International Journal of Research in Education

Volume 3, Issue 2, July 2023, pp. 248 – 254

e-ISSN: 2745-3553

DOI: https://doi.org/10.26877/ijre.v3i2.16539



Physical and Motor Development of 5-6 Years Old Children at PAUD Cita Nanda

Husnul Hadi^{1*}, Muh. Isna Nurdin Wibisana²

^{1,2}Universitas PGRI Semarang, Indonesia

*Corresponding author's email: ajohusnul@gmail.com.

ARTICLE INFO ABSTRACT (Cambria Bold 10, spacing 1)

Received: July 5, 2023

Revised: July 20, 2023

Accepted: July 30, 2023

This is an open access article under the <u>CC-BY-SA</u> license.



Keywords:

Development Physical Gross Motorated Children

Early childhood mass is a very important mass for children in the process of increasing physical growth and motor development. Increased physical growth can be done by fulfilling nutrition in children, while motor development can be improved by doing movement activities. Early childhood is accustomed to doing motor movements, both fine motor and gross motor so that the muscles can work properly. This research uses a qualitative descriptive approach. The data in this study were obtained using the observation method of children aged 5-6 years at PAUD Cita Nanda. Data is the result of the achievement of children's physical-motor development. The sample in the study was early childhood in Kindergarten B which amounted to 12 (twelve) children. Based on the results of data from the research subjects, it can be seen that the development of gross motor fine motor children has developed very well, this can be seen from the coordination of the movements performed. In terms of healthy living behavior, children have made it a habit to live clean and healthy. The physical-motor development of children aged 5-6 years has developed very well, this can be seen from the development of gross motor and fine motor of children who are well coordinated, and children's healthy living behavior is as expected, so that children have healthy living behavior habits.

Introduction

Early childhood education is a coaching effort aimed at children from birth to six years of age which is done through providing educational stimuli to help physical and spiritual growth and development so that children have readiness to enter further education (Habe & Ahiruddin, 2017). NAEYC (National Association for The Education of Young Children) says that early childhood is a child who is in the age range of 0-8 years, which includes education programs in daycare centers (family child care homes) (Sutini, 2018). Early childhood education is organized for children from birth to six years (Habe & Ahiruddin, 2017). Early childhood is a child who is in the age range of 4-6 years old and belongs to the developmental period.

Growth is related to changes in size, bulk, number or dimensions at the cellular, organ or individual level. Growth is quantitative so it can be measured by weight (grams, kilograms), length (cm, m), bone age, and metabolic balance (retention of calcium and nitrogen in the body). Development is the increase in the ability of more complex body

structures and functions. Development involves the process of differentiation of cells, tissues, organs, and organ systems that develop in such a way that each can fulfill its function (Wibisana, 2019).

Early childhood mass is a very important mass for children in the process of increasing physical growth and motor development. Increased physical growth can be done by fulfilling nutrition in children, while motor development can be improved by doing movement activities (Amstrong, 2013). Early childhood is accustomed to doing motor movements, both fine motor and gross motor so that the muscles can work properly. Gross motor development is focused on skills commonly referred to as basic motor skills, including walking, running, jumping, jumping, and ball control skills such as throwing, kicking and bouncing the ball (Hadi et al., 2017).

According to Novella J. Ruffin (Burhaein, 2017) there are seven principles of child growth and development, namely the process of development from the head downward (cephalocaudle principle); the process of development from the center of the body outward (proximodistal development); development based on maturation and learning; the process of development from simple (concrete) to complex; growth and development is a continuous process; growth and development processes from general (general) to specific; individual levels in growth and development.

Based on the principles of child growth and development, children's motor skills need maturation and learning to achieve a better motor level. In an early childhood education environment, children are always encouraged to learn and practice doing movement activities so as to spur their motor development both gross motor and fine motor. Some of the movement activities that children do such as walking, running, jumping, throwing, catching, writing, coloring, cutting, gluing, and so on. Motor is all conditions that increase or produce stimulation / stimulation of physical organ activities (Kamelia, 2019). Physical organ activities certainly involve the muscles, nervous system and other organs of the body so as to produce systematic and well-coordinated movements.

