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DISTINCTIVE FEATURES OF SPEED SWING TECHNIQUE FOR FREESTYLE SWIMMERS

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Abstract:

The article describes how to correctly perform a "somersault" when turning with a crochet and gently approaching the wall when turning in a freestyle swimming. This work concerns the technique of turning in swimming with a crawl as often used in sport swimming. The basic phases of the rotation of the "somersault" when swimming in freestyle swamping, grubbing, and repulsion are described.

Keywords: sporting swimming, freestyle swimmers, speed turn of «somi», swimmer-sprinters, swimmers-stayers.

ОТЛИЧИТЕЛЬНЫЕ ОСОБЕННОСТИ ТЕХНИКИ СКОРОСТНОГО ПОВОРОТА У ПЛОВЦОВ ВОЛЬНОГО СТИЛЯ

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Аннотация:

В статье описывается, как правильно выполнять «сальто»-кувырок при повороте кролем и аккуратно приближаться к стенке при повороте в плавании вольным стилем. Данная работа затрагивает технику поворота в плавании кролем как часто используемого в спортивном плавании. Описываются основные фазы поворота «сальто» при плавании вольным стилем: подплывание, группировка, отталкивание.

Ключевые слова: спортивное плавание, плавание вольным стилем, скоростной поворот «сальто», пловцы-спринтеры, пловцы-стайеры.

Introduction. The level of development of modern navigation in the world is characterized by exceptionally high sports achievements, sharply increased competition. Successes are achieved by those athletes whose technique is highly efficient and expedient. In modern sport swimming, during a competitive distance, swimmers are limited to a long swimming pool, which requires athletes to perform multiple turns, which play an important role in the context of swimmers' competitive activities.

A well-executed turn allows you to continue to move along the distance, maintaining the rhythm and pace of movements taken before the turn, to economically use the forces, to maintain the speed of the distance, the optimal breathing mode.

Data on what requirements are imposed on the technique of making a turn. A well-executed turn allows you to navigate along trajectories, save before turning, and use energy economically, keep

the transmission speed and optimal breathing mode.

In modern navigation, turns are complex acyclic movements that are very difficult to analyze without the right technologies. This is due to the water environment in which this element is directly performed, namely: resistance, refraction and water pressure. And also with the individual characteristics of the body of athletes and their specialization, that is, the characteristics of different segments of the body, which during the turn move in different directions and axes [11, 12].

Many studies in the field of navigation have proved that there is no identical technique of the executed elements. When performing motor action there are common features, but each athlete has individual characteristics, which are inherent on.

It is known that swimmers-rabbits specialize in swimming both for long and short distances

(stagers and sprinters), and this in turn affects the technique of performing elements of the competitive distance and on the features of performing a high-speed turn.

Purpose of the study: was to determine the peculiarities of performing a turn of "flips" by high-ranking swimmers, who specialize in free-style swimming at different distances, and to reveal the distinctive features.

The objectives of the research: 1) To analyse and generalize literary sources. 2) To pedagogically observe and analyse speed turn of «somni».

The methods of the research: 1) the method of video shooting. 2) the method of mathematical statistics.

The results of the study and their discussion. The study was done on the basis of the sports complex of the Burevestnik Pool in Kazan in 2017. 10 highly qualified swimmers participated in the study who are members of the Russian national team and students of the Volga State Academy of Physical Culture of Sports and Tourism (few of which are 7 sprinters and 3 stayers).

The technique of sport swimming is characterized by numerous variants of performing elements of competitive activity. At the same time, the technique of a separate element depends on the characteristics of the execution of each phase, which is a part of the motor action. It is known that a turn in swimming consists of a few separate phases, the performance of each of which influences the subsequent phases. Therefore, the features of the performance of each phase of high-speed rotation affect its integral structure and at the time of its implementation. However, the analysis data helped to consider the turn as a system of movements, and allowed to distinguish three main phases in its structure: a) preparatory - swim to the turn wall; b) the main (working) rotation in the transverse and longitudinal axes, setting the feet on the pool wall and repelling; c) the final - sliding and performing the first swimming movements.

Since the efficiency of the turn depends on the individual characteristics of the athletes and the length of the swimming distance, during our research we established regular differences and common features in the performance of each turn phase between swimmers and sprinklers.

The first phase of the high-speed turn-off phase is characterized by a rapid influx to the pool wall. There are two options for doing this phase: by performing preparatory movements before rotating around the transverse axis of the body 180 degrees, raise your head and look at the pool wall in order to estimate the distance to the rim for more efficient rotation.

It is proved that implementation of the preparatory movements is an error that affects the overall result of the action. In connection with raising of the head, the angle of attack of the body increases, which in turn leads to a decrease in the speed of the athlete's progress. This error arises from the inability of swimmers to perform a turn in both directions, as evidenced by our research. Based on the results of the material received, we can say that 100% of the runners and 70% of the sprinters constantly performed a turn of the "somersault" from the left hand and 10% of the surveyed sprinters constantly perform their turns with the right hand.

Characteristic features of the second phase of the high-speed rotation of the "somersault" - "rotation phase" are the execution of rotation in the transverse axis in the position of a dense grouping. In our studies, during the rotation of the "somersault", 50% of the sprinter swimmers and 60% of the swimmers sweep around the transverse axis with the motion of the upper limbs, without the help of the arms, 40% sprinters and 60% of the stayer, respectively.

The third phase, the "repulsion phase", is a goal of carrying out a powerful push from the pool wall. Carrying out the repulsion phase from the pool wall, the athletes use a variety of techniques: in our study, three variants of this movement were demonstrated: most swimmers (60% of sprinters and 40% of the stayers) repulsed 10% of the stayers and 9% of the sprinters in the position "on the back" and 20% of the sprinters in the positions "on the chest". We also determined that the push to the position "on the chest" was not fulfilled by any sportsman - a stayer.

One of the errors that affect the result of an element is a rotation of the body around the longitudinal axis. In our study, we determined in which phase it is more convenient for athletes to perform this action.

Analyzing the video recording, we determined the following results: the majority of the participants in the experiment (50% of the stairers and 70% of the sprinters) performed rotation around the longitudinal axis during slip and only 20% of the stairers during the repulsion phase.

Conclusions. To date, the study of the features of sports equipment is the importance of the component of sports improvement and the overall hanging of the effectiveness of competitive activities. In this analysis of scientific and methodological literature it is allowed to state the fragmentation of the question of improving the technique of individual elements of sport swimming. Carrying

out the research, we can talk about the presence of some regularity in the implementation of the rotation of the "somersault" sprinters and stayers. Athletes demonstrate a variety of options for technology. This indicates the need to improve this element, regardless of the distances on which athletes specialize. The qualitative and quantitative analysis of the technique of turning "somersaults" in athletes who specialize in freestyle swimming, makes it possible to consider that the reserve for increasing the speed of performing a high-speed turn can be the change and rational use of various options for performing separate phases of a "somersault" turn.

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