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Survey of Physical Fitness Level for Students with Mental Retardation on Extraordinary Elementary School in Donggala Regency

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Abstract

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The purpose of the study was to determine the level of physical fitness of students with mental retardation on an extraordinary elementary school in Donggala Regency. This study is evaluation research using descriptive research methods. The sample of this study was all students with mental retardation on an extraordinary elementary school in Donggala Regency. The sampling technique in this study was purposive sampling. The sample in this study amounted to 10 students consisting of 6 male students and 4 female students. Retrieving data using the Indonesian Physical Fitness Test (TKJI). The results of the study used descriptive percentages with descriptions as follows: excellent categories = 0%, good categories = 0%, moderate categories = 20%, less categories = 60%, and very few categories = 20%. From the results of data analysis shows that the level of physical fitness of students with mental retardation on an extraordinary elementary school in Donggala Regency is less category. Based on the results of data analysis, sports and health physical education teachers need to design learning that is suitable for the growth and development of students so that they can improve their physical fitness.

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INTRODUCTION

Education for students with special needs requires a special pattern of service specifically adjusted with the type and characteristics of the disability. Learning for students with mental retardation is adjusted to their intellectual abilities which are below average. Physical education, exercise, and adaptive health are learning that is specifically designed and modified according to the characteristics of disability and the needs of students. Through physical activity in learning physical education, sports, and adaptive health, one of them is to improve basic movement skills of students with mental retardation on an extraordinary elementary school. (Badan Standar Nasional Pendidikan, 2006).

Husdarta (2010) states that physical sports education and health are basically an integral part of the education system as a whole. The purpose of sports and health physical education is not only to develop the physical realm but also to develop aspects of health, physical fitness, critical thinking skills, emotional stability, social skills, reasoning and moral actions through physical activity and sports activities.

Rosdiani (2013) said that health sports physical education is an educational process that utilizes physical activities planned systematically aimed at developing and improving individuals organically, neuromuscular, perceptual, cognitive, and emotional, within the framework of the national education system. Health sports physical education is adaptive to encourage physical growth, psychological development, motor skills and can stimulate the brain of students with mental retardation to increase their knowledge and reasoning.

Adaptive physical education has been adjusted to the conditions of students with special needs so that it can be applied to students with mental retardation because students with mental retardation also have the same rights as other normal students in obtaining education and learning at every level of education. Providing opportunities to learn the movement of students with mental retardation through health sports

adaptive physical education from an early age to maintain and develop physical and environmental conditions is very important because it will be useful for growth and development of skills and social normal after adulthood, as well as mental development.

Students with mental retardation experience cognitive impairment due to the low IQ level of students with mental retardation. Delay in receiving stimuli results in mental retardation requiring a long time to react or respond to new stimuli and situations. Limitations in the mastery of the discussion, and lack of ability to consider something will affect social development, including in carrying out motion activities.

The research conducted by Somantri (2007) showed that the level of physical fitness of students with mental retardation who have mental abilities at the age of 2 to 12 years is the category of very few while normal students are in less category. Students with mild mental retardation have a significantly lower score on almost all items of certain motor skills, and also skills in object control when compared to their peers who are non-mental retardation.

Westendorp, Houwen, Hartman, Visscher (2012) lack of physical activity results in students' physical fitness levels being so low that they are susceptible to disease. The level of success of education can be known through assessment and evaluation, as said Tarigan (2000) how far the goals have been achieved or where the progress of student learning can be expressed and explained through measurement and evaluation.

The term mental retardation is often also called mental retardation or mental resistance (mentally handicap). Hendrayana (2007) states that the word equivalent set by the government to refer to intellectual disability is mental retardation. Students with mental retardation globally are students who have below-average intelligence that occurs during development and have obstacles in adaptive assessment.

According to Pranowo & Hamid (2012) mental retardation is a condition of a child's growth and deviation, while the growth and development events themselves are the most

important and essential processes in the child. Students with mental retardation are students or individuals who experience mental retardation with a function of intelligence below the average and inability to adjust behavior, it occurs during the development period that is a real condition in students with mental retardation, and those conditions that require specific treatment to can develop themselves (Mumpuniarti, 2000).

