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FEATURES OF THE MORPHOPHENOTYPE AND CHARACTERISTICS OF THE PHYSICAL PERFORMANCE OF YOUNG FOOTBALL PLAYERS AND THEIR RELATIONSHIP WITH THE PLAYING ROLE

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Summary: *In football players, sportsmanship largely depends on factors such as weight, body length, physical performance, speed-strength qualities and speed. Physical performance is an expression of human activity, which is based on movement. This manifests itself in various forms of muscle activity, and this, in turn, depends on the weakness and motivation of a person for professional activity. Anthropometric indicators of weight, height, total body size and proportions, somatotype, significantly affect physical performance, sports activity and the choice of sports specialization.*

Keywords: *physical performance, peculiarities of morphophenotype, young football players, playing role, sports success.*

At the present stage of the development of the training process in youth football, information about the structure and the totality of significant relationships between the components, types and forms of the internal organization of the physical fitness of football players is very important. Sportsmanship among football players largely depends on the mass and length of the body, physical performance, speed-strength qualities and speed. Sports genetics is still at the beginning of the journey, but at the same time it opens up. Physical performance is the most important component of an athlete's preparedness for competitions and is largely determined by the level of the athlete's functional state [27].

The physical development of a person is influenced by heredity, environment, socio-economic factors, working and living conditions, nutrition, physical activity, and sports [14]. Each game sport requires high basic indicators: the level of endurance, speed-strength qualities, technical and tactical skills, stable mentality, sociability in the team and the level of interaction [15].

Physical development is a set of morphological and functional features that make it possible to determine the stock of physical strength, endurance and performance of the body. Physical development is largely due to hereditary factors (genotype), but at the same time, its condition after birth (phenotype) to a greater extent depends on living conditions and upbringing. Physical development is one of the indicators of the health status of a football player [7].

Physical training is a process during which one or another level of physical fitness is achieved.

General physical training is aimed at increasing the level of physical development, broad motor fitness as prerequisites for success in various activities.

Special physical training is a specialized process that contributes to success in a specific activity (type of profession, sport, etc.), which imposes specialized requirements on a person’s motor abilities. The result of

physical training is physical fitness, which reflects the achieved performance in the formed motor skills and abilities that contribute to the effectiveness of the target activity (which the training is focused on).

Physical development is the process of formation, formation and subsequent change during the life of an individual of the morphological and functional properties of his body and the physical qualities and abilities based on them.

Physical development is characterized by changes in three groups of indicators:

- Physique indicators (body length, body weight, posture, volume and shape of individual parts of the body, fat deposition, etc.), which characterize, first of all, biological forms, or human morphology.
- Indicators (criteria) of health, reflecting the morphological and functional changes in the physiological systems of the human body. Of decisive importance for human health is the functioning of the cardiovascular, respiratory, autonomic and central nervous systems, digestive and excretory organs, thermoregulation mechanisms, etc.
- Indicators of the development of physical qualities (strength, speed abilities, endurance, etc.).

Of great importance for the management of physical development in the process of physical education are the biological law of exercise and the law of the unity of the forms and functions of the body in its activity. These laws are the starting point when choosing the means and methods of physical education in each case [13].

Currently, the task of preparing a highly qualified reserve for professional football is being updated. The most important task of all sports training is the formation of a high level of functional capabilities of those involved, as it is the basis for the growth of sportsmanship and special physical performance [12].

Of particular importance for achieving high results in sports is the selection of gifted and promising athletes. According to R.N. Dorokhov [10,11], sports morphologists and anthropologists are currently faced with the task of finding new criteria for selection, orientation and improvement of the training process. Achieving high results in any type of activity depends on many factors, the main of which is the maximum compliance of the individual characteristics of a person with the requirements of the chosen specialization. In this regard, taking into account the requirements of a particular sport for the human body is the most important condition for the education of highly qualified athletes [26, 1,3].

It is well known that all physiological and formally physiological features are determined by the human constitution, which is a functional unity of all physical and physiological properties of the human individuality. When it comes to the constitution, we mean the integrity, unity, stability of the nature of the features under consideration.

