



INFLUENCE OF CHILDREN'S MOTOR DEVELOPMENT PRIMARY SCHOOL AGE IN THE LEARNING PROCESS

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Abstract

Motor skills are abilities related to body movements whose development is influenced by age and overall development. Motor skills also occur in a system commonly called sensory motor. Motor processes occur physiologically which influence muscle contractions so that they can cause movements that occur in humans. This motor ability plays an important role in carrying out an activity so that it can run well, as well as in the learning process, this motor ability is very much needed in student activity in the classroom. Capture ability in understanding in learning and responding to stimuli given by the teacher so that students are important. In studying it. Physical growth and development is related to the physical motor development of children. Through children's unique characteristics, namely great curiosity and the desire to try, children can carry out physical motor exercises through coordinated movements that are facilitated by a supportive environment that provides stimulation. Another development that is also related to a child's motor skills is that the child will be quicker to react, the better his eye and hand coordination will be, and the child will be more agile in moving. As children's self-confidence increases, children will also feel proud if they can do several activities. With these motor skills, children will be able to play together with their friends, such as jumping, running, circling their arms, and so on. Apart from that, good motor skills are also characterized by the child's fast motor reactions, better coordination and cooperation. To train children's motor development, it is best to provide stimulation continuously, meaning that it does not stop at just one stimulus because it is not certain that they can immediately master one stimulus, there are many types of movement elements that children must master in their motor development.

Keywords : Motor development, Elementary school age children, Learning process

Introduction

Every child has a different development. The process of growth and development of a child's ability to move is what is called motor development, which has occurred since the time a person was in the womb, which includes basic movements such as kicking in the mother's stomach and others. Motor is an event that includes the entire process of controlling and regulating the functions of the body's organs, both physiologically and psychologically, which causes a movement to occur. Other events that cannot be observed can include: receiving stimulus information, giving meaning to information, management and decision making processes, and encouragement in carrying out various forms of motor action. After that, physiological events include the provision, regulation and control of impulses towards the body organs involved in carrying out motor actions. So the conclusion that exists in the definition of motor is an action that is consciously planned and regulated. Motor occurs based on the sensory motor regulation system and motor processes are processes that have occurred physiologically and biochemically which also influence muscle contractions which become a movement. So, in writing this article, we have prepared

it as a basis from which we can find out the motor development that occurs in elementary school age children so that it is their development that we will refer to in a scientific work. In children's motoric development, it is also related to the process of growth and development of the child's motor skills. This motor development will be clearly visible through the various movements and games they can do. Motor development is often used as a benchmark to prove that children are growing and developing well. Motor development is something that discusses coordinated physical movements so that in its development various appropriate stimulations are needed for children. This stimulation can also be provided by parents, teachers, both in the school environment and the home environment (Rohyana Fitriani, 2018).

Research Methodology

In writing this article, we used a literature study by looking for relevant theoretical references. According to (Creswell, John. W. 2014; 40) states that a literature review is a written summary of articles, journals, books and other documents that describe good theories and information from journals, books and other documents that describe good theories and information. method by collecting data by understanding various theories from various literature. Data is used by searching for sources and constructing them from various sources such as books, journals and existing research so that we collect the data. From this literature study we can find problems such as: (1) How children's motor skills develop, (2) Children's motor skills in the learning process. To compile this article, you can use several references to form a good and correct article, including: (a) Choose a theme (b) Explore and find information (c) Collect data and information sources (d) Presenting the data we have searched for becomes a discussion.

