Spectrum Journal of Innovation, Reforms and Development

Volume 23, January, 2024 ISSN (E): 2751-1731

Website: www.sjird.journalspark.org

THE RELATIONSHIP OF PHYSICAL QUALITIES AND MOTOR SKILLS IN YOUNG ATHLETES

Turdimuratov J. A. Karakalpak State University

Utegenov J. J. Karakalpak State University

Abstract

The article presents data related to the substantiation of the training system for young athletes, the identification of patterns of age-related development of physical qualities in children, adolescents, boys and girls specializing in various sports.

Keywords. Motor actions, education of physical qualities, movement training, development of physical qualities, specifics of sports training, features of growth and development.

Introduction

The concept of methodology in youth sports covers a set of tools, methods and methodological techniques that characterize the overall way of implementing educational and educational tasks. The methodology is based on some general principles and at the same time has features in each specific section of education or upbringing.

Based on the essence of the two main aspects of physical education, there is a distinction between the method of movements (motor actions) and the method of education of physical qualities. These two major sections of the methodology have both common and distinctive features.

The features of the movement learning process are determined by the fact that it is based on the patterns according to which the purposeful formation of motor skills, skills related to them, and knowledge takes place. The main methodological problems here are in choosing the optimal ways to unlearn, consolidate and improve the technique of physical exercises, in the consistent use of tools, methods and techniques that would guarantee the necessary learning effect. The methodology of the education of physical qualities is subordinated to the laws by which their development is controlled. The main methodological problems here consist in the selection and consistent use of tools, methods and techniques that most effectively ensure the directed development of strength, speed, endurance and other physical qualities.

Movement training and physical education partially coincide, because the underlying patterns of formation of motor skills and development of motor abilities are the same.

Performing physical exercises for the purpose of learning, they always show certain physical qualities and, thereby, contribute to their development to one degree or another, and educating physical qualities, one way or another, affect the results and the process of mastering motor actions. Therefore, the line between movement training and physical education can only be drawn with some conditionality. But it exists and is embodied in very real methodological features. For example, it is natural for the technique of initial learning of motor actions to facilitate the conditions for their performance, including physical activity. On the contrary, one of the main patterns of the methodology of physical education consists in a gradual increase in the load, both in volume and intensity. The discrepancy between the patterns of movement training and the education of physical qualities is expressed, in particular, in the fact that good training in the technique of physical exercises can be combined with a relatively low degree of development of physical qualities. And, conversely, a relatively high degree of development of any physical quality, say, strength, achieved as a result of physical education, is not always combined with an equally developed ability to use this quality rationally.

It follows that in order to understand the essence of the methodology of physical education, it is necessary to keep in mind both what is common - what unites the various sides of the process of physical education, and the features that distinguish them. The same applies to the internal subsections of the methodology.

The study and generalization of the experience of training in various sports and the analysis of special literature have shown that the problem of the relationship of physical qualities, their optimal ratio in the process of sports training is among the least studied in the theory and methodology of physical education. According to some experts [5], in the training process there should be not only the fullest possible development of individual, special qualities, but also bringing them into line with each other, combining their development and unification, carried out together with mastering the technique of movements.

A number of experts note that the relationship between body weight and physical fitness is weak at a younger age and increases over the years. At the same time, it is noted that the total size of the body has a significant impact up to the age of 16, and later the degree of their influence decreases. In particular, a large mass prevents teenagers from achieving high results in running and jumping, while an advantage in height accompanies good results. [7]. A large number of scientists have found [8] that boys and girls run equally fast, regardless of their body length (130 or 160 cm), but not as fast as 12-year-olds of the same height. The increase in running speed in children aged 12 is explained by better coordination. It was found that at the age of 14, boys run even faster than at the age of 12, but those with a longer body length run the distance faster. It should be noted that at the age of 18, body length does not affect running speed, although boys of this age have higher speed indicators than 14-year-olds. Apparently, large differences in puberty in boys at the age of 14 lead to differences in running results.

