

Analysis of Toddler Fundamental Movement on Development of Kinesthetic Intelligence.

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Aang Solahudin Anwar¹, Depi Prihamdani², Desy Oktaviani³

Abstract---This study aims to determine the analysis of basic motor movements of gross and fine motoric children under five (ages 3-5 years) on the development of kinesthetic intelligence and find out the extent of the results of increased kinesthetic intelligence of children through fundamental movements (walking, running and jumping) One of the intelligence of intelligence compound is kinesthetic intelligence, this becomes a determining factor for a child in supporting its growth and development. Kinesthetic intelligence can also support other anxiety so that it supports the success of children in the future. Research methods conducted using qualitative research methods. By analyzing a number of toddlers in the indo natural residential environment. The results showed an analysis that children who have fundamental movements (basic movements of walking, running and jumping) are directly proportional to the kinesthetic intelligence of children under five years old.

Keyword---Fundamental movement, Development, Kinesthetic intelligence

I. INTRODUCTION

Education has become the responsibility of the needs of all parties, not least in kindergarten which is held in an effort to help lay the foundation for development in all aspects of life. The implementation of education in schools is not only in schools but can be done anywhere, including the environment in which we live, we can see from the enactment of the curriculum with the aim of providing programmatic stimulation to the development of students including their multiple intelligences. Many attempts were made by parents so that the baby can be intelligent so that they can be proud of later on, as well as in the world of physical education, endlessly trying to find the best model to stimulate the development of intelligence. Kinesthetic-based physical education is one of the choices in the learning process and physical education is not only in formal education, it can be that motion education is taught outside of class time, in a learning process of motion, the motion process requires coordination between nerves and muscles so that they are able to communicate messages through the beauty of motion.

The development of nerves as a central regulator and basis of intelligence, is no exception compound intelligence is influenced by many factors including learning, fundamental exercise and the experience of motion itself. These factors allow the central nervous system, especially neurocortics, to store memory for longer storing visualization so that it will strengthen memory, so that it can be used when giving impulse answers to stimuli received without having to think long. The role of the media supporting physical education is very helpful in providing stimulus or stimulation for the

^{1,2}Universitas Buana Perjuangan Karawang

Corresponding author's: aang.solahudin@ubpkarawang.ac.id depiprihamdani@ubpkarawang.ac.id

³Widyatama University

development of kinesthetic intelligence. In some schools these conditions are very unfavorable. To make matters worse, it is thought that just learning physical conditions can make children lazy due to fatigue and result in children becoming stupid. The results of previous research on physical education in several kindergartens schools concluded that "the physical education learning process has not gone as expected, this is due to the very limited facilities and infrastructure in addition to educators lacking understanding of the role of physical education for children". The impact of this, physical education learning model was not much developed, including the provision of support. Most educators or fitness instructors assume that physical activity both in physical education or other sports provides benefits for maintaining health alone not in supporting stimulants to help improve kinesthetic intelligence. One potential that needs to be developed in children is kinesthetic intelligence. Kinesthetic intelligence according to Armstrong (Musfiroh, 2008: 6.3) the ability to use the whole body (physical) to express ideas and feelings and the skills to use hands to create or change things.

Meanwhile, according to Gardner (Grafura, 2011: 75) kinesthetic intelligence is the ability to use the body skillfully to express ideas or thoughts and feelings, able to work well in handling and manipulating objects. Many ways to improve kinesthetic abilities include using relay game learning (Aulia, 2016,).

From some of the sources above that many efforts to improve kinesthetic intelligence need more effort because the development of kinesthetic is a supporting asset for other intelligence. Therefore children's education institutions need to provide various facilities and activities that can develop development aspects which include cognitive, language, social, emotional and kinesthetic (Arrofa, 2013). Furthermore Frendy Aru (2018,122-126) revealed in the results of his research that the maximum learning of Physical Education has not been modified in the form of games. and the need for a game model that aims to improve the kinesthetic motion of elementary school students.

Foundamental Movement

This motion is a basic movement that needs to be learned and trained for children in kindergarten age. If this fundamental motion is learned and mastered with the concept of true and appropriate motion learning, it can be expected that children have the foundation to learn movement skills in various sports later in the day (Ahadin, 2008)

Movement abilities are terms that combine three categories of motion, namely non- locomotor (stability), locomotor, and manipulative (object control). One that can be learned from the aspect of motor behavior is its relation to the understanding of the movements displayed and how they are displayed when influenced by age, gender, and social class (Gallahue, D.L & Ozmun, 1998). Human movement in its daily life is divided into several forms including gross movements (gross motor movements), fine movements (fine motor movements), discrete movements (discrete movements), serial movements (series movements), continuous movements (continuous movements), open movements (movements) open), and closed movements or closed movements (Schmidt, RA, Wrisberg, 2000).