The principle of a holistic study of a person does not raise doubts among researchers, however, this approach is either not used on a sports contingent, or is implemented partially or else always methodologically. It is not known to what extent the somatic and physiological characteristics of athletes of different specializations mutually determine each other. Do these indicators combine the same factors in the structure of athletes' physical performance or do they exist relatively independently of each other?

There is still no algorithm for reliable attribution of athletes at the stage of sports improvement, taking into account the informative psychophysiological complex, to the sport to which they are more consistent 18.6].

Assessment of physical development (PD) of a person is of great practical importance in improving the system of physical education and sports training [16,29,32], and is also one of the informative indicators of the level of public health [24].

The morphophenotype of the constitution (somatotype, somatic type, body type) is the most accessible to research, relatively stable in ontogenesis and genetically determined characteristic of the integrity of the organism. Recently, in our country, the method for determining the somatotype of R.N. Dorohova (1985, 1991).

In the studies of R.N. Dorokhov's constitutional diagnosis is based on the priority of morphological features, and the constitution itself is considered as a combination of general and particular constitutions. Somatotype understood as an equivalent of the term "constitution" [17, 30].

The morphophenotype of the constitution (somatotype, somatic type, body type) is the most accessible to research, relatively stable in ontogenesis and genetically determined characteristic of the integrity of the body. Recently, in our country, the method for determining somatotypes by R.N. Dorohova (1985.1991).

To assess the human constitution, the scheme of Stefko and Ostrovsky (1929) is used [33,25]. The proposed scheme provides for the allocation of pure (asthenoid, thoracic, muscular, digestive and abdominal), mixed (a combination of elements of pure types) and indefinite types of constitution. However, this typology is based on somatic features, which introduces a significant subjective part into the assessment of indicators. For decades, scientists have been working on the creation of a fundamentally new system for assessing constitutional types using signs that have a quantitative, metric expression, which makes it possible to predict the duration of individual periods of development, which serves as the basis for predicting the definitive body dimensions, its component composition and motor qualities of an athlete.

Body proportions are determined by the ratio of individual parts of the body and its length, i.e. indices of the relative length of the lower and upper limbs, the width of the shoulder, pelvis, etc. are calculated. It is customary to distinguish 3 main types of proportions - dolichomorphic, brachymorphic and mesomorphic.

When somatotyping, it is proposed by different authors to use the Rohrer, Pirke, Rees-Eysenck, Erisman, shoulder-growth indices; indices of available nutrition - Quetelet and Quetelet II; ratio between upper and lower body segments [31,28]

Morphological, functional and motor parameters of a person are determined by the type of his constitution, which is the medical and biological basis for a differentiated approach in the system of physical education, which implies the need to develop new pedagogical technologies, taking into account the individual typological characteristics of the human body.

Football as a sport makes high demands on various types of training of young football players [9]. One of the most important aspects of training is the special physical training of young football players [21]. It is known that in the process of competitive activity, football players of various roles (goalkeeper, defenders, midfielders, forwards) perform loads of different volume and intensity.The role of a football player determines the required level of development of physical abilities. In this regard, in our opinion, when developing physical abilities in the process of training activities, it is necessary to take into account the game role of young football players.

Among the many indicators of the individual characteristics of the body

For athletes, anthropomorphological features are of great interest, since they can determine the manifestation of strength, speed, endurance, etc. [22, 20].

Anthropometric measurements allow obtaining objective data on important morphological parameters of the body - length, weight, chest circumference, etc. They are the basis of somatometric methods for studying the physical development of a person [23, 19]. The data of many studies in various countries of the world show that height, body weight and other morphological parameters play an important role in human physiology, and his health directly depends on these parameters [2, 4, 5]. So, the low growth of a number of peoples of

tropical countries is a consequence of a lack of protein in food.Excess body weight significantly reduces life expectancy. In children and adolescents of the highlands, the processes of growth and puberty are greatly slowed down in comparison with the inhabitants of the plains and lowlands. The geographical conditions of any region leave their mark on the body of athletes [8, 32].

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