However, there are also contradictory data. In a number of studies, it was not possible to find a statistically reliable relationship between the length and body weight of schoolchildren with the results in jumps.

It should be pointed out that the highest rates of strength growth are observed at the age of 14-17 years [1].

The specifics of sports training in training groups are largely determined by a biological factor - the process of puberty. Athletes of the same passport age may be at different stages of biological development. Individual differences in the timing of puberty have a significant impact on weight and weight characteristics, indicators of physical and technical fitness, performance and, as a result, the dynamics of indicators of success in sports activities [3]. The nature of physical development, the level of manifestation of motor qualities are more related to individual characteristics of growth and development than to passport age [4]. Many researchers dealing with this problem agree that one of the most informative indicators of the rate of biological development is the degree of severity of sex characteristics [6]. And, Since there is a fairly close relationship between the individual parameters of biological maturity, in practical work it is easier and quite sufficient to use the so-called "sexual formula" to determine biological age.

The high level of achievements of young athletes depends on the perfection of the methodology and tactics of sports training, the progress of technical means, timely and effective rehabilitation of athletes, as well as on the growth of mass participation and the correctness of the selection of athletes. To choose a type of sports activity for each teenager is the task of sports orientation; to select the most suitable athletes for a particular sport is the task of sports selection [8].

Different people with the same morphofunctional capabilities have different degrees of trained motor qualities. An outstanding athletic achievement is the result not only of hard sports training, but also of the extraordinary hereditary data possessed by an athlete. A high level of sportsmanship requires long-term training. Therefore, the biggest difficulty lies in the ability to see in a child what he will need to win when he is an adult. Unfortunately, there are still few criteria for evaluating an athlete's prospects. In addition, the model characteristics of the "ideal" types in individual sports have not been sufficiently developed. It is a well-known fact that high results in octopus can be achieved only if there are certain abilities. However, little is known yet about how abilities are formed and what scientific criteria can be used to determine giftedness in a particular motor activity. It has been proven, for example, that children who have a growth advantage retain it in subsequent years [2]. Like any complex phenomenon, the formation of abilities has stable, probabilistic and random components. The random component defies any predictions, the probabilistic one can be assumed, and the stable one is easier to predict than others.

Dropout during selection is a real phenomenon at all its stages. It is known that some people may have advantages over others in mastering any activity. Abilities are the properties of a person that make him suitable for the successful performance of any activity. Abilities are formed on the basis of inclinations - anatomical and physiological characteristics of a person in the process of activity, education and upbringing. But even under the same conditions of education and upbringing, there are huge individual differences in the results, because even today scientists have relatively little information about the inheritance of high variants of normal human traits. It is also important to point out that the problem of developing and

forming talent is inextricably linked with solving the problem of athletic abilities, with solving the problem of individualizing the process of improving skills [9].

The level of development of modern sports is so high that only a few athletes can show international-class results. There are certain recommendations about the age at which to start practicing a particular sport, developed by a number of specialists. There are studies that recommend introducing sports orientation for children to practice handball according to certain criteria.

In the practice of sports selection, talent search usually takes place in a competitive environment. The sports result, however, is not stable, especially in sports games. The determination of athletic fitness is not only a check of a teenager's compliance with the specifics of sports activities, but also the search for contraindications (anti-criteria) and their assessment.

It is undeniable that it is necessary to select promising athletes according to several criteria. Now, for example, it is possible to predict with sufficient accuracy the length of a teenager's body at any stage of his development. The length of the upper and lower limbs can be predicted. The transverse dimensions of the body can also serve as a selection criterion for determining athletic activity! but, [10].

It is known that certain genetic factors have a great influence on the development of various physical qualities.

