EVALUATION OF THE RESULTS OF ANTHROPOMETRIC STUDIES OF ATHLETES IN DIFFERENT ATHLETICS DISCIPLINES

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Abstract:

This article discusses the main anthropometric characteristics of athletes involved in various disciplines of athletics in Samarkand. The study involved 100 athletes in the discipline of athletics

Key words:

athletes, athletics, anthropometric indicators.

The current level of sports achievements, the urgent tasks of sports (choice of specialization, increasing the level of sportsmanship, management and control of the training process, selection and forecasting of performance, etc.) dictate the need to study and assess the potential of all systems of the athlete's body in their relationship, as well as individual features and their impact on athletic performance. In this regard, among the many indicators of individual characteristics, anthropometric indicators are of great interest. As you know, they affect the manifestation of the main motor qualities - strength, speed, endurance, flexibility, provide adaptation to various conditions, the peculiarities of recovery after training and competitive loads. These prerequisites form the basis of the sports section of anthropology and are the basis for the development of approaches to assessing the characteristics in various sports.

Purpose of the work:

Comparative assessment of anthropometric characteristics of the development of female athletes involved in various disciplines of athletics.

Materials and methods of research:

In the course of the research, 100 athletes at the age from 11 to 19 years old were examined, 50 of them were athletes doing short distance running; 50 athletes doing long jump.

All study participants had grades for these sports. This group also included candidates for Master of Sports and Master of Sports. The anthropometric study included measuring the body weight of athletes on an empty stomach, measuring standing and sitting height, measuring the circumference of the chest in the phases of inhalation, exhalation, pause, and calculating the excursion of the chest.

Research results:

The specificity of the kind of sport leaves its mark on the athlete's body, which is expressed in the originality of his constitution, body proportions. In connection with long-term sports, there is not only the formation of individual morphological signs and physique in general, but also the selection of individuals with the most favorable morphological characteristics and physical qualities for this kind of sport.

Based on the foregoing, the purpose of this study was a comparative assessment of the anthropometric characteristics of the development of athletes involved in various disciplines of athletics.

Table 1. Anthropometric characteristics of athletes involved in various disciplines of athletics

Anthropometric sign	Short distance running n = 50	Long jump n = 50
Standing length	158,0±0,9*	162,7±1,1*
Sitting body length	57,1±0,4*	56±0,2*
Body mass	51,3±0,5*	48,8±0,7*
Pause chest circumference	84,5±0,5*	88,6±0,4*
Chest circumference (inhalation)	90,7±0,8*	86,9±0,3*
Chest circumference	86,9±0,1*	83,6±0,2*
cells (exhalation)	3,8±0,2*	3,3±0,5*

*** Index means with which group the differences are significant (p <0.05)**

The results given above allow us to talk about some differences in the physical development of athletes depending on the sport. So, for example, when assessing the body weight of athletes-runners and athletes engaged in long jumps, the fact that athletes running a short distance have significantly higher values of this indicator (51.3 ± 0.5) , compared with athletes doing long jump (48.8 ± 0.7). In our opinion, this is due to the fact that athletes running a short distance have more developed muscle mass.

When assessing the results of anthropometric indicators, such as measuring standing and sitting height, we can say that among athletes specializing in jumping (162.7 ± 1.1), these data prevail over athletes-runners (158.0 ± 0.9). Based on these results, it can be concluded that jumping athletes are ahead of their peers, short distance runners in height.

The chest circumference is the main anthropometric indicator that illustrates the development of the muscular system. The revealed dependence is similar to that established for body weight. From the above table, we can conclude that athletes who are running have higher indicators both on inspiration (90.7 ± 0.8) and on expiration (86.9 ± 0.1) than among athletes who are jumping in length (inhalation - 86.9 ± 0.3, exhalation - 83.6 ± 0.2). Accordingly, the excursion of the chest in athletes-runners (3.8 ± 0.2) will also be greater than the excursion of the chest in athletes of another category (3.3 ± 0.5).

Anthropometric indicators of female athletes in general reflect the patterns of age development, however, there are features that require the development of a specialized module of anthropometric indicators and the improvement of the system for assessing the physical development of female athletes in order to solve selection problems, determine the qualifications of athletes, as well as correction in the training process.

Conclusions:

The study made it possible to establish the differences and at the same time the similarity in individual anthropometric characteristics between the athletes of the studied groups, due to the peculiarities of motor activity in sports specializations. The results obtained can be used as morphological criteria in sports orientation, as well as for medical and biological control of the educational process in athletes of this age category.

Literature:

1. 1.BARATOVA S. S., SOBIROVA S. B. SCANDINA WALKING IS A STRONG ATTITUDE FROM THE AGE CATEGORY, AN EFFECTIVE WAY TO MAINTAIN A HEALTHY LIFESTYLE // Journal of Biomedicine and Practice. - 2020. - T. 5. - №. 5.
2. Margazin V.A. Clinical aspects of sports medicine SPb .: SpetsLit, 2014-462p.
3. Hayitova U. T. and others. PEDAGOGICAL BASIS FOR INDEPENDENT MASS SPORT AND PHYSICAL CULTURE // Bulletin of Science and Education. - 2020. - No. 23-2 (101).
4. Baratova S.S., Mavlyanova Z.F., Burkhanova G.L. Investigation of admissible values of body parameters of athletes using bioimpedance measurement // Problems of Science and Education. - 2019. - No. 31 (81).
5. Kim O.A., Baratova S.S. Computed tomographic comparison of discirculatory encephalopathy and transient ischemic attack of various etiology // Youth and medical science in the XXI century. - 2019 .-- S. 195-195.
6. Baratova S.S., Kim O.A. Comparative assessment of the results of anthropometric studies of female athletes of various qualifications. - 2019.