brain exercise in Al-Kautsar Quran Kindergarten Through observation, interviews and documentation on data collection techniques study. For data collection, reduction data, data presentation, and data verification used in data analysis techniques. While the data validity techniques are: data triangulation. Triangulation is a technique presentation of data by means of data that is adapted to the same informant using

a different technique (Sugiyono, 2017). In testing the truth of the data regarding the implementation of brain exercise activities at Al Kautsar Kindergarten Bandung, data that has been obtained from the field adapted to the interview and documentation with the principal and teacher.

Interviews conducted by researchers are unstructured interviews or what is known as free interviews. Interviews conducted by researchers are interviews conducted face to face and also using the telephone. Several questions were asked regarding matters related to Brain Games and Gymnastics which were implemented in Al-Kautsar Kindergarten. The next main interview was conducted with the teacher, as a brain exercise mentor. Questions were asked about games and brain exercises used before carrying out the learning process. Document research carried out includes activity reports, photos related to the brain exercise process and data relevant to the research objectives. The validity of the data in this study was checked by triangulation, namely: source triangulation and method triangulation. Triangulation in principle checks the truth of the data by matching or comparing it with data obtained from other sources or obtained using other data collection methods.

Results and Discussion

In research on brain exercise at TK Al Kautsar Bandung it can be concluded that the activity it's been well adapted to the child's abilities. Brain gym activities have 35 movements, but the teacher gives it to the child gradually as much as 5 moves per day, then increases to 10 and 15 moves, as they are adjusted with the child's abilities. Movements These range from simple to hardest. As for brain exercise activities implemented, namely planning, implementing with the stages of brain exercise, brain exercise movements, benefits brain exercise activities and evaluation. Based on observations, interviews and documentation that planning brain exercise activities at Al Kautsar Kindergarten that already have a plan stated in the curriculum, program semester, weekly and daily. In the plan, indicators of achievement of brain exercise (Brain Gym) by children (Table 1).

Tabel 1. Description of Al Kautsar Kindergarten Activities

Day	Activity
Mon-Thurs	<ol style="list-style-type: none"> 1. Welcoming Students (15 Minutes) 2. Brain Gym (15 Minutes) 3. Apperception Learning (5-10 Minutes) 4. Learning (20-30 Minutes) 5. Rest (10 Minutes) 6. Iqro/ Literacy (15 Minutes) 7. Review and Closing (15 Minutes)
Friday	<ol style="list-style-type: none"> 1. Welcoming Students (15 Minutes) 2. Brain Gym (15 Minutes) 3. Apperception Learning (5-10 Minutes) 4. Learning (10-15 Minutes) 5. Shalat Practice (15 Minutes) 6. Rest (10 Minutes) 7. Iqro/ Literacy (15 Minutes) 8. Review and Closing (15 Minutes)

Implementation of brain gym activities first, the stages of gymnastics activities at Al Kauthar Kindergarten Bandung. Based on observation, interview and documentation Brain exercise activities begin by lining up and keeping a distance so that Don't cling to other friends when doing brain exercises. The second step is to warm up lightly with simple movements,

such as breathing your stomach, shaking your head, and standing on one leg to balance the body. Before doing brain exercises, the teacher explains to the children the purpose the brain exercise is done distinguishes it from other gymnastic activities as well as the benefits and importance of doing brain exercise activities the gym). Next, gymnastic movements the brain (Brain Gym) has movement simple and can stimulate the ability of a child's left and right brain. Observations that were carried out at Al Kautsar Kindergarten in brain gym activities There are movements that include in the first lateral dimension, movement cross where the movement is to move the body organs left and right simultaneously (Pranata, Fari, & Indaryati, 2021). Then, turning the hand upside down between right and left and performed alternately between left and right. Furthermore, the movements that are included in the focusing dimension first waving hand by hand up next to the ear then the second hand on the lower elbow which are useful for stretching tension in shoulder muscles, control eye coordination and hands. This brain exercise is performed to the accompaniment of enthusiastic children's songs so that in the next stage, children can stay focused. The next activity with the dimension of concentration, that is, drinking water with a purpose, facilitates the flow of energy from the brain throughout the body. calf pump, slide gravity, and mount the easel.



Picture 1. Brain Gym teacher and students at TK Al Kautsar

Benefits of gymnastics brain for children. Based on observation, interviews and documentation, it benefits brain exercise, especially for children. (Yunawati, 2021). In children's learning, more calm learning, more enthusiasm, improves concentration in learning and improves children's memory, this can be seen when finished studying and doing question and answer about learning learned that day. If the child can answer then he can raise his hand. And almost all children raise their hands. Then evaluate, based on the findings obtained from the results observation, interview and documentation by researchers and based on data analysis What the researchers did about games and brain gym activities (Brain Gym) at Al Kautsar Kindergarten is the curriculum which lies in the process of learning activity planning for the semester (Semester Plan) and lesson plans weekly (Weekly Plan/RPPM) and daily lesson plan (Lesson Plan/RPPH). Activity plan daily divided into Opening, Focus Themes and Closing. Making brain exercise activities Gym) adapted to the needs of children. Activities carried out based on every day as a stepping stone so that other activities run smoothly according to the guidelines in carrying out the process (Picture 1).

According to Zulaini (2017) brain exercise should be done when the child is 5-6 years old. Because, at this age usually he can give response to what is wanted by others. Based on research conducted by Santrock (2011) that the development of boys language is slower compared to girls This has an impact on the development cognitive, social and emotional. Mariyati (2017) states specifically that girls are better and read and write compared to boys. The results of this study show there are different levels of ability memory before and after brain exercise on memory Al Kautsar Kindergarten children. It can be seen from the results of this study that Children's memory has increased. This determines the child's achievement because children's memory increases compared to memory before brain exercise to children. The results of this study are in line with research by Prasetyo & Saputra (2017) which states that there is the effect of brain exercise on memory class V SD Muhammadiyah 11 Surabaya. Through brain exercise or Brain Gym, can improve memory and enthusiasm for learning so that achievement can be improved.

The novelty of this research is seen in brain exercise activities that are included in children's daily activities so that they can have a greater impact and can be seen in kindergarten age children at Al-Kaustar Kindergarten so that children become more focused, enthusiastic and help deliver better learning

Conclusion

The role of brain gymnastics in increasing children's concentration power has benefits that are felt especially for kindergarten students aged 5-6 years, which has an impact on students' enthusiasm because brain exercise is accompanied by songs, trains students' physical fitness and students' enthusiasm in participating in the learning process. Based on the results of the research above, suggestions that can be conveyed are that the school should have a Standard Operational Implementation (SOP) in the implementation of brain exercise activities, teachers and brain gym instructors and there needs to be a rhythm in doing slower brain exercise movements so that children can follow the gymnastics movements. brain well. According to Dennison (Yuniarni, 2018) a good frequency of exercise is about 10-15 minutes and has been done regularly every day so that the benefits of brain exercise are felt by students.

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