In Indonesia according to Government Regulation No. 72 of 1991, students with mental retardation are classified into (1) mild mental retardation if IQ 50-70, (2) moderate mental retardation if IQ 30-50, (3) mental retardation is severe and very severe if the IQ is less than 30.

Every child with special needs has different characteristics. Kemis & Rosnawati (2013) said that the characteristics of students with mental retardation are: (a) slow in learning new things, (b) difficulty in generalizing and learning new things, (c) speaking skills are very lacking for students with severe mental retardation. (d) physical disability and movement development, (e) lack of self-help ability, unusual behavior and interactions, (g) continuous behavior is not reasonable.

Someone who has physical fitness will do his activities well compared to people who are not fit. Physical fitness is the ability of a person to perform physical tasks that require strength, endurance, and flexibility (Lutan, 2002). Physical fitness is the ability of a person to carry out physical activity in a relatively long time, which is carried out efficiently without causing significant fatigue.

Mutohir & Maksum (2007) states that physical fitness is the body's ability to carry out activities without experiencing fatigue which means. The body's ability to adjust the function of organs in the body within the limits of physiology to the state of the environment and/or physical work efficiently without tiring excessively. Physical fitness is not only oriented to physical problems but is oriented towards improving the quality of human resources that have overall psycho-physical endurance.

Lutan (2001) physical fitness components have two aspects, namely: (a) physical fitness

related to health (health-related fitness) and (b) physical fitness related to performance or skills (skill-related fitness).

Based on the expert's opinions of the experts above, it can be concluded that physical fitness is a person's ability to carry out daily activities efficiently without causing fatigue which means that he can still enjoy his free time and have the energy to do other activities (Nurhasan, et al. 2005). Physical fitness has a very close relationship with someone and their activities. Assessment and evaluation of students' physical fitness can be done with the Indonesian Physical Fitness Test (TKJI). The results of observations and interviews with health sports physical education teachers on extraordinary elementary school (SDLB) in Donggala Regency, it was found that the school had never had a physical fitness test in general except for students who wanted to take part in the competition. To find out the level of physical fitness of students whether they have met the standards or not, it is necessary to hold a physical fitness test to determine the level of physical fitness of students, namely by using the Indonesian Physical Fitness Test (TKJI) method.

METHODS

This study used the descriptive method as the evaluation research. The population in this study were all students with extraordinary elementary mental retardation in Donggala Regency. The sampling technique in this study was total sampling. The number of samples in this study was 10 students with mental retardation consisting of 6 male students and 4 female students. The instrument used in this study was the Indonesian Physical Fitness Test (TKJI) for students aged 10 to 12 years. As a basis for consideration, this test is entirely prepared according to the conditions of Indonesian students. The variable in this study was the physical fitness level. Types of tests, Run 30 meters, lift the body for 30 seconds (Pull Up), lie down for 30 seconds (Sit Up), jump upright (Vertical Jump), run 600 meters. The data analysis method used in this study is statistical calculations using descriptive analysis percentage (%).

RESULTS AND DISCUSSION

Based on the description analysis, the survey of the physical fitness level of extraordinary elementary school students in Donggala Regency, the data showed that excellent category = 0 students, good category = 0 students, moderate category = 2 students, less category = 6 students, very less category = 2 students. (Table 1).

Table 1. The Results of Indonesian Physical Fitness Test (TKJI) Students on An Extraordinary Elementary School in Donggala Regency

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Number of students	Percentage (%)	Category
0	0	Excellent
0	0	Good
2	20	Moderate
6	60	Less
2	20	Very less

The results of the study were analyzed, that the level of physical fitness with description as follows: excellent category = 0%, good category = 0%, moderate category = 20%, less category = 60%, and very less category = 20%.

Based on the analysis of physical fitness test data on extraordinary elementary school in Donggala Regency, the results have been obtained that students with mental retardation have a physical fitness level showing in excellent category = 0 students, good = 0 students, moderate category = 2 students, less category = 6 students, very less category = 2 students. If analyzed by using percentage calculations with percentage results, students who are in excellent category = 0%, good category = 0%, medium category = 20%, less category = 60%, and very less category = 20%.