According to Gallahue observable motion can be classified into three forms of motion (Gallahue, 1996), namely: a. stabilizing movement stabilizing movement or non-locomotor motion is motion that places itself in a stationary body position, balancing the body against the force of gravity. Some of the motion included in this category are a) beam walk

b) one-foot balance, c) body rolling, and d) dodging b. locomotor movement locomotor movement or locomotor movement is the movement of changes in body position from one place to another. Some of the movements that fall into this category are a) running, b) leaping, c) horizontal jumping, d) vertical jumping, e) jumping from a height, f) hopping, g) galloping and sliding, and h) skipping c. Manipulative movement manipulative movement is a motion that gives or receives a certain object or object. Some of the moves that fall into this category are a) throwing, b) catching, c) kicking, d) trapping, e) dribbling, f) ball rolling, g) striking, h) volleying.

Motion Development Phase

The pattern of motion carried out is still less flexible although a bit more organized. Included in this level are children aged 3 or 4 years. 3. Proficient / Mature stage At this level motor performance has been coordinated and motion is more efficient. Children at the age of 5-6 years are generally at this stage and maybe manipulative movements such as throwing punches and catching are developing rather slowly. That is because these activities do require rather complex visual-motor skills. Motion development in children aged 6-7 years or often referred to in the final phase of early childhood is also at the mature level. Locomotor, non-locomotor and manipulative movements are starting to develop well.

Each of these developments must be absolutely ensured in order to support all activities throughout their lives.

Motor development in humans begins with a reflexive movement phase that occurs in infants in the womb until the age of 1 year and ends with a special movement phase that occurs at the age of 14 and above. Clearly illustrated as in Figure 1. The next phase is the fundamental movement abilities or basic movement abilities where children actively learn and practice the ability of motion from their bodies. In this phase they then learn how to perform various non-locomotor, locomotor, and manipulative movements separately and continuously combining it with other movements. Some researchers and developers of assessment instruments try to divide basic motion into three levels (Gallahue, DL & Ozmun, 1998), namely:

1. Initial stage At this level the movement still seems to be incomplete, seems still limited in the use of the body, and the lack of rhythmic movements and coordination between body parts. Included in this level are children aged 2 years. 2. Elementary stage At this level, motion control and rhythmic coordination are better than the previous level.

But the pattern of motion carried out is still less flexible although a bit more organized. Included in this level are children aged 3 or 4 years. 3. Proficient / Mature stage At this level motor performance has been coordinated and motion is more efficient. Children at the age of 5-6 years are generally at this stage and maybe manipulative movements such as throwing punches and catching are developing rather slowly. That is because these activities do require rather complex visual-motor skills. Motion development in children aged 6-7 years or often referred to in the final phase of early childhood is also at the mature level. Locomotor, non-locomotor and manipulative movements are starting to develop well. Each of these developments must be absolutely ensured in order to support all activities throughout their lives.

Kinesthetic Intelligence

In compound intelligence there is one intelligence that is related to Physical performance namely Kinesthetic intelligence or Physical movement intelligence. The intelligence of physical motion, namely the ability to conduct activities in a coordinated manner between the eyes, hands, body and legs, able to combine the elements of motion into a whole set of movements is good, the ability to coordinate parts of the limbs is good so that the movements made become flexible; Meanwhile, according to Howard Gardner, kinesthetic intelligence is a time when we are able to use good movements, such as running, dancing, building something like arts or crafts

Intelligence in kinesthetic intelligence namely:

Closed Skills

Closed skills or closed ability is when there is only one choice in this intelligence and must follow a predetermined pattern, such as learning to dance. In a dance there are certain movements which must be followed and cannot be done by deviating or will change the meaning of the dance.

Open Skills

What is meant by open skills are skills that require more flexibility in the learning process. An example is in a sports team. Someone who is in a team will learn different tactics, and also different routines in order to adapt to various situations that might arise during a match, because there are no sports matches that take place exactly from one another

II. RESEARCH METHOD

The methodology in this research uses descriptive qualitative research. Qualitative descriptive research attempts to describe a social phenomenon. In other words this research aims to describe the nature of something that is taking place at the time of study. This qualitative method provides complete information so that it is useful for the development of science and can be applied more to various problems

The main objective of qualitative research is to understand (to understand) social phenomena or phenomena by focusing more on a complete picture of the phenomenon being studied rather than detailing it into interrelated variables. The hope is to obtain a deep understanding of the phenomenon to further produce a theory. Because the objectives are different from quantitative research, the procedures for data acquisition and types of qualitative research are also different (Rahardjo, 2010).

