

# Intensity of Motor Learning Physical Needs to Start in Early Age 5-6 Years

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**Abstract:** The purpose of this study was to analyze the physical learning needs of children aged physical motor in the age range of 5-6 years in kindergarten in Malang city. This research uses qualitative research methods, with a sample taken from the 8 early childhood institutions scattered around the city of Malang. Based on the results of the data collection methods such as questionnaires, then the motor physical learning needs 5-6 years old children can be summed up as follows. In the gross motor learning, among others: (1) choose undertake a coordinated body movements to train speed, strength, and agility of 37.5%; (2) selecting coordinate eye movements-foot-hand-head in imitating dance or gymnastics 50%; (3) choose to do a physical game with rules 25%; (4) choose skillfully using the right hand and the left 75%; and (5) pick conduct personal hygiene 87.5%. In the fine motor learning, among others: (1) choosing a draw in accordance with the ideas of 50%; (2) selecting a shape imitating 62.5%; (3) choose to explore the various media and activities 50%; (4) choose the use of stationery and cutlery correctly 62.5%; (5) cutting to fit a pattern of 50%; (6) choose the right stick picture with 75%; and (7) choose the movement to express themselves through drawing in detail, 62.5%.

**Keywords:** motoric learning, physical needs, early age

## 1. INTRODUCTION

Development and growth of the Indonesian nation in the era of revolution 4.0 are becoming growing towards an increasingly better. This can be seen in the vision of Indonesia in 2045, the vision presented that the basic component in the development of human resources through education (Bappenas, 2017). Due to development and progress is affected premises, public mindset. Because therefore being important to change the mindset of society towards better education. So as to bring the Indonesian people towards the development of human resources with the mastery of science and technology better, sustainable economic development, equity in the construction sector and strengthen national resilience in governance

If you want to make it become a reality, then the mindset of the public should be invited to think towards the future. Want to carry this nation in the future? What to do in order to become Indonesia gold in the year 2045? Thousands of questions that will arise if we reflect on this. Let us think in mathematics in 2045 will arrive in the next 25 years. If we calculate the number of children ages 0-10 years old in the present, when added to 25 next year will future so it is, they who become productive age of 2045. So, it is not shut out the possibility that they are the leaders who will lead a variety of sectors in Indonesia. So, it will not be in vain. Education is a key to achieving gold in Indonesia in 2045 since education has been integrated with

the development of children's potential. Naturally, if this is starting from the smallest sphere that is the family, the school up to a wider audience in the general population.

Lately, early childhood began to receive serious attention from the government of Indonesia, since the start of the growing awareness of the importance of early childhood education as a budding nation in the future. It can be seen from the discussion on the next generation of gold in Indonesia in 2045, by experts and practitioners in education through seminars and conferences on the national and international level.

To realize the golden generation of Indonesia in 2045 are resilient and able to compete internationally required child-optimization efforts corresponding to the period of growth and development. Optimization of a stimulus as a form of child development should be done and started as early as possible. This is consistent with the theory put forward by Tabula Rasa (John Lock, 2002) that children are innately like blank paper. So that the experience and knowledge they experienced when with the family and society that will fill this blank paper, so this opinion can be pulled conclusion that the environment that shapes the character and personality of the child.

When the child at the age of 4-6 years, children will begin to enter the age of sensitivity. At this moment the maturation period of physical and psychological functions so that it becomes a good thing to receive a stimulus to optimize development. At this time also become a matter

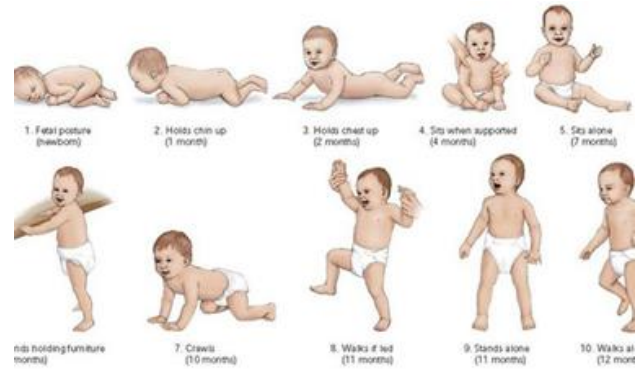
of urgency in developing physical abilities, language, cognitive, artistic, social-emotional, self-reliance, discipline, moral and religious values. Therefore, this period is often called the golden age of children's age (Golden Age).

During the Golden Age, this will happen in the age range of 0-5 years. According to Prasetiawan (2019) in this phase, the brain's performance will work optimally around 70-80%. The findings on the brain development of children in neuroscience state that when a man is born, the baby's brain has about 100 billion brain cells, but not interconnected between brain neurons to one another. Fewer new neurons are active and interconnected, between cells that are interconnected brain cells that control heart rate, breathing, reflex motion, hearing, and sense of life. By the time a child enters the age of 3 years, the brain has formed about 1,000 trillion connections in the brain cells. This amount provides two times more than that of adults. An existing cell in the brain can be connected to 15,000 other brain cells. These brain cells if rarely and never used, then it will die.