Result & Discussion

Children's motor development

Physical motor development plays as important a role as other aspects of development, motor development can be used as the first benchmark to determine a child's growth and development. This is because physical motor development can be observed easily through the five senses, such as changes in the size of a child's body. According to Papalia, DE (2014:125) physical growth and development follows cephalocaudal and proximodistal principles. According to the cephalocaudal principle, growth occurs from top to bottom, because the brain grows rapidly before birth, the head of a newborn baby is of great disproportion. According to the proximodistal principle of growth and motor development from the inside out (body center to the outside), in the womb the head and body develop before the arms and legs, then the hands and feet, and the fingers and toes. Limbs continue to grow faster than hands and feet in early childhood. Physical development is the growth and changes that occur in a person's body. The most obvious changes are changes in a person's body shape and size. Motor development is a change that occurs progressively in control and the ability to carry out movements that is obtained through the interaction between maturation factors and training or experiences during life which can be seen through the changes/movements made. (Rini Hildayani, 2016:3.4) In line with what Hurlock (1978:151) explains, motor development is the development of controlling physical movements through the coordinated activity of nerve centers, nerves and muscles. Before development occurs the child will be helpless. This condition will change rapidly in the first 4-5 years of postnatal life. Children can control rough movements. This movement involves the broad limbs which are used for walking, jumping, running, tiptoeing, swimming, and so on. After the age of 5 years there is a great development in better control of coordination involving the smaller parts of the muscles used for grasping, throwing, catching a ball, writing, and so on. One of the striking differences between preschool children and babies and toddlers is that preschool children do not have baby fat and appear slimmer. This streamlining and increased motor coordination makes it easier for young children to be more confident in participating in movement activities which are very important in their motoric growth and development stages. Children's physical motor development is characterized by physical growth which includes increases in body weight, height, head circumference and muscle tone. A child's less than optimal physical growth can be a sign that something is happening within the child. At the age of three years, a child's body, hands and feet will grow longer. The head is still relatively large, the rest of the body is trying to catch up as the child's body parts become more similar to the adult's body (Morisson 2012:221). Motor development includes the development of gross motor skills and fine motor skills. Gross motor skills involve large muscles and fine motor skills involve small muscles. The movements carried out by children involve muscles and children at an early age are more likely to be active/more happy to move, more happy to do experiments or practice, more happy to play both games that require a lot of energy and games that only involve a little movement. Small or large movements still involve muscles, so that motor

development really supports other aspects of development. As explained by Sher (2009: 37) gross motor activities requiring coordination, such as various types of sports, or even tasks, such as jumping forward. Gross motor skills are physical activities that require coordination, such as various types of sports or simple tasks such as jumping movements. As explained by Decaprio (2013:18), gross motor skills are body movements using large muscles or most of the muscles in the body or all parts of the body which are influenced by personal maturity.

Children's motor skills in the learning process

At school age, children's motor development is smoother, more perfect and better coordinated, as the child's body weight and strength increases. Children seem to be able to control and coordinate the movements of their body parts, such as moving their hands and feet well. The muscles in the hands and feet are starting to get stronger, so that various physical activities such as kicking, jumping, throwing, catching and running can be done more accurately and quickly. In addition, children are also increasingly able to maintain their body balance. Body control, such as bending over, doing various gymnastic exercises and sports activities, develops rapidly. They also begin to show complex, intricate and fast movements, which are needed to produce good quality crafts or play certain musical instruments. 9 To refine their motor skills, children continue to do various physical activities. This physical activity is carried out in the form of games which are sometimes informal, games which are organized by the child themselves, such as the game of seek and seek, where children use their motor skills, besides that, children also involve themselves in formal sports game activities, such as gymnastics, swimming, or hockey games. Primary School Children's Learning Development Stage The developmental stage of primary school age students' learning behavior is greatly influenced by aspects of themselves and the environment around them. It is impossible to separate these two things because the learning process occurs in the context of students' self-interaction with their environment. From this interaction, a good habit is formed which will continue to be carried out as an effort to habituate oneself. Children at elementary school age (7-11 years) are at the concrete operational stage. In this age range, the child's visible behavior is that the child begins to view the world objectively, shifts from one situation to another, then the child also begins to think operationally as evidenced by the child being able to classify the objects around him. Where also in this phase children are smart enough to understand the concepts of substance, length, width, breadth, height, low, light and heavy. The learning tendencies of elementary school age children have three characteristics, namely concrete, integrative and hierarchical. Concrete in the learning process contains meaning that can be seen, heard, smelled, touched and tinkered with, with an emphasis on utilizing the environment as a learning resource that can be optimized in order to achieve learning processes and outcomes. quality, meaningful and valuable. In essence, elementary school age children are not yet able to sort out concepts from various scientific disciplines, this shows a deductive way of thinking, namely from general things to specific things.

