



Analysis Of The Dominant Physical Condition Of The Academy Utama Raya

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Abstract

This study aims to analyze the dominant physical condition of young players at Academy Utama Raya, with a primary focus on four physical components: speed, endurance, agility, and explosive power. The study employs a quantitative descriptive method using purposive sampling on 20 athletes aged 13–14 years. Data were collected through a series of physical tests, including the 30-meter sprint test, Illinois Agility Test, Standing Broad Jump, and Pacer Test. The results show that explosive power and speed are the two most dominant physical components among the participants, while agility and endurance fall into the moderate to low categories. These findings have important implications for coaches in designing more balanced training programs to enhance overall physical performance. The study also emphasizes the importance of early physical development to support optimal athletic growth in the future.



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INTRODUCTION

The best location to improve your soccer skills is a soccer school. There are a number of administrators who oversee the soccer school, and the coach who is responsible for guiding and teaching the children as they practice playing soccer the right way. (Candra & Kurniawan, 2020)

Since football is a team sport, a good, strong, and resilient team is one whose players can play compactly. Therefore, football is one of the sports that receives priority coaching from an early age. This will of course have an impact on the development of Indonesian football along with the rapid development of this sport (Alvian & Syafii, t.t.). Football coaching can be divided into several stages according to age level. The basic level of children's soccer is taught to children aged 6-18 years; Amateur football skills development begins at the age of 18 and above; and professional maturity begins at the age of 19 and above. For those aged 6-13, the stage of enjoying and coaching the basics of soccer takes place in the general public, elementary school, SSB, or any other place where they choose to play soccer. SSB can be referred to as a coaching forum or football association. Actually, the goal of a football school (SSB) is to accommodate students, give them opportunities, and help them develop skills (Anwar, 2013) (Fadli, 2019)

The hope in the future with good physical endurance conditions is to be able to produce players who can play with high intensity throughout the match without getting tired easily. Players who are in excellent physical condition are able to perform at their highest level, improve team performance, and compete at a higher level both at home and abroad. In addition, good physical endurance can also reduce the risk of injury, so players can train and compete consistently. With a structured training program, including physical exercise, a healthy diet, and adequate rest, SSB can create a regeneration of quality players who are ready to step into the world of professional football. In addition to supporting achievements, excellent physical condition also instills a healthy lifestyle and discipline that benefits players in the long run.

The success of a football team can be influenced by a number of factors, including the technical, tactical, and mental abilities of its players. Soccer players need to have these elements and strategies in place to overcome obstacles on the pitch and maintain a high physical condition while playing. (Candra & Kurniawan, 2020)

In football, endurance is a major physical condition factor because it refers to a person's capacity to use his heart, lungs, and circulatory system effectively and efficiently while performing tasks continuously. Other factors include the speed, agility, and explosiveness of their

leg muscles (Candra & Kurniawan, 2020).

The ability to withstand fatigue and bounce back quickly is known as endurance. The body's ability to perform athletic activities for a long period of time without feeling tired is called endurance. As a component that greatly helps technical and tactical skills in playing soccer, endurance is one of the physical attributes that requires training and development. Players must have high endurance. This requirement is based on what a soccer player must do to attack and defend throughout the game, which requires constant movement. (Supriyadi Et Al. , 2024) (Color) Et Al. , 2017) (Maliki Et al., 2016)

Explosive power The ability of the leg muscles to act quickly and forcefully to produce the greatest power is known as explosive power. In the game of soccer, the role of the strength of the leg muscles is very obvious. In a short period of time, one can overcome resistance by using all of his strength. Players who have strong leg muscles can compete with their opponents in a fight for the ball. Furthermore, powerful and fast kicks can be produced by the leg muscles with explosive strength, thus increasing the chances of achieving the goal. (Maliki Et Al. , 2016)

Speed is an important part of the sport. The fundamental ability to play the same progression over and over again in the shortest amount of time or travel a certain distance in the shortest amount of

time is known as speed. A soccer player's ability to move quickly while dribbling or chasing opponents is essential for short passes, breakthrough passes, and anticipating opponents' counterattacks. (Prima & Cahyo Kartiko, 2021)

Agility is training that can improve running speed and difficult level movement skills. In fact, agility is a type of skilled movement that must be fast in order to explode. Players who have good mobility will easily outwit opponents and dribble the ball, so they can control the game to the maximum and endanger the opponent's defense. (Nurlaily Et Al. , 2024) (Arifin & Warni, 2019)

The physical condition of an athlete is also an absolute requirement to achieve the best achievement in his sport; Therefore, physical conditions must be fostered and improved according to the demands, natures, and characteristics of each sport. Based on this view, physical fitness is the foundation of athletic success and consists of elements that are inseparable and must be trained early, consistently, and continuously while still adhering to the rules of physical training to achieve ideal physical fitness. Physical condition is affected by several factors. The physical exercises in question need to be organized, planned, and implemented methodically in order to improve the necessary biomotor skills. (Prima & Cahyo Kartiko, 2021) .