During this period, the best potential in optimizing all aspects of development, including motor development. According to Muhibbin (Samsudin, 2008), the motor is a translation of the word "motor" which is defined by the term that indicates an activity or situation that involves muscles in a movement, therefore the glands that exist in the body will sweat (issued secretion). So that the motor can also be interpreted as any state to provide or stimulate muscle stimulation with various activities physical organs. Because the motor will cause a movement of the limbs (hands, arms, feet, and legs) utilizing the motion of the body (muscle and skeletal) so when it moves also involve motor function in the brain, nerves, muscles, and skeleton.

In motor development in early childhood defines when growth happens (Samsudin, 2008), it will show a qualitative change in various proportions and sizes of the body so that the changes can be calculated. While the development is a generally can show a quantitative structural change. According to Muhadi (2009) young age that a child is often referred to as the current most ideal when learning motor skills due to the following factors: (1) children are easier to master the skills of motoric because of more flexible than in the adult body more rigid; (2) The child can focus on the new skills learned; (3) The nature of children who dare to try something new, it will be the motivation for learning in children; (4) Children love to repeat the action so that the muscles will be trained effectively; and (5) The child has a lot of spare time to learn motor skills.

Changes in the physical development of the motor take place regularly in direction relative to prediction (Figure 1). Suppose that before a child can run smoothly, the child learns to lift his head first, then sit up, crawl, stand up to help and then stood up without help.



**Figure 1 Development of Motoric Skills of Children 0-12 Months**  
Source: Saeful Imam, Nakita (For Mom and Everything That Matters)

**2. METHOD**

This study uses a qualitative research approach because the data and information obtained are more in the nature of a statement or explanation. According to (Sugiono, 2008) This qualitative researcher as human assessment, which the researchers conducted an interactive social role functioning in determining the focus of research, collecting data, determine the source of the informant as the source of the data, interpret the data, maintain quality of the data, analyze the data to make conclusion the research findings. Qualitative research that is emergent or changes and can develop in accordance with the findings in the field.

In the data collection techniques using direct observation (primary data), using data collection techniques such as interviews, questionnaires, and documentation. Samples were taken using purposive sampling-based respondents is a teacher in kindergarten group B. Here will take one person at any one of early childhood institutions scattered throughout the Malang City. With the number 8 early childhood institutions.

**3. RESULTS AND DISCUSSION**

Physical activity needs analysis motor learning in early childhood institutions is based on the results of interviews and questionnaires / questioner field in the learning process of physical motor in early childhood institutions in the data obtained as follows (Table 1; Table 2). Based on data collection in the form of a questionnaire, then the motor physical learning needs 5-6 years old children can be summed up as follows.

First, in the gross motor learning, among others: (1) Choose undertake a coordinated body movement to train speed, strength, and agility of 37.5%; (2) Selecting coordinate eye movements-foot-hand-head in imitating dance or gymnastics 50%; (3) choose to do a physical game with rules 25%; (4) choose to skillfully use the right hand and the left 75%; and (5) pick Conducting personal hygiene 87.5%.

**Table 1 Physical Motor Learning which is Often Taught in Early Childhood Institutions**

No	Physical Development Motor	Learning Activities are Often Conducted
1	Rough motoric	Morning exercises, rhythmic gymnastics, gymnastics vary, playing catch throwing the ball, run, traditional game, walk, up and downstairs, imitate the movement of animals, jump, and walking off the plank
2	Fine motor skills	Collage, draw, snip, color, transfix, patch, writing, rip, squeeze, fold, disposable seals, drawing free, coloring image, paint finger painting, sew, trace, and making lines and shapes

**Table 2 Physical Motor is Most Often Done in School**

No.	Level of Achievement Physical Motor Anything in Teach by Master in one week	Percentage Number of Answers	Percentage
<b>A</b>	<b>Rough Motoric</b>		
1	Conducting coordinated body movements to train speed, strength, and agility	3	37.5%
2	To coordinate the movement of the eye-hand-foot-head in imitating dance or gymnastics	4	50%
3	Doing physical play by the rules	2	25%
4	Skillfully using the right and left hands	6	75%
5	Conducting personal hygiene	7	87.5%
<b>B</b>	<b>Fine Motor Skills</b>		
1	Drawing accordance ideas	4	50%
2	Mimicking the shape	5	62.5%
3	Exploration of the various media and activities	4	50%
4	Using stationery and eat right	5	62.5%
5	Cutting out according to the pattern	4	50%
6	Sticking with the right image	6	75%
7	Express themselves through movement, drawing in detail	5	62.5%

Second, in the fine motor learning, among others: (1) choosing a draw in accordance with the ideas of 50%; (2) selecting a shape imitating 62.5%; (3) choose to explore the various media and activities 50%; (4) choose using stationery and eat right 62.5%; (5) cutting accordance with the pattern of 50%; (6) choose the image stuck with exactly 75%; and (7) choose the movement to express themselves through drawing in detail, 62.5%.

