



Eksplorng Basic Movements of Early Childhood in Kindergarten

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Abstract

This research is based on the increasingly distant children from physical activity. Though very physical literacy important to develop and will have a bad impact if not developed. The objectives of this study are to analyze literacy development Kindergarten children's physical activities related to basic motion and knowledge in motion. The method in research was mix method research. The sample (n=30) at three kindergarten in Padang City. The research results that can be concluded are: The basic movements of children in the three Kindergartens studied showed varying scores in the range of medium and high scores and. Based on this research, the movement ability of children in coastal areas is better than children in hilly areas. It can be concluded that children's movement abilities are influenced by geography at the beginning of the observation, but after repeated basic movement activities, children in high geographic areas can match and even exceed basic movement skills of children in lowlands.

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INTRODUCTION

Education is one way of developing a child's self in line with his or her ability to the best that can be done through communication so that children reach social, emotional, and intellectual maturity [1]. Education at an early age is education that is very influential in the future. There are six aspects of early childhood development, namely cognitive, language, physical motor, religious moral, social emotional and art, all of which are aspects of child development that must be given the right educational stimulus to achieve optimal child development. A fun atmosphere of play can be applied in early childhood education and in educating children according to the child's development stage by compiling interesting learning materials or media [2].

Morrison [3] stated that stimulation or enrichment programs play an important role in the early years of a child's life. PAUD teachers must be able to seek various learning strategies in the form of selecting and determining methods, media and up to the evaluation of the learning carried out. Initially, literacy was related to reading and writing activities, but nowadays the meaning and scope of literacy has become wider. At the beginning of the 21st century the term physical literacy was introduced.

Physical literacy (PL) is the ability to move, trust in one's ability, adopt a healthy lifestyle by adopting an active lifestyle, and have good basic movement skills. In the context of kindergarten education, physical literacy refers to the development of basic movement skills and basic sports movements that can encourage children to have confidence in their abilities, adopt a healthy lifestyle with an active lifestyle, and have movement skills. [4] and encourages the overall achievement of children's literacy [5].

Physical literacy is fundamental for children because childhood is a period when children are active in motion and movement activities, which are generally formed in the 2-5 years age range [6]. Kindergarten age is an important period in child development, because during this period basic movement skills, social and cognitive are formed [7]. There are many benefits for children when they are active in exercising, including maintaining health, especially for the prevention of obesity in children [8], obtaining benefits in cognitive development and academic performance [9], increasing cognitive abilities and increasing children's academic achievement [10], developing skills psychomotor and provide psychological benefits through the development

of personal and social responsibility and appropriate social behavior [11].

Physical literacy is also defined as the ability of each individual in motivation, self-confidence, physical competence, knowledge and understanding to maintain physical activity throughout the life cycle [12], while the latest understanding of physical literacy is defined as each individual's ability to motivate. self-confidence, physical competence, knowledge and understanding of values and taking responsibility for being involved in physical activity for life [13]. According to Mandigo, Francis, Lodewyk, and Lopez (2012), physical literacy is defined as the ability to move with competence and confidence in various physical activities in various environments [14].

The role of educators is indispensable in encouraging children to actively move in order to grow and develop healthy and strong. Physical literacy is the foundation in the formation of behavior, understanding of an active lifestyle, to increase motivation, self-confidence, movement, knowledge and vision, the ability to understand, communicate, apply knowledge, and learn movement in different ways and demonstrate movement flexibility with confidence, comprehensive, and creative promote children's literacy achievement as a whole [15]. This study is based on the increasingly distant children from physical activity [12]. In the current era, it is not uncommon for children to experience various degenerative diseases caused by a lack of inactivity. The result is that children are at greater risk of developing dangerous diseases, namely non-communicable diseases (NCDs) and other general health problems such as obesity, heart attacks, hypertension, cancer, and diabetes [16] and experience delays in social, emotional and cognitive development. happened throughout his life [17]. In addition, children who have low movement skills show a less active attitude in learning than children who have good movement skills [18]. The development of children's movements is often forgotten because the focus in the early years of education is directed at developing language, numeracy and social skills, whereas the development of children's movements is the foundation for subsequent child development, especially children's cognitive development [12].

