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Survei Kebugaran Jasmani UKM Bola Voli Putra Mahasiswa STOK Bina Guna 2025

Physical Fitness Survey of Men's Volleyball Student Activity Unit STOK Bina Guna 2025

Mikael Tarigan¹, Mhd Adib Pidanto², Mhd Wisnu Ardhana³, Muhammad Abizan Hakim⁴,
Maulida Turahmah⁵, Mhd. Alvin Syahri⁶

{tariganmikael15@gmail.com¹, muhammadadib326@gmail.com²,
Bonirinsiswanto@gmail.com³, abizan.id@gmail.com⁴, turahmahm@gmail.com⁵,
muhammadalvin161104@gmail.com⁶}

Sekolah Tinggi Olahraga dan Kesehatan Bina Guna, Jl. Alumunium Raya No.77, Tj. Mulia
Hilir, Kec. Medan Deli, Kota Medan, Sumatera Utara¹; Sekolah Tinggi Olahraga dan
Kesehatan Bina Guna, Jl. Alumunium Raya No.77, Tj. Mulia Hilir, Kec. Medan Deli, Kota
Medan, Sumatera Utara²; Sekolah Tinggi Olahraga dan Kesehatan Bina Guna, Jl. Alumunium
Raya No.77, Tj. Mulia Hilir, Kec. Medan Deli, Kota Medan, Sumatera Utara³; Sekolah Tinggi
Olahraga dan Kesehatan Bina Guna, Jl. Alumunium Raya No.77, Tj. Mulia Hilir, Kec. Medan
Deli, Kota Medan, Sumatera Utara⁴; Sekolah Tinggi Olahraga dan Kesehatan Bina Guna, Jl.
Alumunium Raya No.77, Tj. Mulia Hilir, Kec. Medan Deli, Kota Medan, Sumatera Utara⁵;
Sekolah Tinggi Olahraga dan Kesehatan Bina Guna, Jl. Alumunium Raya No.77, Tj. Mulia
Hilir, Kec. Medan Deli, Kota Medan, Sumatera Utara⁶

Abstract.Physical fitness is the ability of a person's body to do daily work without causing significant fatigue, so that the body can still cope with additional loads. Physical fitness is an important component that must be possessed by STOK BINA GUNA men's volleyball UKM students. The physical fitness test has never been conducted on STOK Bina Guna volleyball UKM students is the problem behind this study. The need for coaches to know the level of physical fitness of students because the different physical fitness conditions of UKM students require different training programs. The purpose of this study was to determine the level of physical fitness of STOK BINA GUNA men's volleyball UKM students. This research is a type of quantitative research and the analysis research used in this study is descriptive statistical analysis of percentages. The data collection technique in this study was by conducting a survey method with test and measurement techniques with the Indonesian Physical Fitness Test (TKJI) for ages 16-19 years. The population in this study were STOK BINA GUNA men's volleyball UKM students. The sampling technique in this study used purposive sampling with the consideration of men's volleyball UKM students aged 16-19 years. The total sample in this study was 8 people. Based on the

results of the research and discussion that have been discussed in the previous chapter according to the series of Indonesian physical fitness tests (TKJI) aged 16-19 years from 8 UKM students who took the physical fitness test, we can see that there are 6 STOK Bina Guna men's volleyball UKM students who are in the good category (75%) and 2 people are in the moderate category (25%), there are no UKM students who are in the very good, poor and very poor categories. Based on the percentage of physical fitness above, it can be concluded that STOK Bina Guna football UKM students generally have good physical fitness.

Keywords: Physical Fitness

1 Introduction

Sports are a systematic process consisting of every activity and effort that can help develop or foster the physical and spiritual potentials of a person as an individual, or a member of society. Sports can be in the form of games, matches, and peak achievements in the formation of humans who have a complete and quality ideology based on the state ideology and Pancasila (Toho Cholik Mutohir). Sports are a learning process in developing the potential that exists in oneself or self-abilities that are developed systematically and in the long term to achieve the goal of improving the quality of human resources, especially in Indonesia. Giriwijoyo (2005:30) also said that sports are a series of regular and planned physical movements that people do consciously to improve their functional abilities. Then sports are also activities to train a person's body both physically and spiritually. The more often we exercise, the healthier our bodies will be. In addition, it can also make our bodies less susceptible to various diseases and other health disorders. Sports are one form of effort to improve the quality of Indonesian people which is directed at the formation of character and personality, high discipline and sportsmanship, and increasing achievements that can arouse a sense of national pride. The government has planned a determination, namely to popularize sports and make the community sporty. This is intended so that the community likes sports and can create a strong development force. The definition of sports according to Husdarta (2011:13) states that "sports are energetic muscle activities and in these activities UKM students demonstrate their movement abilities or performance.

