

Training polyathlon picked team of cadets of the Russian Federation Ministry of Defense military college

Zinaida Kuznetsova¹, Alexander Loginov^{2*}, Ilsiyyar Mutaeva³, Stanislav Kuznetsov¹, Rafida Kashapova⁴

¹Naberezhnye Chelny branch of the University of Management “TISBI”, 423806, Naberezhnye Chelny, Russia

²Tyumen Higher Military –Engineering Command School (military Institute), 625001, Tyumen, Russia

³Yelabuga Institute of Kazan (Volga region) Federal University, 423600, Yelabuga, Russia

⁴ Ufa branch of Financial University Under the Government of the Russian Federation, 450015, Ufa, Russia

Abstract: The article considers the main factors of polyathlon picked team of cadets formation taking into account the specificity of educational establishment of the Ministry of Defense of the Russian Federation. The article reveals the urgency of sports training reconsideration with the necessity determination to correlate all sides of cadets professional training with the main kind of physical and functional components segregation. We defined the importance of polyathlon for physical training integration, as the main, in the system of educational establishment. We revealed the factor, which influences the picked team of cadets formation for taking part in the main starts. The stages of the picked team formation are revealed with the main training means distribution. We created model characteristics of physical working capacity and aerobic productivity of cadets in age-related aspect.

1 Introduction

Cadets training, in terms of the Russian Federation Ministry of Defense educational establishments, is based on considering the questions of the future high class military specialists training. The most important demand is the necessity to correlate all sides of the future military men oncoming generation professional training.

Modern level of life of the Russian Federation Armed Forces military men demands training of skilled specialists. They successfully fulfill the set objectives and have a high level of combat readiness in different conditions of life [4, p. 13-15].

The conditions of training young generation of the future military men demand the necessity to reconsider the importance of physical and functional training, as the base of the preparatory professional military education. For military specialty development the authority created the concept of education widening in cadet corps, Suvorov Military Schools, Nakhimov Colleges.

Studying the problem helps to get an objective information concerning the degree of different kinds of physical-sports activity realization and reveal the factors, which influence the level of complex training and create the programs of cadets training [1,2,3,4].

It becomes urgent to study the question of cadets' physical training improvement taking into account the specificity of educational establishment. It is important to use more attractive kinds of sport. They show a complex development of physical qualities and motor abilities [5,6, 7,8].

A.A. Opletin (2015) in his works considers polyathlon as the means of professional-applied training in higher educational establishment students [8, p. 82-85].

The most important factors, which help to form a high level of motor activity can be the age of cadets (12-13, 14-15 and 16-17). The presented age periods are characterized by not even organism growth and development, by considerable inner and outer transformations. They are demonstrated in different conditions. There happens personality formation with the future professional self-determination. We also see the improvement of organism adaptive abilities to physical loads of different orientation. There is the opportunity to widen the range of motor activity volume formation and high physical readiness, as the base for a high level of cadets' physical development. Polyathlon is a good alternative of a successful adaptation to the increasing mental and physical loads and also provides a high level of motivation for systematic lessons, being an effective means of physical, functional and psychological abilities widening. In the opinion of the specialists, polyathlon is a unique means of psychological training and it is also important to take into account functional components of training [9,10,11].

The process of training polyathlon athletes provides bigger volumes of the training lessons and their intensity. They cause considerable physical and psychic tension and also the use of great diversity of technical and physical training. Apart from that training and competitive activity polyathlon demands students' quick transfer from one kind to another. It differs by motor and psychological character, kinematic and dynamic structure, being the base for many-sided training.

* Corresponding author: yulyaloginova@myrambler.ru

Among important factors, which define the necessity to use polyathlon means, we can define the ability to bring up moral, volitional and professionally important psychological qualities in cadets of military colleges during the training and competitive activity [4].

Thus, the problem of polyathlon picked teams of cadets formation on the basis of their training development in terms of educational establishment becomes extremely urgent.

2 Materials and Methods

During the research we revealed the attitude of the specialists to the questions of training effectiveness improvement and polyathlon picked team of cadets formation, taking into account the peculiarities of the Russian Federation Ministry of Defense educational establishment. Experimental work was held since 2017 till 2018 in Tyumen Presidential Cadet School of the Ministry of Defense of the Russian Federation. 12-13, 14-15, 16-17 year old cadets (30 people) took part in the experiment. All they went in for polyathlon.

3 Results and Discussion

Polyathlon picked team of cadets formation for taking part in competitions and tournaments helps to prepare all cadets and provide their optimal physical and psychological readiness for the main starts. The team formation is an important part of a pedagogical staff work at an educational establishment of the Russian Federation Ministry of Defense. Well-selected and balanced staff of the picked team of cadets, combined by general aim, is the way to successful competitive performance. Creating the collective of like-minded people, taking into account their general level of readiness helps to realize maximal abilities of cadets and defense the honor of an educational establishment.

The principle of the best cadets choice for taking part in competitions is the base for sports training. Selection of cadets and the picked team formation at an educational establishment should be held in several stages.

For the picked team of cadets formation a complex control and observation over cadets is held. Special events concerning operating and current control are held. The example of cadets phased picked team formation at an educational establishment is presented in table 1.

