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The Physical Fitness Level of Children with Special Needs During the Covid-19 Pandemic In Extraordinary Schools

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Abstract

This study aims to analyze the level of physical fitness of children with special needs in pandemic Coronavirus Disease 2019 (COVID-19) at Sekolah Luar Biasa (SLB) Widya Santika Karangploso Malang. This study is non-hypothetical descriptive, so there was no hypothesis formulation. The results of this study are described the physical fitness levels of children with special needs in pandemic at SLB Widya Santika Karangploso Malang. The study population is all students in SLB Widya Santika Karangploso Malang, there is 60 students. Data analysis used quantitative descriptive data analysis techniques, that is scores for each item are summed and the results are compared with the expected score or ideal score. The results obtained were 16.7% of children with special needs classified a level of physical fitness in the "good"; 21.6% “medium”; 48.3% “less”; 28.3% “very little”. In general, concluded that the mean physical fitness levels of children with special needs in pandemic COVID-19 at SLB Widya Santika Karangploso Malang were classified as "less" level. The results of this study can be used as evaluation material for teachers in improving students' physical fitness, especially for students with disabilities in pandemic COVID-19.

Kata kunci:
Tingkat kebugaran jasmani;
Anak berkebutuhan khusus;
COVID-19

Abstrak

Penelitian ini bertujuan untuk menganalisis tingkat kebugaran jasmani anak berkebutuhan khusus (ABK) pada masa pandemi Coronavirus Disease 2019 (COVID-19) di Sekolah Luar Biasa (SLB) Widya Santika Karangploso Malang. Penelitian ini merupakan penelitian deskriptif non hipotesis, sehingga dalam penelitiannya tidak merumuskan hipotesis. Hasil dari penelitian ini berupa deskriptif tingkat kebugaran jasmani ABK pada masa pandemi COVID-19 di SLB Widya Santika Karangploso Malang. Populasi pada penelitian ini, yaitu seluruh peserta didik di SLB Widya Santika Karangploso Malang sejumlah 60 siswa. Data yang terkumpul dianalisis menggunakan teknik deskriptif kuantitatif, angka pada setiap item dijumlahkan dan hasilnya dibandingkan dengan jumlah skor ideal. Hasil yang didapatkan sebanyak 16,7% ABK memiliki tingkat kebugaran jasmani dengan kategori “baik”; 21,6% kategori “sedang”; 48,3% kategori “kurang”; kategori 28,3% “kurang sekali”. Secara

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garis besar dapat disimpulkan bahwa rata-rata tingkat kebugaran jasmani ABK di masa pandemi COVID-19 di SLB Widya Santika Karangploso Malang berada di tingkat "kurang". Hasil studi ini dapat dijadikan bahan evaluasi bagi guru dalam meningkatkan kebugaran jasmani siswa, khusunya pada siswa penyandang disabilitas selama pandemi COVID-19.

INTRODUCTION

Physical fitness level is important for learning sustainability at all levels of education (Michael et al., 2015). Students are required to have good academics and stay healthy and fit. In pandemic COVID-19, staying in shape has a bigger challenge due to orders lockdown by the government. An educational environment that should be a forum for academic discussion with freedom of opinion and doing physical activity with other students has turned into an online learning concept in pandemic COVID-19. As a result, students who should need movement activities will have limited stability in their movement activities (Dunton & Wang, 2020).

The government is making full efforts to keep facilitating the implementation of education in pandemic COVID-19. This is following the Circular of the Minister of Education and Culture Number 36962/MPK.A/HK/2020 concerning Online Learning and Working from Home in the context of preventing the spread of COVID-19. Online learning is not yet optimal, especially in physical education learning which tends to teach motor skills, although cognitive and affective mastery must also be added to it. The Decree of the Minister of Education and Culture regarding online learning makes students have a culture of sedentary without any other physical activity, especially for students who tend to have a hobby of playing online games.

The COVID-19 pandemic made students lazy to be active, they happier with gadgets and become passive (Bates et al., 2020; King, 2020). Pandemic COVID-19 has also impacted children with special needs (Kuper et al., 2020). At the Extraordinary School, pandemic COVID-19 has hampered teaching and learning due to the limitations of teachers in delivering teaching materials, which not all parents can convey learning information from teachers for their children at home. That will be more difficult to study the motion learning material in physical education subjects. The existing limitations make the children inactive and away from the routine of movement activities that are usually done at school with the guidance of the teacher to achieve and just maintain their physical fitness.

