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PHYSIOLOGICAL REQUIREMENTS OF THE FOOTBALL BRANCH

(Review study)

Akif Taş^a

^a *Department of Sports Sciences, Mersin University, Türkiye*

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Abstract

Football, which is followed with interest by the masses in today's world, is a sport that entertains people. professional and professional sports by athletes who are devoted to this sport as well as their branch. literally can be implemented. Developmental strategies of football sport are many We can also see the benefits. Economic, political, socio-cultural and psychological in many areas Its social impact is too great to ignore. Individually, he as in the sports branch, the features required for the performance of football are given to the athletes. gained as a result of the training provided. Coming out for the flawed sport of football starting from here. The resulting requirements are among the permanent ones of this sport. athletes The endurance of the training they perform, what needs to be done during the performance of the sport It contributes to strength and also to the acquisition of speed, which is one of its important elements. provides. The general issue discussed effectively is literally the supporters of these elements. better by the players of this popular sport, which is followed fondly by It is to examine some concepts that are important for the components.

Keywords: Football; strength; speed; endurance.

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*Corresponding author: Akif Taş. ORCID ID.: <https://orcid.org/0000-0001-6070-2829> E-mail: a1k9i8f3@gmail.com

1. Introduction

As a concept, football is formed by the combination of the English words foot and ball. is coming. In Turkish, the concept of Football is translated as football (Arıkan, 2007). Football is an important part of our daily lives in these times we live in. is in position. Football is two different teams consisting of eleven players within sports branches. A ball played between a number of rules, with the game rules determined in advance. It is a game. Football, the most popular sports branch in the world among people, is globally A business that has stood out by creating high brand values equivalent to billions of dollars It also creates the field (Kubat, 2001).

Football is not only the most interesting activity of our age, but also an enjoyable and participatory activity for the spectators. It comes before sports branches that are enjoyable, integrative and very active. Football, in its simple definition, is about scoring goals. It consists of 11 players on the field who work as a team to prevent a goal by giving strategic and tactical answers to their moves against a team that applies strategic and tactical variations while working. It can be expressed as two rival teams formed for the same purpose.

The complex of this branch includes many different motoric components. While some of them are dominant depending on his situation, some remain less dominant. It is an inevitable fact that some plans should be made in training and most importantly, the recovery time should be reduced to the shortest time due to intense competition efforts. Unless otherwise, the fatigue factor will restrict players from doing what they want and playing football, which is a team game, in the desired way. Therefore, the aim of this study is to shed light on the physiological needs in football.

2. Method

Collection of Data

The research was conducted using document review and scanning model. Document review and research It involves the analysis of written materials containing information about the targeted phenomenon or phenomena. In the research, football and A literature review was conducted regarding energy requirements.

Data Collection Tool

In this study created with the traditional compilation method; Pub Med, Google Scholar and Web of Using the keywords football, energy systems and training plan in Science databases, this The topics were examined and evaluated based on the studies conducted in the literature.

Statistical Analysis of Data

Qualitative data analysis is where researchers organize their data, divide it into units of analysis, synthesize it, Revealing formats, discovering important variables, and deciding what information to include in the report somewhere. In other words, the researcher who conducts qualitative analysis starts from the data he has collected from the field. It strives to discover and reveal the things hidden in this data. This is general information Works, articles and articles written about football, energy systems and training programs within the scope of The reviews are scanned, examined and interpreted.

3. Results

When we look at the way football is played and its purposes, the person playing football has physical In addition to developing mentally, it is also possible to perform many tasks simultaneously. It is observed that it should also have the ability to bring Starting from this situation It has been observed that individuals who receive football training in infrastructures show multi-functional developments. is seen (Lutz H., 2010). In this regard, in the study conducted by Peker (2017) the following are included:

- Body balance is important in football. Jumping, leaping and sudden change of direction etc. various It is a sports branch played through movements.
- While adapting to instantaneous positions during the game, other the need to make effective and immediate decisions when the need for alternatives arises It is a game that happens.
- The effort to be put forth during the game should be balanced from the beginning to the end of the game. It appears as a game that must be used efficiently.
- In addition to performing the movements with the ball, the actions performed in the field without the ball It is a sport in which the opposing team requires effort to prevent them from gaining the upper hand.
- The main framework of the game is to establish a numerical advantage over the opposing team during the match. It is a type of game based on its purpose.
- Regarding the positions performed or missed by the players on the field It is a sport that can get instant feedback from the audience.
- Players of the same team within the field of play where the competition takes place have a common It is a branch of game in which people exhibit common behaviors for the sake of a goal. In light of all this, football also reveals the mental skills of each player.

In addition to their needs such as mobility, flexibility and balance, their individual By revealing its qualities, it adapts to instant positions during the game. It is a type of game that must be provided (İnal, 2013).

