

PHYSICAL CONDITION LEVEL OF VOLLEYBALL TEAM

Muhammad Fauzan¹ Mimi Yulianti²

¹²Physical education study program, Faculty of Teacher Training and Education, Riau Islamic University, Riau, Indonesia

Corresponding author. Email: mimipenjas@edu.uir.ac.id

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Abstract. The purpose of this study was to determine the level of physical condition of the Sungai Sarik Lipat Kain volleyball team. This type of research is descriptive research. The population of the entire Sungai Sarik Lipat Kain volleyball team with a population of 9 people. The sampling technique in this study was the total sampling technique. The sample in this study was the entire population, so the sample was 9 people. The instruments used in this study were leg dynamometer, hand dynamometer, back dynamometer, pull-up, wall squat, 15-minute run (VO2 Max). Then the data was processed statistically, with a percentage formula and referring to the assessment norms. Based on the results of the study, it can be concluded that the physical condition of the Sungai Sarik Lipat Kain volleyball team is in the less category with a percentage of 58.33%.

Keywords: Physical Condition; Level Vo2max; Volleyball



INTRODUCTION

Sports are physical activities that are done to get a healthy and strong body, the activity itself tends to be fun and entertaining. The word sport comes from the original Indonesian language, not the same as sport. Sport means cultivating or perfecting the body or perfecting the body or physique. Looking at the objectives, sports are divided into three parts, namely educational sports, achievement sports, and recreational sports. Educational sports are carried out in schools, achievement sports are carried out in sports clubs through the parent sports branch, while recreational sports are carried out only to fill free time.

All sports activities in society are based on the philosophy of the Indonesian nation regarding the National Sports System in Chapter 2, Article 4, namely (DBON 2022) Article 1 paragraph 8 states that community sports are sports carried out by the community based on hobbies and abilities that grow and develop in accordance with the conditions and cultural values of the local community which are carried out continuously for health, fitness and joy and Article 1 paragraph 9: achievement sports are sports that foster and develop athletes in a planned, systematic, integrated, tiered and sustainable manner through competition to achieve achievements with the support of sports science and technology.

In accordance with the sound of the two articles above, exercise will help maintain and improve health and fitness by training the muscles so that blood and oxygen circulation in the body becomes smooth. Therefore, sport gives effect to the body as a whole. Sport itself is said to be one of the good physical activities and beneficial for the body, mind, and soul. Doing sport regularly can maintain fitness, mental well-being, and social interaction to be better.

According to Pangestu, Parwata, & Wijaya as quoted by (Yulianti, Ningsih, and Dhona 2024) Sports have an essential role in everyday life. In this modern era, humans cannot be separated from involvement in sports activities, either to improve achievements or maintain body health. In general, sports are seen as activities carried out by individuals or groups with the aim of improving physical fitness.

One form of sport that is popular with the public is volleyball. Volleyball is a sport that is quite popular in Indonesia. This sport is played by all groups, both men and women, old and young. Volleyball is a game played in the form of team work or team cooperation,

where each team's area is limited by a net (Mawarti 2019). Each team tries to pass the ball as quickly as possible to the opponent's area, using legitimate techniques and tactics and playing the ball

Volleyball is a game played by two teams using a ball to be bounced back and forth over a net, with the intention of dropping the ball in the opponent's court area in order to win (Ariady and Yulianti 2024). Bouncing the ball into the air can use all members or parts of the body from the tip of the toes to the head with a perfect bounce. Volleyball can be played outdoors (out door) and can also be played indoors (in door). In the game of volleyball there are several basic techniques or movements, which students are still lacking in such as service techniques, passing techniques, smash techniques, and blocking techniques. In this study, one of the techniques that will be discussed is the underhand serve technique, because this technique is the initial technique in the game of volleyball.

To achieve maximum achievement and good performance in playing volleyball, physical, technical and tactical readiness is needed. Sports achievements today cannot be achieved just by exercising, but must go through a complex process (Apriani et al. 2021). Sports in the present and the future will be marked by the dominance of the role of science and technology and the occurrence of an era of globalization of information and changes that are running very fast. The application of science and technology in the world of sports is better known as sports science. Sports science is needed to develop high performance athletes, especially physical, technical, tactical and psychological.

