

# EFFECT OF BASIC MOVEMENT SKILLS IN THE GAME OF ABILITY EARLY CHILDREN'S COGNITIVE

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**EFFECT OF BASIC MOVEMENT SKILLS IN THE GAME OF ABILITY  
EARLY CHILDREN'S COGNITIVE**

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**Abstract**

*In line with the theories which write that motion can help improve cognitive abilities, the golden age of formation is at the age of 5-6 years. The sample taken was early childhood education, with the aim of the study was to see the influence of basic movement skills on cognitive abilities. The research method uses experiment. Basic movement skills become a stimulant to help improve basic movement skills. With a sample size of 28 people who were divided into 2 groups, it was found that children with high basic motor skills were in line with children's cognitive abilities. Based on the results of the study, it is hoped that the kindergarten / early childhood education level units will make movement skills the focus that is applied to the curriculum.*

**Keywords:** *Playing, Basic Movement, Cognitive Ability.*

**Introduction**

The golden age or the golden age of children's growth ranges from 4-6 years, one of the targets for the formation of the golden age is the intellectual ability, intellectual / thinking ability which in the world of education is called cognitive ability. In line with this, Fish in Rusli Lutan (1988: 371) says "school-age children have disabilities in motor and perceptual functions, also experience disabilities in intellectual development". The development of congenital abilities must be built as early as possible, to build cognitive abilities it can be stimulated through simple movements, because poor coordination of movements will result in slow intellectual or cognitive growth (Sinulingga, 2000: 15). So it can be concluded that based on the theory of movement experts, it is a strong factor to help improve children's cognitive abilities at an early age. Deep government. For ages 4-6 years in the world of education are categorized into the earliest education level units, namely TK / PAUD. Giving movement material can be done through PJOK which is wrapped in a game. The limitation of the problem in this study leads to the high and low level of basic movement skills of children, games that become a container for movement material for children / students, children's cognitive abilities. movement of children, to see the influence of basic movement skills on cognitive abilities, and to see whether there is a relationship between basic movement skills and early childhood cognitive abilities.

## Discussion

Movement is the main point in the nature of humans as living things, as an example for animals moving is an activity that must be done to find food or simply survive the attacks of other animals. As for humans, movement has an important part in helping to maximize the stages of growth and development of the body as a whole. (Sugden, 2013) concludes that the phases of human development start and the body's ability to range of motion according to their age, ages 3 to 4 years old children start trying to reach objects in front of them. 6 to 8 months of age babies are able to control their posture, then 9 months of sitting is the best achievement. Some infant approaches note that the child will sit on a stool at 22 months, then at 11 months the child will be able to bend over and return to the original or upright position. For early childhood, movement is divided into 3 according to the response classification, (1) gross skills and fine skills, gross skills are movements that require large muscle organization accompanied by a lot of exertion, in contrast to fine skills, used is a group of small muscles, such as the fingers, arms, and often require coordination and speed of the eye of the hand. (2) discrete, serial and continuous skills are all skills that can be recognized at the beginning and the last moment. (3) open skills (open skills) and closed skills (closed skills) (Lutan, 1988). For ages 4-6 years the movement skills that must be mastered are included in the basic movement skills category. (Thomas, 2008) describes the arrangement of the stages of age development according to the category of motion that must be mastered.

Figure 1. Pyramid development motor skill acquisition



Furthermore (Thompson, 2004) wrote down fundamental movement or basic movement skills in early childhood consisting of 22 movements which are divided into 3 parts, namely; Body Management, examples of balance or balance movements, clim (climbing), forwad roll (rolling forward), line walk (walking

straight). Locomotor movement examples of locomotor leap (jump continuously), dodge (avoid), gallop (pry), hop (jump), jump for distance (jump with a distance forward), jump for high (jump high up), side gallops, skip (jumping rope), sprint run (sprinting). Object control, for example catch, chest pass (pass at chest level), foot dribble (dribble with your feet), hand dribble (dribble with your hands), kick (kick), overarm throw (pass from above your head), underarm throw (passes from under your hand), punt (kick the ball), two-handed strike (hits with both hands). Meanwhile, according to the book Fundamental Movement, 2007 writes 3 basic movement skills, namely locomotor skills, manipulative skills and stability skills. In line with (Thomas, 2008) some examples of locomotor skills are walking and running, jumping, hopping, galloping, sliding and skipping. While manipulative skills, for example, are catching, striking and kicking, throwing. Movement skills in this study only include 2 types of motion in basic movement skills, namely locomotor and manipulative. This is adjusted to the form of the test used, namely TGMD-2, where the test is only divided into 2 types of basic movement skills consisting of 12 forms of motion, locomotor is the body's ability to move from one place to another. Manipulative skills are the body's ability to make movements whose purpose is to control, direct objects with tools or limbs in the desired direction.

