

# The Effect Of Play Approach On Gross Motor Skills Of Disability Children In SLB Jombang Regency

Rendra Wahyu Pradana <sup>1\*</sup>, Nurhasan <sup>2</sup>, Suroto<sup>3</sup>, Zakaria Wahyu Hidayat <sup>4</sup>

<sup>1</sup> Doctoral student in sports science, Surabaya State University, Indonesia

<sup>2,3</sup> Lecturer of sports science, State University of Surabaya, Indonesia

<sup>4</sup> Lecturer of physical education, University PGRI Jombang, Indonesia

\* Corresponding Author:

Email: [rendrapradana16070946006@mhs.unesa.ac.id](mailto:rendrapradana16070946006@mhs.unesa.ac.id)

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## Abstract

*Based on the purpose of this study to get an overview of the play approach to gross motor skills of children with disabilities, using a method for this study with Pre-Experimental Design, this research design with pre-test and post-test. Retrieval using tests related to motor movement skills. The number of subjects used in the study were 27 students of tunagrahita children. Data analysis techniques using descriptive statistics are used to interpret and analyse data and t-test to see significant differences in the two variables before and after the play approach. The results of the calculation of the pre-test score description minimum score 7, maximum 12 average 8.74, standard deviation 1.28, for the post test score minimum 7, maximum 15, average 12.22, standard deviation 1.82. For the calculation of the difference test between the post test and the pre test using the paired sample test, the value based on the sig value is  $0.00 < 0.05$ , so it can be concluded that there is an effect of the play approach on the motor skills of children with disabilities in SLB Jombang Regency.*

**Keywords:** Play approach, gross motor skills, and children with learning disabilities.

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## I. INTRODUCTION

Education provides a very important role for human life as a material to develop in oneself through education, it is for education is needed by every human being including children with special needs. As well as a special service for children with physical, intellectual, and mental abnormalities have the right to special education services through adaptive physical education. In adaptive education is a forum for children with special needs about learning related to physical material with the nature of theory and practice, adaptive education provides a sports activity that is appropriate and has the character of children with special needs such as, hearing impaired, mentally impaired, and blind. When children with mental retardation mention that social skills conceptual funds are important in relation to children with mental retardation, (Pinazo & Reina, 2017). Children with intellectual disabilities is a term to describe a disorder that is caused and characterised by significant limitations in adaptive functioning, characterised by poor ability and complex information and acquiring new things to become independent, (Teodorescu & Popescu, 2014). One of these types of children is a child who has a physical delay that affects movement skills, but for the face is not much different from normal children but only differs in limited abilities. A child with a disability is an individual with low intelligence and adaptability that occurs during the developmental period, and lacks the ability to adapt to the demands of society. Motor development has been identified as one of the important areas of child development. (Lam, 2011). When there are deficiencies related to visual and motor coordination, there will be problems related to the coordination of development that each child with special needs has. (Kirby Ananda, Sugden D, A 2020).

Intellectual disability is a condition in which a student has a deficiency in brain function that can affect the child's motor skills and cognition, (Giagazoglou, Arabatzi, Dipla, Liga, & Kellis, 2012), (Top, 2015). The intellectual abilities of children who are below average are often referred to as tunagrahita children, and also the decline and reduction of abilities in terms of strength, quality, and also behaviour so that intelligence is impaired. The limitation of motor skills can be considered a neuro developmental disorder that can affect the relationship between practical and interpersonal skills, (Tomaz, Santos, da Silva De Avó, Germano, & Melo, 2017), (Memisevic & Djordjevic, 2018), (Kang, 2021). These limitations include physical skills, movement, and lack of coordination in movement. Motor skills are orientated towards a

movement that requires the body to perform the movement skill, (Skinner & Piek, 2001), (Cools, W, Martelaer Kristine De , Samaey Christiane, 2009). The impact of these limitations in general is that they never do activities independently, they need help from people around them. So it requires a variation in playing sports to be able to have a positive impact on movement activities and have enthusiasm for doing sports. In motor-related learning, it is a process of integration of various neural functions with cortical functions and emotional development, so that children can experience motor skills related to environmental adaptation, (Okuda & Pinheiro, 2015). In special education, people with disabilities have rights and responsibilities for the rest of their lives, (Hakala, Björnsdóttir, Lappalainen, Jóhannesson, & Teittinen, 2018).

Play in this case provides fun activities for children and gives freedom to get new things, by playing can optimise and develop the potential that children have for aspects of children's self-development. Play in this case for children with special needs is an individually designed programme related to motor skills, patterns and basic movement skills, making it easier for children to perform movements in a game. The child has problems related to physical and motor development, and in contrast to normal children, the child has slow physical development and difficulty moving such as throwing, jumping and running, the process of change in human life which is a factor that affects motor skills, (Abdullah, Jaafar, & Ayub, 2012). Play can be said to be a form of activity that interacts children with others to get pleasure, it is also a fun activity in learning children and getting new experiences, in playing benefits to children such as affecting the physical, increasing children's knowledge, affecting children's creativity, and as child therapy. The characteristics of mentally retarded children experience limitations in behaviour in motor coordination, communication, and the ability to follow instructions, mentally retarded children have difficulty in receiving information and difficulty implementing the information received. One of the characteristics of mentally retarded children can be seen from the physical condition that tends to be low in the level of motor coordination. Late motor maturity, and less dynamic in posture.