Physical condition is a need that athletes need to achieve maximum performance. Physical condition is the most basic need for athletes that cannot be ignored, so that it is ideal (Alexander et al. 2024). Physical condition ability is an important element and becomes the foundation in developing and improving the technical, tactical/strategic and mental abilities of athletes, physical condition status can reach an optimal point if started from a young age through physical activity that is done repeatedly, continuously, periodically based on the principles and norms of training correctly and well in a structured, measurable and regular program (Sidik, Pesurnay, Paulus, and Afari 2019).

Physical condition is a physical condition of a person to face the demands of a sport in order to perform optimally. So that physical condition not only affects technique, but also on improving tactics, and the player's mentality also affects physical condition.

Which without good or perfect physical condition, technique, tactics and mentality cannot run perfectly (Hidayat and Yulianti 2023).

The aim of developing physical condition is to improve physical development in general and improve specific physical development that perfects the technique of the chosen or trained sport, so the aim of developing physical condition depends on the condition and skills of a person to improve the biomotor abilities needed to improve the achievements of the sport being pursued (Heri;(Zikri and Yulianti 2024).

METHOD

The type of research is descriptive research with a quantitative approach, according to (Kusumawati 2015) explains that this method is called a quantitative descriptive method because the research data is in the form of numbers and the analysis uses statistics. The population in this study was the Sungai Sarik Lipat Kain volleyball team. consisting of 9 people. The technique used is total sampling, namely the entire population is used as a sample. So that the sample in this study amounted to 9 people in the Sungai Sarik Lipat Kain volleyball team.

The research instrument used was a series of physical condition tests for volleyball players according to (Fernanlampir and Faruq 2015) namely tests: leg muscle strength, arm and shoulder muscle strength, waist muscle strength, arm and shoulder muscle endurance, waist muscle endurance, and general endurance (cardiovascular) to overcome fatigue caused by relatively long training loads.

RESULTS AND DISCUSSION

RESULTS

Based on data on arm and shoulder muscle strength (pull), the level of physical condition of the Sungai Sarik Lipat Kain volleyball team is 50% in the poor category, 33.33% is in the sufficient category, 16.67% is in the good category, while the level of arm and shoulder muscle strength (push) level of physical condition of the Sungai Sarik Lipat Kain volleyball team is 83.33% in the poor category, 16.67% is in the sufficient category, leg muscle strength level of physical condition of the Sungai Sarik Volleyball team Folding Kain 100% is in the poor category, waist muscle strength level of physical condition of the Sungai Sarik Lipat Kain volleyball team is 25% in the poor category, 33.33% is in the sufficient category while 41.67% is in the good category. Looking at

the results of calculations and analysis of data on arm and shoulder muscle strength, leg muscle strength, waist muscle strength, the Sungai Sarik Lipat volleyball team is not evenly distributed, whereas to achieve the desired performance, arm and shoulder muscle strength must be possessed, in order to master the technique and obtain good results.

Arm and shoulder muscle endurance in this study, the level of physical condition of the Sungai Sarik Lipat Kain volleyball team was 91.67% in the poor category, 8.33% was in the good category. Waist muscle endurance in this study was categorized as 58.33% poor, 25% adequate and 16.67% good (right leg), 50% poor, 25% adequate, 16.67% good, 8.33% very good (left leg). Arm and waist muscle endurance is local muscle endurance, without good local muscle endurance ability.

DISCUSSION

Strength is power and force, while in English power is strength, which means the ability of muscles to contract optimally. Arm muscle strength is the ability to resist resistance by contracting a group of muscles from the shoulder, base of the arm, upper arm to the palm of the hand. Volleyball players perform open spike movements using the triceps and deltoid muscles, by swinging their arms forward in a sharp dive to produce a ball with a hard and sharp glide. For this reason, volleyball players need to train their arm muscle strength. Strength can help improve components such as speed, agility and accuracy (Nasution 2015).

The general endurance (cardiovascular) level of physical condition of the Sungai Sarik Lipat Kain volleyball team, in this study was in the poor category with a percentage of 100%. Endurance is needed for the Sungai Sarik Lipat volleyball team, because volleyball matches take a long time. According to Wismiarti and Hermanzoni (2020) Endurance is one of the most important elements of physical condition, because it is the foundation or foundation for the development of other elements of physical condition.

CONCLUSIONS

The data collection process in this research is based on implementation provisions that have been analyzed first, so the results are in accordance with the plans that have been implemented. By carrying out procedures and data collection processes carefully

and carefully, the data obtained will be more objective. Based on the results of the research that has been carried out, the following research conclusions can be drawn that the level of physical condition of the Sungai Sarik Lipat Kain volleyball team is in the poor category with a percentage of 58.33%.

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