

# Level of the Child's Motor Ability of Group B at the Kindergarten in Buleleng District Bali

Made Vina Arie Paramita<sup>1\*</sup>, Sariyasa<sup>1</sup>, I Nyoman Indhi Wiradika<sup>2</sup>

<sup>1</sup>Universitas Pendidikan Ganesha, Indonesia

<sup>2</sup>Universitas Negeri Yogyakarta, Indonesia

\*Corresponding author. Email: [vina.arie@undiksha.ac.id](mailto:vina.arie@undiksha.ac.id)

## ABSTRACT

This study aimed to find out the level of a child's motor ability of group B in Buleleng Districts, Bali. Motor ability was very significant to be developed. The movement of the child's limbs while playing had many benefits for the growth of other aspects of child's abilities, such as aspects of cognitive development and aspects of child's social-emotional development. Thus, motor ability played a significant role in every activity. This study was conducted at the Kindergarten in Buleleng District, Bali, which consisted of 8 Clusters with 73 children. The object of this study was the child's motor ability. This study used a quantitative approach to the type of survey research. The data was collected using the observation method. The results showed that the child's motor ability was included in the high category of 42%, followed by the low category of 38% and a moderate of 12%.

**Keywords:** *Gross Motor, Fine Motor, Early Childhood*

## 1. INTRODUCTION

The growth and development of children in the first five years are called the golden age because of the physical condition and all the developmental abilities of children develop rapidly during the period. It means that the period makes it easier for children to learn and build mindsets about everything around them without feeling any difficulties [1]. Thus, the first five years is the most appropriate time to train children to be able to develop all aspects of development. One aspect of its development is the child's motor development [2].

Motor development is one aspect that must be considered in the child's development. Motor development is often used as a benchmark to prove that children grow and develop well [3]. Motor physical development is also a significant aspect of a child's development and has a big influence on a child's academic achievement or school readiness in primary education [4]. Besides, the development of motor physical is very influential on other development aspects. Children who are physically trained will have more opportunities to explore their environment so they can get to know and understand their environment better [5]. The development of a child's motor physical can be seen from their motor ability.

Motor ability means the development of controlling physical movement through coordinated nerve and muscle activity [6]. Basic motor ability serves as the foundation for skills. The growth and development process of a child's motor ability is related to the growth and development process of a child's mobility. The development of a child's motor ability will be seen clearly through the various movements and games they can do. The stronger and more skilled the movement of a child, it makes the child happy to play, and they are not tired to move all their limbs while playing. The movement of the child's limbs while playing has many benefits for the growth of other aspects of the child's abilities, such as aspects of cognitive development and aspects of the child's social-emotional development. Thus, motor ability plays a significant role in every activity.

The movements performed by the child start from simple to more complex motions. The limb motions help children to train their dexterity, agility, speed, strength, endurance, flexibility, balance, and accuracy of hand and eye coordination [7]. These eight elements are very significant and very closely related to a child's life. For instance, in the element of balance, children are asked to cross the river on a footbridge; if the child is not trained in balance, the child will have difficulty even falling. Therefore, developing motor ability is needed by children so that they can grow and develop optimally. It can be

said that motor ability is a very significant factor for personal development in children [8].

Motor skills prioritize skills in moving the limbs, both gross and fine motor skills. At the age of 4 years, fine motor skills should be getting better [9]. Fine motor skills are one aspect of development that has a major influence on the child's academic abilities in primary education. Fine motor skills also have a significant relationship to functional performance in self-care, mobility, and social functions [10]. Fine motor skills are movements that use the ability of fine muscles [11]. It means that fine motor skills are movements that only involve particular parts of the body and are performed by small muscles, such as the skill of using the fingers and precise wrist movements. Therefore, it does not require much effort, but it does require careful hand-eye coordination. Fine motor skills include stringing beads, folding, cutting, binding, shaping, writing, composing [12]. Meanwhile, gross motor skills are abilities that require the coordination of most parts of the child's body. Therefore, it usually requires strength because it is carried out by the larger muscles. Gross motor skills include several types of movements such as walking, running, climbing, jumping, squeezing, crouching, kicking, throwing, catching, bouncing, and hitting. Gross motor skills are as important as other aspects of development because the inability of children to carry out physical activities will lead to negative self-concepts in [13]. Various gross motoric movements that are achieved by children are indeed very useful for their future life [14].

In fact, every child has a difference in the stages of motor ability. It is because each child has a different maturity from the other children. In addition, several causative factors affect the motor skills of early childhood, namely genetic or hereditary factors, nutritional intake factors, parenting patterns, and cultural background. Thus, the differences in the child's motor ability will vary according to the causative factors of their development and the environmental factors that influence them [15].

### ***1.1. Development of Gross Motor***

Motor development is a change that occurs progressively in control and the ability to perform movement obtained through the interaction between maturation factors and training or experiences during life, which can be seen through changes or movements made [16]. Motor development also controls physical movement through the coordinated activity of the nerve centers, nerves, and muscles. Before the development occurs, the child will be helpless. This condition will change rapidly at the age of 4-5 years of life after birth [6].

Gross motor skills are body movements that use large muscles or most or all of the limbs that are affected by

the maturity of the child himself. Gross motor movements for children include creeping, crawling, standing, climbing, walking, running, kicking, catching, jumping, sliding, and jumping rope.