PAUD is one form of education that focuses on laying the foundation towards physical growth and development (fine and gross motor coordination), intelligence (thinking power, creative power, emotional intelligence, spiritual intelligence), social-emotional (attitude and behavior and religion), language and communication in accordance with the uniqueness and stages of development through early childhood (Setyawan et al., 2018). PAUD Cita Nanda as an educational institution has the duty and responsibility to develop early childhood physical motor skills. There are several criteria for the ability to achieve early childhood development, namely aspects of religious and moral values, physicalmotor, cognitive, language, social-emotional, and art. Regulation of the Minister of Education and Culture Number 137 of 2014, article 10 paragraph 3 states that physicalmotor abilities include; a) gross motor which includes the ability to move the body in a coordinated, flexible, balanced, agile, non-locomotor, and follow the rules; b) fine motor, including the ability and flexibility to use fingers and tools to explore and express themselves in various forms; c) health and safety behavior, including weight, height, head circumference according to age and the ability to behave clean, healthy, and care for their safety (Kementrian Pendidikan Nasional RI, 2014).

PAUD Cita Nanda has implemented a sustainable educational process to achieve the Standard Level of Achievement of Early Childhood Development. Based on the data, there are 12 (twelve) children who have completed education at PAUD Cita Nanda in the

2022/2023 academic year. Therefore, researchers analyzed the achievement of physical-motor development of children aged 5-6 years.

Research Methods

This research uses a qualitative descriptive approach. Qualitative methodology is a research procedure that produces descriptive data in the form of written words or forms of policy action (Subandi, 2011). Data in this study were obtained using the observation method of children aged 5-6 years at PAUD Cita Nanda. The data is the result of the achievement of children's physical-motor development. The sample in the study was early childhood in Kindergarten B which amounted to 12 (twelve) children. Qualitative research, data analysis is carried out through 4 (four) stages, namely data collection, data reduction, data presentation and conclusion drawing.

Findings

The results of observations made of the research subjects, namely 12 (twelve) children aged 5-6 years at PAUD Cita Nanda as follows:

Subject 1

Gross motor development develops as expected, able to use large muscles in the hands and feet in a controlled manner, in kicking the ball, bouncing and catching the handball, throwing the ball in the basket appropriately. Coordination of the muscles of the hands and eyes is developing according to his age, able to tear the paper and paste on the pattern of teapot, whistle, drum with seeds. Uses brushes, crayons to draw, paint, fold, shape cameras, umbrellas, fans, envelopes. Forming bells from malampad, children are developing as expected. In terms of healthy living, it has developed as expected, eating with vegetables, washing hands before and after doing activities.

Subject 2

Motor development is developing as expected, able to use large muscles in the hands and feet in a controlled manner in kicking the ball, bouncing and catching the handball, throwing the ball in the basket appropriately. Coordination of the muscles of the hands and eyes is developing according to his age. Able to tear paper and paste on patterns of teapot, whistle, drum with seeds. Using brushes, crayons, to draw, paint, fold, form cameras, umbrellas, fans, envelopes, form bells from malampad, development as expected. In terms of healthy living, it has developed as expected, by washing hands after finishing learning and wanting to eat vegetables.

Subject 3

Gross motor development is developing as expected, able to use large muscles in the hands and feet in a controlled manner in kicking the ball, bouncing the ball, and catching it, throwing the ball in the basket appropriately still needs support and practice. Fine motor skills, coordination of the muscles of the hands and eyes are very well developed, able to tear the leapt paper, and paste on the pattern of teapot, whistle, for drum with seeds, sawdust, kambil pulp, sand. In using brushes and crayons to color pictures is developing well, painting, folding to form cameras, umbrellas, fans, envelopes, and making/forming

night bells, developing as expected. In terms of washing hands after and before doing activities is as expected, to eat vegetables are still picky and still need support from parents and teachers at school.

