



Systemic approach to incentive athletes in bullet shooting

UDC 796+06



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Abstract

Objective of the study was to determine the most effective methods of stimulation for those involved in bullet shooting.

Methods and structure of the study. The experiment involved two groups involved in bullet shooting, at the Army Sports Club (ASC) in St. Petersburg, 100 athletes (50 in the experimental and 50 in the control groups) with I and II sports categories.

Results and conclusions. The physical preparation of the shooter is necessary, first of all, for psychological stability when aiming, when certain muscle groups are activated and every action must be coordinated at the subconscious level, up to the shot itself. Therefore, the universality of a systematic approach to stimulating those involved in shooting, when special attention is paid to psychological motives. Consequently, the universality of a systematic approach to stimulating those involved in shooting, when special attention is paid to psychological motives, spiritual qualities, character development, will and concentration, including on the basis of Zen philosophy, is the most productive.

Keywords: bullet shooting, sport, health, zen philosophy, psychology, stimulation, motivation.

Introduction. Bullet shooting is a modern type of shooting sport in which shooting is carried out with a bullet from pneumatic, small-caliber and large-caliber rifles and pistols [1].

Shooting requires a person's accuracy and good reaction, which is necessary to hit the target. A developed sense of dynamics and balance is also needed to capture the movement of the target. When shooting with one hand, you need sufficient strength and shooting skills at the same time - the development of strength and the necessary skills is provided through regular training and competition. The most successful shooters often have such qualities as high self-control and endurance.

Specialists in bullet shooting note the great psychologism of this sport, in which it is important to understand the philosophy of shooting. In particular, beginners are not advised to worry too much about their shooting ability - it is more important that shooting is fun. In this philosophy, the Japanese phrase "Issha Zetsumei" is applicable, which describes the situation

when the shooter takes the last shot before dying. This phrase in many ways reflects the Zen philosophy of bullet shooting, it is supposed that a good shooter before shooting should create a setting for himself: there is no other goal or concern in life than to make the perfect shot here and now. As you know, Zen philosophy recognizes that there is no second chance in life, so whatever a person does, he must do it perfectly, or not do it at all. In bullet shooting, this philosophy is very stimulating for shooters, psychologically setting them up to make any shot as good as if each shot was fired by a man convinced that he was the last in his life.

The philosophy of bullet shooting believes that it is not limited to applied meaning: it helps to give a person a sense of freedom, in the physical and mental senses. According to the famous popularizer of the Zen teaching in the West, Shunryu Suzuki Roshi, with a sufficiently strong concentration on some activity, the state of mind changes so much that a person no longer feels the boundary between the inner "I" and the external object (his activity): in this state, a person



is like would itself become activity, and vice versa. This seems to be an important understanding of the philosophy of bullet shooting, where the ability to enter into such a state, which develops in the course of practice, is very important for success [2].

Equally important is another Eastern concept, "mushin" - the state of mind in which martial artists reside during meditation or during combat. Professor Daisets Suzuki describes it psychologically as a state of "conscious unconsciousness". During the practice of bullet shooting, the mind should become completely calm and empty, "like the surface of the water." A person should be able to clear himself of all thoughts at the moment of shooting, which does not require reaching a "special" state and even special knowledge - theoretically, any person is capable of doing this. As with yoga or meditation, you need to focus all your attention on what is happening, and all the processes in the body, physiological and psychological, should occur on their own, in harmony with the state achieved, contributing to the perfect shot. All this is somehow connected with the practice of instilling high

concentration, which is of paramount importance in bullet shooting.

Among the general physiological and psychological effects of bullet shooting, the following are known: strengthening the muscle corset, which allows you to maintain the correct posture; increasing the strength of the arms and hands; development of logical, mathematical abilities (it is believed that successful shooting is 90% dependent on the mind and 10% on abilities); the production of adrenaline, relaxes the bronchioles in the lungs, which makes it easier to breathe; improved concentration; improving endurance; stress relief; character development; increasing self-discipline, self-control and responsibility [2].

Objective of the study was to determine the most effective methods of stimulation for those involved in bullet shooting.

Methods and structure of the study. For the experiment, two groups of people engaged in bullet shooting were selected at the Army Sports Club (ASC) in St. Petersburg. The experiment involved 100 athletes (50 in the experimental and 50 in the control

Table 1. Results of the control group

Parameters		In training activities	In competitive activity
Average reaction time, ms		231,6±29,03	235,4±56,22
Stability of attention, c.u.		1,42±0,10	1,31±0,09
Concentration of attention, c.u.		0,85±0,04	0,83±0,06
Loskutova's criteria	Functional level of the system	4,21±0,09	4,11±0,17
	Reaction stability	2,02±0,08	1,5±0,03
	Functionality level	3,38±0,02	3,01±0,15
Noise immunity		355,91±21,3	367,2±13,8
Attention score		324,37±32,41	311,02±14,16

Table 2. Results of the experimental group

Parameters		In training activities	In competitive activity
Average reaction time, ms		224,1±20,05	226,9±33,19
Stability of attention, c.u.		1,54±0,3	1,491±0,18
Concentration of attention, c.u.		0,88±0,11	0,86±0,7
Loskutova's criteria	Functional level of the system	4,26±0,13	4,22±0,25
	Reaction stability	2,03±0,27	1,7±0,11
	Functionality level	3,38±0,18	3,14±0,3
Noise immunity		362,25±21,3	369,1±0,3
Attention score		328,11±24,12	320,18±12,47



groups) with the first and second sports category. The experiment was conducted from September to December 2022, the end of the experiment coincided with the final competition at the end of the year.

In the control group, those involved were stimulated by common traditional methods, without a systematic approach. In particular, stimulation implied a periodic impact on such motives as gaining recognition (due to achieving high results), the motive of health and physical activity.

In the experimental group, a systematic approach to stimulating shooting was provided. Here, more attention was paid to psychological motives, spiritual qualities, education of character, will and concentration, including on the basis of Zen philosophy, in relation to bullet shooting. Among the specific methods, it should be noted autogenic training according to the Schultz method, which provides for a psychological effect that contributes to the normalization of higher nervous activity, relieving tension, anxiety and emotional discomfort, which, in our opinion, corresponds to the general description of the influence of Zen philosophy on training in bullet shooting. [1].

Results of the study and their discussion. Indicators of the effectiveness of stimulation measures for athletes in the control and experimental groups and their values are shown in tables 1, 2.

As can be seen from the comparison of the data for both groups, the athletes of the experimental group showed higher results than the athletes of the control group.

The decrease in the main physiological indicators in those involved in competitive shooting in both groups is mainly due to progressive fatigue. However, it is important to note that the difference between the indicators in the training and competitive activities in the experimental group is much smaller than in the control group. In our opinion, this directly indicates the effectiveness of a universal systematic approach

to the methods of stimulation of those involved in bullet shooting, related to the education of character, patience and strong-willed qualities, which in practice greatly simplifies self-control and reduces the influence of the stress factor, both during training and during training. competition time.

Conclusions. The results of the study indicate that the physical preparation of the shooter is needed, first of all, for psychological stability when aiming, when certain muscle groups are activated and every action must be coordinated at the subconscious level, up to the shot itself. Therefore, the universality of a systematic approach to stimulating those involved in shooting, when special attention is paid to psychological motives, spiritual qualities, education of character, will and concentration, including on the basis of Zen philosophy, is the most productive.

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