



# Analysis of Adolescent Physical Fitness Levels Junior High School in Covid 19

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**Abstract.** This research aims to find out the level of physical fitness of junior high school teenagers during the Covid 19 period in Fifty Cities Regency. This study was conducted in June-October 2021. This type of research is cross-sectional research. The number of samples in this study amounted to 110 adolescents aged 13–15 years who were taken on a proposed random sampling basis. The instruments in this study used tes kebugaran jasmani Indonesia for adolescents aged 13 to 15 years. Analysis of research data is done using descriptive statistics. From the analysis of data obtained the level of physical fitness of adolescents none classified as baik sekali and most (57.27%) belong to the category of less. 2.72% of adolescent fitness levels belonged to the good category and 23.63% of the moderate category. There are still 16.36% of adolescents who fall into the category of fitness levels less at all.

**Keywords:** Physical Fitness · Adolescents · Covid 19

## 1 Introduction

At this time the world is experiencing the impact of the spread of the corona virus which resulted in obstruction of activity outside the home. Therefore, the government urges people to stay at home, keep their distance so as not to contract so as to break the chain of spread of the corona virus (Covid-19).

With the case, the world of education is also one that must anticipate that school residents are not affected by the outbreak. Therefore, the Ministry of Education and Culture issued a circular letter of the Minister of Education no. 4 of 2020 on guidelines for the implementation of learning from home in the emergency period of the spread of covid-19. Expert staff of the Minister of Education and Culture in the field of regulation, Chatarina Muliana Girsang delivered circular letter number 15 to strengthen the circular letter of the Minister of Education and Culture number 4 of 2020 on the implementation of education in the emergency period of Corona virus Disease (covid-19) In accordance with the circular, face-to-face learning becomes online learning from home, where students or teachers send tasks that will be done through technology. One of the benefits of the advancement of science and technology is that the work previously done with great

effort and considerable physical capabilities today can be easily completed by automated machines or applications that are found in the smartphone (Anggita et al. 2021).

Activity learning to teach in schools that only through online zoom applications during the covid 19 pandemic will weaken the physical condition of students who will also have an impact on students' learning achievement and outcomes. Teaching and learning activities using online methods is what causes students to be lazy in physical activity and exercise. This is because the online learning process causes students to only be glued in front of the monitor and minimal physical activity is done, in addition students will also be dissolved in the use of smartphones and do activities away from physical activities such as playing online games, surfing in cyberspace and accessing social media.

In schools students who study with online systems will be preoccupied on the monitor screen, this is because of the tasks given by teachers in school with so much online media. Students are expected to learn by utilizing the technology and knowledge they have to keep tasks and learning systems running smoothly, for that, students need to have a fit and stable physical condition and steady, the physical fitness of students plays an important role in maintaining it. To achieve a fit physical condition requires quality food intake, quality here does not mean expensive but meets the energy needs needed by the body, but in this pandemic the physical activity is drastically reduced by the psbb and *lockdown* policy policies implemented by the government.

A person's activities are inseparable from the needs of physical fitness. According to Anggita et al. (2021) Physical fitness becomes an important component in determining a person's health status, ranging from cardiovascular health status, body composition, cognitive and academic abilities. People who have good physical fitness will be able to do all physical activities without experiencing significant fatigue. Good physical fitness is related to a person's productivity or performance. An employee who has optimal physical fitness will certainly be able to produce the best *kinerja* that supports the achievement of institutional performance. Likewise, the physical fitness of good school teenagers is very beneficial in achieving optimal learning outcomes as well. A school teenager who has good physical fitness, will certainly be able to follow the learning process well and eventually become a quality human resource.

Many things can be done to maintain a person's physical fitness, regular exercise, consume nutritious food and run a good diet and rest patterns. Regular physical activity and doing sports activities are factors that play an important role in improving physical fitness. But in this pandemic period, all forms of activities are limited by conditions that must be kept at a distance and run fairly strict health protocols and plus more activities are carried out at home. Learning and teaching school youth activities are done online, so many students are less sedentary.