Many studies are examined physical fitness in general without specific samples. A study by Arifin (2018) explains that with fitness exercise 3 times a week there is an increase in physical fitness with a percentage increase of 40%. A similar study with the title "Physical Activity of Children with Special Needs During The Covid-19 Social Restrictions", only describes activities in general with a deepening of activities starting from waking up to before going to bed for children with special needs without implementing appropriate activities to keep them healthy and fit in pandemic COVID-19 (Boleng, 2015). Another study entitled "Sports for Disabilities During The Covid19 Social Restrictions to Improve Physical Fitness" by Hammad (2017) explained that in pandemic COVID-19, exercise light to moderate physical activity was needed for disabilities, but did not explain the exercise in specific. Existing research raises the assumption that exercise during a pandemic is important for physical fitness, there has never been a study on physical fitness levels of children with special needs during the COVID-19 pandemic. This encourages researchers to research as well as explore fitness levels during the pandemic for children with special needs.

Pandemic COVID-19 makes children with special needs more limited in their movements (French et al., 2020). Online school learning forces children to include learning media such as computers, cellphones, laptops, etc., which have shortcomings in monitoring children's movements. This needs to be described with valid data with a series of systematic research. Children with special needs require special education and services to optimize their potential perfectly. Fragala (2016), defines children with special needs as children with special characteristics that are different from

children in general without always showing mental, emotional, or physical incompetence. Children with special needs are children who are significantly different in several important dimensions of their human functioning. Those who are physically, psychologically, cognitively, or socially late in achieving their goals or needs and their maximum potential, including those who are deaf, blind, speech impaired, physically disabled, mentally retarded, emotionally impaired, as well as children gifted with intelligence. Children with special needs require treatment from trained professionals. (Arvedson et al., 2018) states that the deviations that cause children with special needs are different in terms of differences in mental characteristics, sensory, physical and neuromuscular abilities, social and emotional behavior, communication skills, or a combination of two or three of these things. Based on several definitions before, children with special needs can be defined as individuals who have physical, intellectual, or emotional characteristics, above or below the average individual in general.

A study by Marco et al. (2018), explained that the fitness level of athletes in special needs sports events which are held every 2 years has decreased by 21% from before the pandemic COVID-19. It was carried out in areas that have less progress in terms of achievement so that they are not representative of several other regions. A similar study explains that during the pandemic physical activity of children with disabilities aged 8-16 years in Asia decreased. Before the pandemic in 1 week encouraged to do light physical activity for 24-29 hours, after the pandemic it only reaches 15-17 hours (Smith, 2019). Vora (2019) revealed that during the pandemic, children with special needs tend to enjoy learning with gadgets more, this is the biggest factor that makes children prefer to sit for hours with gadget entertainment than physically active independently, in groups, outdoors or indoors.

Several other relevant studies have never appeared that describe in detail the physical fitness data of children with special needs by concluding their fitness level. Researchers researched with a sports science review to prove facts for monitoring evaluations in the field which explained that the pandemic affected the physical fitness of children with special needs.

METHOD

This study is non-hypothetical descriptive, so there was no hypothesis formulation (Budiwanto, 2011). The results of this study are described the physical fitness levels of children with special needs in pandemic at SLB Widya Santika Karangploso Malang. The study population is all students in SLB Widya Santika Karangploso Malang, there is 60 students. The sample included in this study were students aged 13-15 years, this was due to age suitability with research instruments in taking physical fitness data. As for the sampling technique used random sampling.

The instrument used in this research is the standard Eurofit fitness test for types of mild and moderate mental retardation (Williyanto et al., 2018). The Eurofit Physical Fitness Test is a set of physical fitness tests that cover flexibility, speed, endurance, and strength for mentally retarded people aged 13-15 years which are systematically arranged by involving specific movements. Eurofit is a test that has been adjusted for the psychomotor state and IQ of the mentally retarded with 5 test components (Stork balance stand test, Sit and Reach test-flexibility, Bent Arm Hang-muscle endurance/functional strength, 50-meter running test -measures running speed and agility, Harvard step test-cardiorespiratory endurance. The results of these tests are added up and the final results are converted into the standard Eurofit table for ages 13-15 years. The rest of the other types of disabilities, use the Indonesian Physical Fitness Test for ages 13- 15 years who have been standard with a series of 50 meters running, hanging elbows bent and st up for 60 seconds, and jumping upright.

