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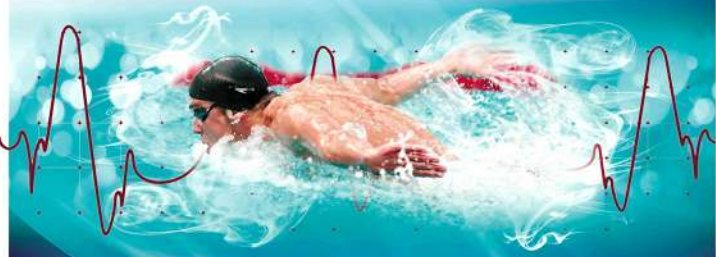

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с международным участием

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RUSSIAN RESEARCH IN THE EXTRAPOLATION OF MOVING SKILLS IN THE LAST SEVEN YEARS

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Abstract. The article reviews the domestic studies in the field of extrapolation of motor skills carried out over the past seven years. The main volume of the research is devoted gaming sports, and namely volleyball; a slightly smaller share is in gymnastics, boxing and judo. The authors of the studies confirm the need for the development of athletes' ability to extrapolate motor actions, as a necessary condition for the achievement of sportsmanship, optimizing the development of technical and tactical actions. In addition, the authors of the research identify effective ways of applying extrapolation in the training process, and also establish factors that enhance the ability to extrapolate the motor skill, and weaken this ability, as an example, the implementation of monotonous actions. Based on the studies reviewed, it is concluded that research in the field of extrapolation of motor actions is a promising direction of the study, if successful, capable to significantly improve the effectiveness of the training process.

Introduction. Human motor activity is characterized by great variability. A significant part of the motor acts of the new structure is carried out by extrapolation. It provides the so-called transfer of skills and the ability to "new places" to carry out new movements. For example, in a basketball player, the player throws the ball into the ring after a push in the back, a blow to the opponent's hands or a successful basket of the opponent occurs after a successful throw from the center of the court in the last seconds of the added time, etc. [6].

Novikov A.P. determines extrapolation, as the ability of the nervous system to adequately solve new motor problems on the basis of existing experience. Increasing the number of mastered technical actions increases the ability of a person to perform similar to them without special training [6].

The author notes that sometimes a fixed skill can prevent the formation of a new one. This happens when the structure of the new skill requires a change in the structure of the old one. From this it follows that in the course of training, it is necessary to immediately form the correct movements.

Particular importance extrapolation acquires for movements performed with significant variations in the external nature of the motor act.

The ability to extrapolate is weakly related to human heredity, more dependent on the formation of temporary connections. One-dimensional execution of movements reduces the ability to extrapolate, diverse, on the contrary - increases.

Extrapolation can be applied not always, in particular, when it comes to transferring skills from different kind of sports in the direction, for example, from football to wrestling. This raises the need to carefully select a set of preparatory exercises that should facilitate the mastery of the main exercise. Also, the number of auxiliary exercises should be reduced if they give the same effect [6].

Novikov A.P. indicates the need to take into account the impact of ex-trapolation on autonomic functions in sports games.

The purpose of this article is to conduct a comparative analysis of the Russian research in the field of extrapolation of motor skills in different sports over the past seven years.

The method of the research: the theoretical analysis of the scientific literature.

Results of the research and their discussion. The study of scientific literature during this period made it possible to single out a number of studies, mainly on games, in particular volleyball.

So, Burtsev A.V. in his study poses the problem of the formation of space-time orientation in the performance of technical techniques of volleyball players and offers its solution on the basis of extrapolation of motor actions [1, 2].

The results of the pedagogical experiment showed a positive effect of extrapolation on the performance of technical techniques by volleyball players. It was revealed an increase in the number of options for feeding the ball from its place: by 38.37% in the experimental group, at 28.39% in the control group.

A similar pattern can be observed with the methods of receiving the ball: the increase in the indices of the experimental group to 41.44%, at 28.16% in the control group.

Tinyukov A.B., Avramova N.V. in their article describe extrapolation as a necessary condition for the effectiveness of the technique and tactics of volition-painters, their sporting skills.

The authors point out the characteristic variability of the process of playing the game, which causes the absence of the possibility of performing actions with previously known space-time parameters. That points to the need to educate athletes in the skills of extrapolating motor activities [8].

The pedagogical experiment carried out by the researchers confirms their assumptions. Conclusions are made about the need, when preparing volleyball players, to take into account extrapolation, as a factor influencing the effectiveness of competitive activities.

Kochurova L.A. offers a technique developed by her, which expands the range of use of preparatory and leading exercises for volleyballers, which leads to the development of an extrapolation mechanism [5].

The author recognizes the importance of extrapolation as a necessary condition for sportsmanship, and also reveals an additional effect that is involved in the psycho-emotional state of volleyballers, as a consequence of increasing interest in training, which has acquired a diverse nature.

In addition to all said above, the studies devoted to gymnastics were interesting for us. Zayachuk T.V., Savosina M.N. note that the variability characteristic for each sport predetermines the formation of motor acts containing a new structure by extrapolation, which is possible because of the high plasticity of the central nervous system [4].

For the growth of mastery in sports stereotyping of motor actions is characteristic. The authors raise the problem of undesirable influence of such stereotyping on the process of mastering new technical actions, which results in the gradual loss of the ability to extrapolate.

Researchers distinguish the role of gymnastics as a sport that develops opportunities for extrapolation. This is due to the multistructure and multifunctionality of gymnastic exercises, which allows them to be used in future for various purposes [9, 10, 11].

The authors propose a model of applying gymnastic exercises developed by them for various specializations of the Volga State Academy of Physical Culture, Sports and Tourism, corresponding to their motor skills.

Petrov A.G. investigated the phenomenon of extrapolation on the basis of boxing. A training methodology was developed that takes into account this phenomenon, which made it possible to develop new technical actions based on similar ones already developed [7].

The study showed that extrapolation of motor actions allows for lesser forces to develop the variability of technology in a short time.

Buchnev A.A., exploring the application of extrapolation in the preparation of judo-tales, revealed the ability of wrestlers to master different structured special-preparatory exercises of the same orientation, which,

on the one hand, significantly reduces their number, and on the other hand, allows you to pick up effective techniques, specific to a particular athlete [3].

The author notes that this approach should be used when performing technical and tactical actions of medium and maximum complexity.

Conclusion. The review in this article of the studies carried out over the last seven years clearly shows that extrapolation has been and remains an interesting and promising direction of study. Further deepening of scientific thought in this sphere will improve the efficiency of training in all sports.

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