With this explanation it can be said that good physical condition can determine good learning achievements and outcomes as well, with online learning methods that make students always glued to the monitor screen and *lockdown* policies that reinforce the reason students do not want to exercise by just jogging outside the house then teenage students who lack physical activity due to the activity, So it is driven by a strong reason for researchers who want to conduct *research* on determinant factor analysis of the physical fitness level of junior high school teenagers in the Covid period.

## 2 Materials and Methods

This type of research is descriptive research with variables studied is the physical fitness level of junior high school teenagers. Physical fitness in this study is intended is a person's ability to do a daily activity at a certain time without experiencing significant fatigue and the person still has the reserve energy to do an activity. The population of this study is all students of Junior High School 2 Situjuh, District 50 City. The sample count was 110 people taken with stratified random sampling techniques. Data collection technique with Indonesian Physical Fitness Test for ages 13 to 15 years. The TKJI test consists of a 50-m running test, a pull up test, a sit up test, a vertical jump test and a 1000-m running test for men and an 800-m one for women. As for alat-tool is lintasan run or field that is flat and notslippery, stopwatch brand herwins, sebanyak 4 pieces, peluit, papan scale to jump upright, Palang tunggal, serbuk powder, penghapus, bendera start, formulir test and tools write.

## 3 Results and Discussion

Descriptive analysis was conducted on the level of physical freshness of students of State Junior High School 2 Situjuh. This is intended to give meaning to the results of the analysis that has been done. Data on the level of physical freshness of students of State Junior High School 2 Situjuh. For more details, it is described as follows: Running data of 50 m, dioleh average value (mean) = 9.05 out of 110 samples with the total number of values a whole a(sum) as much as 896.76. Nilai simpangan baku (standard deviation) = 1.65 dari lowestvalue (minimum) = 6,44 s andn highest value(maximum) = 13,34 s. Data running 1000 m average value(mean) = 7.12 out of 66 samples with the total value of a whole acar(sum) as much as 463.22. Forthe default value (standard deviation) = 1.65 dari the lowestvalue (minimum) = 4.25 min and the highestvalue (maximum) = 10.07 min. Women's 800 m running data, dioleh averagevalue (mean) = 7.59 out of 44 samples with the total value of a whole a(sum) as much as 334.2. Forthe default value (standard deviation) = 1.87 dari the lowestvalue (minimum) = 3.7 min and the highestvalue (maximum) = 11.33 min. Men's Pull Up data, dioleh average value(mean) = 5.28 out of 66 samples with the total number of values of a whole ad (sum) as much as 301.2. Forthe value of the default (standard deviation) = 4.48 dari the lowestvalue (minimum) = 0 dan the highestvalue (maximum) = 15. The daughter Pull Up data, dioleh average value (mean) = 3.79 out of 44 samples with the total number of values a whole ad(sum) as much as 151.62. Forthe default value (standard deviation) = 5.43 dari the lowestvalue (minimum) = 0 s and the highestvalue (maximum) = 24.59 s. The data of the sit baring test, dioleh average value(mean) = 18.81 out of 110 samples with the total number of values of a whole ad (sum) as much as 2070. Forthe default value (standard deviation) = 7.35 dari the lowestvalue (minimum) = 1 dan the highestvalue (maximum) = 37. Vertical jump test average value(mean) = 37.3 out of 110 samples with the total number of values of a whole ad (sum) as much as 4103. For the value of the default (standard deviation) = 11.1 the lowest value (minimum) = 10 dan the highest value (maximum) = 66.

The results of the physical fitness level test study obtained in students of State Junior High School 2 Situjuh, it appeared that of 110 student samples turned out to have a

**Table 1.** Summary of Descriptive Analysis Results of Data on Physical Fitness Level of Adolescent Students SMP Negeri 2 Situjuah

	Run 50m (seconds)	Men's 1000m run (min)	Women's 800m run (min)	Pull Up Men (score)	Pull Up Princess (seconds)	Sit Up (skor)	Vertical Jump (score)
<b>N</b>	110	66	44	66	44	110	110
<b>Mean</b>	9,05	7,12	7,59	5,28	3,79	18,81	37,3
<b>SD</b>	1,65	1,65	1,87	4,48	5,43	7,35	11,1
<b>Min</b>	6,44	4,25	3,7	0	0	1	10
<b>Max</b>	13,34	10,07	11,33	15	24,59	37	66
<b>Sum</b>	896,76	463,22	334,2	301,2	151,62	2070	4103

good classification of 3 people (2.72%), moderate classification as manyas 26 people (23.63%), classification less as manyas 63 people (57.27%), classification as many as 18 people (16.36%) and no students who have classifika That's so nice (Table 1).