Data analysis used quantitative descriptive data analysis techniques. The score on the item causes the total score to be high or low, thus an item has factor validity when the score on the item

correlates with the total score. Scores for each item are summed and the results are compared with the expected score or ideal score.

FINDINGS AND DISCUSSION

A total of 60 subjects included in the current study consisted of six types of disabilities including visual impairment, hearing impairment, speech impairment, mental retardation consisting of mild and moderate, quadriplegic, hearing impaired with the classification as referred to in the partner SLB. The age of the subjects ranged in the range of 13-15 years. The existing subjects have their characteristics in adjusting their physical fitness measurements. In more detail, each type of disability is examined in the following diagram.

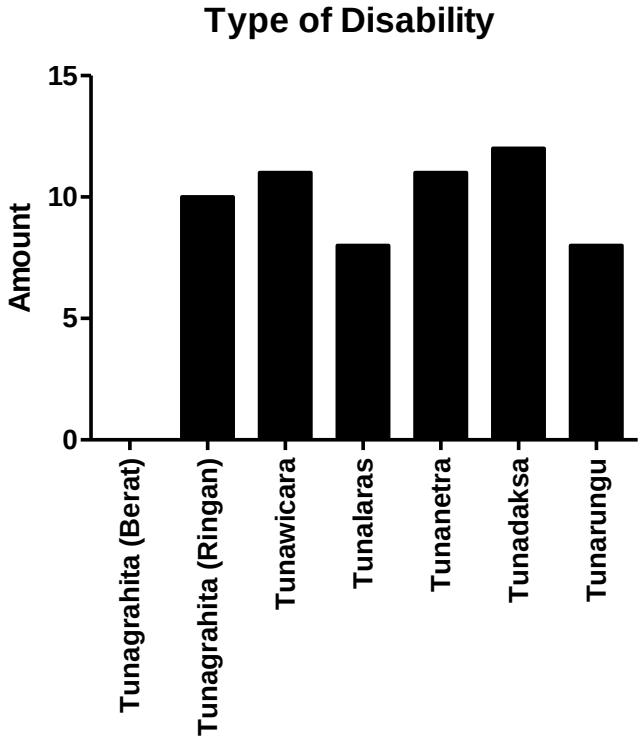

Figure 1. Types of Disabilities

While data each item on the Eurofit test that was collected showed a different score, the data can be seen in table 1.

Table 1. Obtained Scores on Each Eurofit Test Item

Test Type	Score				
	1	2	3	4	5
Standing Stork Test	1	6	3	0	0
Sit and Reach	0	3	4	1	2
Bent Arm hang	0	5	5	1	0
Lari 50 metet	3	5	2	0	0
Harvard Step	4	2	2	2	0
Total	8	21	16	4	2

Table 1 shows the details of each item for further analysis. In the balance test, 1 person who gets points 1 and 6 people get 2 scores, this is because the subject does not get balance training. 60 subjects, none of the subjects scored in the moderate or good category for balance. This standing stork test raises the scores of 6 subjects who get 2 points, this number is the highest number of scores

from a maximum score of 5 obtained. Further discussion, 6 subjects perform standing stork test balance in the low category, proving that the largest percentage of balance is still not perfect.

It's different in the sit and reaches test, 4 people get 3 points in the medium category, while 3 people get 2 points and only two people get perfect scores. This reflects the flexibility of the waist of mentally retarded children, only 2 people experienced the "good" or "perfect" category, the rest were in the "less" category. The third test is in the form of a bent arm hang, as many as 5 people get 3 points in the "moderate" category, this reflects the arm strength of each subject in the "medium" category, as in the previous review of activities that the subject did more activities related to arm muscle strength in general.

In the 50-meter run test, only 2 people got the highest score in the "medium" category, no subject got a perfect score of 5 or 4. This is because mentally retarded children are rarely given a stimulus in the form of a sprint series by the teacher or coach. In their daily environment, as a result, on a 50-meter run test, many subjects experience confusion so that they are not optimal with the results obtained. The last fitting item was Harvard Steps which was worse than the others because 4 mentally retarded children got 1 point, the rest only got 2, 3, and 4 points, each of which contained 2 subjects. This reflects that the mental retardation endurance is not good, according to Harvard scientists, the stop is a cardio test with endurance but the results at this moment are not good.

