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Physical Fitness of PJKR STKIP YPUP Makassar Students Using the Harvard Step Test Method

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ABSTRACT

The purpose of this study was to determine the level of physical fitness of PJKR STKIP YPUP Makassar students who were registered in the even semester of the 2022–2023 academic year. The Harvard Step Test is an instrument used in this study. The implementation is carried out for 5 minutes by going up and down the bench to a height of 50 cm (for men) and 42 cm (for women). Based on the research findings, out of 50 sixth semester students at STKIP YPUP Makassar, 30 people fall into the "Enough" group (70%), and 20 people fall into the "Medium" category (30%). This indicates that the physical health of Semester VI STKIP YPUP Makassar Students for the 2022–2023 Academic Year is still unsatisfactory.

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INTRODUCTION

Everyone has different activities in their lives every day. These activities can be in the form of fulfilling the necessities of life, working, playing, exercising, or channelling passion. The dense activities carried out by humans must, of course, be supported by qualified physical fitness accompanied by a good diet. This becomes very important in order to achieve goals or ideals in life. Likewise for a student whose activities are not only limited to studying on campus, especially for students majoring in physical education whose daily activities in carrying out lectures are not only carried out in class but must carry out various practical courses consisting of various sports. Of course, these various activities must be supported by good physical fitness.

Physical education is obliged to improve the body and soul, which affect all aspects of the daily life of a person or the whole person (Syafruddin et al., 2022). All human activities always require physical support. Physical ability is a basic factor in every human activity.



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Therefore, to carry out every daily activity, individuals must at least have the physical ability to always support these activities. In carrying out daily life, everyone will not be separated from physical fitness, because physical fitness is a very important factor in carrying out daily life. Whether physical fitness is closely related to a person's health condition or not.

Fitness status can be assessed using fitness components, which are grouped into two groups: 1) health-related fitness components, including cardio-pulmonary endurance, muscle strength and endurance, flexibility, and body composition. 2). Components of freshness related to skills include speed, coordination, power, and agility (Sudiana, 2014).

The definition of physical fitness is a person's ability to do daily work efficiently without excessive fatigue so that he can still enjoy his free time. Fox (1987:6) in Paiman (2022) states that physical fitness is seen as a physiological aspect, namely the functional capacity to improve the quality of life. The definition of fitness according to Fox above can be understood as overall fitness (total fitness), while physical fitness (physical fitness) is part of overall fitness.

Physical fitness is essentially related to a person's physical abilities and abilities to carry out their daily tasks efficiently and effectively in a relatively long time without causing significant fatigue and still having reserves to carry out other activities. Physical fitness has many positive benefits for one's health and quality of life. Here are some of the main benefits of physical fitness: Heart health, Mental health, Muscle strength and fitness, Weight control, Bone and joint health, Better sleep quality, and Increased energy According to Wiarto (2013), Hasanuddin (2020) says that the benefits of physical fitness training are to improve and maintain a person's degree of physical fitness. Therefore, it is important for every individual to maintain physical fitness by doing physical activity regularly and according to their individual abilities. Physical fitness is an important aspect needed by humans to carry out their daily activities. Physical fitness can be obtained by getting used to a healthy lifestyle, such as doing regular physical activity.

Physical fitness is an excellent physical condition that is able to carry out every daily activity in the form of work, assignments, and daily routines effectively and without feeling tired, which affects him after carrying out activities on that day, so that he still has more strength for the work that takes place suddenly or additional activities. Fitness level is defined as a measure of a person's ability to perform daily activities. The higher a person's fitness level, the better their ability to carry out activities, especially in terms of physical strength or stamina. A person with good physical fitness will have success in various activities in life (Hasruddin, Jusran S., and Sitti Maifa, 2022).

The success of achieving physical fitness is largely determined by the quality of the exercise, which includes the purpose of the exercise, the selection of the exercise model, the use of training facilities, and more importantly, the dose or doses of exercise, which are described in the concept of FIT (frequency, Intensity, and Time) (Iswadi, 2019).

