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Physical Fitness Level of Physical Education Students of Dehasen University Bengkulu

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ABSTRACT

This study aims to determine the level of physical fitness possessed by physical education students at Dehasen University, Bengkulu. This study is a quantitative descriptive study using a survey method. The sampling technique used in this study is random sampling, which is a technique for taking samples from a population randomly and using the principle of probability in determining the sample elements. The subjects in this study were 249 students of the Physical Education Department, Dehasen University, Bengkulu, semester 3, class of 2023, and in determining the sample using the Slovin formula with an error rate of 20% which then got a result of 10.96 which was then rounded up to 11 samples. This study is a quantitative descriptive study that uses a survey method. In this study, the sampling technique used is random sampling, where the research sampling technique in this study was carried out randomly and used the principle of probability in determining the sample elements. This study in its data collection technique uses tests and measurements of the Indonesian Physical Fitness Level (TKJI) aged 16-19 years. The data analysis technique uses descriptive analysis which is then expressed in the form of percentage figures. Based on the results of the research that has been done, the results of the physical fitness level of physical education students at Dehasen University, Bengkulu were obtained. The assessment was based on 5 items of the Indonesian Physical Health Test, namely 30-meter sprint, Pull-UP, Sit-UP, Vertical, and the last was medium-distance running. The results of data analysis from the measurement test based on the TKJI calculation benchmark obtained data and values which were then categorized into five categories, namely very good, good, moderate, less, and very less. Of the 11 students who received the Very Good category, there was 1 person, the Good category was 6 people, the Moderate category was 4 people, the Less category was 0 people, and the last category was the Very Less category was 0 people, and from the entire test sample, the average category was GOOD.

Keywords: TKJI, Fitness, Fitness Test

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A) Conception and design of the study;
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C) Analysis and interpretation of data;
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INTRODUCTION

Sport is one of the most popular activities for everyone, because basically sport is a necessity of life that cannot be abandoned and sport can be done by all groups because it does not look at ethnicity, religion or social status (Aprilianto & Fahrizqi 2020).Sport is a form of physical activity that is planned and structured, and involves repeated body movements and aims to improve the physical fitness of the individual who does it. If we talk about the benefits of doing sports, there are various benefits that are obtained when we do sports, one of which is that we can feel it both in the short and long term, sports are also the right strategy in forming a healthy physique (Salahudin, 2020).



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Sports means that there will be an activity related to the event of processing, namely processing the individual's body or in other words, processing the body (Faisal et al. 2017). There are several types of sports and their goals, the first of which is achievement sports where the main goal is to foster and develop athletes in a planned, tiered and sustainable manner through competition in order to achieve the best peak of achievement. Educational sports are sports carried out in schools or universities which are part of a regular and continuous educational process in obtaining knowledge, health, personality, skills, and physical fitness. Every living creature has aspects and goals that are aspired to, in achieving these goals there can be various processes that can be achieved in a short time or require a relatively long time, depending on how much effort is made by the individual and what struggles have been made. Especially in a process to improve ability, guality, strength, or physical condition as well as endurance and flexibility. Education is a conscious and planned effort in an effort to create a pleasant teaching and learning atmosphere, so that in the process it makes students actively develop the potential that exists within themselves. High quality education is the main requirement in realizing a more advanced, modern and prosperous nation civilization. History says that the development of an advanced, modern, prosperous and prosperous nation is a nation that has a quality education system (Iswanto, 2021).

Physical education or abbreviated as penjas is a teaching and learning process through a systematic organized physical activity in an effort to improve children's health and physical fitness. Such as developing motor skills and abilities, knowledge and healthy and active living behavior, sportsmanship and emotional intelligence. Penjas aims to teach basic movement skills, strategies and basic techniques of games/sports, and also introduce the values of honesty, sportsmanship, cooperation between friends and encourage healthy lifestyle habits in children where the learning process is not only based on theory in the classroom, but involves intellectual, emotional, mental, social elements, and of course the main one is physical activity. It is hoped that with this physical education (penjas), students can gain an experience that has positive values in it, both in terms of skilled, creative, innovative personal expression, and also improving and maintaining physical fitness and understanding of human body movements (Hanafi 2023).

In essence, in general the purpose of this physical fitness test is to see the level of physical fitness of a person by measuring it. However, in each region or country there are different interpretations and needs for physical fitness, for Indonesia itself there are guidelines for measuring a person's level of physical fitness. The Indonesian physical fitness test (TKJI) is a standard test used to measure the level of physical fitness of Indonesians. The test was created because the physical condition of Indonesian people is not the same as other countries. Therefore, to meet the need for a picture of the level of physical fitness of Indonesians, the Indonesian physical fitness test was created (Endang 2019).