Margono (2004) which states that with the characteristics of research that is holistic (comprehensive), researchers in qualitative research require analyst sharpness (descriptive analytic), objectivity, systematic and systemic in order to obtain accuracy in interpretation. Method In the study carried out by way of observation to children under five (ages 3-5 years), this process It does take a long time but the absence of reference sources and technology can make it possible to solve the problems in this research. The steps we took in this study Nadzim (in Ari Wardono 2017) 1). Choose a problem 2) Gather relevant material 3). Determine strategies and develop instruments 4). Collecting data 5). Interpret data 6). Report the results of research.

III. RESULT AND DISCUSSION

The results of this study can be explained that the research is intended for children who perform activities with fundamental movements of walking, running, and jumping and are observed in the daily habits of children such as playing ball, playing rhythmic musical instruments, and cycling for men and playing with rubber , playing rhythmic musical instruments and cycling for women.

Tabel. 1. Fundamental Movement Observation and Analysis Results

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Movement	Years	Walk	Run	Jump	Kinesthetic Intelegece
Gender	Old				
Boy	5-7	Able to do walking movements well. Without having to be trained	Able to run well without being taught.	Able to do by jumping flexibly without having to be taught first	This age boy's fundamental mobility is directly proportional to other kinesthetic intelligence such as kicking a ball, hitting a drum and cycling.
		Can do the walking movements well. But it	Can do the walking movements well. But it	Mampu melakukan gerakan dengan	Able to make movements by jumping. Boys of this age are not all

		must be taught first	must be taught first	melompat dengan luwes dengan harus diajarkan Terlebih dahulu	the fundamental motion ability is directly proportional to kinesthetic intelligence, such as kicking the ability of the ball is not flexible, hitting the drum is not too fast and not smooth. First
		Able to do walking movements well. Without having to be trained	Able to run well without being taught.	Able to do by jumping flexibly without having to be taught first	Girls at that age, the ability to move fundamentally is directly proportional to other kinesthetic intelligence, such as the ability to jump on a rubber strap, hit the drum and ride a bicycle.
Girls	5				Boys of that age do

	-7	Can do the walking movements well. But it must be taught first	Able to run well. But it must be taught	Being able to make movements by jumping flexibly must be taught First	not all have a fundamental ability to move directly proportional to kinesthetic intelligence, such as the ability to play the rope is not flexible, hitting the drum is not too long and not smooth Cycling.
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From the results of the explanation in the column above we can discuss right that the ability of Fundamental motion or basic motion of a child if observed flexible and pleasing to the eye, will have good kinesthetic intelligence. As quoted "Children who have good kinesthetic intelligence will naturally also have strengths (strength) which is relatively better than those with less kinesthetic intelligence (Cholik & Ali, 2004: 55). Indirectly, kinesthetic intelligence will have an impact on fundamental motion and one of the capabilities of the physical fitness component. Vice versa. Even this is directly proportional to intelligence, kinesthetic intelligence associated with body movements produced by the brain in the form of knowledge about the regulation of body movements (Gardner, 1983: 210). Hurlock (1990: 156) also says that childhood is the ideal period for studying or training a child's kinesthetic intelligence. There are several reasons put forward why this can occur, (1) the child's body is getting stronger and balanced so that the child can easily accept physical motor activities, (2) the child does not yet have many skills that will collide with the new knowledge the child is getting, (3) children are more willing to try, so children have a very large motivation, (4) if adults feel bored doing repetition, in contrast to children, they prefer to repeat playing again so that the more physically the child is trained, (5) the child has smaller responsibilities than adults, so doing a repetition does not put another pressure on the child.

IV. CONCLUSION

The conclusion of this research is the study summary. Fundamental movement analysis of children aged 5-7 years by looking at the comparison of kinesthetic intelligence. Based on the conclusion and discussion that

1. Children who are able to do well walking. Without having to be trained it will be directly proportional to kinetic intelligence. In the sense that fundamental motion is directly proportional to other kinesthetic intelligence such as kicking a ball, hitting a drum or a pentatonic musical instrument and cycling.
2. Children who can walk well. But it must be taught in advance, the fundamental motion is not all directly proportional to kinesthetic intelligence, such as kicking the ability of the ball is not flexible, hitting drums or pentatonic musical instruments are not too beramaama and not smooth Cycling.
3. Girls who are able to do well walking. Without having to be trained, fundamental mobility is directly proportional to other kinesthetic intelligence, such as the ability to jump on a rubber strap, hit the drum and ride a bicycle.
4. Girls who can do well walking. But it must be taught in advance, the ability of the fundamental motion is not all directly proportional to kinesthetic intelligence, such as kicking the ability to play rubber straps are not flexible and smooth, hit the drum not too long and not smooth Cycling.

V. RECOMMENDATION

In a study nothing is perfect, the research realizes that this research needs to be refined for the future. With the following recommendations: 1. This research can be updated from existing methodologies, using other meetodelogy, so that it can present very practical information.

2. the subject of research conducted in the future can be more complex and heterogeneous so that it can represent a large portion of the existing population.

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