Referring to the quantitative descriptive analysis formula that has been explained, the Eurofit test results are obtained from the total acquisition of each item on the subject divided into the ideal scope, then multiplied by 100%. The completeness of the 10 subjects as a whole is presented in table 1. The combined analysis and the mean overall score of 10 mentally retarded subjects show the percentage of 48.4% and 12.2 with the category of "less" fitness level. A total of 50 subjects with other types of disabilities other than mental retardation who use TKJI are presented in Table 2.

Table 2. Data of Scores on Each TKJI Item

Test Type	Scores				
	1	2	3	4	5
50-meter run	12	29	9	0	0
Pull up	8	16	20	2	4
Sit Up	3	18	25	4	0
Vertical Jump	17	25	4	1	3
1000-meter run	20	6	7	14	3

The score in each TKJI item has an up and down characteristic, this can be seen in table 2. In the first item in the form of a 50-meter run, 29 subjects scored 2 and only 9 people scored in the moderate category which is 3 scores. There are none of these children with special needs who get perfect scores or are just good if you look at many subjects who still have difficulty adjusting to the 50-meter run because they are rarely trained or taught by educators in their environment.

The pull-up test brings up 20 subjects who get a score of 3, and 4 subjects get a perfect score in doing pull-ups. This is an unusual thing because this test is quite difficult to do and must involve muscles which are also difficult to train for children with special needs. On further inspection, it turns out that the schoolyard supports this, in the schoolyard, there are lots of pull-up poles so every day ABK often does it without instructions from the exercise teacher. In the sit-up test, 3 people got a score of 3 or the lowest, this proves that in the previous learning the teacher has given a lot of material for this movement with the existing limitations.

In the vertical jump test, only 3 subjects did it perfectly, meaning that there were 47 subjects with sub-optimal results. Limited facilities and infrastructure make children with special needs less understand and practice this series of tests before. In the final test series in the form of a 1000 meter run, 20 subjects got a score of 20, this proves that 60% of children with special needs have never done physical activity running at a distance of more than 800 meters. Meanwhile, for the final

conversion that combines the results of the Eurofi and TKJI tests, 16.7% of the subjects were in the "good" category; 21.67% "medium" category; 28.83% of the "poor" category, and 48.33% of the "very bad" category are shown in table 3.

Table 3. Subject Category Conversion

	Categories				
	Very Good	Good	Medium	Less	Very Less
Total Subjects	0	1	13	17	29
Percentage	0%	16,7%	21,67%	28,33%	48,33%

The data obtained by the researcher appears analytically that the physical fitness of children with special needs in a pandemic is classified as "less". Learning for children with special needs during the COVID-19 pandemic is required to be more varied with regular physical activity. Overview of mentally retarded children who have an IQ below the average it is difficult to adapt online learning because of the pandemic so that the information provided by the teacher is hampered (Tomm, 2019). In addition, the inactivity of moving like children in general at the same age makes a lack of fitness value. In general, children with special needs perform physical activity during physical education at school, with the pandemic this activity is hampered by online learning which is not easy for educators to control. To improve and maintain the level of physical fitness of mentally retarded children, special services are needed in learning movement skills compared to normal children their age. According to (Azim, 2019), modification of the form of sports for movement activities of mentally retarded children needs to adjust the movement patterns of mentally retarded children.

With the results of physical fitness that are felt to be lacking, the adaptive learning curriculum during the pandemic is more focused on physical fitness and general health, including cardiopulmonary endurance, muscle strength and endurance, flexibility, and motor skills need to be dominated. The results showed that the overall physical capacity of mentally retarded children was higher than the physical capacity of other disabilities (Ferreira, 2017). This is because children with mental retardation have the awareness to carry out uncontrolled physical activities and have more clarity and aggressive power than other disabilities, therefore the physical activity of children with disabilities has more value (Li, 2018).

CONCLUSION

In general, it can be concluded that the average level of physical fitness of ABK during the COVID-19 pandemic at SLB Widya Santika Karangploso Malang was at the "less" level. The results of this study can be used as evaluation material for teachers in improving students' physical fitness, especially for students with disabilities during the COVID-19 pandemic.

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