METHODS

The purpose of the research is to find, document, analyze, and compile reports on the findings. Because it has a direct influence on the data collected, the research methodology is also an important component of a research. Thus, a descriptive method combined with survey techniques is used in this study. A descriptive approach is a type of research methodology used to describe current or historical events or phenomena that are occurring. Based on this background, this study uses a quantitative descriptive research approach, which requires basic statistical calculations to provide a summary of the findings of variable calculations. (Sihotang & Pd, 2023) (Sihotang & Pd, 2023)

In a study, a population describes a large amount of diverse data. In this case, the population is also the collection of all the subjects, sizes, and potential items that a study is the focus of. The total athlete population of the major Academy of Athletics is 100 athletes (Sihotang & Pd, 2023)

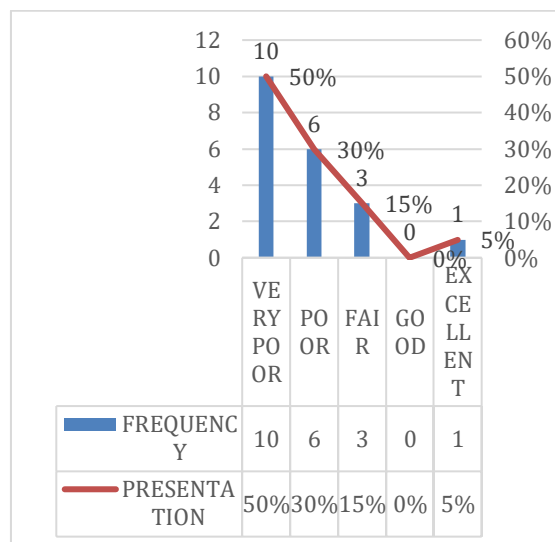
A sample is a part of a population selected through a sampling procedure. Researchers determine the sample by considering a number of factors, including the challenges faced during the study. (Sihotang & Pd, 2023)

The data collection technique uses the purposive sampling method, which is the criteria for athletes aged 13-14 years.

In this study, the population and sample are players or students from Academy Utama Raya which totals 20 people.

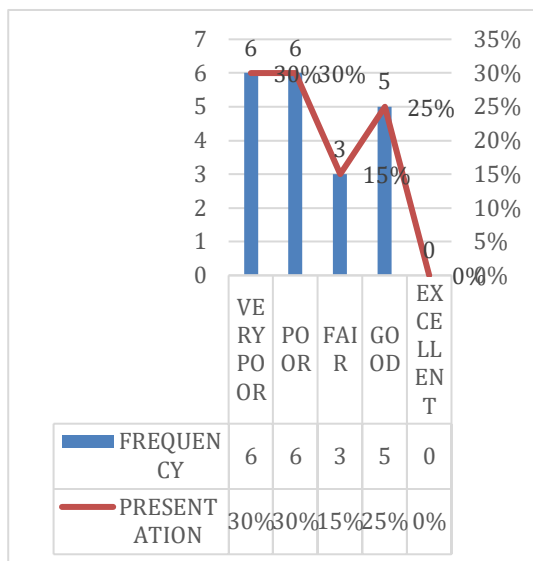
RESULT

Table 1. Results of the Pacer Test for students of Academy Utama Raya.



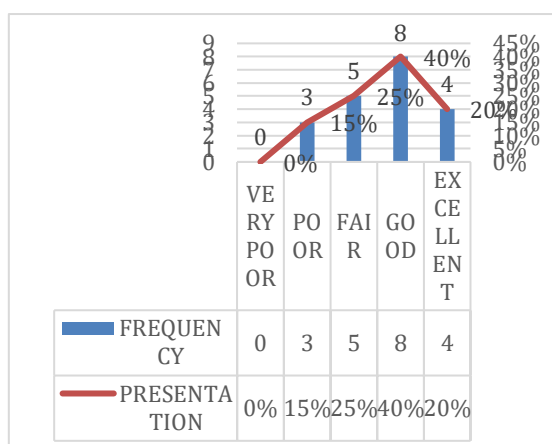
Based on Table 1. Durability test results using the Pacer Test. Category Less frequency 10 people and 50% percentage, Less frequency category 6 people and 30% percentage, Category with enough frequency 3 people and 15% percentage, Good category 0 people frequency, very good category with 1 person frequency and 5% percentage.

Table 2. Results of the Standing Broad Jump Test for students of Academy Utama Raya.



