

Profile of the Physical Condition of Athletes from SSB Golden Football Academy Semarang City U-14 to U-15 Years

Faisal Putra Kurniawan^a, Purwono Sidik Permono^b

^{ab}Universitas Negeri Semarang, Indonesia

Correspondence: faisalputrakurniawan12@students.unnes.ac.id

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Abstract

This research aims to determine the physical condition of the players at the Golden Football Academy Soccer School, using a descriptive method. The population of this study consists of 25 individuals aged 14-15 years. The sample for the study is also 25 individuals. Data collection was conducted by performing physical condition tests, namely: arm muscle strength with the push-up test, abdominal muscle strength with the sit-up test, leg muscle explosiveness with the standing broad jump test, agility with the arrowhead agility test, speed with the 30-meter run test, and endurance with the 1,200-meter run test. The data obtained thru the research test instruments were calculated using percentage formulas. The results of this study show that: 1) Arm muscle strength with an average of 80% falls into the good category, 2) Abdominal muscle strength with an average of 88% falls into the good category, 3) Explosiveness with an average of 96% falls into the good category, 4) Agility with an average of 96% falls into the good category, 5) Speed with an average of 96% falls into the good category, 6) Endurance with an average of 96% falls into the good category. The conclusion from all the tests in this study is that the physical condition of the players at the Golden Football Academy soccer school is in the good category. The players are expected to have more motivation to train physically according to their needs.

Keywords: physical condition; ssb academy; football

1. Introduction

Sports are one of the important aspects of human life. If developed thru the right approach, sports can become a means to awaken spirit and self-potential. In the process of character building, discipline, competitiveness, productivity, and work ethic, sports conducted in a sporting manner play a significant role in enhancing the quality of human resources to achieve achievements. Essentially, sports are physical activities that contain elements of play and involve struggles—whether against oneself, others, or challenges from nature. The rapid development of science and technology has brought significant changes in various aspects of human life, thereby encouraging globalization and a free market system (Nugroho, 2017).

According to (Supriyono, 2018), football is a sport that demands great physical strength, intelligence in playing on the field, and the ability to evoke spirit and happiness thru teamwork. In the world of sports, many factors play a role in achieving success, such as physical condition, technical skills, game strategy (tactics), and mental strength. All these elements are very important in improving the performance of football players. Training becomes one of the main components that greatly influences the achievement of performance. In addition, the type of training applied also plays a significant role in the success of achieving the set targets.

According to (Pramdhan et al., 2021) Physical conditioning training is more directed toward the comprehensive development of an athlete's physique and becomes one of the key factors that are very important in a training program to achieve maximum performance. The main focus of this training is to optimally enhance the body's functions of athletes and to develop biomotor abilities to the highest level. Thru physical conditioning training, athletes' physical fitness can be maintained or improved, both in terms of sports skills and general health aspects.

According to (Ridwan & Irawan, 2018), physical condition is an absolute requirement that must be possessed by every football player in order to improve and develop performance optimally. Therefore, the development and improvement of physical condition must be adjusted to the characteristics, distinctive features, and needs of each sport. Physical condition becomes an important element in the effort to improve athletes' performance, and it can even be considered a fundamental need that cannot be postponed or ignored. Physical condition is also a complete unity of various interconnected components, so the process of improvement or maintenance cannot be done separately (Pradana & Bulqini, 2018). Physical condition is a complete unity of various interconnected components that cannot be separated, both in the process of development and maintenance. This means that in the effort to improve physical condition, all the elements that constitute it must be trained thoroughly. Physical condition is also an absolute requirement that an athlete must possess to achieve and develop their performance to the fullest (Saputro & Syafii, 2022). Therefore, the development of physical condition must be adjusted to the characteristics, needs, and distinctive features of each sport. In fact, physical conditioning can be considered a basic need that cannot be postponed or ignored in the process of achievement training (Afif Yozardi et al., 2024).

To achieve optimal performance in football, in addition to requiring a well-planned, directed, and sustainable training and development program, attention must also be focused on the development of physical condition. This is important because physical condition is one of the most dominant factors in achieving peak performance (Burhan et al., 2024). The components of physical condition include: strength, endurance, speed, flexibility, explosiveness, agility, coordination, balance, accuracy, and reaction. Thru proper physical training, an athlete's physical fitness can be maintained and even improved, both in relation to technical skills and overall health. This physical fitness also serves as a primary indicator of an athlete's physical ability to perform daily activities (Hamsah & Setijono, 2018).