Cognitive is one of the 3 achievement targets in the world of education, besides cognitive there are also affective and psychomotor. Affective itself is a part of educational achievement that looks at the attitudes of students as a whole, while psychomotor refers to the ability of students in the domain that includes movement and one's physical abilities. The understanding of cognitive has many meanings according to experts. Cognitive can be said to be cognition which has the meaning of thinking and observing. Then cognitive is related to intelligence, cognition is more passive or static, which is the ability to understand something, while active intelligence is a form of cognition that is applied through activity or behavior. (Sugiono, 2010) said that intelligence is an innate cognitive ability. It can be concluded that cognitive is an activity of observing and thinking factually and empirically which can also be called intelligence. The entire process described earlier occurs in one part of the body, namely the brain. In general, the brain has the brain regulates and coordinates most of the movements, behavior and body functions of homeostasis such as heart rate, blood pressure, body fluid balance and body temperature. The human brain is responsible for the regulation of the entire human body and thought. In other words, it can be said that all activities carried out by humans outside the body provide stimulants to the human brain itself and the brain's ability is directly proportional to the overall body skills. So it can be said that an increase in cognitive abilities leads to an increase in brain ability. Broadly speaking, the ability of the brain can be increased by maximizing efforts to connect neuron cells to one another through stimulants or external stimuli. Cognitive abilities for children aged 4-6 years can be seen directly by paying attention to language skills, the way children understand the environment (Sasi, 2011). The Permendikbud states some of the cognitive achievements that

children aged 4-6 years old should have. These achievements are listed in the following table;

Table 1. Cognitive performance table

Environment Development	Child Development Achievement Level	
	4-5 years old	5-6 years old
Cognitive A. Learn and Solution Problem	<ol style="list-style-type: none"> <li>1. Know objects by function (knife for cutting, pencil for writing)</li> <li>2. Using objects as symbolic play (seats as cars)</li> <li>3. Get to know simple concepts in everyday life (drizzle, rain, dark, light, dim, etc.)</li> <li>4. Know the concepts of many and a little</li> <li>5. Creating something in accordance with his own ideas associated with various problem solving</li> <li>6. Observing objects and symptoms with curiosity</li> <li>7. Know the pattern of activities and realize the importance of time</li> <li>8. Understand the position / position in the family, space, social environment (eg as a participant students / children / friends)</li> </ol>	<ol style="list-style-type: none"> <li>1. Demonstrate activities that are exploratory and probing (such as: what is happens when water is shed)</li> <li>2. Solve simple problems in everyday life in a manner flexible and socially acceptable</li> <li>3. Apply knowledge or experience in a new context</li> <li>4. Show a creative attitude in solving problems (ideas, ideas out of the ordinary)</li> </ol>
	B. Logical Thinking	<ol style="list-style-type: none"> <li>1. Classify objects based on function, form or color or size</li> <li>2. Recognizing the cause and effect symptoms associated with him</li> <li>3. Classify objects into the same group or similar groups or groups that are paired with 2 variations</li> <li>4. Recognizes patterns (eg AB-AB and ABC-ABC) and repeats them</li> <li>5. Sort objects by 5 series sizes or colors</li> </ol>

<p><b>C. Symbolic Thinking</b></p>	<ol style="list-style-type: none"> <li>1. Add multiple objects one to ten</li> <li>2. Know the concept of numbers</li> <li>3. Know the symbols of numbers</li> <li>4. Recognize letter symbols</li> </ol>	<p><b>5</b></p> <ol style="list-style-type: none"> <li>1. Understand several commands simultaneously</li> <li>2. Repeating more complex sentences</li> <li>3. Understand the rules in a game</li> <li>4. Enjoy and appreciate the reading</li> </ol>
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The game in this research refers to basic movement skills associated with cognitive achievement goals in PERMENDIKBUD. Referring to this, the form of the game is the result of the researcher's design which contains the movements in the fundamental movements and the level of achievement of children's development as described in table 2.2. The game has the basic word play, play (play) is a term that is used freely, so it has a biased main meaning, the most appropriate main meaning for playing is any activity carried out for pleasure without considering the final result. Meanwhile, games are a medium that improves children's cognitive development (Piaget, 2010). In line with that (Vigotsky, 2010) states that the game is a very good setting for cognitive development, it can be concluded that the game is a playing activity which has settings that can be made and changed by the game maker. The concept of this research can be illustrated that the game becomes a place to help basic motion skills improve cognitive abilities in children aged 4-6 years.

### Conclusion

From the research results it was found that basic movement skills have an interaction between basic movement skills and cognitive abilities. Children with high basic movement skills have higher cognitive abilities. Game variations made with motion material help students to focus and enjoy the learning process in pleasant conditions so that they can have an effect on increasing children's cognitive abilities.

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