

Research Journal of Pharmaceutical, Biological and Chemical Sciences

Physiologically Justified Method Of Practicing Sambo With Teenagers With Hearing Impairment.

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ABSTRACT

The article presents a physiologically justified method of practicing Sambo wrestling with hard of hearing and deaf teenagers aged 12-14. The description of the basic elements and techniques of sambo used in the training process with teenagers with hearing impairment is given. A system of specially designed gestures is presented, which denotes various initial positions or elements in the fight, introduced into the practice of training sessions for adolescents with a violation of the auditory analyzer. The necessity of using color markers in Sambo classes with this category of teenagers is indicated. Information is provided on the need to conduct Sambo classes with hearing impairment in conjunction with healthy athletes. The proposed methodology has been tested and can be recommended for mass training of adolescents with hearing impairments in sambo.

Keywords: sambo, adolescents, hearing impairments, movements, physiological bases, methods of training.

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INTRODUCTION

Motor activity is an acknowledged variant of healing and toning of the body [1,2]. Its use is possible in mammals and humans in different forms [3,4]. Most preferably this is in the form of various systems [5], including in the form of control systems.

At present, sambo is a form of struggle that includes physiologically beneficial movements [6,7]. This dynamic and popular sport has long gathered many supporters in different countries around the world. Sambo is actively developing among the general population: students, workers, employees and just lovers of a healthy lifestyle [8,9]. Sambo is gaining popularity among people with disabilities, in particular, people with auditory analyzer disorders. The official start of the development of the Sambo fight among hard of hearing and deaf athletes in Russia is considered to be 2011, in which the Moscow city championship and the Russian Sambo championship were held [10,11]. A very important moment in the development of Sambo among people with hearing impairment was the inclusion in 2016 of the discipline "Sambo deaf" in the list of sports developed at the all-Russian level [10].

In these conditions, the question of improving the preparation of Sambo wrestlers with hearing impairment in Russia is becoming increasingly acute. Currently, there is a certain deficit of scientific and methodological information on the preparation of hard of hearing and deaf sambo wrestlers. In this regard, the trainers working with this category of athletes still do not have a physiologically conditioned methodology for their training and are forced to focus only on their pedagogical skills and experience.

In this regard, the goal is set: to develop a physiologically justified method of training in sambo for people with hearing impairment.

MATERIALS AND METHODS

The study was approved by the local ethics committee of the Russian State Social University on September 15, 2017 (protocol No. 9). The study was conducted on the basis of the Russian State Social University in Moscow, Russia.

To achieve this goal, the working programs on combating sambo for healthy children were analyzed, the most accessible elements of the Sambo fight for schoolchildren with hearing impairments and corresponding to the peculiarities of adaptive physical culture were identified and evaluated. All information was systematized and combined in the form of a table. When drawing up technical actions of the struggle, the principle "from simple to complex" was applied, taking into account the main elements in the stalls (the struggle lying down). As master elements are mastered in the stalls and the self-insurance skill of the trainees, receptions in the rack and more complex acrobatic elements are mastered. The arsenal of technical actions of Sambo wrestlers with hearing loss was not as great as that of healthy athletes. Their training is mainly aimed at removing the enemy from equilibrium and techniques that do not require large power costs. The developed elements of Sambo training for teenagers with hearing impairment are presented in Table 1.

Table 1. Motor actions used in the preparation of Sambo wrestlers with hearing impairment

Elements of Sambo Fighting		
1.	Acrobatic exercises	Rifts in a dense grouping: forward-backward, left-right.
		Racks: on the shoulder blades, on the head.
		Flips: forward-backward.
		Turn sideways "wheel".
		Equilibrium on the right (left) leg "swallow".
2.	Elements of wrestling technique	Rifts through the left and right shoulder.
		Self-insurance when falling on the right (left) side, self-insurance when falling on the back.
		Front (rear) wrestling bridge.
3.	Motor actions in the fight lying (ground)	Coups: capture of hands, grip of the arm and leg, lever.
		Hold: from the side, across, on the top, from the side of the

		head. Pain receptions: lever of the elbow through the thigh, shoulder assembly, infringement of the Achilles tendon.
4.	Motion in the rack	Throws: back footstep, front incision, passage for one leg, hook for the same leg.

A system of special gestures was developed to denote a certain motor action in the fight (rack, roll, somersault, etc.). The use of these gestures, the total number of which was ten, made it possible to significantly increase the motor density of the exercise, without occupying the time of the teacher for a long explanation of already familiar elements and exercises. Gestures used in Sambo classes are shown in Table 2.