3.1. The Importance of Strength in Football

Strength is the primary factor affecting performance in matches in individuals playing football. It is one of the main engine features. From this perspective of priority, football players The muscle groups they use most during the competition are the muscle groups in the ankle, triceps surae, hamstring, quadriceps, core muscles, muscles in the chest area It is observed as. From another perspective, in terms of the positions played by the players There may be differences between muscular strength levels. This is the most important issue The main reasons are the positions they play as well as the positions they take part in. It arises from the characteristics of the relevant muscle groups for the position. For the execution of the football branch Muscular strength is the ability of players to face physical contact during double combat in competitions. is of importance. In addition, force helps football players to hit the ball, change direction, Able to jump, balance on slipping places, gain speed and suddenly change direction. It occurs when the relevant muscle

bundles perform the movement. Considering all this issue In football, strength and the ability to maintain this strength are very important in the game. has become a topic (Şentürk, 2011).

3.2. The Importance of Speed in Football

Another requirement in the football branch is agility and agility ability. Many sports capacities and agility abilities are known as performances of achievement. Sprint, speed finishing in a straight line; agility, speed performance in various directions It is a well-known company. Activities at the highest level of speed in a short time In the name of maximum energy molecules such as adenosine triphosphate (ATP) and phosphocretin (PC) The establishment of the organization is seen. Conceptually, speed is the difference between one place and another. distribution is classified as the performance of moving as quickly as possible. But this The difference between a person's genetic characteristics and a natural motor skill compared to the other should not be taken. When talking about the effect of genetic characteristics on humans, players have their own unique characteristics. His talent should not be ignored either. But in the eyes of individuals, people It is difficult to reveal this ability even with high-level training while possessing situation is revealed. However, speed development can be achieved by improving mobility and speech. It can be done indirectly by lengthening the necessary muscle bundles in question. Speed relations is a process that requires passing through primary school in order to develop talent. It is understood that he was educated starting from children.

With this education, children develop continuously until adolescence. They show. Thus, the development of speed in children depends only on sprinting abilities. However, it also occurs as a result of better muscle coordination. It removes. An important value component of the sport of football is agility. Agility: One as a rapid whole-body movement with a change in speed or direction in response to stimulus is defined. Dribbling ability, which is one of the main skills of the football branch It is evaluated in the light of the studies that the agility contribution is 43% to 30% (Yaman, 2021).

3.3. The Importance of Endurance in Football (Anaerobic and Aerobic Endurance)

As much as aerobic endurance, there are also a lot of anaerobic activities in the football game. It is a sports branch that requires versatile skills. Overperformance in football game and for success, the athletes' condition, physical strength, technical skills, tactics and play Their ability to comprehend depends on their situation. Football matches last 90 minutes Physical structure and physical performance characteristics are of great importance. (Bompa, Haff, 2015). Players with high oxygen capacity (VO₂max) during the competition They were able to cover more distance and perform more sprints in the competition. It is known to occur in studies conducted. During football matches Physical stress level and physical requirements of football players In the light of the data obtained by determining the trainings and the competition, Measuring the performance has an important place.

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In the light of all these data, VO₂max, which affects performance during the football match, It has been determined that the values alone are not sufficient. during football match One of the most important variables affecting activity is anaerobic power. is known. In the football branch, training with high anaerobic properties helps football players Immediate and high-intensity actions such as sprinting, jumping, acceleration, deceleration, shooting and heading In match activities, during the maximum level of competition that is repeated within the game It is of great importance for them to continue more frequently and for a longer period of time (Köse, 2018). Players' heart rate increases during the competition in the football branch. is climbing. Players averaged an intensity close to the anaerobic threshold of 10 kilometers. They are observed running. In order for the players to get used to this situation, they need to have strong physical structures. They must be. This situation creates many differences for performance that requires durability. needs to be created. These; sprinting, kicking the ball or jumping appears before us. Football players therefore reach the highest levels in a field Instead, the necessity of making the right move where necessary in football puts performance on the body. They need to bring it. It is important for the career of players interested in the football branch. professionalism, which is the athlete's ability to show himself or herself in order to prove themselves. Bringing physical mobility to the fore by providing more than the required performance requires them to be removed. However, in order to demonstrate this awareness, morphological and functional should be at the maximum level. In this case, as much as it does not normally show will be involved in physiological work. Exercising for health today It has become as popular as playing professional sports. In daily life, from busy business life In isolation, individuals should choose low-intensity exercises instead of intense and tiring exercises. is doing. In this way, instead of pushing their limits, they use their existing physical and physiological structures. They want protection. Being in such a relationship with performance is “Sports for All” or “Sports for Health” concepts. (Serin, 2019).