Children are less active in motion activities because they spend more time watching television or playing gadgets. The negative impact is a decrease in vocabulary and math skills, children find it difficult to focus attention, and delay in movement skills [19]. In the context of kindergarten development, physical literacy is used to

learn various aspects that allow children to learn, adopt a healthy lifestyle with an active lifestyle, and have movement skills [20]. Physical literacy in this study is focused on children's activities to move confidently, have motivation, knowledge in movement, and have movement skills in different geographical conditions. Therefore, researchers are interested in analyzing the physical literacy of kindergarten-aged children. The research objectives were (1) to analyze the physical literacy development of kindergarten children related to moving activities with confidence; analyzing the physical literacy development of kindergarten children related to movement activities with motivation (3) analyzing the physical literacy development of kindergarten children related to knowledge in movement; (4) analyzing the physical literacy development of kindergarten children related to skills.

METHOD

This research method is a mixed method carried out in three Kindergartens in the city of Padang during 2020. Because the research was carried out during the Covid-19 pandemic, the number of kindergartens carrying out face-to-face learning was limited, so the number of samples in the study was limited, namely 30 children aged 5-6 years. Data were collected using observation, interview, and documentation techniques. There are 2 kinds of observation data collection techniques, namely closed observation with the help of independent instruments from the basic movement measurement instruments for children and instruments for children's movement knowledge. Before using the instrument, it was validated by 3 experts, namely 2 basic movement experts and an early childhood education expert. Then performed the instrument testing. Furthermore, the valid instrument used for this research is using SPSS 20.0 for windows. There are 2 invalid statements of the basic motion instrument measurement results. Instruments that have been valid are then tested for reliability using the Cronbach Alpha formula with the help of SPSS 20.0 for windows if r alpha is positive and the size of r table (0.334) means that all the instrument items are reliable. Furthermore, a valid instrument is used in this study. The data collected from these measurements are converted into quantitative data. Quantitative data were analyzed by means of frequency calculations. The measurement of children's knowledge variables was carried out by open interviews, namely by using interview notes to 30 children as respondents as qualitative data.

Data analysis while in the field: At this stage, data analysis is carried out by collecting data directly through questionnaires, interviews and / or observations. For example, when the interview took place, the researcher had analyzed the answers from the respondents. If the researcher is not satisfied with the answer from the respondent, then the researcher can continue the question again until a certain amount of valid data is obtained; Analysis after in the field was also carried out by connecting the data that had been obtained while in the field, then analyzed using the Milles and Huberman method [21].

RESULT AND DISCUSSION

Quantitative Result

The development of locomotor movements for children aged 5-6 years consisting of walk, run, jump, hop, throw, kick and hit movements.

Table 1. Walk.

| Category | Frequency | Percentage (%) |
|----------|-----------|----------------|
| Low | 1 | 3.33 |
| Average | 3 | 10 |
| High | 26 | 86.7 |
| Total | 30 | 100 |

Table 1 be seen that most of the children already have a high development of walking movements. number of samples of 30 children, as many as 26 children or 86.7% of children who have perkembangan gan run high or growing very well and 1 child or 3:33% of children who have low capacity and 3 children, or 10% have the ability of moderate or good on development walking motion.

Table 2. Run.

| Category | Frequency | Percentage (%) |
|----------|-----------|----------------|
| Low | 0 | 0 |
| Average | 3 | 10.0 |
| High | 27 | 90.0 |
| Total | 30 | 100 |

It can be seen that most of the children had memiliki a good running motor development. This can be seen from the sample size of 30

children, as many as 27 children or 90% of children classified as having very good running development (Hight). While three children, or 10% of children who have developmental ran the medium.

Table 3. Jumps.

| Category | Frequen- cy | Percent- age (%) |
|----------|----------------|---------------------|
| Low | 5 | 16.7 |
| A verage | 20 | 66.7 |
| H ight | 5 | 16.7 |
| Total | 30 | 100 |

Table 3 can be seen that most of the children already have good jump movement development. This can be seen from the number of samples of 30 children, 20 children or 66, 7 % of children were classified as having developmental Jump *average*. The 5 children or 16.7% lower or less well and as much as 5 children or 16.7% of children who have a very good development.

