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RESEARCH OF AUXILIARY SUPPORTING MEANS IN SWIMMING TRAINING OF ADULTS, WHICH ARE AFRAID OF WATER

Abstract. Purpose: *To consider the possibility of effective teaching swimming adults suffering from hydrophobia, using auxiliary equipment. **Materials and Methods:** The study involved 37 people aged 22-45 years. **Applied:** analysis of the educational process of learning to swim, questioning, ekspertgaya assessment techniques, teacher observation and experiment, mathematical statistics. **Results:** This study suggests that the formation of swimming skills is faster and more effective when used the auxiliary equipment. In the experimental group, four swimming styles were mastered by 59% and in the control by 18%. **Conclusions:** The proposed method of training of adults, with auxiliary equipment, allows to overcome the feelings of fear, accelerates the learning process and improve its efficiency.*

Key words: *recreation swimming, teaching methodology, adults, hydrophobia, auxiliary equipment.*

Setting of a problem. Analysis of the last publications. Swimming is one of the most popular and favourite sports in our country. Now swimming is available to various age groups. Importance of swimming is great. It well influences activity of cardiovascular and respiratory systems, develops muscles, increases organism resilience to catarrhal diseases, strengthens nervous system [1; 5]. Recreational swimming is carried out for the purpose of a hardening, the prevention of diseases, strengthening of health, increase of working capacity and to distance the signs of aging [8; 9].

To begin recreational swimming, it is necessary to learn to swim. Ability to swim opens for the person new opportunities of a relaxation and active recreation [3; 6; 7; 10]. When training in swimming of adults there are difficulties which aren't present when training children. Trainers, training in swimming of adults, face manifestation of hypersensibility and other undesirable reactions at stay in the water environment. Usually it is called fear of water, hydrophobia. For overcoming of hydrophobia considerable psychological efforts are required [2; 4; 8].

When mastering the skill of swimming, adults more often than children are using supportive applications. Such supportive applications as inflatable oversleeves, floats, swimming boards, poles, "noodles" are giving to the beginner confidence in his ability to learn to swim.

By psychological criterions, while training in swimming of adults, four groups are allocated [6]. If in the first group of trainees water causes positive emotions and there is a desire to develop skill of swimming, in the fourth group, trainees feel panic

fear of an entrance to water and depth. Using the regular technique when training in swimming of this category of people is often ineffectively. The analysis of publications indicates the need of search of other forms and approaches to training in swimming of the adults having hydrophobia [2; 3; 6; 8].

The offered subject is caused by that a large number of the adults wishing to visit groups of recreational swimming, but badly swimming or who aren't able to swim, annually meets. Thus 8–13 % of their number have hydrophobia. Such trainees demanding the higher attention to themselves and a special technique of training in swimming [1; 2; 4].

The subject of this work is to research the possibility of effective training in swimming of the adults, feeling fear of the water environment, with use of the supportive applications.

Main objectives of research:

1. To study experience on training of adults in swimming;
2. To reveal a positive effect in formation of swimming skill as a result of application of the auxiliary supporting tutorials;

For the solution of the main objectives we used the following methods of researches: analysis and generalization of scientific and methodical literature; analysis of educational process of training in swimming of adults; questioning and oral poll; pedagogical supervision, experiment.

Organization and results of research. The conducted questionnaire of trainees in groups of recreational swimming of the public pool "Pioneer" in Kharkov (October, 2013) which badly swam or weren't able to float and thus had hydrophobia, showed that hydrophobia can arise prior to classes in water: the person heard that people sink or itself was present in case of accidents. Therefore, after the conducted poll we created groups of people not able to swim, those who were having hydrophobia, and applied a special technique on elimination of various forms of fear (hydrophobia, fear of depth) which are shown at elementary swimming education.

The research of efficiency in training swimming with use of the auxiliary supporting tutorials, was carried out on adults of age 22–45, which weren't able to float and had the initial swimming skill from 0 to 5 m. Evaluation of swimming technique was carried out by three experts on a 10- point scale ranging from 1-3 balls – "Low " : 3-4 blunders and 5-7 minor ; from 4-7 balls – " average " : 1-2 blunders and 3-4 minor ; 8-10 balls – a "high level" : 1-5 minor.

From trainees 2 groups were created: the control group – 15 persons, and experimental group – 12 persons. Classes with groups were given 3 times a week for 45 min. in water, with one teacher. Sequence of learning swimming styles in control group: a freestyle – backstroke – breaststroke – the simplified version of butterfly ("dolphin") (when hands are making a fungus in water like in breaststroke); in the experimental: a breaststroke – freestyle – backstroke – the simplified version of butterfly ("dolphin").

