ISSN: 0975-8585

Research Journal of Pharmaceutical, Biological and Chemical Sciences

The Effectiveness Of The Theoretical Training Of Russian Students Of Secondary Schools In Physical Culture.

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ABSTRACT

The implementation of the Russian Federal State Educational Standard in the framework of physical education requires the organization of an educational process in Russia aimed at developing a diversely developed personality for students who can actively use the values of physical culture and sports to strengthen their own health and optimize educational and work activities. Theoretical knowledge of physical culture is a leading component of the content of physical education education, and form the fundamental basis of learning outcomes. Theoretical training in Russia on the subject "Physical Education" should act as a fundamental for the implementation of the sections of the program material "Methods of motor activity" and "Physical improvement." In the modern conditions of the practice of physical education in Russian secondary schools, special attention is paid to the design of theoretical training, which should be done taking into account the effectiveness of students' mastering knowledge of physical culture. An assessment was made of the development of theoretical knowledge of physical culture by Russian students in grades 1-11 of secondary schools for the period from 2013 to 2018. It became clear that the Russian teacher of physical education needed to strengthen the targeted design of a theoretical training scheme for students in physical education in a secondary school the degree of achievement of the planned results and the degree of formation of theoretical knowledge of his students. It should begin to rethink the content and technology of conducting physical education lessons. At the lessons of physical culture, it is necessary to actively apply practice-oriented, creative and research tasks of various kinds. This will contribute to a fuller mastery of basic theoretical information in the field of physical culture and sports, as well as a clearer formation of their practical skills in physical education and sports activities.

Keywords: physical education, theoretical training, physical education, performance, students.

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ISSN: 0975-8585

INTRODUCTION

The beginning of the ontogeny of a mammalian organism [1,2,3], including humans [4,5,6], is always associated with serious changes in its structure and functions [7,8,9] towards improvement [10,11] . This is associated with serious alterations in various organs [12,13] and deployment in the body of a complex program [14,15] of individual development [16,17]. A big role in its adequate implementation in the early stages of its ontogenesis [18–21] is played by the adequacy of environmental effects [22–25]. The environment is a recognized factor in modeling various processes [26,27] and programs in the body [28], ensuring either the optimum of its functioning [29,30], or the appearance of numerous dysfunctions [31,32] and pathologies [33,34]. Of particular importance in the number of environmental impacts [35] are physical loads [36, 37], which, if used wisely, can greatly heal the young organism [38–41], giving it a large safety margin for many years [42–44]. In this regard, all aspects of their use in young people have always been of great interest [45-49].

The implementation of the Russian Federal State Educational Standard in the framework of physical education requires the organization of the educational process in Russia to achieve the specific goal of school physical education - the formation of a versatile, physically developed personality capable of actively using the values of physical culture and sports to strengthen their own health, optimizing educational and work activities and organization active recreation [50,51]. Theoretical knowledge of physical culture, according to a number of specialists, is the leading component of the content of physical education, and form the fundamental basis of not only subject, but personal learning outcomes [52]. Thus, the theoretical training on the subject "Physical Education" should act as a fundamental for the implementation of the sections of the program material "Methods of motor activity" and "Physical improvement" [50].

In modern conditions, the practice of physical education in general education schools does not pay special attention to the design of theoretical training, given the effectiveness of students' mastering knowledge of physical culture throughout the entire period of study at each level of general education [53.54].

In this connection, improvement of the process of formation of theoretical knowledge on physical culture will be possible in the conditions of informing teachers about the structure and content of acquired knowledge in the process of mastering program material on physical culture. In this regard, the goal was set in the work: to evaluate the effectiveness of theoretical training of Russian students in the field of physical culture over the past 5 years.

MATERIALS AND METHODS

The study was approved by the local ethics committee of the Russian State Social University on September 15, 2013 (protocol №8). The analysis of the formation of knowledge on physical culture among Russian students was carried out within the framework of the International Contest-Game on Physical Culture "Eaglet" in the period from 2013 to 2018, the purpose of which is to develop students' sustainable motives and needs in caring for their health, knowledge of physical culture and sports, their history and modern development. The control of theoretical preparedness of Russian students in grades 1-11 (total number 109171 people) was carried out using a set of test tasks designed based on the requirements of the results of mastering the basic educational program of general education and the structure of the planned results for the Physical Education course [55]. Test tasks on physical culture are divided into two blocks: a theoretical block with multi-level tasks and a block with creative and research tasks [52,55]. In the process of selecting test items, the necessary level of learning in physical culture was taken into account, in accordance with the age characteristics of students and the requirements of program material (Table 1). For the first level of mastering knowledge, the result of which is perception, awareness of the meaning and fixation in the memory of the received information, tasks (1 level of complexity) for memorizing and reproducing theoretical material were used. Within the framework of the second level of mastering knowledge, tasks were used that promote the manifestation of students' readiness to apply theoretical knowledge of physical culture according to a well-known pattern in standard situations. This group consists of tasks (2 level of complexity), in which a word, phrase, tasks that require a comparison of facts and concepts are omitted. The third level of learning is manifested in the readiness of students for their creative and effective use in new, unfamiliar situations. Tasks of the third level of complexity are tasks related to the transfer of knowledge and skills into practical physical culture and sports activities that are close to real ones. Creative tasks related to the analysis, synthesis and evaluation of actions in the field of physical culture and sports. These include cognitive tasks, research tasks,