We often compare the ability of various people to perform tasks with other people in everyday life. For example, some people look normal while others seem quite tired climbing the stairs in a building with their friends. Each person's level of physical fitness has an impact on this. People who exercise regularly will develop higher strength reserves than those who rarely exercise because their bodies will adapt or get used to it. People who exercise regularly also have healthy hearts and have lower blood pressure than those who rarely exercise.

In this study, we will look at how the Harvard test technique is used to determine physical fitness standards. The Harvard test is used to measure our body's capacity for a certain task. This test evaluates fitness and the ability to recover from strenuous activities to estimate the body's work capacity index.

In this book, the Harvard Step Test was created with the aim of measuring the general capacity of the body to adapt to a load and the recovery from fatigue after the load. The Harvard Step Test is a procedure used to measure the physical fitness index by going up and down a bench with a size of 47 centimetres for men and 40 centimetres for women for 5 minutes according to the rhythm of the metronome and categorising the level of physical fitness into less, moderate, and good abilities. Students investigate the effect of activity on cardiac performance and physiological changes by carrying out a fitness test (the Harvard Step Test) to determine the ability of their physical performance by measuring heart rate using levels of physical fitness. To determine our body's ability to carry out an activity, the Harvard test is carried out. This test aims to determine the index of the body's ability to do work; here we assess fitness and the ability to recover from hard work (Saputra et al., 2019).

The researchers' observations revealed that Semester VI Physical Education students at STKIP YPUP Makassar had varying levels of physical fitness. Because the activities of semester VI students vary, some take part in sports every day and some don't do it at all. Researchers are interested in researching the "Physical Fitness Study Using the Harvard Step Test Method for Physical Education Students for the 2022-2023 Academic Year at STKIP YPUP Makassar" because the level of physical fitness of Physical Education students for the 2022-2023 Academic Year at STKIP YPUP Makassar is unknown.

MATERIALS AND METHODS

The study in question is about the Physical Fitness Study Using the Harvard Step Test Method for PJKR Students Semester VI STKIP YPUP Makassar for the Academic Year 2022-2023, according to the problems and research objectives previously mentioned. This type of research uses quantitative methods for descriptive analysis in the field. Descriptive writing doesn't test hypotheses; it just describes an ongoing scenario. The Harvard Step Test is a test used as a procedure. Descriptive research, as stated by H. Iskandar (2010: 61), is research that provides an overview of the phenomenon or symptoms studied by detailing the legal formalities regarding the value of independent variables, both one-variable (independent) and multiples.

RESULTS AND DISCUSSION

To determine the fitness level of PJKR STKIP YPUP Makassar students for the 2022–2023 academic year, this study used tests and measurements of physical fitness (Harvard Step Test). Descriptive analysis of percentages is a data analysis method used to assess the data in this study. The percentage of physical education students who fall into the very good, good, fair, moderate, and bad categories is the result of research calculations.

Research findings can be confirmed by the collected and statistically evaluated data that has been obtained. The collection technique is to use a test. A descriptive analysis of percentages was used to test the data in this study, and the percentage of physical education students in semester VI of PJKR STKIP YPUP Makassar for the 2022–2023 academic year who were in the Very Good, Good, Fair, Moderate, and Poor categories was used to calculate the research results. The results of the physical fitness measurement test for PJKR STKIP YPUP Makassar students in semester VI of the 2022-2023 Academic Year using the Harvard step test method are as follows.