Table 2. Special gestures used in classes with Sambo wrestlers with hearing impairments

No	Motor action	Gesture used by the trainer	Drawing
1.	Stand on the shoulder blades	The coach bends his arm in the elbow joint, facing the back of the practitioner, the palm is opened, the fingers look up together	
2.	Headstand	The coach touches his forehead with an open palm and shows the previous gesture	
3.	The emphasis is on the knees and elbows	The coach leans a little forward, bends his arms in the elbow joints and puts one forearm in front of the other	
4.	Roll forward	The trainer puts one index finger, horizontally the floor, the second disposes over the first and performs a rotational motion with the fingers forward	

5.	Back somersault	Previous gesture, only rotation backwards	
6.	Bortsovsky Bridge	The coach squeezes four fingers of the brush, bending them and the thumb in the interphalangeal joints to form a kind of "bridge"	
7.	Self-insurance	The coach sharply extends his arm in the elbow joint, performing a kind of "cotton" in the air	
8.	Rolling	The coach bends his arm in the elbow joint and shows the movement with his hand diagonally downwards	
9.	Hold	The coach leans slightly forward, bends the arm at the elbow joint, so that the angle between the shoulder and forearm is approximately 30-35 degrees	

10	Mutual struggle	The coach clenches his hands in fists, puts them vertically opposite each other and moves towards each other	
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Two exercises were developed using color markers aimed at developing coordination abilities. The first exercise "carousel" (Figure 1) is as follows: around the perimeter of the carpet are colored circles (yellow, blue, red) with a diameter of 20 cm. At the command of the coach, the athletes begin to move around the hall (step or step, jogging) the trainers are to stand in a circle and perform a certain stand, each color corresponds to a certain task (yellow - "Romberg's pose", blue - Roma's pose "Stork", red balance on one foot "Swallow"), then on signal, on the carpet and so on.

The second exercise "carousel 2" (figure 2) is as follows: around the perimeter of the carpet there are colored circles (yellow, blue, red) with a diameter of 20 cm, according to the command of the coach, athletes begin to perform acrobatic exercises in accordance with the color of the circle ahead (yellow - somersault forward, blue - roll, red - backwards somersault). To complicate the task, the coach changes the location of the circles around the perimeter of the room.

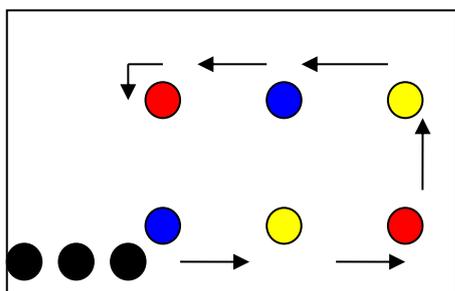


Figure 1. Exercise "carousel"

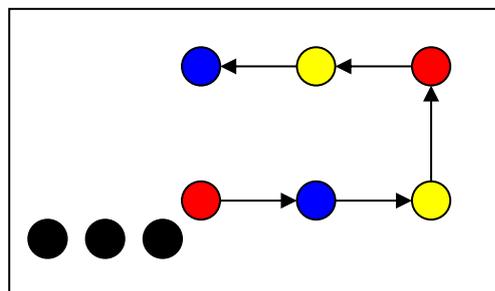


Figure 2. exercise "carousel 2"

Also, joint training of athletes with hearing impairment with healthy sambo wrestlers was organized. These classes were held once a week. Pairs were made by weight categories. The athlete with hearing impairment has always had a healthy opponent. The healthy fighters had a condition - during the testing of technical actions to correct mistakes of the opponent with hearing impairment, and during the training fights give the opportunity to take the winning capture and work not in full force.

RESULTS AND DISCUSSION

Training sessions for hard of hearing and deaf wrestlers were built according to the standard scheme: 10-15 minutes warm-up, 68-75 minutes main part, 5-7 minutes hitching. In this technique, the proposed technical arsenal for teens with hearing impairment was not so great in contrast to healthy adolescents, the main attention in the study of various motor actions was given to the assimilation of acquired knowledge and the formation of the self-insurance skill [12, 13]. This allowed the authors to successfully apply Sambo elements in work with hard of hearing and deaf wrestlers. During the training sessions, specially designed gestures were used, indicating different initial positions and stances in the fight. This increased the motor density of the exercise and allowed us not to waste time explaining the previously studied elements [14, 15]. The use of color markers during the training process diversified the exercises aimed at the formation of

coordination abilities [16]. The effectiveness of training sambists with hearing impairment was significantly increased as a result of training with healthy athletes [17-21]. This provided an increase in the technical skills of hard of hearing and deaf trainees [22-24].

CONCLUSION

The method of combating sambo for initial training groups presented in the work allows successfully preparing wrestlers with hearing impairments, clearly applying the elements of sambo in the training process. As a result of the use of the basic principles of adaptive physical culture in this technique, it is able to successfully implement the training process in the pathology of hearing. A harmonious combination in the classes of technical elements, special gestures, color markers, the use of joint activities with healthy fighters gives a positive effect and promotes targeted training of hard of hearing and deaf teenagers.

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