Results of Data Analysis Percentage of Physical Fitness Level of State Junior High School Students 2 Situjuah. The results that have been obtained in research on physical freshness tests consisting of running 50 m, running 1000 m for men running jarak 800 m for women, hanging body lifts (pullups) for men, hanging bent elbows for women, sitting baring (sit up) and vertical jumping (vertical jump) in junior high school students 2 Situjuah Poured in the form of percentages to get the frequency category of each variable obtained.

Based on the results above obtained results from junior high school students 2 Sutu-juah from 110 samples, many students whose physical fitness in the classification is less with the number of students 63 people with a percentage of 57.27% and there are no students in the classification either.

Various studies convince, that the function and meaning of the body in an effort to support the growth and development of children of age is no doubt. Sesuai with the function of physical fitness as revealed by (Ismayarti 2008) which states that "the function of physical fitness is to develop the ability and ability of every human being who is useful to increase the power of work". So many parents today strive to include their children in various sports activities, be it with the aim to provide positive activities to fill their free time, support the process of growth, health, or even to obtain higher goals, namely achievement. However, what must be realized is that sports in every concept of goodness also store adverse potential, of course if not done properly. For this reason, there is a need for systematic steps from sports activities.

The intended systematic measures include planning, implementing, and also evaluating the results of activities. Proper planning in accordance with the goals and rules of sports is the first step of successful efforts to achieve sports goals. Consistent implementation and adhere to the principles of practice are also key factors of achieving sports goals.

This seems to be the evidence in this study. From the results of field research conducted as well as some of the results of studies, showed that the object of the study (TKJI test instrument 13–15 years). Categories by distinguishing also the gender of the male and female categories. TKJI is a battery test in the method of discussion and simulation of samples given the following material: 1. Sprints or sprints aim to measure speed. The distance categories that must be traveled by each age group are different. 2. PullUps, pull ups aim to measure the strength of the arm and shoulder muscles. For the assessment of the age group 13–15 years do pull-ups as long as 60 seconds with the assessment. 3. Sit-Ups, sit-ups aim to measure the strength and endurance of the abdominal muscles. The age group of 13–15 years do for 60 s. 4. Vertical Jump, ticeis aimed at measuring the explosiveness of the limb muscles. The size of the board is 30 cm wide and 150 cm long, where the distance between the lines of each and the other is 1 cm each. The board is sometimes affixed to the wall with a distance of zero (0) with a floor of 150 cm. First stand sideways the board at the time by raising the hand above the height measure obtained, then do the jump as high as possible three times, each jump recorded the height obtained then take the highest, the difference between the highest achievement with the first measurement when not jumping is the result of vertical jump. 5. Medium Distance Running, Distance running is being done to measure the endurance of the lungs, heart, and blood vessels. The distance traveled depends on each age group.

After students finish simulating physical fitness tests in a way part becomes a tester and partly becomes a sample. For criteria fitness category we must sum all the values of the five test items then match the norm.

Thus, after completing the activity and matching the value of the five test items to the norm, it was obtained as a result of physical fitness tests obtained in students of State Junior High School 2 Situjuah, it appears that from 110 samples of ternyata students who have a good classification of 3 people with a percentage (2.72%), moderate classification as many as 26 people with percentage (23.63%), Classification is less than 63 people with a percentage (57.27%), classification is less once as many as 18 people with a percentage (16.36%) and no students who have a good classification at all.

## 4 Conclusions

Based on the results of the data description on students of State Junior High School 2 Situjuah from 110 samples, which has a good classification of 3 people with a percentage (2.72%), a moderate classification of 26 people with a percentage (23.63%), a classification of less than 63 people with a percentage (57.27%), a classification of less once as many as 18 people with a percentage (16.36%) and none of the students had a good classification at all.

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