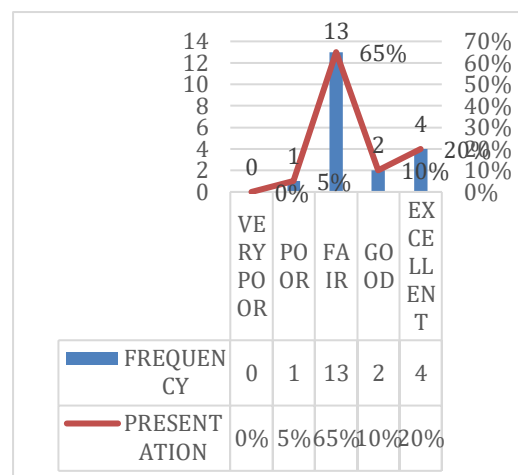
The results of the Explosive Power test using the Standing Broad Jump Test can be seen in Table 2. Very low frequency classification 0%, low frequency 5 people and 25% of the population, sufficient frequency 3 people and 15% of the population, excellent frequency 6 people and 30% of the population, and excellent frequency 6 people and 30% of the population.

Table 3. Results of the speed test (30 meter run) of students of Academy Utama Raya.



Based on Table 3. The results of the Speed Test use the 30-meter Run test. Four people and 20% of the population fall into the category of very bad frequencies; eight people and 40% of the population fall into the category of low frequency; five people and 25% of the population fall into the category of sufficient frequency; three people and 15% of the population fall into the category of good frequencies; and 0% of the population falls into the very good category.

Table 4. Results of the Agility test (Illinois Agility) for students of Academy



Utama Raya.

Based on Table 4, the Agility test results use the Illinois Agility test. The category is very low frequency 4 people and the percentage is 20%, the category is less frequency 2 times and the percentage is 10%, the category is low frequency 13 people and the percentage is 65%, the category is very good people 0%

The purpose of this study is to identify the most common physical characteristics in students of Academy

Utama Raya. Durability, speed, agility, and explosiveness are some of the elements tested. To support performance during training or competitions, every element is essential. Excellent body condition not only affects physical endurance, but also plays a role in maintaining concentration and increasing the accuracy of decision-making during the match (Jeki et al., 2025).

The body's ability to perform athletic activities for long periods of time without experiencing severe fatigue is known as endurance. The most important element that affects the performance of football players is their endurance level. . The test results showed that most athletes were in the category of good to moderate, but not as strong as other physical conditions. This shows that endurance is the weakest physical component among the four aspects measured. This can be the focus of further training to improve overall performance in long-term matches. The aerobic capacity of athletes needs to be increased in order to survive prolonged activities during the games. It is important to note that the body's aerobic capacity or resistance to long-term activity is still a weak point that needs more attention in future exercise planning. (Badaru & Sufitriyono, 2021) (Arifin et al., 2022)

Explosive power is the ability to show or release force quickly or explosively. The test results showed that most of the athletes were in the good to very good category. This shows that

explosive abilities (muscle power, especially the lower body) are the most dominant components in the Utama Raya Academy. Shows most athletes achieve excellent results. This indicates that the ability of muscles to produce explosive power in a short period of time is one of the main advantages of athletes. (Hardiansyah, 2018)

Speed is the ability to travel a certain link in the shortest possible time- In short (Azra et al., 2021) Speed is the second physical component that is quite dominant. From the results seen, the speed of the athletes is quite prominent with many in the good category. This signifies that the athlete has good acceleration abilities, which is important in game transitions and short sprints. This shows that Academy Utama Raya athletes have adequate acceleration skills, which are needed in dynamic and competitive game situations. Speed is one of the important foundations in supporting performance on the field, especially in facing game transitions.

For a sport that requires a high level of situational adaptation throughout the game, agility is an important component of movement. The results of agility showed that some athletes were in the medium to good category. However, there are also those who are still in the category of sufficient to less. This shows that the aspect of the ability to move quickly and precisely in a change of direction is still uneven and requires improvement through an exercise

program that focuses more on lateral movement and body coordination. This means that there is still room for improvement in this aspect. shows that aspects of change of direction and coordination of motion still need to be improved. This could be a priority in the training program going forward. Agility is especially important in sports such as football or basketball that require lateral movement and sudden changes in direction. (Ngatman & Fitzgerald dual Andriyani , 2017)

DISCUSSION

Based on the results of physical condition measurements carried out at Academy Utama Raya, there are four main components that are tested, namely explosiveness, speed, agility, and durability. The results of each of these tests provide an overview of the physical strengths and weaknesses of the athletes who are members of the academy. The most dominant physical components possessed by Academy Utama Raya athletes are explosiveness and speed. These two components are the main forces in their physical condition profile. This shows that their training program is quite effective in improving explosive abilities and short sprints. However, in terms of agility and endurance, it is something that still needs to be improved thoroughly so that athletes have balanced and optimal physical abilities in facing various types of matches. The results of the four components show that explosiveness and speed are the two most

dominant aspects of physical condition and are the main strengths of the athletes of the Utama Raya Academy. Instead.

CONCLUSION

This analysis of physical conditions shows that the Utama Raya Academy has an advantage in explosiveness and speed. Meanwhile, the aspects of agility and endurance need to be improved through a more balanced and specific training program. To form a well-balanced athlete, it is necessary to place additional emphasis on regular agility and endurance training. With proper training planning, athletes can have physical performance that needs to be improved thoroughly so that athletes have balanced and optimal physical abilities in facing various types of exercises or matches.

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