



BRAINDANCE FOR GROSS MOTOR DEVELOPMENT IN PRE-SCHOOL CHILDREN

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Received date: 22 June 2023

Revised date: 12 July 2023

Accepted date: 02 August 2023

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ABSTRACT

In the first five years of a child's life, gross motor development is the most dominant. To optimize this development, proper stimulation is needed, one of which is through gymnastic activities. Research This study uses an analytic survey design with a *cross sectional approach*. The research was conducted in TK PGRI 03 Srigonco, Malang Regency Indonesia. This study involved 25 children (aged 3-5 years) were taken using a *purposive sampling technique*. Data collection using *checklist* for quality of braindance and for measurement of gross motor development using a DDST. Data analysis used the *Lambda statistical test* with the help of SPSS. The research results from 25 children obtained 19 (63.3 %) had good quality exercise and without gross motor disorder. From the results of statistical tests, it shows that the value of $p = 0.032$ where $p < \alpha (0.05)$, so that H_0 is rejected, meaning that there is a relationship between braindance quality and gross motor development of children aged 3-5 years. With the relationship between the quality of braindance and the gross motor development of children aged 3-5 years, it is hoped that preschool educational institutions can improve the activities held to optimize children's development.

KEYWORDS: *Braindance*, Gross Motor, Pre School, DDST.

INTRODUCTION

The toddler period is the most important period in terms of growth and development. It is during this period that fundamental growth will affect the next child's development. In this case there is a basis that determines further development, namely, the development of language skills, creativity, social awareness, emotional and intelligence. Another development formed during this period is the development of morals and the foundations of personality. Any abnormalities or irregularities that occur during this period and are not detected let alone not handled will affect the quality of human resources in the future. Detection can be done using the Denver Developmental Screening Test (DDST) which suggests four parameters to assess the development of children aged 1-5 years, namely personality/social behavior, fine motor movements, language and gross motor development (Adriana, 2017).

Development correlates with growth, if growth is fast, then the development experienced by the child also experiences an increase in proportion to that growth. If there is a disturbance in a child's growth, this will also have an impact on the child's development (Irdawati, 2020; Khadijah & Amelia, 2020). About 5-10% of

children are estimated to have developmental delays. Data on the incidence of general developmental delays are not known with certainty, but it is estimated that around 1-3% of children under the age of 5 experience developmental delays. Meanwhile, according to IDAI East Java data, 2,634 children were examined. From the results of the examination for development it was found to be normal according to age 53%, doubtful (requiring deeper examination) as much as 13% and developmental deviations as much as 34%.

One of the developments experienced by children aged 3-5 years is motor development. In the first five years of a child's life, gross motor skills develop more dominantly (Ananditha, 2017). Gross motor is an activity that involves using large muscles such as sitting, standing and so on (Khadijah & Amelia, 2020). Jurana in 2017 stated that toddlers who are raised in an environment without stimulation have a 4.25 times greater chance of experiencing gross motor development disorders.

Children aged 3-5 years are included in preschool age. Where at this time the child will experience many changes. These changes will be optimal if given educational stimulation that can help their development. The Early Childhood Education Standards related to the

task of developing the physical-motor domain issued by the Regulation of the Minister of National Education of the Republic of Indonesia Number 58 of 2009 are as follows: to train flexibility, balance and agility children can make body movements in a coordinated manner; coordinating the movements of the feet, hands and head, in imitating dance or gymnastics.

To achieve optimal development, stimulation is needed that can help children's development (Adriana 2017). One activity that can develop motor skills is gymnastics (Olga, 2018). Gymnastics is an activity for the body that is created intentionally and planned with the aim of increasing development. One type of gymnastics is fantasy gymnastics. Fantasy gymnastics is gymnastics that imitates other objects, for example imitating the movements of animals, plants or other objects. Gymnastics here is only a tool, because the main focus is the aspect of child growth and development. There are several types of fantasy gymnastics, one of which is *brandaince*. However In various early childhood education institutions that are supposed to be facilities for gross motor development, it turns out that there are still many teachers who still rely only on learning to read, write and count, so that the development of children's gross motor skills is often neglected. This is because there are still a few teachers who apply varied learning activities, especially in developing gross motor skills such as *out bond activities*, dancing, movement and songs, gymnastics and so on. So that approximately 80% of children have developmental disorders and experience difficulties in regulating body balance. Adjustment of body balance is needed by children to carry out more difficult and complex activities such as jumping, running, climbing, dancing and gymnastics which requires a large variety of motion. The impact of imbalance on children is difficulty in regulating and controlling limb movements so that the movements seem

stiff, hesitant and awkward (Olga, 2018; Jurana, 2017; Ananditha, 2017).