Training in control group was held by a traditional technique, in experimental group – by means of the supporting applications of individual purpose (floats, boards, etc.), and also the supporting means of group use (floating constructions from the floats connected). Besides, when training, the special devices for an insurance of

swimming trainees – a pole, noodles (the long flexible cylinders made of foam), swimming boards and swimming belts were quite often used.

In the course of training in experimental group, we applied special exercises to formate the skills, preventing appearance of water-danger fear and creating favourable conditions for development of swimming movements. All exercises for elementary education of the adults having hydrophobia were united in system and were carried out with keeping the didactic principles (in particular, conscious training), with gradual reduction of a support.

The training material was intended for 36 classes and was distributed as follows: the first four classes were devoted to check out the initial swimming readiness and to carry out the exercises on mastering with water, 10 classes – were dedicated to learn a breaststroke style, 8 classes – for learning a freestyle, 6 – for a backstroke, 6 – for the simplified butterfly ("dolphin"), 2 last classes – for improvement of the studied styles of swimming and for checking the results of training.

Training process consisted of several stages: fact-finding, initial and the main. In a fact-finding stage such exercises as walking on a dock apron, knee-bends in water, acceptance of a prone position on a breast and on a back (with support and without), lowering of the face in water in swimming goggles, and then without them (with closed, and then with opened eyes), breathing exercises by means of which the trainees got used to waterfeel, were used. Exercises on mastering with water were carried out in parallel – on small and deep parts of the pool. They accustomed to two provisions – in vertical, and then in horizontal. As a result already through 3–4 lessons the trainees could carry out various exercises, which were supporting them on a water surface both on small, and on a deep place. At the initial stage the trainees mastered movements on a water surface with different swimming styles on the distance of 25 m. Examinees were offered to master technique of different elements of a swimming style in position on a breast and on a back on small part of the pool with support (with help of a pole, noodles or a swimming board), and then without support. Further the same movements were carried out on deep part of the pool with the supporting means. Then them passed to mastering of technique of swimming styles without carrying hands out to a water surface and without using of the supporting means. Distinctive feature of experimental group was that in preparatory part on the first classes in mastering of a new style, the various all-developing, imitating exercises (on the land) were included, and more than 50 % of time of the main part of classes (in water) the supportive applications were used.

The main stage began with independent swimming the facilitated styles, both on small and on deep part of the pool; tasks with change of the movement direction on a water surface were offered; examinees were trained in breath in extreme situations; carried out jumps from a side on deep part of the pool with the emersion by means of elementary feet and hands movements, and also with the subsequent independent swimming; were sliding under water.

As a result of training in experimental group higher rates, both in length of the swimming distance, and on technology of swimming were reached. The experiment

showed advantage of a technique of training with use of the auxiliary supporting tutorials of the adults having hydrophobia against traditional techniques (table 1).

Table 1

Comparative data of results of traditional training in swimming and training in swimming of adults, having hydrophobia with the help of supportive applications

Metrics			Groups		t	p
			CG (n=15)	EG (n=12)		
Initial swimming skill (ISS), m			0-5	0-5		
Number of classes			36	36		
Results of trainings (average)	Breast stroke	metrs	13±1,47	23±2,50	3,45	<0,01
		points	3,0	7,0		
	Freestyle	metrs	9±1,20	21±1,65	5,88	<0,001
		points	5,0	8,0		
	Back stroke	metrs	15±1,51	25±2,38	3,54	<0,01
		points	6,0	9,0		
	Simplified butterfly ("dolphin")	metrs	8±0,93	17±1,69	4,66	<0,001
		points	3,0	6,0		
Mastered 4 swimming styles, %			18	59		

Apparently from table 1, in control group average swimming distance isn't satisfactory, technique points are low (the assessment was made on a 10-ball scale). All this tells about low efficiency of an educational method.

In experimental group formation of skills in all swimming styles was much more successful. In experimental group 59 % of those, who were engaged, siezed skill in 4 swimming style. In control group there were only 18 % seized. Swimming technique points in experimental group are indicating more successful rational movements mastering. The positive effect of training in swimming became possible as a result of the auxiliary supporting tutorials application. Increase of training effect was intensified by such pedagogical methods as presentation, sequence, availability, repetition of the movements studied.

Conclusions: Use of the auxiliary supporting tutorials allows to quicker overcome feeling of hydrophobia (reducing number of accidents on water), to create rational technology of swimming that in turn affects the size of the swimming distances. This technique of training promotes increase of swimming readiness of the population, that can increase public swimming pools attendance.

Prospect of further researches consist in development of programs for training an adult part of population, in which, along with the traditional auxiliary equipment, more difficult modern technical means of training will be used.

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Received: 10.01.2015.

Published: 28.02.2015.

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