Definition of child motor development

According to Elizabeth B Hurlock (1978:159) said that motor development is defined as the development of elements of maturity in controlling movement in the body and the brain as the center of movement. Movement is also divided into 2, namely gross movement and fine movement. Murti (2018) also explains that motor development is a process of maturity or movement that directly involves muscles to move with a neural process that makes a person able to move and a neural process that makes a person able to move their body. From the various opinions above, it can also be concluded that motor development is a change in motor skills from birth which involves several aspects of behavior and motor skills. Education is the process of changing the attitudes and behavior of a person or group of people to mature humans through teaching and training efforts. From an early age, humans have needed education in the process of developing into play. The average age of Indonesian children when they enter elementary school is 6 years and they finish (graduate) at the age of 12 years. If we refer to the division of stages of child development, school-age children are in two developmental periods, the first is middle childhood (6-9 years), and the second is late childhood (10-12 years). School-aged children have different characteristics from younger children. He likes to play, likes to move, likes to work in groups, and likes to feel or do something directly. Therefore, teachers should develop a learning process that links games. Education is the process of changing the attitudes and behavior of a person or group of people to mature humans through teaching and training efforts. From an early age, humans have needed education in the process of developing into play. The average age of Indonesian children when they enter elementary school is 6 years and they finish (graduate) at the age of 12 years. If we refer to the division of stages of child development, school-age children are in two developmental periods, the first is middle childhood (6-9 years), and the second is late childhood (10-12 years). School-aged children have different characteristics from younger children. He likes to play, likes to move, likes to

work in groups, and likes to feel or do something directly. Therefore, teachers should develop a learning process that links games with lessons, then teachers can also encourage children to move or move, children are also taught how to work or study in groups, and teachers provide opportunities to be directly involved in learning. Understanding children is the beginning of success in education. The world of children is the world of play, when they play children will absorb everything that happens in the surrounding environment, as stated by Maslichatoen that "play is also an essential demand and need for elementary school age children, through play activities children will be able to achieve the demands and development needs of the dimensions of motor, cognitive, creativity, language, emotion, social, values and attitudes to life". The motor development aspect is one aspect of development that can integrate the development of other aspects. Physical motor development is defined as the development of elements of maturity and control of body movements. Physical development has a very important role in children's lives, both directly and indirectly. Directly, a child's physical development will determine the child's movement skills. While indirectly, physical growth and development will influence the child's view of himself and the child's view of others, physical development goes hand in hand with motor development. Disturbances in physical motor development at elementary school age children become obstacles in their activities, including, children will have difficulty playing, writing, erasing the blackboard and so on.

Part of children's motor development.

- a. Children who have good neurological maturity will also produce good movements from the brain and muscles.
- b. In this motoric development, the movement component becomes an important point for children to carry out activities whose movements are still not well directed, including complex movements for children.
- c. The role of motivation is very large in children's development. Strong motivating factors from individuals, parents and the environment can give children strong self-confidence
- d. Whatever movements a child makes must be practiced directly by parents and teachers in order to be able to direct the child correctly and appropriately.

Assessment in Motor Development

Assessment of motor abilities in children has become increasingly important in recent years, as it has been suggested to be associated with cognitive, language, social and emotional difficulties (Ayan et al., 2019). Good motor skills are considered important for the physical, social and psychological development of children (Hestbaek et al., 2017) and can even be the basis for an active lifestyle, as some studies show a positive association between good motor skills and more physical activity. Tall (Hestbaek et al., 2017). Bo's states that basic motor skills: endurance, strength, speed, coordination and flexibility. To capture the construct of human motor abilities, over the last half century various systematizations have been proposed, all of which uniformly claim their multidimensional nature (Schmidt et al., 2017). Five general motor skills, namely flexibility, speed, skill, stamina (endurance), and strength (Van Hooren & De Ste Croix, 2020). The play approach with all forms, methods, rules and physical activities in it can improve students' basic movement abilities to the maximum and learning uses a play approach, in practice students are invited to be able to play while learning to achieve learning achievements, namely increasing basic movement abilities to the maximum. In the play activity approach, it contains elements of fun and tension in the game. The play approach has many benefits for students because games provide knowledge (cognitive) values, foster good (affective) attitudes and maximize psychomotor abilities in students' basic movement abilities.

Game-based Motor Learning Model for Elementary School Students.

A game-based motor skills learning model product that is suitable for elementary school children aged 9-10 years and is able to develop affective (attitude), cognitive (knowledge) and psychomotor (skills) aspects. Apart from that, to make it easy for teachers to use this learning model, a guidebook for using the model is packaged. The aim of creating a guidebook for using the model is to explain more specifically how to use this model, so that teachers as practitioners in the field and readers will understand and be able to use this model. The learning videos are packaged in DVD (Digital Video Disc) form as a guide on how to implement learning with games. The product specifications developed are:

Material

The development of the content and objectives of the game-based learning model is guided by Basic Competencies (KD), and adapted to the characteristics of elementary school students aged 9-10 years. Some of the games in the manual contain three parts, namely: (1) initial activities which contain implementation before learning begins, from preparing students to warming up, (2) The core activity contains the implementation of the motor skills learning process with eight game activities, namely: (a) Left Korero (b) Half and Half Relay's (c) Rob the Nest (d) Mousetrap (e) Catching with a Partner (f) Shuttle Passes (g) Moving Targets, (h) Wandering Ball. (3) The closing activity contains cool-down activities, evaluation of the implementation of learning, and reflection on the usefulness of learning with the games carried out

The relationship between motor development and family economic status

Children's motor skills are related with the family's economic status, which determines nutritional conditions that can influence a child's growth and development (Liu, et al. 2017). Low economic status ranks first in society which causes inadequate nutrition. A mother has a good influence on a child because she monitors and follows the child's growth and development.