Football is a game that demands dynamic movements and is supported by optimal physical conditions, such as strength, speed, agility, endurance, flexibility, accuracy, power, reaction, and coordination (Andi Ferianto, 2021). A player is required to be able to perform various quick movements, such as jumping, running back and forth, dribbling at high speed, and dribbling the ball past opponents. All these basic movements require excellent physical condition. In addition, football also requires strengthening locomotor abilities to support muscle endurance. Maintenance of heart function, respiratory system, and flexibility.

2. Method

The type of this research is a quantitative descriptive study intended to collect information about an existing phenomenon. The population of this study consists of 25 individuals aged 14-15 years. The research technique uses the purposive sampling method, which determines the sample based

on specific characteristics. It was then determined that 25 people would be selected as the research sample. The test instruments used are the "Battery Test of Physical Conditioning" for athletes of the Golden Football Academy Soccer School (SSB) in Semarang City, namely: push-up test for arm muscle strength, sit-up test for abdominal muscle strength, standing broad jump test for explosiveness, arrowhead agility test for agility, 30-meter sprint test for speed, and 1,200-meter run test for endurance. The data collection technique for this research uses data analysis obtained through research test instruments analyzed with percentage formulas. The measurement results from the test implementation, based on the test norms that have been analyzed as shown in the table below.

3. Result

1. Arm Muscle Strength Test

The measurement results from the push-up test implementation, based on the analyzed test norms as shown in the table below:

Table 1. Distribusi frekuensi tes *push up*

Interval	Frekuensi a	Frekuensi r	kategori
>28	3	12%	Baik Sekali
24-27	20	80%	Baik
20-23	2	8%	Sedang
16-19	0	0	Kurang
>15	0	0	Kurang sekali
	25	100%	

Based on Table 1 above, out of 25 sample people, 3 people (12%) are in the very good category, 20 people (80%) are in the good category, 2 people (8%) are in the moderate category, 0 people (0%) are in the poor category, and 0 people (0%) are in the very poor category.

2. Abdominal Muscle Strength Test

The measurement results from the sit-up test implementation, based on the analyzed test norms as shown in the table below:

Table 2. Distribusi frekuensi tes *sit up*

Interval	Frekuensi a	Frekuensi r	kategori
>29	2	8%	Baik Sekali
26-28	22	88%	Baik
23-25	1	4%	Sedang
19-22	0	0	Kurang
>18	0	0	Kurang sekali
	25	100%	

Based on Table 2 above, out of 25 sample individuals, 2 people (8%) fall into the very good category, 22 people (88%) fall into the good category, 1 person (4%) falls into the moderate category, 0 people (0%) are in the poor category, and 0 people (0%) are in the very poor category.

category, 0 people (0%) fall into the poor category, and 0 people (0%) fall into the very poor category.

3. Leg Muscle Explosive Power Test

The measurement results from the standing broad jump test, based on the analyzed test norms as shown in the table below:

Tabel 3. Distribusi frekuensi tes *standing broad jump*

Interval	Frekuensi a	Frekuensi r	kategori
>234	0	0%	Baik Sekali
219-233	24	96%	Baik
205-218	1	4%	Sedang
189-204	0	0%	Kurang
>188	0	0	Kurang sekali
	25	100%	

Based on Table 3 above, out of 25 sample individuals, there are 0 people (0%) in the very good category, 24 people (96%) in the good category, 1 person (4%) in the moderate category, 0 people (0%) in the poor category, and 0 people (0%) in the very poor category.

4. Agility Test

The measurement results from the implementation of the arrowhead agility test, based on the analyzed test norms as shown in the table below:

Tabel 4. Distribusi frekuensi tes *arrowhead agility*

Interval	Frekuensi a	Frekuensi r	kategori
>8.04	0	0%	Baik Sekali
8.05-8.37	24	96%	Baik
8.38-8.71	1	4%	Sedang
8.72-90.4	0	0%	Kurang
>9.05	0	0%	Kurang sekali
	25	100%	

Based on Table 4 above, out of 25 sample individuals, there are 0 people (0%) in the very good category, 24 people (96%) in the good category, 1 person (4%) in the moderate category, 0 people (0%) in the poor category, and 0 people (0%) in the very poor category.