Table 1. The stages of polyathlon picked team of cadets formation educational establishment of the Russian Federation Ministry of Defense

Stages of picked team formation and its training	The main directions of work and the means of polyathlon picked team of cadets formation
I	Promising gifted schoolchildren involvement into polyathlon lessons. Check and selection. Preliminary training in terms of educational establishment.
II	Picked team formation from the cadets of the first level of readiness. The picked team testing at regional competitions. Taking part in the competitions of high level.
III	The content of the picked team of cadets stabilization toward educational cycle. Potential physical, functional and psychological abilities estimation. Training planning for the academic year and the period of studying at the educational establishment of the Russian Federation Ministry of Defense. Checking the reliability of the team members for taking part in higher level competitions.
IV	The main staff selection for taking part in higher level competitions.

Table 1 shows that polyathlon picked team of cadets formation at an educational establishment is held in within stages.

During the first stage we involve promising gifted schoolchildren into polyathlon lessons and check and select them according to their abilities to demonstrate the arsenal of different motor actions. Then we organize preliminary training of the Russian Federation Ministry of Defense educational establishment.

The second stage is characterized by the picked team formation from the cadets of the first level of readiness, according to the results of a complex level of physical, functional abilities of an organism revelation. We test the picked team during regional competitions.

The third stage includes the content of the picked team of cadets stabilization toward educational cycle of training. We estimate the potentialities of cadets, taking into account the experience of the training lessons. Training planning for the academic year and the period of studying at the educational establishment of the Ministry of Defense of the Russian Federation is realized taking into account the age and experience of going in for lessons. Checking the reliability of the team members during competitive activity helps to estimate the reliability of the main staff of the picked team. An important component in this case is the level of their progress in the main subjects.

The fourth stage is characterized by the final selection of the main staff for taking part in higher level polyathlon competitions.

On the basis of a questionnaire survey (n=12) we revealed the main selection criteria into polyathlon picked teams of cadets:

- cadets' health state according to medical indices;
- the effectiveness of adaptation level to the loads of different intensity;
- the dynamics of physical working capacity rehabilitation;
- preliminaries organization;
- the level of psychological steadiness and reliability;
- positive dynamics of competitive results according to the separate kinds of polyathlon;
- the results correspondence with the model characteristics of physical development, physical and functional readiness and psycho-emotional state;
- the level of psychological steadiness;
- the level of competitive motivation;
- personal and social discipline and progress.

The main aim of the picked team of cadets formation is the searching for the cadets. Their level of readiness and abilities allows to predict higher results. The base for the picked team of cadets formation is a modern integral estimation of cadets' individual indices. In this connection the base for the picked team of cadets formation and training forms the program of a complex cadets examination.

The most important subsystem of the picked team creation is model characteristics of the kinds of training study. It is connected with the fact that each cadet should get closer to the level of readiness model characteristics during training.

The main model characteristics include model characteristics of competitive activity, physical working capacity, physical and technical readiness, functional state.

During the first stage of the research work we created model characteristics of physical working capacity and aerobic productivity of cadets in the age aspect.

The created model characteristics of physical working capacity and aerobic productivity for selection into polyathlon picked team of cadets are presented in table 2.

Table 2. Model characteristics of physical working capacity and aerobic productivity for selection into polyathlon picked team of cadets

№	Model indices	Period of training	Model indices according to age of cadets		
			12-13 years-old	14-15 years-old	16-17 years-old
1	PWC170 (kgm/min/kg)	SPST	13,7-14,9	15,0- 15,9	16,0- 16,5
2	MOC (ml/min/kg)	SPST	40- 40,9	41- 41,9	42-45
3	PWC170 (kgm/min/kg)	CST	16,0- 16,9	17,0- 17,4	17,5-18,0
4	MOC (ml/min/kg)	CST	41-41,9	42-43	43-47

Note: SPST- special preparatory stage of training; CST –competitive stage of training.

The results of table 2 reflect model characteristics of physical working capacity and aerobic productivity of cadets at different stages of sports training. It was mentioned that by the competitive period model indices increase. The demands claimed on cadets' readiness level increase year after year and the range of the acceptable values of cadets' physical working capacity model characteristics and aerobic productivity become narrower.

4 Conclusions

Thus, the held research works helped to mention that the leading directions of the cadets training polyathlon picked effectiveness increase team are the following:

- cadets' functional readiness increase in all age groups, taking into account age-related and individual peculiarities of an organism;
- aerobic abilities increase in the ratio 25,30 and 50% in accordance with the considered age groups of training;
- physical qualities development, taking into account sensitive periods of their more distinct demonstration;
- the reliability of motor action fulfillment and the speed of actions increase depending on the level of coordinating difficulty fulfillment;
- technical-tactical actions improvement taking into account the specificity of the kinds polyathlon;
- individual psychological work with each cadet.

All mentioned above helps to come to the conclusion that the system of the picked team training formation should start before the stage of studying at the educational establishment of the Russian Federation Ministry of Defense.

Thus, the planned selection of pedagogical means of training the picked team of cadets during the period of training lessons and competitive activity would help to decrease the risk of non-effective team formation.

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