Table 4. Hops

| Category | F r e - quency | Percent- age (%) |
|----------|-------------------|---------------------|
| Low | 13 | 43.3 |
| A verage | 8 | 26.7 |
| hight | 9 | 30.0 |
| Total | 30 | 100 |

Table 4 can be seen that most of the children already have good hop movement development. It can be seen from the number of samples of 30 children, a total of 9 children, or 30.0% of children were classified as very high or very well developed and as many as 8 or 26, 7 % of children who perke m ment of motion being while 13 children or 43, 3 % of children 's Hop movement development is low.

Table 5. Throw

| Category | Frequen- cy | Percent- age (%) |
|----------|----------------|---------------------|
| Low | 14 | 46.7 |
| A verage | 11 | 36.7 |
| H ight | 5 | 16.7 |
| Total | 30 | 100 |

Table 5 can be seen that most of the children have good development of throw motion. This can be seen from the number of samples of 30 children, 14 children or 46, 7 % growth thrownya motion or begin to develop while 11 children or 36, 7 % of children have a good development and 5 children or 16.7% of children have developmental g e excellent throw rack (hight).

Table 6. Kict

| Category | Frequen- cy | Percent- age (%) |
|----------|----------------|---------------------|
| Low | 9 | 30.0 |
| A verage | 9 | 30.0 |
| H ight | 12 | 40.0 |
| Total | 30 | 100 |

Table 6 can be seen that most children already have very good manipulative movement development in kict movements. This can be seen from the number of samples of 30 children, a total of 9 children, or 30.0% of children were classified as kict motor development is still low, and as many as nine children, or 30.0% of children whose development has been good kict as 12 children or 40.0% of children with manipulative motion development in their kict movements are already very good or their movement development is high.

The entire data that has been collected on the development of locomotor movements of children aged 5-6 years can be drawn with the following diagram.

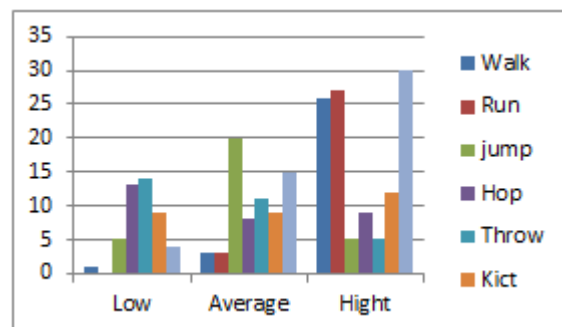


Figure 1 Histogram of Locomotor Movement Development Results for Children aged 5-6 Years

In the picture above can be concluded that the development of locomotor movements in children aged 5-6 years in general are at kat e gori developing excellent (high). This means that the development of children's locomotor moti-

on is in accordance with the development of the child's age, therefore it is necessary for the role of teachers and parents to help children who are just starting to develop, by doing good movement activities.

The results of this study are also supported by the results of interviews with several informants on the development of children's locomotor skills at school

Qualitative Analysis

a. Basic Movement at First Kindergarten

The first research was conducted to measure the abilities of the children. The research looked at the ability of the locomotor movement and ability manipulative child. The research was carried out 4 times. On the 5th day, activities were carried out to see children's knowledge related to basic movements. The implementation dates are, namely, 20, 23, 27, 30, in November 2020.

Based on the research conducted on the walking indicator, the average child was able to do it according to the requested descriptor. Children at Kindergarten has an uncanny ability to be executed or done is walking with the heels and walk on tiptoe. On average, children are able to follow locomotor movements according to indicators.

Running indicators carried out by 12 children, on average the children were able to do according to the indicators, from the 12 children there were some who had different understandings in the concept of running leaning forward where the child did not move his hands like running as usual, the children lifted his hand from behind. In contrast to zigzag running, children are able to balance their body in zigzag running and run as usual with additional zigzag variations.