5. Speed Test

The measurement results from the 30-meter sprint test, based on the analyzed test norms as shown in the table below:

Tabel 5. Distribusi frekuensi tes lari 30 meter

Interval	Frekuensi a	Frekuensi r	kategori
>4.20	0	0%	Baik Sekali
4.21-4.43	24	96%	Baik
4.44-4.67	1	4%	Sedang
4.68-4.90	0	0%	Kurang
>4.91	0	0%	Kurang sekali
	25	100%	

Based on Table 4 above, out of 25 sample individuals, there are 0 people (0%) in the very good category, 24 people (96%) in the good category, 1 person (4%) in the moderate category, 0 people (0%) in the poor category, and 0 people (0%) in the very poor category.

6. Endurance Test

The measurement results from the 1,200-meter running test, based on the analyzed test norms as shown in the table below.

Table 6. Distribusi frekuensi tes lari 1.200 meter

Interval	Frekuensi a	Frekuensi r	kategori
>4.52	0	0%	Baik Sekali
4.53-4.92	24	96%	Baik
4.93-5.33	1	4%	Sedang
5.34-5.73	0	0	Kurang
>5.74	0	0	Kurang sekali
	25	100%	

Based on Table 4 above, out of 25 sample individuals, there are 0 people (0%) in the very good category, 24 people (96%) in the good category, 1 person (4%) in the moderate category, 0 people (0%) in the poor category, and 0 people (0%) in the very poor category.

7. Discussion

Based on the results of the physical condition tests on the players of the Golden Football Academy Soccer School (SSB) in Semarang City, it can be concluded that the majority of football athletes there have physical conditions in the good category. One of the goals of the training program is to improve aspects of fitness such as strength, speed, explosiveness, agility, and endurance. All of that is very essential in the game of football. Physical condition is a key element that serves as the foundation for the development of techniques, tactics, and strategies in playing. In addition, physical condition is also one of the important requirements in the effort to improve athletes' performance, even becoming the initial foundation in building competitive sports.

Physical strength is a very crucial aspect because it serves as the foundation for developing other physical aspects such as speed, flexibility, explosiveness, and balance. Therefore, in carrying out adequate physical activities, strength becomes very important. A person's success in carrying out activities, especially in the sport of football, greatly depends on how good their physical condition is, particularly their strength.

Physical speed is a highly considered ability in sports, especially football. Speed is defined as the ability to perform repeated movements or move the body quickly within the shortest possible time. The development of speed is carried out on the parts of the body that need to move quickly so that athletes can achieve the desired performance. Therefore, speed contributes significantly to an athlete's performance, especially in sports like football.

The explosiveness of the leg muscles has a significant impact on performance in football. Kicks will not reach their maximum potential if the strength of the leg muscles is inadequate, and similarly, high jumps when heading the ball will be difficult to execute optimally. This is due to the low explosiveness of the leg muscles possessed by the players. Not only in shooting and heading situations, the explosiveness of the leg muscles also plays an important role when running, passing, or dribbling the ball.

Physical agility is a person's ability to move and change direction quickly and accurately while maintaining balance. This ability is closely related to speed and flexibility; if one aspect is lacking, agile movement is difficult to achieve. The factor of balance also plays an important role in supporting agility. Tests show that the more often someone trains agility, the better the results. With good agility, a player can respond to situations on the field, such as changing running direction quickly to outsmart the opponent.

Endurance is a person's ability to perform activities over a relatively long period of time. Muscle endurance is greatly influenced by and closely related to muscle strength. A football player must have good general endurance, ideally perfect, because about 80% of the techniques in the game will be maximized if supported by good general endurance or VO2Max. Aerobic capacity or general endurance also helps in maintaining the emotional stability of the players.

5. Conclusion and Recommendation

Based on the research results and discussion, this study can be concluded as follows: (1) The physical condition in terms of arm muscle strength of the athletes from the Golden Football Academy Soccer School in Semarang City is categorized as good, (2) The physical condition in terms of abdominal muscle strength of the athletes from the Golden Football Academy Soccer School in Semarang City is categorized as good, (3) The physical condition in terms of leg muscle explosive strength of the athletes from the Golden Football Academy Soccer School in Semarang City is categorized as good, (4) The physical condition in terms of arm muscle strength of the athletes from the Golden Football Academy Soccer School in Semarang City is categorized as good, (5) The physical condition in terms of speed of the athletes from the Golden Football Academy Soccer School in Semarang City is categorized as good, (6) The physical condition in terms of endurance of the athletes from the Golden Football Academy Soccer School in Semarang City is categorized as good.

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