3.4. The Importance of Other Physiological Requirements in Football

An athlete's performance in football is affected by many different factors. These We can categorize it as physiological, psychological and sociological factors. These factors Of course, physiological factors will have the most important place. Because individuals' physical Their existence is a combination of many physiological factors and fundamentally affects the performance of sports. element. The physiological structure of the athlete depends on the branch of sports they practice. Unless their performance is in line with their characteristics, their performance will not be sufficient. will not be able to provide. However, in football, the physiological needs and physical requirements of athletes It should be noted that structures constitute only one of the performance indicators. This In this respect, the performance of the athletes is positive if their other motoric features are also in place. It is seen that it has a positive effect (Açıkada and Ergen, 1990). Physiological needs that affect performance in football; technical, tactical, physical, The structure of the football game, along with physiological and psychological elements, determines the player's tactical and technical We can also give examples of skills and environmental conditions. Football is basically “aerobic and anaerobic” mobility, speed, strength, flexibility, agility, balance, muscular and factors such as cardiorespiratory endurance and coordination affect performance together. It is a highly coordinated sports discipline” (Akgün, 1994). Football, one of the most common sports in the world in terms of being practiced and followed. sport is different from other sports due to the width of the playing field, the number of

players and the feature that requires struggle. It is differentiated in its branches and has a unique place in terms of physiological characteristics. This In this respect, it is played both in the large area in which it is played and in the tasks given to the players. With its differentiation, the need for evaluation based on physiological needs arises. Strength, high-level endurance, speed, flexibility, performance and bodybuilding for athletes The fact that the movements differ from other branches is also a distinctive feature of football. is one of its features. The relationship between the physiological characteristics of athletes and the task they will undertake Considering the physical and athletic skills of defensive and offensive players in football today, It is observed that they do not have any structure. However, in terms of motoric features, the team All players must have all kinds of motor skills. your team and in the integrity of the game, most of the time offensive players have to defend when necessary, Defensive players may also need to assist the attack.

As in many sports branches, the athlete's performance is the most fundamental factor in football. It is based on strength, endurance, body, speed and composition characteristics. athletes The high correlation we see between their body's lean mass and endurance and strength, Naturally, their performance depends slightly on the fat content. It requires. For this reason, athletes' body structures and accordingly The limit of its performance needs to be investigated. However, football teams The players' physical structures and proportions will be close to each other according to their positions. It should be evaluated accordingly (Günay, 1994). All sports branches are important both in terms of their basic requirements and the performance of sports. It is very closely related to physical properties in terms of its adaptive properties in the process. muscles and with sports, provided that the bone structure is within its genetic limits It is also seen that it can be shaped. For example, the height of basketball and volleyball players We often find that it is much longer. Or the arms of tennis players where they frequently hold the racket. We observe that it has a more muscular appearance. In this regard, in the football branch We can talk about many factors that affect and are affected by the physical structure. Because, in a sense, determining the limits of physiological capacity is defined as "bodily structure or physical means "features". The characteristics of the physical structure must be suitable for the sport branch is required. If the athlete's current physical structure is not suitable for the sport branch to be performed, It will be very difficult to reach the desired performance level. The physical structure of an athlete, It constitutes one of the most important foundations for high level performance. (Köklü, 2009). To put it clearly, performance in football, as in all sports branches, is There are features that have a positive impact. As mentioned above, the most The most important are physiological skills. Physiological skills; endurance, speed, strength and size is its composition. There is a high correlation between body mass index and endurance of football players. There is a relationship. In this case, the physiological needs of the football branch are needed for success. It can be said that it is very important.

4. Discussion and Conclusions

As a result, in this study, the way football is performed and the purposes of the sport are taken into consideration. In addition to the physical development of an athlete playing football, At the same time, the ability to perform many tasks simultaneously mentally It is understood that he should keep it himself. During the competition period, all athletes This is also the importance of the competitions held to enable them to practice the game with its characteristics. emergence. The force that the football player will apply in the match is also The durability of its rates provides a lot of benefit to the player. main aerobics Details of the training, athletes' dates, acceleration, Many features such as spreading and changing direction can be used effectively in the field. allows them to show. Footballers who can achieve this level of efficiency internationally Thus, they rise to an indispensable height for this sport.

Physically capable Other elements next to the elements should not be done consecutively. Therefore, sports are not only One must say that it does not appeal to one's muscles. Mentally and emotionally through sports It is possible to achieve salvation. The training the athlete received and the training performed A complex structure can be created with all the elements of the body. This complex structure makes it He does not learn to act as a whole with things through this tool. Strength for athletes, top endurance, stamina, endurance, performance and body movements compared to other branches Change representation also includes these distinctive features of football.

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