Children's motor development

Early Childhood Motor Skills Development A young child who learns to move his body parts deftly is in the process of developing his motor skills. The baby will become helpless before it develops. When people are in the first 4 to 5 years of life after birth, these factors change rapidly. Children have good motor control. To move, a person uses wide limbs which are used for walking, jumping, sprinting, tiptoeing, swimming and other sports. The ability to regulate the smaller muscle groups involved in gripping, throwing, catching, writing, and other tasks improves significantly after age five. Therefore, teachers teach their students various movement patterns that they can use to improve hand-eye coordination, speed, strength, dexterity, and flexibility. For a child to grow and develop well, his motor skills must be developed. Three categories of motor skills exist in children, namely: (1) Locomotor abilities, including stumbling, sliding, and running (2) Non-motor skills, including pulling, lifting, pushing, bending and swinging (3) The ability to catch, throw and project by receiving/catching objects (Sudjono, 2015). Motor development includes the development of gross motor skills and fine motor skills. Running, walking, and jumping are examples of activities that involve large muscles and require a lot of energy. Meanwhile, fine motor movements, such as folding, cutting and merging, involve the use of small muscles and must be focused between the eyes and hands. Children's movements include their muscles from an early age, and they tend to be more active and prefer to move, do experiments or exercise, and playing physically demanding games and activities that require little or no movement. Muscles are still used in all movements, both small and large, which means motor development really helps other elements of growth. Children make two types of movements: large and small movements. Energy is undoubtedly needed for large activities involving large muscles, and vice versa. Children participate in these activities because they find it fun. Running, jumping, throwing, and other actions are performed either playing games with rules or engaging in unstructured play. Drawing, writing and cutting are examples of fine motor skills that require hand-eye coordination, according to Lolita Indraswari. Children who can cut paper with straight edges, draw meaningful pictures, color neatly, sew, weave, and other fine motor skills can become increasingly

Goals and Functions of Children's Motor Development

The achievement of abilities represented in the capacity to perform specific motor tasks is the goal of motor development. Sumantri separates the objectives of the early childhood motor skills development program into two categories, namely:

- a. Gross motor skills development program, especially so that children can:
 - Can improve ability or movement skills.
 - Maintain and improve physical fitness,
 - Develop self-confidence,
 - Foster teamwork, and
 - Can increase discipline, honesty and sportsmanship behavior.
- b. Fine motor skills development program, especially so that children can:
 - Functions for small muscles to work, such as when the fingers move
 - Eye and hand movements must be coordinated. And

- Can control his emotions

Functions of children's motor skills

As explained by Hurlock, among others: (1) Self-help skills (self-help) To encourage children to become independent and able to look after themselves so that they can feel more confident, therefore motor skills must be acquired/learned (2) Playing skills or abilities To play with peers, be accepted by their peers, or entertain themselves independently of their peers, children must learn and perfect their playing skills (3) Social help skills (social-help) In order to adapt at home, at school and in society, children must have skills. To help with school assignments at home, in class, or in the community, a person must have certain motor skills.

Skills at school Children are exposed to many motor skills-intensive activities when they first enter school, including painting, writing, sketching, and dancing. The more talents a person has, the better social adjustment they make, and the higher the academic results they get (Khadijah, 2020).

Conclusion

Motor development is a development that occurs increasingly in children in carrying out various movements through muscles and nerves, so that they can carry out various movements which are also obtained from the interaction between maturity factors which can be seen through the movements they make. A student also has motor skills which is in accordance with the development that must be achieved, then students can carry out various activities in the learning process. Starting from how they move, socialize, interact with friends, teachers and their environment. Then to develop students' motor skills, someone It must also develop students' creativity so that it can produce students who have motor skills who are able to adapt in the classroom, school and outside the school environment. All of these activities are also positive in nature so that they will be able to form and produce students who have great personalities, are intelligent, creative, capable and have noble morals.

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