Subject 4

Motor development as expected, able to use large muscles in the hands and feet in a controlled manner in kicking the ball, bouncing and catching the handball, throwing the ball in the basket appropriately. Coordination of the muscles of the hands, eyes develops as expected by tearing the paper and attaching it to the teapot pattern, whistle, sticking the drum with seeds and powder to the drum pattern, using brushes, crayons, colored pencils, markers for coloring, painting, folding with folding paper, forming cameras, umbrellas, fans, envelopes, forming bells, animals from malapad, children develop as expected. In terms of healthy living behavior, washing hands before and after doing activities develops as expected. Eating with vegetables has begun to be tried.

Subject 5

Motor development develops as expected, able to use large muscles in the hands and feet in a controlled manner in kicking the ball, bouncing and catching the handball, throwing the ball in the basket appropriately. Coordination of the muscles of the hands, eyes develops as expected, by tearing paper and sticking to the pattern of a teapot, whistle, sticking a drum with seeds, powder, using crayons, colored pencils, markers for coloring, drawing, folding with folding paper, forming a camera, umbrella, fan, envelope, forming a bell, animals from malapad, the child develops as expected. Healthy living behavior by eating vegetables, washing hands before and after doing activities.

Subject 6

Motor development develops as expected, able to use large muscles in the hands and feet in a controlled manner in kicking the ball, bouncing and catching the handball, throwing the ball in the basket appropriately. Coordination of the muscles of the hands, eyes develops as expected, by tearing the paper and attaching it to the pattern of a teapot, whistle, sticking the drum with seeds, powder, using crayons, colored pencils, markers for coloring, drawing, folding with folding paper, forming a camera, umbrella, fan, envelope, forming a bell, animals from malapad, the child develops as expected. In terms of healthy living, washing hands before and after doing activities. Eating nutritious food in the form of vegetables is still picky and needs motivation.

Subject 7

Motor development develops as expected, able to use large muscles in the hands and feet in a controlled manner in kicking the ball, bouncing and catching the handball, throwing the ball in the basket appropriately. Coordination of the muscles of the hands, eyes develops as expected, by tearing the paper and attaching it to the teapot pattern, whistle, attaching seeds and powder to the drum pattern. In terms of using brushes,

crayons, colored pencils, markers for coloring, painting, folding with folding paper, forming cameras, umbrellas, fans, envelopes, forming bells, animals from malapads, children develop as expected. Healthy living behavior by washing hands before and after doing activities, eating vegetables, developed very well.

Subject 8

Gross motor development develops as expected, able to use large muscles in the hands and feet in a controlled manner in kicking the ball, bouncing and catching the handball, throwing the ball in the basket appropriately. Coordination of the muscles of the hands, eyes develops as expected, by tearing the paper and attaching it to the teapot pattern, whistle, attaching seeds and powder to the drum pattern. In terms of using brushes, crayons, colored pencils, markers for coloring, painting, folding with folding paper, forming cameras, umbrellas, fans, envelopes, forming bells, animals from malapads, children develop as expected. Healthy living behavior by washing hands before and after doing activities, eating a balanced diet of vegetables, developed very well.

Subject 9

Gross motor development develops as expected, able to use large muscles in the hands and feet in a controlled manner in kicking the ball, bouncing and catching the handball, throwing the ball in the basket appropriately. Coordination of the muscles of the hands, eyes develops as expected, by tearing the paper and attaching it to the teapot pattern, whistle, attaching seeds and powder to the drum pattern. In terms of using brushes, crayons, colored pencils, markers for coloring, painting, folding with folding paper, forming cameras, umbrellas, fans, envelopes, forming bells, animals from malapads, children develop as expected. In terms of healthy living, they have developed as expected, washing hands before and after doing activities, eating vegetables.

Subject 10

Gross motor development develops as expected, able to use large muscles in the hands and feet in a controlled manner in kicking the ball, bouncing and catching the handball, throwing the ball in the basket appropriately. Coordination of the muscles of the hands, eyes develops as expected, by tearing the paper and attaching it to the teapot pattern, whistle, attaching seeds and powder to the drum pattern. In terms of using brushes, crayons, colored pencils, markers for coloring, painting, folding with folding paper, forming cameras, umbrellas, fans, envelopes, forming bells, animals from malapads, children develop as expected. In terms of healthy living, they have developed as expected, eating vegetables, washing hands before and after doing activities.