## II. METHODS

The method used in this study with Pre-Experimental Design, namely with experiments that have external variables to take part in influencing so that independent variables are formed. This research design with pre-test (initial assessment) and post-test (final assessment) to determine the effect of the play approach on children's gross motor skills, this method is used to determine significant differences in students' gross motor skills before and after taking the play approach. The respondents were students in Jombang Regency SLB aged 13-15 years with a total of 27 students, taking subjects by purposive sampling based on characteristics as students aged 13-15 years and with special needs. The instrument for data collection used in this study is a motor skill test related to the movements of the sprint test, throwing the ball, jumping from blocks, jumping without a prefix, and standing 1 foot. For the treatment using a play approach related to the characteristics and related to motor skills such as playing running the ball into the basket, playing throwing the ball into the basket, jumping over the bottle, playing with the position of standing 1 foot by throwing the ball. Data analysis techniques using descriptive statistics were used to interpret and analyse the data. T-test to see the significant difference of the two variables before and after the play approach.

## III. RESULT AND DISCUSSION

### 1. Result

The results of this study using experimental research with the aim of knowing the impact of the play approach to gross motor skills on special school children in Jombang Regency with a total of 27 students aged 13-15 years. The following descriptive data calculation results in this study can be seen in table 1 below:

**Table 1.** Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	27	7.00	12.00	8.7407	1.28879
Posttest	27	7.00	15.00	12.2222	1.82574
Valid N (listwise)	27				

From the explanation of table 1, it shows descriptive data for the minimum score of pre test and post test data is 7, the maximum data for pre test is 12 and post test is 15, for the average pre test is 8.74 and post test is 12.22, and the standard deviation for pre test is 1.28, and post test is 1.82. After knowing the descriptive data, the following calculations for the results of the research data for the normality test are as follows:

**Tabel 2.** Tests of Normality

	Shapiro-Wilk		
	Statistic	df	Sig.
Pretest	.901	27	.061
Posttest	.929	27	.076

Table 2 shows the results of the calculation of pre-test and post-test data on the normality test, it can be seen that for the pre-test data the sig value is  $0.14 > 0.05$ , and for the post-test sig value is  $0.76 > 0.05$ , so it can be explained that this research data includes normal data. After knowing the normal data calculation using the normality test with the shapiro wilk test. Furthermore, calculating the results of the pre-test and post-test difference test on this research data using the paired sample test, the following calculation results are in table 3 below:

**Tabel 3.** Paired Samples Test

		t	Df	Sig. (2-tailed)
Pair 1	posttest - pretest	11.645	26	.000

Based on table. 3 explains that in the different test to determine the results of the pre test and post test, it gives an explanation that the results show that based on the results of the value obtained, the sig value is  $0.00 < 0.05$ , so it can be seen from the sig value that the conclusion of the analysis in one experimental group is known that there is an effect of the play approach on children's gross motor skills.

## 2. Discussion

The play approach is very important for children with disabilities, especially play related to fun movements such as jumping and jumping games, because childhood is a period that likes to play and move. The play approach states that the benefits of movement have a good impact on development and coordination related to involving large muscles, endurance and muscle growth that makes children feel happy and happy in children. In improving children's movement abilities in this case, it is necessary to have an important thing related to motor skills, even though the child is a child with special needs, but the child still has an intellectual and can make achievements by participating in sports activities carried out for people with disabilities. When children with disabilities get inclusive learning with peers, it will have an impact on their development and contribute well to them and also motor skills are a concern, (Top, 2021). The play approach will have a therapeutic impact and will be more independent in daily activities, in the optimal development for skills is very important when children are developing and also failing to achieve basic motor skills competencies, (Chang, Tsai, Lee, & Liang, 2020). Biological and environmental factors will shape children's characteristics with interactions in the form of activities, playing new things, adapting to new friends, and mental strength, (Angelka & Goran, 2018).

The complex personality of a child with intellectual disability is evident in a number of ways related to speech, behaviour, social characteristics, and overall functioning in daily activities. Play has characteristics such as intrinsic motivation with the urge related to wanting to do play activities that are active and can be done by anyone so it requires everyone to be active in playing, so that there is a pleasant feeling in doing play activities related to children's gross motor skills. There needs to be an attractive and interesting form of sports play gradually based on the characteristics of children, (Ma, Wang, Li, & Wang, 2020). The characteristics of gross motor skills, which are associated with large muscles in developing children's gross motor stimulation with a safe environment and parental support, play is an important thing that can provide in social participation and also affect cognitive, physical and emotional children, (Kennedy-Behr, Rodger, & Mickan, 2013). In doing activities that can affect children's emotional, physical, cognitive, and social development through play, so play can be said that play activities are fun activities for children, play is a necessity because it provides an opportunity for children to adapt with friends and the environment so that it will have an impact on motor skills, (Ray, D. C. 2019).

Play can also offer activities that try to develop children's intelligence, in play activities by moving muscles repeatedly which results in the development of gross motor skills. And also the possibility that with the ability to control cognitive and motor relationships with intellectual disability, hirata. The motor characteristics of children with special needs with the concept of mutual precedence used so that it will have an impact on motor development. Play activities that make children happy will always want to do the same activities, so they feel their muscles are trained to work. So that motor movements related to the muscle system, every motor activity will be beneficial for students who have delays so that they need long play movements. When reduced movement activities in daily life will have an impact on reducing the quality of children's motor skills, Roth. Play for children who are still in the process of growth helps to understand the outside world, develop skills and understanding related to problems in life. In humans, it is always related to motor development because it is a process of continuous change, motor development can be said to be a change in movement that occurs during human life so that it can be called that motor development is a change in behaviour that occurs in human life and the process as a form of change from various influencing factors.

#### IV. CONCLUSION

Based on the explanation of the research data that has been analysed by looking at the effect of the play approach on gross motor skills of children aged 13-15 years with the subject of 27 SLB students. By looking at the results of the motor skills test before treatment and after treatment with a different test it is known that the results are based on the results of the sig value of  $0.00 < 0.05$ , so it can be concluded that there is an effect of the play approach on children's gross motor skills.

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