The survey results about the physical fitness level of students with mental retardation indicate that the level of physical fitness of students with extraordinary elementary school mental retardation in Donggala Regency is less category. This can be influenced by several factors including nutritional intake, movement

patterns, eating patterns, weight, parenting parents. Lack of movement in doing a physical activity can result in less physical fitness levels. To improve physical fitness need to increase movement, be active in activities that require a lot of physical activity so that it can help in doing many physical and movement activities. This requires support from various parties, especially those who are close to students including parents, teachers, especially physical education teachers and sports coaches.

Students with mental retardation experience obstacles in growth and development because intellectual abilities of students with mental retardation below the average only range from 30 to 70. This results in students with mental retardation slow in receiving stimulation so that it is slow in responding to the stimuli they receive.

Therefore it requires adjusting activities with characteristics, growth, development of students with mental retardation. Schools must be institutions that always maintain and improve the physical fitness of students, this is consistent with the opinion of Ortega, Ruiz, Castillo & Sjöström (2008) saying health promotion policies and physical activity programs should be designed to improve cardiorespiratory fitness, but two other of the physical fitness components such as muscle strength and speed or agility. Schools can play an important role in identifying students with low physical fitness and promoting positive health behaviors such as encouraging students to be active with a special emphasis on the intensity of activity.

Students with mental retardation can add experience and improve their motor skills through learning in school. Learning health sports physical education as a learning tool to be able to improve motor skills and can improve the physical fitness of students. Adaptive learning sports physical education health modified to be able to adjust the movement with the characteristics of growth and development of students with special needs based on their disability. Students with mental retardation who experience obstacles in growth and development, resulting in hope that growth is not the same as

students in general. Then it is necessary to adjust the activities with their development so that they can be involved in these activities. The use of customized forms of exercise can help the development and improvement of fitness in students with mental retardation (Kocić, Bojić, Aleksandrović, Ignjatović & Radovanović, 2017).

Dandashi, Karkar, Saad, Barhoumi, Al-Jaam & El Saddik (2015) the existence of adjustments or modifications to the movement can help students in carrying out a physical activity without experiencing difficulties. Through physical activity can help students improve cognition and motivation during learning.

Teachers have an important role in improving students' basic movements and mental health through physical activity by modifying learning so students are active in learning (Sumaryanti, Rahayu, T., Amirullah, Rahayu, S., Rukmini, 2013).

Physical education teachers are expected to design learning models according to the growth and development of students (Mansur & Soegiyanto, 2017). Through physical activity can improve students' physical fitness. Good physical health can affect the development of functional skills, thus helping students to live independently.

Improving students' physical fitness can have a positive impact on the quality of liferelated to health (Gu, Chang & Solmon, 2016). Play activities in the form of Outbound Management Training (OMT) are effective to improve abilities, adapt students with mental retardation (Wati, 2012).

When students do activities outside of being able to socialize with students or other people outside of students with mental retardation. Physical conditions have an important role in daily life to do physical activity, and live socializing with the environment and can affect the quality of life including students with mental retardation. To improve the fitness of students with mental retardation, special services and involvement of people close to them in doing physical activities need to be done so that they feel safe to move. The development of community skills through health sports physical

education must involve the role of the principal and teacher (Tucker, Bebeley & Laggao, 2017).

The involvement of parents in physical activity through playing with movements will help to improve the students' skills and the relationship of interactions between students and parents (Welters-Davis & Lawson, 2011).

Therefore it is expected that the sports physical education health learning teacher needs to modify learning according to the growth and development of students so that they are interested in participating in learning that indirectly spurs students with mental retardation to engage in physical activity. In addition, test for measuring and evaluating learning also need to be adjusted, including physical fitness tests, students with mental retardation need to be adapted to their growth and development.

CONCLUSION

Based on the results of data analysis, and discussion, it can be concluded that the physical fitness level students with mental retardation in Donggala Regency is less category. So that health sports physical education teachers need to design learning according to the characteristics of growth and development of students with mental retardation. Measuring instruments used in the success of learning and tools for the level of physical fitness students with mental retardation need to be adjusted to their growth and development.

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