In the results of a preliminary study conducted by researchers at Kindergarten PGRI 03 Srigonco Village, Bantur District, Malang Regency which was conducted on November 2019 using the interview method with several teachers, they stated that the exercise activities carried out were useful for improving the motor skills of their students. In addition, this exercise activity has an impact on students' abilities, for example, students who were previously less active in moving after participating in this exercise are more active. From the results of observations of 5 students who took part in gymnastic activities, it was found that 4 of them were silent while the gymnastic activities were in progress. From this statement the researcher wanted to examine the relationship between the quality of fantasy gymnastics (braindance) and the gross motor development of children aged 3-5 years in kindergarten PGRI 03 Srigonco Village, Bantur District, Malang Regency.

MATERIALS AND METHODS

This research uses analytic survey research. The research was conducted at TK PGRI 03 Srigonco Village, Bantur District, Malang Regency on 11-20 February 2020. The population in this study were all students at TK PGRI 03 Srigonco, Bantur District, Malang Regency, aged 3-5 years who did fantasy gymnastics (braindance), 30 children. The sampling technique used is purposive sampling. This technique is included in non-random (non-probability) sampling. Purposive sampling is a sampling technique based on certain considerations made by researchers, based on previously known characteristics or characteristics of the population. The sample size in this study was 25 children who did brain dance exercises and their gross motor development was measured using the DDST.

RESULTS

Table 1: Presents the results of the lambda correlation analysis. The table consists of the correlation coefficient (r), p-value and number of subjects.

		Gross Motor Development		Total	R	P
		With impairment	Without impairment			
Gymnastics quality	Good	0	9	9	0.8	0.032
	Enough	1	6	7		
	less	4	0	4		
Total		5	25	0		

The distribution of respondents is based on the quality of gymnastics they have, namely most of the 19 respondents (63.3%) have good quality gymnastics and a small proportion of 4 respondents (14.3%) have less gymnastics quality

From the statistical test results in table 1 using the lambda correlation test with the help of the SPSS version 16 computer program, a significant level (p-value) was

0.032. Because the p-value is 0.032 lower than the alpha level (0.05), then H_0 is rejected and H_a is accepted so that there is a relationship between the quality of fantasy gymnastics (braindance) and gross motor development of children aged 3-5 years with a correlation strength value (r) of 0.8, which means that the strength of the correlation between the two variables is strong.

DISCUSSION

Based on table 1, the results of statistical tests using lambda correlation explained that there were 25 respondents who took part in gymnastic activities and carried out the DDST test. obtained a significant level (p-value) 0.032. Because the p-value is 0.032 lower than the alpha level (0.05), then H_0 is rejected and H_a is accepted so that there is a relationship between the quality of fantasy gymnastics (braindance) and the gross motor development of children aged 3-5 years in Kindergarten PGRI 03 Desa Srigonco District Bantur Malang Regency with a correlation strength value (r) of 0.8, which means that the strength of the correlation between the two variables is strong.

The results above show that 19 respondents (63.3%) had good braindance quality and also had gross motor development without interference, 7 respondents (23.3%) had sufficient braindance quality where 6 respondents had gross motor development without impairment and 1 respondent had gross motor development with impairment. While 4 respondents (13.3%) had poor braindance quality and had gross motor development with impairments.

Physical skills can help children grow into smart, independent and healthy teenagers, therefore teachers in kindergarten need to stimulate children's interest in making various movements (Fatnamartiana, 2019; Semet, 2017). Gross motor is movement that is controlled by all limbs such as sports, movement, swinging, going up and down stairs, jumping, running, gymnastics and so on. Motoric development is strongly influenced by the brain organ as a regulator of every movement a child makes. The more mature the development of the brain's nervous system which regulates muscles allows the development of children's motoric competence or abilities. This development can be developed through stimulus or attention from the surrounding environment. because early childhood has a very limited attention span so that children easily switch attention to new things and things around them. So that the provision of stimulation or attention from the surrounding environment is needed for early childhood, one of which is the Brain Gym method as a learning method in stimulating children's gross motor skills. At the age of toddlers and pre-school the most prominent level of developmental achievement is motor, motor is very closely related to physical activity. Brain Gym is a series of simple movements to facilitate learning activities and adjustments to daily demands that aim to unite the mind and body. Motor development is closely related to the nervous system, namely the development of coordinated control of body movements between the nervous system, brain and spinal cord (spinal nerves). one way to optimize the use of all brain dimensions is brain exercise (Begel, 2022; Chiang, 2017; Rudd, 2021; Fatnamartiana, 2019). In the first five years of a child's life, gross motor skills develop more dominantly. To achieve optimal development, stimulation or stimulation

is needed that can help develop children's gross motor skills, one of which is by providing good quality braindance with the assistance of parents or teachers and facilitators.

CONCLUSION

Braindance quality has a strong correlation with children's gross motor development. So that one of the efforts to optimize children's gross motor development can be achieved with a quality braindance application with the assistance of a facilitator.

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