LITERATURE REVIEW

Physical fitnessor physical fitness is an individual's body ability to carry out its functions in daily activities or activities. One individual with another has a different level of physical fitness and can be developed through various activities and physical exercises. However, physical fitness is not only having the ability to carry out daily

activities well, but also having the ability and physical and mental endurance that is sufficient to enjoy free time and be able to face various challenges in the future, because basically physical fitness is a condition that is very much dreamed of by every individual (Darmawan 2017).

Prativi et al., (2013) Physical activities such as doing sports activities can greatly affect human physical fitness, especially since these activities do provide direct contributions to the physical fitness components of a person who is doing them. There are several factors that can affect an individual's physical fitness, including gender, genetics, age, body mass index, exercise, and what physical activity is done.

For Physical Education Students, almost every day they have to attend lectures on campus, either in the form of field practice or theory in class. For that, in addition to being required to have good talents and interests, physical education students must also have adequate physical fitness and have prime health, because basically physical fitness is the ability to carry out daily activities without feeling excessively tired (Mahfud et al. 2020).

METHODS

In this study, a survey research type was used with a quantitative descriptive approach with data collection techniques using physical fitness measurement tests. Quantitative research is a type of research that can be used to research a particular population or sample and data collection using research instruments with the aim of testing the hypothesis (Ho) that has been set (Arif Rachman (2024). The variables in this study are physical fitness levels. Physical fitness itself is the ability of an individual to perform an activity within a certain time without feeling excessive fatigue, so that the individual still has energy reserves to perform other daily activities. The Indonesian Physical Fitness Test (TKJI) for the age range of 16-19 years which has been standardized consists of 5 test items including: 30-meter sprint, Pull-UP or hanging elbow bend 60 seconds, Sit-UP 60 seconds, Vertical Jump, medium distance running 1200 meters for men and 1000m for women.

The population in this study were 249 students of the Physical Education Department of Dehasen University of Bengkulu, semester 3, class of 2023, and in determining the sample using the Slovin formula with an error rate of 20% which then got a result of 10.96 which was then rounded up to 11 samples. The sample used was 30 people and the sampling technique used simple random sampling. The use of valid test instruments is one of the crucial factors in conducting research. With reliable instruments, the data collected will be more objective, valid, and reliable. To determine the level of physical fitness according to the TKJI norms with an age range of 16-19 years, data analysis used a quantitative descriptive method by calculating the percentage. In addition, the attendance steps for each test item that have been achieved by participants who took the test will be recorded as rough results. The level of physical fitness of students cannot be assessed directly based on the achievements that have been achieved, because the units used in each test item are not the same, namely: a) For the 30-meter sprint test item using the time unit (minutes and seconds), b) For Pull-UP and Sit-up using the unit of measurement of the number of repetitions of the movement, c) For the Vertical Jump test item using the unit of measurement of distance (centimeters). The TKJI values for adolescents aged 16-19 are as follows:

Tat	le 1. 30-meter sprint test				
16 to					
(30-mete	Mark				
Son	Daughter				
sd - 7.2 seconds	sd - 8.4 seconds	5			
7.3 - 8.3 seconds	3.3 seconds 8.5 - 9.8 seconds				
8.4 - 9.6 seconds	9.9 - 11.4 seconds	3 2			
9.7 - 11.0 seconds	conds 11.5 - 13.4 seconds				
11.1 - etc.	11.1 - etc. 13.5 - etc.				
	Table 2. Pull-UP Test				
	19 years UP Test)	Mark			
Son		Mark			
	Daughter > 40 seconds				
> 19 14 -18	> 40 seconds 20 - 39 seconds	5			
9 - 13	8 - 19 seconds	4			
9 - 15 5 - 8	2 - 7 seconds	3 2			
< 4	< 2 seconds	1			
		I			
16 to	Table 3. Sit-up Test				
	16 to 19 years (Sit-up Test)				
Son	Daughter				
> 41	sd - 8.4 seconds	5			
30 - 40 times	8.5 - 9.8 seconds	4			
21 - 29 times	9.9 - 11.4 seconds	3			
10 - 20 times	11.5 - 13.4 seconds	2			
< 9 times	13.5 - etc.	1			
	Table 4				
	Vertical Jump				
	19 years cal Jump)	Mark			
Son	Daughter				
> 73 cm	> 50 cm	5			
60 - 72 cm	39 - 49 cm	4			
50 - 59 cm	31 - 38 cm	3			
39 - 49 cm	23 - 30 cm	2			
< 39 cm	< 23 cm	1			
Table 5	Middle Distance Running Test				
16 to	Mark				
(Medium Dista					
Son	Daughter	5			
up to 3'14"					
3'15" - 4'25"					
4'26" - 5'12"					
	5'13" - 6'33" 5'59" - 7'23"				
< 6'33"	< 7'23"	1			