tasks that develop logical thinking and the ability to interpret results, carry out various information transformations, evaluate phenomena and facts for a specific purpose. The obtained results were processed using a standard package of statistical programs.

RESULTS AND DISCUSSION

In the course of the study, all the applied test tasks were combined into generalized sections, taking into account the substantive and methodological line of the educational program in physical culture, ensuring the continuity of the content of training in physical education classes and extracurricular activities (Table 1).

Table 1. The distribution of topics in the sections of pedagogical testing of students in the general education system

Sections	Approximate topics	Difficulty level of tasks
Health and healthy lifestyle	Concepts by section. Posture and flatfoot. Hardening of the body. Daily regime. Means and methods of health promotion and preservation. Health Assessment.	Tasks 1 and 2 levels of difficulty (3, 4, 5 points)
Sports theorist	Concepts in the field of physical culture. Summer sports. Physical qualities. Means and methods of PV. Technical actions and techniques of various sports.	Tasks 1 and 2 levels of difficulty (3, 4, 5 points)
Sports practice	Judging rules. Drawing up a set of exercises. Self-observation and self-control. Planning self-study.	Tasks 1 and 2 levels of difficulty (3, 4, 5 points)
From the history of sports, the Olympic movement	The history of physical culture and sports. Olympic Games and the Olympic movement. Physical culture in the modern world.	Tasks 1 and 2 levels of difficulty (3, 4, 5 points)

The ratio of tasks by section depends on the class. In elementary school, the tasks in the first section, “Health and a healthy lifestyle,” predominate; in high school, “Sports Practices” (Table 2).

ISSN: 0975-8585

Table 2. The approximate ratio of educational sections in the pedagogical tests on physical culture

School class	Sections			
	Health and healthy lifestyle, %	Sports theorist,%	Sports practice,%	From the history of sports, the Olympic movement, %
1	40	25	15	20
2	30	30	25	15
3	35	30	20	25
4	30	35	15	20
5	25	35	20	20
6	25	30	30	15
7	25	30	25	20
8	25	20	30	25
9	16	24	36	20
10-11	20	32	28	20

Pedagogical testing with the use of the proposed test tasks was conducted from 2013 to 2018, in which students aged from 7 to 18 years old took part (Figure 1).

