

## MULTILATERAL PHYSICAL TRAINING FOR YOUTH FOOTBALL PLAYERS

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### Abstract

*Problem statement.* Sport in general and football in particular today play an important educational role through the process of training youngsters. Football training should not only offer the opportunity to develop the skills necessary for the game itself, but should take a holistic approach, also developing young people's personal and social skills. It is essential to establish objectives to be achieved in each of the stages, taking into account the players' age and size, psychological development, puberty, muscular and physical development, learning speed and level of natural potential already achieved.

*The aim.* to present actual aspects and theory of multilateral physical training for youth football players and to identifying the structural elements of multilateral physical training.

*Conclusion.* A good multilateral physical training basic at a youth level provide the development the performance skills of the future elite football player. It is necessary when training young players and during specific training sessions, to develop and work on speed in all its forms: speed of reaction, running speed, agility, speed of execution, tactical speed.

*Key Words.* multilateral physical training, football, youth players.

### Introduction

Today's football, like other sports, requires a thorough knowledge of all components of sports training. The multilateral physical training of young footballers has a decisive role in the entire training process, determining their performance in training and especially in competitions. The transition to high performance is achieved in modern football only by juniors with a

#### **Delimitations of the concepts of general physical training, multilateral physical training and sports physical training**

From the very beginning we must highlight a certain uncertainty or more correctly, the state of uncertainty and ambiguity of the specialists in defining and delimitating the concept. So, the concepts of physical training, physical condition, physical capacity, fitness, etc. are equally used. Physical training

a) Level of development of physical and motor possibilities of the individual reached in the process of systematic repetition of physical exercise

b) Component of sports training consisting of the development of motor skills, of the morpho-functional indices of the organism and of the mastery of a wide and varied system of motor skills and abilities.

In sports training, they have two main aspects

- general and multilateral physical training – process aimed at ensuring a broad, multilateral

multilateral development, fast, strong and skilled, capable of the most inspired choices even in the most complicated phases of the game. An excellent physical training allows the player a high performance and to express his technical valences at the highest level until the last minute of the game.

basis of morpho-functional indices, motor qualities, of movement skills and abilities, which ensure the specific premises and technical, tactical and mental training.

- specific physical training – process of selective development of morpho-functional of the body and motor qualities in accordance with the characteristics of the effort specific to each branch or sporting event and with the requirements of sports performance (E.E.F.S.R. 2002, volum IV, pag. 296)

In the practical activity itself, we are dealing with three forms of manifestation of physical training:

**General physical training** (synonymous with general motor capacity) is the concept that ensures the development of basic motor skills and general motor skills of the body, in general, enriches the general fund of motor skills, ensures the harmonious physical development of the functional indicators that condition

the practice of the sport branch (Dragnea, 1996).

**Multilateral physical training** is challenged by some specialists. Others consider it to be the basis for specific training. After D. E. (1998, pag 104) "Multilateral physical training is in fact general physical training selectively focused on the specifics of the sports industry and individual deficiencies in the training of athletes."

Multilateral physical training has as instrumental objectives dimensions:

- harmonious physical development and of those components that subsidize the specific physical training, the technical - tactical training;
- development of basic motor skills (VÎRF) that subsidize the specific training of the football game (specific physical training, technical training, tactical training);
- development of motor qualities, differentiated of athletes.

**The specific physical training** aims at increasing the functional capacity of the body, developing the basic motor qualities and enriching the motor fund of the players. These three basic objectives of physical training are found throughout the training and acquire different weights, necessary for each stage of training (beginners, advanced, performance) and each period or stage of training (I. Motroc, 1994, pag. 117): Specific physical training in football aims to develop the motor qualities involved in technical-tactical activity and the body's capacity for effort. Specifically, the specific physical training is performed according to the following parameters:

- motor qualities that are part of the structure of the technical procedures: the force of hitting the ball, the speed of execution, expansion;
- combined motor qualities:  $F + V$ ;  $V + F$ ;  $\hat{I} + V$ ; coordination;
- increasing the body's energy efficiency for mixed efforts (aerobic - anaerobic);
- resistance to specific stress.

#### • Identification of the structural components of multilateral physical training

From what has been said before about the concept of physical training, we note the essential components of multilateral physical training, namely:

- development of basic motor qualities (VÎRF) that subsidize the specific motor structure of football;
- harmonious physical development in which we distinguish: somatic ensemble (waist, weight, wingspan, bust, etc.), perimeters (abdominal, thoracic, thigh, etc.), diameters (bitrohanterian and biacromial), functional ensemble: (heart rate, blood pressure, respiratory rate, oxygen consumption), proportionality between somatic and functional indices; poor specific motor skills of athletes.

This finding is determined to establish the instructional objectives specific to the multilateral physical training of beginners, in our case the footballers of 10 to 12 years.