Furthermore, the jump indicator which is a jump with one foot pedestal when making a jump and a foot down at the same time when landing. Based on the observations carried out the average knowledge and concepts taught by the teacher when jumping and jumping are the same. The knowledge the child begins to understand where to jump and jump, the average child is able to carry out the jump suit and requested indicator.

The jumping indicator was carried out by 12 children, the average child was able to carry out jumping activities correctly and as requested. The jumping indicator can be seen by children when jumping, some children have high jumps, namely 7 children, and some children are also unable to jump high, namely 5 children.

b. Basic Movement at Second Kindergarten

The second research was conducted to measure the abilities of the children. This study also looked at the locomotor and manipulative movements of the children. Research was carried out for 5 days. On day 6, activities were carried out to see children's knowledge related to basic movements. The implementation dates are 19, 23, 23, 25, 26 November 2020.

Based on the research carried out on the walking indicator, on average, the child was able to do it according to the requested descriptor. However, there are 2 children who are less able on the descriptor of walking on heels. In the in-jit walking descriptor there is 1 underprivileged child. There is 1 child who has not been able to walk with heels and in-jit because the child is classified as a child with special needs. The number of children involved in the walking indicator was 7 people.

Then go to the running indicator which is done by 7 children. On average, children are able to carry out running activities according to the requested descriptor. However, there is 1 child who is less able to run zigzag movements. The next activity of jumping was carried out by 7 children. The average mastery of children's movements in cycle 1, the children seemed able to do the requested movements. However, there are 2 children who are unable to do it and 2 children who are less able to do it. In jumping activities, the child's ability to move is the same as jumping activities. Children who have not been able and are less able to jump, in jumping activities also have the same abilities as jumping activities. Children in jumping and jumping activities are constrained by controlling balance.

c. Basic Movement at Third Kindergarten

According to a study on Wednesday, 2 December 2020 implemented locomotor activity with indicators of walking and running. The number of children who participated in this activity were 12 children with 7 boys and 5 girls. In the first activity the walking indicator is carried out, by advancing 10 steps with an upright body position, swinging the arm opposite the leg, not bending the knee and balancing the body when walking within 1 meter. In this activity on average all children are able to do it. Furthermore, the activity of walking backwards 5 steps with a balanced body position within a distance of 1 meter, all children are still able to do it. Then the activity of walking steps with heels with a balanced body position within a distance of 1 meter, there are 2 children who are still not able to make

the movement.

Then locomotor movement activities with indicators, namely running, by following a straight line with the body leaning forward and swinging the arm against the leg within 2 meters on average all children are able to do it. Then run zig - zag (turn around) without touching the tools provided with the body leaning forward within 2 meters, there are 2 children who are still not able to make movements according to the descriptor. On Thursday the 3rd of November 2020 implemented locomotor activity with the indicator jumping motion. The number of children who participated in this activity was 12 children. There are 7 boys and 5 girls. In the first activity carried out, namely jumping, by advancing 3 times with the legs raised to knee height in a bent state with the repulsion of one leg. Here only 3 children are able to do the movement, then there are 6 children who can do it but are not perfect and 3 more children are not able to do the movement according to the descriptor.

On Tuesday 8th November 2020 carried out activities of the locomotor movement with the indicator jumping, throwing a ball, kicking and punching. The number of children who participated in this activity was 12 children. There are 7 boys and 5 girls. In the first activity carried out, namely jumping, with a height of 40 cm with a floating body position where the arms act like wings. Here only 2 children are able to do it, the rest of the children have not been able to do this movement. Then jump as far as 30 cm with the support of the legs must be flexed during the landing process. Here also only 2 children are able to do this activity and the rest on average have not been able to do it.

DISCUSSION

Based on the results of the study showed that the basic movement skills of children in walking have developed well. In this case the child does not experience problems in walking. The development of the child in walking is in accordance with the age range of the child. Susanto (2012:30) walking is an activity of moving from one direction to another that involves the bones of the legs, muscles and nervous system [22]. Walking is a movement to move or move the body from one point to another by stepping using the legs alternately. The movement of the body in walking is dominated by footsteps, although the movement of the hands and other limbs is also required, but the motion of the foot is the main

movement.