To classify a person's physical fitness test results, it is necessary to add up the values categorized into five aspects that are measured. The categories are as follows:

Table 6. Fitness Test Classification Table					
No	Total Value	Classification			
1	22 - 25	Very Good (BS)			
2	18 - 21	Good (B)			
3	14 - 17	Medium (S)			
4	10 - 13	Less (K)			
5	5 - 9	Less than once (KS)			

Source: (Endang 2019)

RESULTS AND DISCUSSION

The purpose of this study was to determine the level of physical fitness of Physical Education Students of Dehasen University, Bengkulu. From the results of the research data obtained, the level of physical fitness of Physical Education Students of Dehasen University, Bengkulu was based on 5 items of the Indonesian Physical Health Test, namely 30-meter sprint, Pull-UP, Sit-UP, Vertical, and the last was medium-distance running. The results of data analysis from the measurement test based on the TKJI calculation benchmark obtained data and values which were then categorized into five categories, namely very good, good, moderate, lacking, and very lacking.

The following is the distribution of the Physical Fitness Level scores for Physical Education Students at the University of Dehasen Bengkulu is as follows:

NO	NAMA	SKOR					JUMLAH	КЕТ
		LARI CEPAT 30 METER	Pull-UP	Sit-UP	Vertical Jump	LARI JARAK SEDANG		KL1
1	PAS	4	3	3	5	4	19	BAIK
2	MD F	3	3	3	4	2	15	SEDANG
3	AAI	3	4	4	3	4	18	BAIK
4	IAR	4	3	3	3	4	17	SEDANG
5	MD R R	4	4	4	3	3	18	BAIK
6	EJ	5	5	3	4	4	21	BAIK
7	LS	3	3	4	3	2	15	SEDANG
8	BDG	4	3	5	4	4	20	BAIK
9	YR	4	5	4	5	4	22	BAIK SEKALI
10	MD P A	4	5	4	5	3	21	BAIK
11	G A	4	3	3	4	3	17	SEDANG

Table 7. Physical Fitness Score of Physical Education Students of Dehasen University, Bengkulu

Based on the table above, it can be explained that from 11 students whose names were disguised by the researcher in an effort to maintain the privacy of the sample. From the tests that have been carried out, students who received the Very Good score category were 1 person, the Good score category were 6 people, the Moderate score category were 4 people, the Less score category were 0 people, and the last category was the Very Less score category were 0 people, and from the entire test sample, the average score category was GOOD. When displayed in the form of a bar chart, it can be seen in the image below:

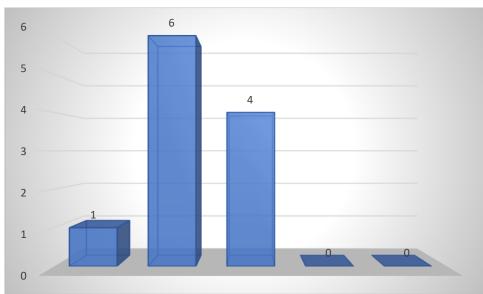


Figure 1. Physical Fitness Diagram of Physical Education Students of Dehasen University, Bengkulu

DISCUSSION

From the research data above, we can see that based on the results of the research that has been done, it is known that the results of the physical fitness level of Physical Education Students at Dehasen University, Bengkulu obtained an average score of 18 or entered the GOOD category. The cause of the results of the physical fitness test which has a moderate level depends on what activities are carried out by the individual, although the physical activity of these physical education students cannot be separated from sports activities in their learning process, this is not enough to improve the physical fitness of these students into the Very Good category. Moreover, these 3rd semester students have only been involved in sports activities for 1 and a half years with their backgrounds, not all of whom are athletes. The higher the frequency of physical activity, the better a person's physical fitness will be. Although they do physical activities or exercises during practical courses, this is considered still lacking in supporting the physical fitness of the students concerned. Therefore, it is recommended to do additional sports activities or physical exercises outside of lecture hours as much as 3-5 times a week. It is hoped that this can help improve the physical fitness of the students concerned significantly. In addition, students can also choose the Student Activity Unit (UKM) for sports that they like, so that they can carry out these activities and gain experience and motivate themselves to take part in various sports competitions.

CONCLUSION

Having good physical fitness is very important and beneficial especially for Physical Education Students of Dehasen University Bengkulu. In addition to having benefits in terms of physical fitness, these activities are also useful in building muscle strength and endurance, which can support performance in both sports and non-sports activities, increasing aerobic, anaerobic and flexibility endurance, as well as increasing life passion and reducing stress. There are several other factors that can affect physical fitness including body mass index, and smoking (Alfarisi 2013).

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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