• **The guidelines of the modern methodology, for the identification and realization of the multilateral physical training**, are strictly directed towards the motor structure of the football game itself.

According to the opinions of well-known specialists (authors) in the field of football (see Stănculescu, Motroc, Cojocaru, Ciolcă, Radulescu, etc.) the improvement of the physical condition (physical training or fitness) can be carried out in practice, discussing the following observable components or dimensions and / or parameters of the game:

- motor qualities for football: control, attention, dribbling, goal shooting, tactical thinking, energetic ability to play;
- the type of constitution and body development;
- physical qualities: speed, agility, balance;
- power, strength, balance;
- endurance, vigor, energy;
- psychic qualities: motivation, desire to compete, motivation, emotional balance, desire to devote, concentration of attention for 90 -120 minutes;
- social requirements: nominal time dedicated to football, giving up harmful habits (smoking, alcohol, drugs, other excesses);
- intellectual training: school training, professional skills, desire to succeed professionally;
- support for family, club, sponsors.

Regarding the motor structure of the game, many coaches are of the opinion that in order to achieve the physical training specific to the football game, we must resort to studying the original (of the game itself). In this case, it is good to consult closely the "game model" elaborated (established) by specialists, who for the significant dimensions of the physical training specific to the game of preponderance enumerate the following elements:

- morpho-functional indicators: height, weight, body mass index, adipose tissue, vital capacity, aerobic and anaerobic functional capacity;
- physical ability: speed of reaction and execution, speed of starting and moving, relaxation, explosive force of the arms, the force of hitting the ball, specific resistance to the game (Cojocaru, 1998).

One of the instructional strategies for achieving multilateral physical training in our opinion is its mandatory implementation in the formative stage of playing football, in which the specific means, but also the non-specific ones, called by us non-traditional means, will directly contribute to the formation of the general capacities that direct methodologically, the requirements of a multilateral physical training in accordance with the previous level of training, as well as the individual particularities of the young footballers. So, it is expected not to move directly to the narrow specialization of game

learning until after a minimum of 6 months of multilateral physical training. This stage of multilateral physical training would substantiate the maximum long-term performance capacity.

• **The problem of the importance of using non-traditional means in the multilateral training of young footballers**, must be seen in terms of achieving a multilateral physical training in which the versatility of the training must be an essential element. . Specifically, it is about the multitude of means or exercises that do not belong to football, but rather to other sports activities taken from: athletics, gymnastics, basketball, swimming, judo, etc. It is important to note that the choice of non-traditional means must be made in this way and subsidize the motor structure and require aerobic / anaerobic functions specific to the game of football. The notion of non-traditional means should not be summarized only in the category of motor structures taken from other sports or other motor activities. Their category also includes various installations, training equipment or even the natural hardening factors of the body (water, air, sun), the hygienic conditions in which the proper training of motor, functional and psychological capacity takes place.

• **The peculiarities and characteristics of the age of 10 - 12 years, play an important role in the training process of young footballers.**

The age of 10 to 12 marks the second school age of the student. According to some experts in the problem, at this age the following characteristics are outlined (E. HAHN, 1996, p.8):

- the appearance of the first curves of the body;
- visible changes in height;
- lack of harmony between the limb and the trunk;
- prepubertal phase B = 10 - 11 years;
- outlining the first secondary sexual features;
- normalization of proportions
- coordinative capacities are developed.

Within the limits of this age range are distinguished and specified approximately the set of motor qualities that develop predominantly (Wolanski , 1979, P 234):

- dynamic balance 11 -15 years;
- balance in rotational movements 11 -14 years;
- precision in the movements of the right hand 10 - 13 years;
- precision the movements of the left hand 10 - 15 years;
- precision in the movements of the two hands 10 - 12 years;
- hand strength 11 -13 years;
- shoulder strength 12 - 14 years;
- lumbar muscle strength 10 - 12 years;
- reaction to visual stimuli 18 - 22 years;
- reaction to acoustic stimuli 18 years;
- reaction to tactile stimuli 12 - 14 years;

- speed of rotational movements 12 -14 years;
- hand movement speed 10 - 14 years;
- general endurance (maximum VO<sub>2</sub>) 15 - 22 years.

According to D. Martin (quoted by E. Hahn) the period of 10 - 12 years is conducive to the development / education of the following abilities:

- motor learning ability;
- ability to differentiate and control;
- visual and acoustic reaction capacity;
- spatio-temporal orientation;
- rhythm of movements;
- balance;
- speed (7 -13 years);
- start training for endurance (11 - 12 years) and strength at (12 years);
- cognitive, affective qualities.

Finally, we can say that the main phenomenon that we must take into account at the age of 10-12 years is the process of growth and physical development.