Walking is a natural movement that every individual does. Walking performed by adults is learned from childhood. Often the teacher considers that the child could walk right by nature whereas when parents or teachers do not give correct lessons to good roads then errors made by children will be carried over into adulthood and become a *pe rilaku* who settled on the child. Therefore, how to make people walk well, it is necessary to pay attention to signs for parents or teachers to teach children to walk well.

Pangrazi & Dauer, (1992) revealed that a good walk should pay attention to the following: (a) Head straight and look straight ahead (b) Toes pointing forward (c) Swing arms relaxed (d) Walking without sound (e) Chest upright (f) Stepping by pressing using the tips of the toes [23]. If this condition is done well, it will make children's habits to walk well

The movement of walking is different depending on the goal we want. Here 's how to walk properly. (a) The body must be relaxed, the whole body is in an upright position, so that the spine that supports the body is straight. Keep your head straight, bend your shoulders straight in line with your body, pull your chin slightly and keep your gaze forward. (b) The chest is pulled slightly outstretched or open so that the breathing carried out is abdominal breathing. After that, look straight ahead. (c) Alternately swing arms in a natural and relaxed manner. The swing starts at the shoulder and elbow joints. (d) The feet step forward alternately, occasionally the heel lifts and pushes against the base of the toes. (e) Legs are raised swinging forward with knees slightly bent, tread on the heels, soles and tips of the toes that are directed straight ahead. f. That is repeated alternately, the leg which was originally the fulcrum changed to the swing leg (Vanagosi, 2016) [24].

Based on the results of motion run children have been very good, although there are still barriers faced by *seb a gian* children. Where these barriers that children lack the strength of leg muscles are not well controlled, so that when run, there are children who *Kesa n dung* and fell.

Smith & Pellegrini (2013) stated that locomotor games consist of playing (running, climbing) which involves body activities that are supported by muscles, strength, endurance and skills [25]. This movement skills will continue to be part of daily life - day in the future. Of course, the role of the teacher in providing direction or lessons about running is done as well as possible

because it involves the ability of children in the future, especially in life activities in the community. Running and road sa n gatlah different, the difference of the most fundamental adalaah foot contact with the ground. In walking there is always one foot or both feet in contact with the ground, while in running there is always a time when both feet are not on the ground.

Pangrazi & Dauer, (1992) revealed that running is good and right by paying attention to the following things: (a) Running using the ball of the foot, (b) Head straight and looking forward, (c) Bend knees, (d) Body to relax, (e) Breathe naturally, (f) Swing arms forward not sideways [25]. The factors mentioned above are the key to the success of a student to run as well as possible.

Based on the results p enelitian child's basic motor skills in jumping is still less than the maximum, where children face obstacles that most children are not ma mpu resting one foot in maintaining the balance, the balance of the child's foot is out of control and unable to carry the other leg with a long time. there is a child who has a body weight beyond his age so he has problems in jumping.

Jumping movement is a locomotor movement that must be owned by a student for his needs in various activities in the future. Jumping for early childhood must pay attention to the most basic thing, namely that children should not be given too much jumping movement up. This is because early childhood is experiencing a period of growth, it is feared that children with high jumps if the landing process is not carried out properly will result in injury to early childhood. Therefore, it is necessary for teachers to pay attention to directing early childhood when making jumps. This is intended to help reduce the risk of early childhood injuries

Sujiono in Zuhriyah (2015: 172) balance can be divided into two ma c am namely static and dynamic balance. Static balance is the ability to maintain a certain body position so as not to sway or collapse. While dynamical balance is the body's ability to maintain current padaa tumbling agat not mealkukan movement [26].