Subject 11

Gross motor development develops as expected, able to use large muscles in the hands and feet in a controlled manner in kicking the ball, bouncing and catching the handball, throwing the ball in the basket appropriately. Coordination of the muscles of the hands, eyes develops as expected, by tearing the paper and attaching it to the teapot

pattern, whistle, attaching seeds and powder to the drum pattern. In terms of using brushes, crayons, colored pencils, markers for coloring, painting, folding with folding paper, forming cameras, umbrellas, fans, envelopes, forming bells, animals from malapads, children develop as expected. In terms of healthy living, willing to eat vegetables, wash hands before and after doing activities, developing as expected.

Subject 12

Gross motor development develops as expected, able to use large muscles in the hands and feet in a controlled manner in kicking the ball, bouncing and catching the handball, throwing the ball in the basket appropriately. Coordination of the muscles of the hands, eyes develops as expected, by tearing the paper and attaching it to the teapot pattern, whistle, attaching seeds and powder to the drum pattern. In terms of using brushes, crayons, colored pencils, markers for coloring, painting, folding with folding paper, forming cameras, umbrellas, fans, envelopes, forming bells, animals from malapads, children develop as expected. In terms of healthy living, it has developed as expected, washing hands before and after doing activities, wanting to eat vegetables.

Based on the results of the data from the research subjects, it can be seen that the development of gross motor fine motor of children has developed very well, this can be seen from the coordination of the movements performed. In terms of healthy living behavior, children have made it a habit to live clean and healthy.

Discussion

1. Children's Gross Motor Development

Gross motor development focuses on skills commonly referred to as basic motor skills, including walking, running, jumping, skipping, and ball handling skills such as throwing, kicking and bouncing the ball. Basic motor skills are developed in the pre-school and early school years. Gross motor movements are specifically controlled by large muscles, these muscles are relatively large in size, for example the thigh muscles and calf muscles. According to Hurlock (Setiani, 2013), motor development depends on the maturity of muscles and nerves. Skilled movements cannot be mastered before the child's muscle mechanism develops. During childhood, the striped muscle or striated muscle that controls voluntary movements develops at a rather slow rate. Before the child is sufficiently mature, there can be no coordinated voluntary actions (Formiga & Linhares, 2015).

Children aged 5-6 years at PAUD Cita Nanda, experience very good motor development such as; being able to use the large muscles of the hands and feet in a controlled manner in kicking the ball, bouncing and catching the ball, throwing the ball in the basket with precision. Coordination of the muscles of the hands and eyes develops as expected, such as tearing paper and sticking it to the pattern (Learning et al., 2018).

2. Children's Fine Motor Development

Fine motor control has been defined as the ability to coordinate or regulate the use of forms of eye and hand movements in an efficient, precise and adaptive manner (Bailey & Collins, 2016). These forms of motion can manifest themselves in a wide variety that includes all activities, from: writing, drawing, coloring, pastel drawing, and manipulating small objects.

Children's fine motor development has developed as expected. In this case, for example; using brushes, crayons, colored pencils, markers for coloring, painting, folding with folding paper, forming cameras, umbrellas, fans, envelopes, forming bells, animals and others.

3. Healthy Living Behavior

Healthy living behavior is a habit that must be formed from an early age. The formation of children's health is not an instant process, but is also related to the healthy behavior of the child himself and the people around him (Rizkha et al., 2020). Children at PAUD Cita Nanda are taught to have healthy living habits and consume nutritious food. Based on the results of the study, children get used to washing their hands before and after doing activities. In addition, children are also encouraged to eat healthy foods such as vegetables, and others.

Conclusion

The physical-motor development of children aged 5-6 years has developed very well, this can be seen from the development of gross motor and fine motor of children who are well coordinated, and children's healthy living behavior is as expected, so that children have healthy living behavior habits.