Sports are basically physical activities that are used as a medium to achieve overall individual development. However, the acquisition of skills and other physical developments are also goals. Through sports, students are socialized into physical activities including sports skills. Therefore, it is not surprising that many believe and say that sports are part of comprehensive education, and at the same time have strategic potential to educate. Sports are a human need that is a basic element and is very influential in the formation of a strong soul (spiritual) and body (body and body) (Pardilla, 2021). As with the motto of Ancient Greece which reads: *orandum est ut sit, mens sana in corpore sano* which means, "May it be, in a strong body, body, body resides a healthy soul". So that every human being who often does sports will have better physical and spiritual health than humans who rarely or do not do sports at all. Volleyball is one of the branches of a large ball game played by two teams and each team consists of each team consisting of 6 people. Which is played on a rectangular field measuring 18 m x 9 m. This game is a type of indirect box game, because each team plays on its own field and is limited by a net with a height of 2.43 m for men and 2.24 m for women. The ball used in the game must be made

of soft (flexible) material, round and made of rubber or similar material inside (Yunus, 1992). Volleyball is a fun sport because it can adapt to various conditions that may arise in it, can be played with a varying number of players such as beach volleyball with 2 players, and games with 2 people that are commonly used. In the sense of fun is that it can be played and enjoyed by various ages and levels of ability, can be played on all forms of fields such as grass, wood, sand, or artificial floor surfaces, and can be done indoors or outdoors.

According to research conducted by (Suhar (3) Technique, is a movement technique and proof in practice as well as possible for a definite solution in a sport. (4) Tactics, is a strategy of reason used during a match to seek victory in a sporting manner". In college, volleyball is used as a learning activity and can be used as an extracurricular educational activity outside of lecture hours. Volleyball is one of the most popular sports among young people in West Papua, especially at STOK Bina Guna. Volleyball is one of the special courses in the physical education study program at STOK Bina Guna. There are many students who have talent and expertise in this sport, not only physical education students, even students from other study programs like this sport. (2002) stated: "There are 4 (four) basic elements that support, namely (1) Physical condition, which aims to increase students' physical abilities to peak conditions which are useful for carrying out sports activities in achieving achievements. (2) Mental, is the driving force and motivator 4 to carry out physical abilities, techniques and tactics in carrying out sports activities. Efforts to achieve maximum performance in playing volleyball are not only emphasized on mastering techniques and tactics, but also good physical condition thanks to training which is an important requirement for volleyball players. The training carried out must also be in accordance with the basic principles of training. Training must be arranged in such a way that students can develop to achieve maximum performance. One of the supporting factors and enabling players to win or play volleyball is having good physical condition and fitness.

Physical fitness is closely related to human activities in doing work and moving. Physical fitness is needed to support a person's daily activities (work) so that the work or activity is optimal. Work or activities can also affect a person's physical fitness. High physical fitness is an essential capital to complete activities enthusiastically, effectively, and efficiently, resulting in productivity, and all of that is used as an indicator of the quality of human resources that are highly expected in individuals as part of a society that is actively developing. One way to improve physical fitness is through sports that are carried out regularly, measurably, programmed, systematically and always increasing. Physical condition development through sports is the foundation for improving physical fitness, so that they can do activities well. A person who has good physical fitness will avoid the possibility of injury when doing physical activities or heavier sports. Developing a person's physical fitness through sports activities aims to improve a person's physical condition and endurance so that they are able to follow learning activities well. A person who has a high degree of physical fitness will support their learning activities and improve performance and be able to do other physical activities. To obtain good physical fitness, physical exercise is needed with regular exercise frequency. However, in reality, volleyball courses are still very lacking if they only follow lecture hours, which are 2 credits (2x45 minutes) each week for 1 semester. Therefore, a Student Activity Unit (UKM) STOK Bina Guna was formed.