According to Syarifuddin in Aniroh (2012: 8) jumping is doing repulsion with one leg, to perform a jumping movement there are several stages that must be done, namely (1) stretching. Stretchers to maintain flexibility/balance while jumping, flexible muscles can provide maximum jump, whereas poor flexibility limits the strength of the jump and even increases the potential for injury. (2) take 1-2 steps as a jump off. The essence of the square off before jumping is to increase

the momentum so that when doing the repulsion, a fraction of the energy that we generate when taking the square will be used to increase lift. (3) take a position. Take a position on the back of 30 degrees (against the footing) of the knees down to 60 degrees, the ankles of 25 degrees, and position both hands at the sides of the body for maximum power without creating the potential for splitting the knee. (4) push the body with leg strength, at this time the lower back muscles are very important, push the front legs while swinging the upper arms and exhaling while doing this movement. (5) landing, land safely and the forefoot pads touch the floor first and deliver the shock to the knees and upper thighs as if our bodies were springs [27].

Based on the results of children hopping motion is well developed, but some children have difficulties in which children often jump jump on papa n leap to measure how much the child is able to hops and there is exceeding or transcending board

The ability to hops can be used as an estimate of body strength and can also be a diagnostic test in terms of movement coordination. The development of the ability to jump is related to increasing body strength and coordination. Well-developed body coordination and accompanied by a good increase in strength will result in the development of good hops ability as well. At the time of the child's age occurred development capability that is fast enough later development bolt shaped increased power jump (further away or higher) and shaped p e enhancing the quality of Gerkan form. The form of movement is getting better or more efficient in terms of mechanics (Sugiyanto and Sudjarwo, 1991:121) [28].

The comparison of the ability to jump between boys and girls until the age of approximately 9 years is only slightly different and after that the difference is even greater. Boys have better jumping abilities, both in terms of upright jumping power and long jumps, it turns out that they are not the same. This is evident from the results of research W Arren R. Johnson (1960), about the ability of the two kinds of stepping on boys and girls aged 5-17 years (Sugiyanto and Sudjarwo, 1991: 121) [28].

Based on the results of the research showed that there are fa c tors peng h Ambat that causes motor skills of children aged 5-6 years in the city of Padang has not developed very well. It is caused by several fa c tors that impede among which the muscle strength of the child's foot was not controlled so often happens when children ran quickly stumble own feet, legs child

is still weak and the balance of the child is still not settled, if the child memil i ki weight those who exceed their age, it is difficult to maintain balance when jumping, the relationship between the hands and feet and eyes when doing movement activities. No that does not keep his balance as throwing the ball because too strong push, eye hand coordination with arbitrary time n gkap ball is still not balanced, especially girls kicking a ball with the power of the body is not strong so nice balance and eventually fall.

Vanagosi (2016: 75) errors in basic movements that are not corrected will harm the child and will be permanent and difficult to change. These disadvantages include (1) inefficient movement, (2) poor performance mechanics, (3) greater chance of injury and (4) greater energy expenditure/energy wastage [24]

The cause of the poor basic movements of children is that the daily learning plans made by the teacher are not in accordance with the basic movements of children well. Where the teacher has not given treatment and carried out exercises to children in accordance with the stages of basic movements so that children perform basic movements according to the development they are experiencing without being directed properly.

This is when the running movement is carried out, the teacher does not make preparations in advance, where children are told to run without warming up, so there are children who stumble and fall while running. At the time of catching the ball, where the teacher did not supervise the child's movements, so that when catching the ball there were children who were not able to catch it properly and hit their body parts. This is because the teacher does not give the cue how to catch the ball well.

If this is not addressed by the teacher, this will cause the child's basic movement skills to be delayed, so that the child will have difficulty interacting with the environment. Therefore, children's basic movement skills will develop well if there are activities or stimulation to improve children's basic movements, so that growth develops normally.

Limitations this research was happening pandemic covid-19 so many schools that do not operate and their social restrictions by the government. This affects only a few schools still open when there pandemic covid 19. Existing research can be used as a base to carry out p enelitian-subsequent research. So that in the future it is hoped that there will be studies that are more perfect, relevant and of course useful for early childhood education.

CONCLUSION

Based on this research, the movement ability of children in coastal areas is better than children in hilly areas. It can be concluded that children's movement abilities are influenced by geography at the beginning of the observation, but after repeated basic movement activities, children in high geographic areas can match and even exceed basic movement skills of children in lowlands.

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