This component of the human being becomes, in today's sport, the main structural element of multilateral physical training. Growth is the quantitative process of cell multiplication having the effect of increasing the size, volume and body weight, while development is the qualitative process of cell differentiation, expressed by adaptive functional changes. These two processes are conditioned by a series of internal factors (genetic inheritance, neuro-endocrine mechanism) and external factors (geo-climatic factors, diet, hygienic conditions, materials, type of activity).

Physical training is an external factor that subjects the body to complex phenomena of adaptation, compensation and overcompensation. It also stimulates and doses the growth and development of the human being if done correctly.

### **The importance of using non-traditional means in the training of beginners in the game of football**

The predominant use of non-traditional means in the initiation phase in the game of football, especially in children aged 10 to 12, is largely justified by the following arguments:

First of all, it must be shown that the general motor training with which beginner children are introduced in the practice of football is quite insignificant. Most beginner footballers have serious motor deficiencies, either due to the lack of playgrounds, or the small number of physical education lessons, done in school, or as a consequence of the development of the contemporary world that offers young people many other extracurricular occupations, computer work, etc. . .

Second, the age of 10 to 12 years beginner footballers is particularly favorable for motor learning and that some motor qualities, or motor skills, do not develop sufficiently later.

Third, it can be said that a multilateral physical training performed with non-traditional means creates a solid basis for building specific motor capacity for long-term performance.

In this sense, this can be confirmed and it can be stated that numerous researches have been done in which it was observed that young people who, before entering specialized training aimed strictly at renewing the game of football, also practiced other branches or sporting events. subsequently obtaining superior results in the new chosen specialization. At the same time, this category of footballers retains its specific performance capability for a much longer time.

The problem of multilateral physical training is raising the issue of non-traditional exercises taken from other sports more and more seriously.

Thus, a first criterion for their choice would be the same in which non-traditional means have importance and influence the body in terms of somatic, anthropometric, functional, energetic, psychological, but also motor structures specific to the game of football. In other words, their use will lead to the widening of the motive fund for the footballer to consolidate the technical-tactical actions specific to the modern football game.

The second criterion is the choice of those means that facilitate and influence the improvement of specific motor acts. For example, short distance sprints will directly lead to an increase in the starting speed of the running speed, etc .; the exercises taken from acrobatic gymnastics will improve the goalkeeper's game through his interventions on the ball, through dives, ball dispossessions, etc. A third criterion is that non-traditional exercises must not lead to negative transformations that contradict the growth and development processes of children.

In other words, it is good not to use strength exercises when the growth cartilages have not ossified, also do not use exercises that lead to the appearance or exacerbation of physical deficiencies installed due to various causes (defective body posture, deformities of the spine, weakening of posture tone, etc.).

Fourth, a multilateral physical training based on non-traditional means, enriched the children's sports culture by forming habits to practice other sports in their free

time, as a means of compensating the specific demand of the game of football.

Concretely, taking into account this motivation, the approached topic is justified by the following findings and practical-methodical needs, as follows:

- Deficiencies or low level of development in biomotor and psychomotor availability for performance football found in the debut groups;
- The need to achieve at an early age (respectively 10 - 12 years) a high level of multilateral physical training to substantiate the intention to maximize the performance capacity specific to beginner footballers over a long period of time.
- In other words, ensuring a high level of multilateral physical training will contribute to the future construction of football-specific performance capacity;
- The use of non-traditional means in the first formative stage and continued later in other instructional stages is little treated in the literature and at the same time, less scientifically researched

**• The methodology of elaborating multilateral physical training programs is another important issue of the training process of young footballers.**

Usually, the elaboration of multilateral physical training programs is done starting from the motor structure of the game, namely:

- the need for multilateral physical training to be given priority at this age in order to ensure a solid motor basis for long-term performance capacity;
- increased attention to the choice of means, methods of working materials, rules and didactic principles, etc., so as not to slow down the process of growth and physical development;
- identification of the poorly developed structural elements of the preparation of the subjects from the experimental group.

According to what is currently reported, the methodology of elaboration of multilateral physical training programs begins with the establishment of instructional objectives (having as source the original - the game itself and the important elements of the game).

The instructional objectives entail the choice of means (exercises), training methods, principles, rules as well as the evaluation tests (control tests) used in practice.

### Conclusions

The need for multilateral physical training for groups of beginners (beginners in football) is justified by the following elements:

- Insufficient motor baggage with which beginners are presented at the selection stages. This means skills or motor skills not acquired or misappropriated, poorly developed motor skills,

- poor functional capacity of the cardio respiratory system, physical deficiencies, etc.
- Scientific requirements have shown that students with good multilateral physical training are more likely to become high performance athletes. In other words, a strong base of homogeneous multilateral physical training ensures the construction of performance capacity in a sport in general and in the game of football in particular.

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