Based on the results of the analysis of the needs of the physical aspect of the motor learning process for early childhood 5-6-year-old early childhood institutions are still low 25% of teachers who choose to perform physical play by the rules and 37.5% choose to undertake a coordinated body movement to train speed, strength, and agility on aspects of gross motor skills. This is because teachers who admitted having problems at the time of preparing the necessary media to physical learning motor skills because of limited facilities and infrastructure. So, the researchers concluded that this can be overcome by creating a game that can train a child's gross motor skills. The problem faced by teachers when doing physical learning motor skills in children aged 5-6 years in kindergarten institution after statements that often appear summed up as follows

Constraints experienced by teachers when doing physical learning motor skills in kindergarten institutions: (1) media should be prepared; (2) facilities and infrastructure are incomplete; (3) limitations media; (4) media are less attractive; (5) the learning activities are too difficult; (6) the ability of children in concentrating; (7) the child's condition during the learning; (8) should be more patient when teaching; (9) learning fist that no child

magazine; (10) kids are not enthusiastic; (11) children do not like what a given; (12) kids feel less confident; (13) children's grasp of each of the different; (14) limited time; and (15) shortage of human resources.

#### 4. CONCLUSION

The results of the analysis of learning needs physical motor what is required in early childhood institutions for children aged 5-6 years in port cities and eight early childhood education institutions shows that the learning process implemented yet balance as expected this to happen in early childhood institution that has been in meticulous, the dominance of one of the physical learning fine motor which in almost all institutions.

Data obtained from the field shows still lack of teachers who chooses to do the teaching in physical play with the rules and choose undertake a coordinated body movement to train speed, strength, and agility on aspects of gross motor skills. So that researchers have the results from the description of the physical learning needs analysis of the motor in 4-5 years early childhood institutions are indispensable to the development of games that involve physical activity can develop rough motoric skills with theory based on the theory of play and games, physical theories motor by Harlock, and the theory of stimulation.

#### REFERENCES

- [1] Awi Muhadi Wijaya (2009). The importance of stimulation, Detection and Early Intervention growth and development (SDIDTK) Anak.Jakarta, mone.

- [2] Allen, K. Eileen and Marotz, Lynn R. 2008. Developmental profiles: Pre-NrithThrough Twelve. Valentino.
- [3] BAPPENAS. (2017). Indonesia Indonesia Vision 2045. Vision 2045, 1 (September), 48. Retrieved October, 2, 2020, from <https://luk.staff.ugm.ac.id/atur/BahanPaparanMPPN-VisiIndonesia2045-25September2017.pdf>.
- [4] Hurlock, B. Elizabeth. 1980. Developmental Psychology An Approach Throughout Range Life. Jakarta: Erland.
- [5] Hariweni, 2003. Application of Motor Development. Retrieved October, 2, 2020, from <http://kharicmayanda.blogspot.com/2010/08>.
- [6] Indrijati, Herdina. 2016. Developmental Psychology and Early Childhood Education. Jakarta: Prenadamedia Group.
- [7] Locke, John, in 2002, the Power That Belongs to the People: Essays On The Origin Indeed, Scope and Purpose of Civil Government (translated from the works of John Locke's "An Essay Concerning the True Original, Extent and End of Civil Government" by A. Widyamartaya), Canisius, Yogyakarta.
- [8] K. Eileen Allen, Lynn R. Marotz, Development profiles: Pre-NrithThrough Twelve.Penerjemah Valentino. Jakarta: Index 2010.
- [9] Rahman, U. (2009). Characteristics of Early Childhood Development. Lantern Education: MT And Teaching Science Journal, 12 (1), 46-57. <https://doi.org/10.24252/lp.2009v12n1a4>.
- [10] Rismayanthi, C., & Jaya, M. 2018. Health Sports. Yogyakarta: Yogyakarta State University.
- [11] Suyadi. Class Tindakan Research Guide. Jogjakarta: Diva Press. 2013.
- [12] Samsudin 2008. Motor learning in kindergarten. Jakarta: Litera.
- [13] Prasetiawan, LM (2019). The development of the Golden Age in the Perspective of Islamic Education. Journal of Chemical Information and Modeling, 53 (9), 1689-1699. <https://doi.org/10.1017/CBO9781107415324.004>.
- [14] Pramono. 2015. Playing & Gaming. Malang: The Malang State University.
- [15] Joseph, Syamsu. 2011. Development of Child and Adolescent Psychology. Bandung: PT Young Rosdakarya.
- [16] Joseph, 2004.Pentingnya Motor Sports as Child Stimulation. Dalam<http://www.ibudanbalita.com>. Retrieved on 13 November 2019 at: 16:58