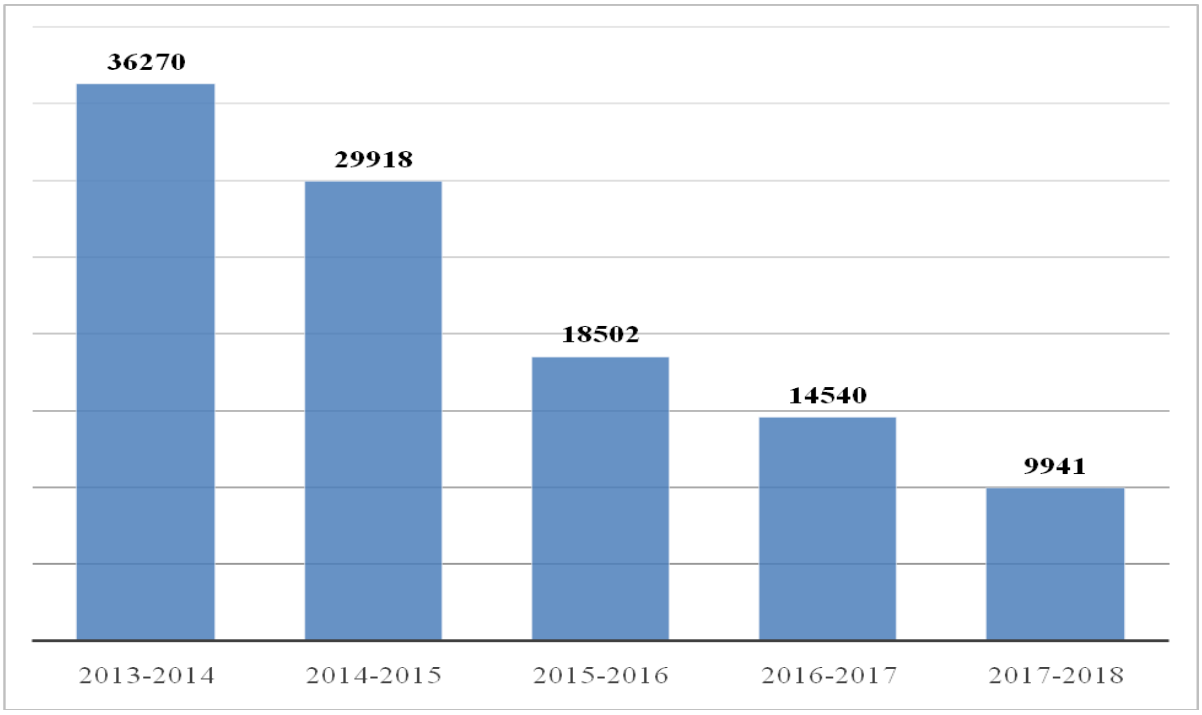

Figure 1. Dynamics of the number of participants in testing on theoretical knowledge in the field of physical culture in the course of the Eaglet Competition

The results of the analysis of the results of testing the knowledge of physical culture of students in grades 1-11 over five years showed that the average percentage of assignment performance ranges from 46.0% to 73.0%. (Figure 2).

ISSN: 0975-8585

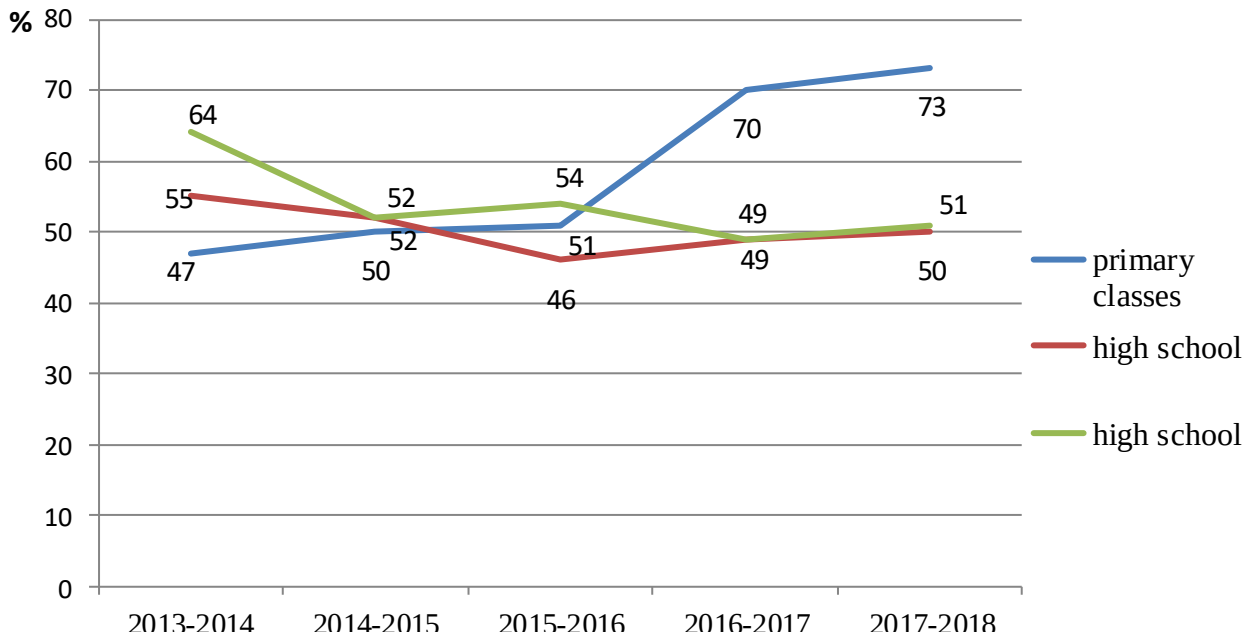

Figure 2. The dynamics of the performance of the test tasks on the physical culture of students, in %

The analysis revealed an insufficient level of knowledge on the main topics of program material among students in grades 1–4, which leads to low learning outcomes and implementation of the requirements of the Russian federal state educational standard. Primary school students at the middle level master the topics related to the history of the emergence and revival of the Olympic Games.

Knowledge of the section "Organization of a healthy lifestyle" of Russian students is at the second level of mastering, which implies the definition, comparison and selection of the necessary information in standard situations. Noted a large number of errors in the tasks on the following topics (less than 50% correct answers):

-concepts about physical culture and its connection with labor and military activities;
-prevention of various diseases;
- terminology of gymnastic exercises;
-the simplest ways to assess the physical condition.