### ***1.2. Development of Fine Motor***

Fine motor skills involve finely regulated motions such as grasping toys and buttoning clothes, which require eye-hand coordination skills. During the first two years of life, babies refine the act of their reaching and holding. At the age of 3 years, the child can pick up the smallest object between the thumb and forefinger for some time, but they are still awkward at it, can build a tall tower of blocks but not yet upright, and able to play simple unloading drawings though a bit rough. At the age of 4 years, the child can play unloading using blocks better and more complex because their hand, arms, and fingers, all move together under the command of the eye. 6-year-olds children can hammer, glue, tie shoelaces, and put on clothes. Children aged seven years have more stable hands, so they prefer pencils to crayons; reverse letters back and forth is rare. At the age of 8-10 years, children can write. They do not scribble anymore. At the age of 10-12 years, children begin to show manipulative skills just like adults. Fine motor skills develop the child's ability to use his fingers, especially the thumb and forefinger. There are various fine motor skills, including grasping, Pincer grasping, holding, ripping up, and cutting [17].

## **2. RESEARCH METHODS**

The type of this research is survey research with a quantitative approach. This study aimed to find out the level of motor ability of children in group B (5-6 years). The subject was determined using a simple random sampling technique. The method of collecting the data applied in this study was the observation. The researcher observed the activity and is not directly involved in implementing learning activities. The instrument used was a checklist about the rate of the child's motor ability in the form of an observation sheet (via google form). The data were analyzed using the descriptive quantitative analysis technique. This data analysis included the use of simple numbers, namely the frequency and percentage of the calculation of the observed data. This study analyzed data regarding motor skills in group B.

## **3. RESULTS**

The results of data obtained based on distributed instruments are as follows:

**Table 1.** Results of The Child's Activities

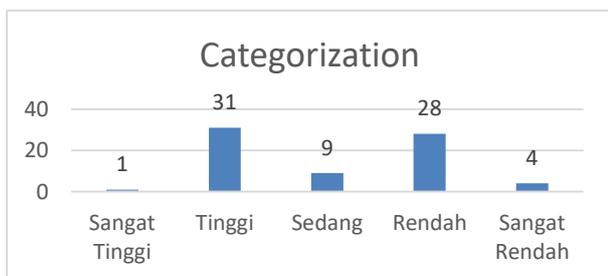
No	Indicators	Score			
		1	2	3	4
1	The child's ability to throw the ball on target	0	29	30	14
2	The child's ability to catch the ball	0	18	36	19
3	Child's ability to high jump	0	23	30	20
4	Child's ability to long jump	0	35	19	19
5	The movement to stretch the arms sideways on one leg	1	20	26	26
6	The movement of walking balanced on a straight line and stretching out arms	0	9	33	31
7	The movement of walking on tiptoes	0	0	43	30
8	The movement of zigzag running	0	29	16	28
9	The movement of step sideways	0	14	27	32
10	Stringing beading activity (can be patterned)	0	11	44	18
11	Making shapes out of playdough or clay or plasticine	0	16	36	21
12	Cutting paper based on patterns	0	22	37	14

Based on the data in table 1, which describes the 12 indicators, it can be seen that the child's motor ability 8 out of the 12 indicators or 66,7% are dominated by the Developing According to Expectations (BSH) range (score 3). It is undeniable that every indicator still detects the children whose motor ability is starting to develop. Even the developing category (score 2) dominates at the indicators of the movement of zigzag running (39.7%), the ability to throw the ball on the target (39.7%), and the ability to long jump (48%). Of the 12 indicators used, only 2 indicators were dominated by developing according to expectations (score 3) and developing very well (score 4), namely the indicator for the movement of walking on tiptoes and the movement of balanced on a straight line.

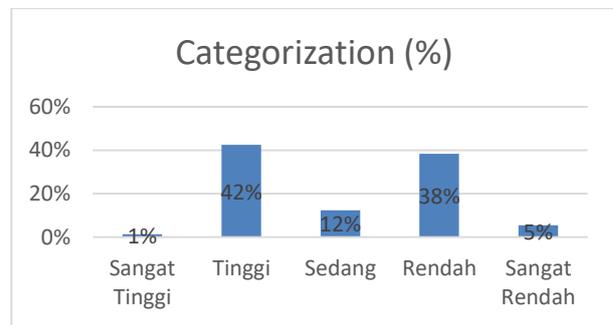
Based on the data obtained, it was continued to analyze the range or categorize the child's motor ability. The results can be seen in Table 2 and Figure 1.

**Table 2.** Results of The Child's Activities

No	Interval	Frequency	Relative
1	26-29	12	16%
2	30-33	20	27%
3	34-37	9	12%
4	38-41	9	12%
5	42-45	11	15%
6	46-48	12	16%
Total	73	100%	



**Figure 1** Categories of The Child's Motor Ability



**Figure 2** Categorization (in the form of%) Child's Motor Ability

Based on the data in Figure 2, it illustrates that the child's motor ability is in the high category of 42%, followed by the low category of 38%, and moderate of 12%. The difference in the child's motor ability in the high and low categories is very few, namely, only 3 points (Figure 1). It shows that the child's motor ability during the pandemic has not been developed optimally.

**4. CONCLUSION**

This study concludes that the child's motor ability 8 out of 12 indicators, or 66.7% are dominated by the Developing According to Expectations (BSH) range. Of the 12 indicators used, only 2 indicators are dominated by developing according to expectations (BSH) and developing very well (BSB). The Child's motor ability is included in the high category of 42%, followed by the low category of 38% and moderate of 12%.

After looking at the results of this study, it is expected that in the future, intense stimulus or stimulation in optimizing the child's motor ability is necessary to be done. Optimization can be done by providing simple activities that involve the child's physical motor skills (both gross motor and fine motor). Also, it is expected that this research can be used as a basis or description for future research in developing the child's motor ability in or after a pandemic.

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