This volleyball UKM is a place for students who are interested in the field of volleyball, the purpose of UKM activities in general is to develop student talents according to their interests, develop potential, skills and knowledge in volleyball for students, and also have the aim of improving the achievements of the sport itself. In volleyball UKM activities, students are expected to have a good level of physical fitness, because in volleyball every limb must be

moved maximally. The components of physical fitness, both those related to health such as heart and lung endurance, body composition, muscle strength, muscle endurance, flexibility, and physical fitness related to skills such as speed, explosive power, and agility will be interrelated to support student performance while on the field. The training method used in the STOK Bina Guna volleyball UKM is still focused on techniques and tactics, but physical fitness tests have never been carried out on students. It is necessary for coaches to know the level of physical fitness because different physical fitness conditions of students require different training programs. Training that aims to improve physical fitness is very necessary because physical fitness is the basis for volleyball UKM students to be able to carry out training and matches optimally. Physical training is a very important component in volleyball, because with good physical fitness students will not experience significant fatigue when competing. Seeing the conditions that a coach must be able to measure the level of physical fitness possessed by his students. It is hoped that by knowing the level of physical fitness possessed by students, the coach can determine the right training program. Referring to the explanation above that physical fitness is an important part of the sport of volleyball, the author wants to conduct research on the level of physical fitness of men's volleyball UKM students STOK Bina Guna. Thus, a coach must be able to measure the level of physical fitness possessed by his students. It is hoped that by knowing the level of physical fitness possessed by students, the coach can determine the right training program. Referring to the explanation above that physical fitness is an important part of the sport of volleyball, the author wants to conduct research on the level of physical fitness of male volleyball UKM students at STOK Bina Guna.

2 Method

The method used in this study is a survey test. Surveys are part of a descriptive study that aims to find a position or status, phenomenon (symptoms) and find similarities in status by comparing standards that have been determined by Suharsimi Arikunto (2006:90). The data collection technique in this study is by conducting a survey method with test and measurement techniques. The type of this research is Quantitative Research, and the Analysis Research used in this study is descriptive percentage statistical analysis, namely descriptive percentage statistical analysis in this study is used to describe physical fitness test data on STOK Bina Guna volleyball UKM students. The research variable is anything in any form that is determined by the researcher to be studied so that information about it is obtained, then conclusions are drawn. Sugiono (2016:38)

The variable in this study is the level of physical fitness of STOK Bina Guna men's volleyball UKM students. According to (Sunarno, 2011), data collection is a systematic and standard procedure carried out to obtain the data needed in a study. The data collection technique in this study uses test and measurement techniques. Tests and measurements were conducted at one time with the assistance of several friends to help smooth the data collection process.

The test was conducted in stages at each post that had been provided. Before taking the test, UKM students had to warm up first and were given instructions on how to do the test. In this study, the Indonesian Physical Fitness Test for children aged 16-19 years was used as a data collection tool or research instrument, (Rekreasi, 2000), namely: (1) 60-meter run, (2) Hanging body lift 60 seconds, (3) Lying sitting 60 seconds, (4) Upright jump, (5) 1200-meter run.

Data analysis techniques in quantitative research use statistics. There are two types of statistics used for data analysis in research, namely descriptive statistics and inferential statistics, in this study the author uses descriptive statistical analysis. Descriptive statistics are statistics used to

analyze data by describing or depicting data that has been collected as it is without intending to make conclusions that apply to the general public or generalizations. In this study, it was used to describe physical fitness test data on male volleyball UKM students STOK Bina Guna with the following steps:

- a) Calculating the test scores from each test in the Indonesian Physical Fitness Test (TKJI) for ages 16-19 years
- b) Categorizing the level of physical fitness of each student
- c) Calculating the percentage with the formula:

Description:

P = Percentage

F = Frequency

3 Result

The results of the physical fitness test of STOK Bina Guna men's volleyball UKM students on April 24, 2021. The purpose of this study was to determine the physical fitness of 8 STOK Bina Guna men's volleyball UKM students in 2021. This study uses tests and measurements of the 5 physical components contained in the Indonesian physical fitness test for ages 16-19 years, which are used to support the physical abilities of STOK Bina Guna men's volleyball UKM students. The data analysis technique used to fill in the data and this study uses descriptive percentages, where the results of this study are calculated in the percentage of players who are included in the categories of very good, good, moderate, less, and very less. Based on research from each series of tests, the following data was obtained:

Speed Test

Based on the 60 meter running test, the following data results were obtained:

Table 1 60 meter run

No	Criteria	Frequency	Percentage
1	Very well	3	37,5%
2	Good	1	12,5%
3	Currently	1	12,5%
4	Not enough	3	37.5%
5	Less than once	0	0%
Amount		8	100%

From the table above, it can be seen the frequency of the 60-meter running test of male volleyball UKM students STOK Bina Guna. Students who are included in the very good category are 3 students (37.5%), the good category is 1 student (12.5%), the moderate category is 1 student (12.5%), the less category is 3 students (37.5%). There are no students who are included in the very less category. 2. Arm muscle strength and endurance test Based on the body lifting hanging test (Pull Up) for 60 seconds, the following data results were obtained:

Table 2 Body lifting hanging test

No	Criteria	Frekuensi	Prosentase
1	Very well	0	0%
2	Good	4	50%
3	Currently	4	50%
4	Not enough	0	0%
5	Less than once	0	0%
Amount		8	100%

From the table above, it can be seen the frequency of the body lifting hanging test of male volleyball UKM students STOK Bina Guna. Students who are included in the good category are 4 students (50%), the moderate category is 4 students (50%). There are no students who are included in the very good, less and very less categories. 2. Abdominal muscle strength and endurance test Based on research conducted from the 60-second sitting lying test, the following data were obtained:

Table 3 Results of the 60-second Sitting-Lying Test

No	Criteria	Frekuensi	Prosentase
1	Very well	6	75%
2	Good	0	0%
3	Currently	2	25%
4	Not enough	0	0%
5	Less than once	0	0%
Jumlah		8	100%

From the table above, it can be seen the frequency of the 60-second sitting test of male volleyball UKM students of STOK Bina Guna. Students who fall into the very good category are 6 students (75%), the moderate category is 2 students (25%). There are no students who fall into the good, less, and very less categories.

Explosive power or explosive force test

Based on research conducted from the vertical jump test, the following data was obtained:

Table 4. Vertical Jump Test Results

No	Criteria	Frekuensi	Prosentase
1	Very well	1	12,5%
2	Good	3	37,5%
3	Currently	4	50%
4	Not enough	0	0%
5	Less than once	0	0%
Amount		8	100%

From the table above, it can be seen the frequency of the vertical jump test of male volleyball UKM students of STOK Bina Guna. Students who are included in the very good category are 1 student (12.5%), the good category is 3 students (37.5%), the moderate category is 4 students (50%). There are no students who are included in the less and very less categories.

Cardiovascular, circulatory and respiratory endurance tests

Based on research conducted from a 1200 meter running test, the following data was obtained:

Tabel 5. Hasil Tes Lari 1200 Meter

No	Criteria	Frekuensi	Prosentase
1	Very well	0	0%
2	Good	6	75%
3	Currently	2	25%
4	Not enough	0	0%
5	Less than once	0	0%
Amount		8	100%

From Table 5 above, it can be seen the frequency of the 1200-meter running test of male volleyball UKM students of STOK Bina Guna. Students who fall into the good category are 6 students (75%), the moderate category is 2 students (25%). There are no students who fall into the very good, less, and very less categories.

4 Discussion

Based on the results of the component tests of the Indonesian Physical Fitness Test, it can be seen that the speed test with a 60-meter run shows information that 3 students are in the very good category, 1 person is in the good category, 1 person is in the moderate category and 3 people are in the poor category. So it can be concluded that the speed of the STOK Bina Guna male volleyball students is still lacking so that it must be improved so that they are able to move faster. The strength and endurance test of the arm and shoulder muscles with a pull up for 60 seconds shows that 4 people are in the good category, 4 people are in the moderate category. So it can be concluded that 50% show the good category, 50% show the moderate category. It can be said that the strength and endurance of the students' arm muscles are quite good, but training must be increased so that when competing they can play optimally.

The 60-second lying test to measure the strength and endurance of the abdominal muscles obtained information that 6 students were in the very good category and 2 people were in the moderate category. From the results of the study, it can be concluded that the abdominal muscle strength of male volleyball students at STOK Bina Guna is good, but there are still some students who are in the moderate category, therefore students who are in the

moderate category must have their training increased so that they can be like other students. The vertical jump test obtained information that 1 student was in the very good category, 3 people were in the good category, 4 people were in the moderate category. From these results, it can be seen that the explosive power or explosive power of STOK Bina Guna volleyball students is 12.5% in the very good category, 37.5% in the good category, 50% in the moderate category, so training still needs to be increased so that students who are still in the moderate category can have good explosive power or explosive power.

The 12-minute running test obtained information showing that 6 people were in the good category, 2 people were in the moderate category. So it can be concluded that the endurance of the heart, blood circulation and breathing of male volleyball students of STOK Bina Guna is good, but there are still some students who are in the moderate category, so training must be increased again so that they can have endurance of the heart, blood circulation and breathing that is equal to other students.

5 Conclusion

Based on the results of the research and discussion that have been discussed in the previous chapter according to the series of Indonesian physical fitness tests (TKJI) aged 16-19 years from 8 students who took the physical fitness test, we can see that there are 6 STOK Bina Guna male volleyball UKM students who are in the good category (75%) and 2 people are in the moderate category (25%). Based on the percentage of physical fitness above, it can be concluded that STOK Bina Guna male volleyball students generally have good physical fitness.

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