References

- Amstrong, N. (2013). Developing of the Elite Young Athlete. *Journal of Physical Activity, Sports et Exercise: JPASPEX, 1*(1), 1–7. https://doi.org/10.1016/j.ptsp.2011.04.006
- Bailey, R., & Collins, D. (2016). The Standard Model of Talent Development and Its Discontents. *Kinesiology Review*, *2*(4), 248–259. https://doi.org/10.1123/krj.2.4.248
- Burhaein, E. (2017). Aktivitas Fisik Olahraga untuk Pertumbuhan dan Perkembangan Siswa SD. *Indonesian Journal of Primary Education*, 1(1), 51. https://doi.org/10.17509/ijpe.v1i1.7497
- Formiga, C. K. M. R., & Linhares, M. B. M. (2015). Motor Skills: Development in Infancy and Early Childhood. *International Encyclopedia of the Social & Behavioral Sciences: Second Edition, December*, 971–977. https://doi.org/10.1016/B978-0-08-097086-8.23071-7
- Habe, H., & Ahiruddin, A. (2017). Sistem Pendidikan Nasional. *Ekombis Sains: Jurnal Ekonomi, Keuangan Dan Bisnis*, 2(1), 39–45. https://doi.org/10.24967/ekombis.v2i1.48
- Hadi, H., Fatkhu Royana, I., & Aji Setyawan, D. (2017). Keterampilan Gerak Dasar Anak Usia Dini Pada Taman Kanak-Kanak (Tk) Di Kota Surakarta. *Jurnal Ilmiah Penjas (Penelitian, Pendidikan Dan Pengajaran)*, 3(2), 61–74.
- Kamelia, N. (2019). PERKEMBANGAN FISIK MOTORIK ANAK USIA DINI (STANDAR TINGKAT PENCAPAIAN PERKEMBANGAN ANAK) STPPA TERCAPAI di RA HARAPAN BANGSA MAGUWOHARJO CONDONG CATUR YOGYAKARTA. KINDERGARTEN: Journal of Islamic Early Childhood Education, 2(2), 112. https://doi.org/10.24014/kjiece.v2i2.9064
- Kementrian Pendidikan Nasional RI. (2014). Standar Nasional Pendidikan Anak Usia Dini No 137 Tahun 2014. Peraturan Menteri Pendidikan Dan Kebudayaan Republik Indonesia, 1–76.

- Learning, M., Analysis, N., & Wales, S. (2018). *An introduction to sports coaching: From science and theory to practice*. 185. http://books.google.com/books?id=3j3dEbL05KUC&pgis=1
- Rizkha, D., Tri, A., Yuliati, N., Aisiyah, L. N., Sehat, P. H., & Dini, A. U. (2020). PENGEMBANGAN MEDIA LIFT THE FLAP BOOK UNTUK KELOMPOK B DI TK PURI ANANDA KECAMATAN (Developing Lift The Flap Book Media To Introduce Healthy Living Behavior To B Group At. *Journal Of Early Childhood Education And Research*, 1(1), 6–12.
- Setiani, R. E. (2013). MEMAHAMI POLA PERKEMBANGAN MOTORIK PADA ANAK USIA DINI. *INSANIA*, 18(3), 455–470.
- Setyawan, D. A., Hadi, H., & Royana, I. F. (2018). Kemampuan Motorik Kasar Anak Usia 5-6 Tahun Di Tk Negeri Pembina Kota Surakarta. *Jurnal Penjakora*, *5*(1), 17–27.
- Subandi. (2011). Qualitative Description as one Method in Performing Arts Study. *Harmonia*, 19, 173–179.
- Sutini, A. (2018). Meningkatkan Keterampilan Motorik Anak Usia Dini Melalui Permainan Tradisional. *Cakrawala Dini: Jurnal Pendidikan Anak Usia Dini, 4*(2), 67–77. https://doi.org/10.17509/cd.v4i2.10386
- Wibisana, M. I. N. (2019). *Indeks Daya Tahan Aerobik Mahasiswa Baru Prodi Pendidikan Jasmani Kesehatan dan Rekreasi Tahun Akademik 2019/2020*. 61–65.