Effective control by the genotype is subject to: speed, muscle strength and especially endurance. It turned out that speed does not depend on the athlete's physique. The basis for the ability to move quickly is the high excitability of the nervous system. Such a quality as endurance does not depend on the athlete's physique, and it, in turn, depends on the genotype of the subject. There is no doubt that the importance of physical qualities in different sports varies. The ability for a particular sport can be assessed using only tests and exercises specific to it.

The analysis of the above research materials allowed us to draw the following main conclusions:

- 1. The conducted research has demonstrated the importance of the problem of the interrelation of physical qualities in the training process of young athletes.
- 2. The quantitative characteristics of the interrelation of physical qualities in students specializing in sports of a speed-strength nature are revealed; in sports in which success depends mainly on accuracy, the art of performing movements; in sports characterized by a complex manifestation of physical qualities. With age, as an athlete improves his skills, the correlation between those physical qualities that are leading in his chosen sport increases, as well as between these qualities and athletic performance. In accordance with this, it is necessary to choose sets of exercises aimed at developing the physical qualities of those involved.
- 3. Taking into account the quantitative characteristics of the relationship of physical qualities contributes to a more successful management of the educational and training process at various age stages of athletes' training, allows you to achieve such a ratio of physical qualities that is necessary for high results in your chosen sport.

- 4. With the help of a schematic diagram of the study of the relationship of physical qualities, developed by us on the basis of our research, it is possible to identify the ratio of levels of development of physical qualities in various sports and different age groups, determine on the basis of this the predominant orientation of the training process and choose effective means to ensure the optimal ratio of levels of development of physical qualities in different age groups. Thus, taking into account the peculiarities of the relationship of physical qualities allows you to successfully manage the process of improving sports skills.
- 5. The basic scheme for identifying the relationship between physical qualities and managing the process of educating these qualities in athletes of various groups is as follows:

 1) the level of development of physical qualities; 2) the degree of interrelation of physical qualities; 3) the degree of interrelation of physical qualities and athletic performance; 4) the predominant focus of sports training; 5) basic means and methods of sports training.
- 6. Further research is needed to identify the ratio of physical qualities in various sports, taking into account the age and qualifications of those involved.

References

- 1. Железняк Г. Совершенствование системы подготовки спортивных резервов в игровых видах спорта.: Автореф. дис.... д~ ра пед. наук. М.-.1991. 48 с.
- 2. Иващенко В.П. Совершенствование методики техникотактической подготовки юных гандболистов 14-15 лет: Автореф, дис.... канд. пед. наук Л.:, 1992. 22 с.
- 3. Назаренко Л.Д. Развитие двигательно-координационных качеств как фактор оздоровления детей и подростков // Ж. Теория и практика физической культуры. 2001. №. С. 26-29.
- 4. Прасад II.В. Дети в спорте // Спортивная медицина. К.: Олимпийская литература. 2003. С. 260-264.
- 5. Тоден Д.С. Тестирование аэробной мощности // Физиологическое тестирование спортсмена. К.: Олимпийская литература. 1998. С. 119-191.
- Тюленьков С.Ю. Методика этапного контроля физической работоспособности футболистов // Ж. Теория и практика физической культуры. - 2001. - №и. - С. 36-38.
- 7. Фураева Н.В. О фактах, определяющих структуру годичного соревновательнотренировочного цикла в современном баскетболе // Ж. Теория и практика физической культуры 2001. №5. С. 28-30.
- 8. Чепуркина А.А. Использование элементов минигандбола в физическом воспитании старших дошкольников.: Автореф. дис. ... канд. пед. наук. Краснодар.-1997. 21 с.
- 9. Айрапетьянц Л.Р. Педагогические основы планирования и контроля соревновательной и тренировочной деятельности в спортивных играх.: Автореф.дис.... д-ра пед. наук -М.: 1992. -41 с.
- 10. Бахрах И.И. Актуальные проблемы детской спортивной медицины// Ж. Теория и практика физической культуры. 1996. №12. С. 26-29.