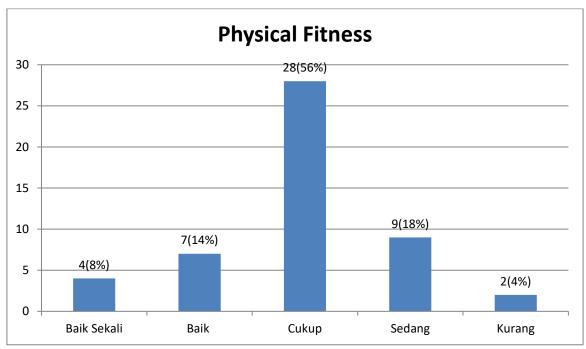


Figure 1. Graph of Physical Fitness Data for PJKR STKIP YPUP Makassar Students, Semester VI Academic Year 2022-2023

Table 1. Physical Fitness Test Results for PJKR STKIP YPUP Makassar Students for the 2022–2023 Academic Year

Category	Range	Frekuensi	Persentase (%)
Very well	> 90	4	8
Good	80-89	7	14
Enough	65-79	28	56
Currently	55-64	9	18
Not enough	< 54	2	4
Total		50	100

From the table above, it can be concluded that the Harvard Step Test assessment of 50 PJKR STKIP YPUP Makassar students for the 2022-2023 Academic Year, namely: 4 students have good category physical fitness (8%), 7 people in the good category (14%), 28 people in the moderate category (56%), 9 people in the moderate category (18%), and 2 people in the less category (4%),

The level of physical fitness of these students can be caused by several factors. According to the manual for measuring physical fitness (Ministry of Health, RI), factors that influence physical fitness include genetics, age, gender, physical activity, and smoking habits. From the several factors above, it can be concluded that the factors that affect a person's physical fitness level include Age, Gender, Genetics, Food, Physical Activity, and Smoking Habits (Mas'udin, 2018).

While the factors that affect physical fitness according to Wiarto (2015: 59) are (1) Age, children's physical fitness increases until it reaches a maximum at the age of 25–30 years, then there will be a decrease in the functional capacity of the whole body, approximately 0.8%–1% per year, but if we are diligent in exercising, this decrease can be reduced by half. (2) Gender. Until puberty, boys' physical fitness is usually almost the same as girls', but after puberty, boys usually have a greater value. (3) Genetics, Genetics affect the capacity of the heart and lungs, body posture, obesity, haemoglobin in blood cells, and muscle fibres. (4) Food, High endurance when consuming carbohydrate levels (60%–70%).

A high-protein diet is mainly for building muscles and for sports that require great muscle strength.

According to Roji (Parmo 2014: 9), Balanced and sufficient nutrition is needed to achieve a good degree of physical fitness; therefore, the consumption of nutritious food must be carried out according to the needs of each individual. Foods that contain balanced nutrition are those that contain substances such as proteins, carbohydrates, vitamins, fats, and minerals. (5) Cigarettes and inhaled CO levels will reduce the VO2 value, which has an effect on endurance. Besides that, according to Perkins and Sexton's research, existing nicotine can increase energy expenditure and reduce appetite. (6) Exercise. Exercise is one of the most effective and safe alternatives to gaining fitness. Sport has multiple benefits, namely: it can improve physical fitness, make people resistant to stress, increase self-confidence, have many colleagues, establish communication with other people or add to relationships, work with others, and respect yourself and others. For students themselves, having good physical fitness can certainly support all their activities in daily life, whether it's following the lecture process, doing assignments, or other activities. So that indirectly, good physical fitness can also increase motivation in lectures.

CONCLUSION

After analyzing research data regarding the physical fitness of PJKR STKIP YPUP Makassar students in semester VI of the 202-2023 academic year using the Harvard Step Test method, it can be concluded that the physical fitness condition of semester VI students of PJKR STKIP YPUP Makassar is adequate. From the tests that have been carried out, it turns out that for the fitness condition of the sixth semester students of PJKR STKIP YPUP Makassar for the 2022-2023 academic year, 4 people get the very good category (8%), 7 people get the good category (14%), 28 people get the enough category (56%), 9 people get the moderate category (18%), and 2 people get the less category (4%). Enough (70%), and 20 people get into the moderate category (30%). And it can be said that the physical fitness of PJKR STKIP YPUP Makassar Semester VI students in 2022–2023 is still not optimal.

CONFLICT OF INTEREST

There are no conflicts of interest in this article.

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