The lessons with primary school students should ensure that they learn the basics of physical education methodology at the level of attaining the requirements related to the disclosure of physical activity and how to regulate it in the process of performing morning hygienic gymnastics, exercise complexes of various directions, and measuring individual physical development. Therefore, teachers of physical culture should use not only conversations, discussions, but also practice-oriented (game) tasks related to the formation of skills to use knowledge in practical physical culture and sports activities [56,57].

Students in grades 5–9 have an average level of theoretical readiness on historical topics related to the revival of the Olympic Games and the Olympic movement, physical culture and sports in modern society, and achievements of national athletes at the Olympic Games. During testing, a small number of errors on the topics of a healthy lifestyle. Assignments for instructor and methodological knowledge are performed by students of middle classes in the range of 40-50%. Insufficiently and deeply, students know about the basic concepts of the field of physical culture and sports, about conducting independent physical education classes and evaluating their effectiveness. This knowledge is the basis for the practical component of an independent physical culture and sports activities. A low percentage of task performance (from 25 to 50%) by students in grades 5–9 was identified in the thematic section "Sports Practices". The lowest rates in the last two years were recorded for students in grades 6.7 and 9 (no more than 48% of correct answers), the highest rates were

found for students in grades 5 (53% of correct answers). It should be noted that the theoretical readiness of students in grades 5-9 does not reflect the results of mastering the content of the subject "Physical Education", which characterize the experience of students in creative motor activity. The experience gained is manifested in the knowledge and methods of motor activity, the ability to apply them creatively in solving practical problems in the process of independent study [51,58].

Mostly among students, the first level of mastering the knowledge of the main topics of the program material prevails, whereas in the middle classes most of the theoretical knowledge should be mastered at the second and third levels. For example, in accordance with an exemplary program in physical culture in the process of mastering the content of the course "Human Physical Development", middle-class students should be able to select and perform exercises to prevent its disorders and corrections. Thus, by grade 9, students should have the result of mastering theoretical knowledge of the third level, namely, the practical level.

Analysis of the results of the study evaluating the theoretical preparedness of students in grades 10-11 showed they Maturity of knowledge about health and healthy life (60 to 70% of correct answers), teaching high school are aware of the concept and types of sports and sports activities for the organization of a healthy lifestyle , outdoor activities and leisure. However, it should be noted that students in grades 10-11 are not able to relate the effect of physical training on health and physical development, as well as to assess the state of health, physical development, mental and physical performance. Students have only a general idea about the basic methods of control and self-monitoring of physical fitness, which in turn does not allow to fully achieve the planned results [59-61].

The highest percentage of students in grades 10-11 found it difficult to ask questions whose content included knowledge of the methodological foundations of developing physical qualities and the implementation of the learning process of basic motor skills and skills that take into account the specificity of sports [62,63]. Errors were not observed in the basic concepts and terms of physical culture and sports, the characteristics of the main forms of organization of physical culture classes [64,65]. While most students do not know how to determine the target orientation of various activities and the specifics of their conduct, taking into account life and professional situations. In this connection, the performance of tasks in the sections "Sports theorist and sports practice" is at a low level, and is about 50% (in 2017 - 42/40%; in 2018 - 59/52%). For five years, knowledge of the section "From the history of sports, the Olympic movement" has been at a high level, and the tasks carried out are within 60-85%. There were few mistakes in assignments involving knowledge of the history of modern Olympic Games.

After analyzing the data, it was found that students do not fully possess the theoretical knowledge in accordance with the requirements of the Russian Federal State Educational Standard. The result of theoretical training in students' physical culture is the assimilation of knowledge at the first level, the main feature of which is the completeness of knowledge, measured by the ratio of the amount of the acquired information to the aggregate proposed by the teacher [66,67]. Students at this level are able to identify, identify the object of study studied in the lesson or list its features, or describe (for example, list factors affecting a healthy lifestyle; choose only cyclic sports) [68]. While in each age period theoretical knowledge should be mastered at the second and third levels, determined by the number of situations and the ways of their application for solving the same task or situation, which is reflected in educational programs on physical culture [69-71]. These results include the following:

- in primary school - to make individual sets of exercises for self-study;
- in middle classes - to select physical exercises according to their functional orientation, to make of them individual complexes for recreational gymnastics and physical training;
- in high school - independently organize and conduct classes of professional-applied physical training, select physical exercises depending on the individual orientation to future professional activities [72,73,74].

CONCLUSION

The Russian teacher of physical education needs to more purposefully design a scheme for theoretical training of students in physical education in a general education school based on the degree of realization of the achievement of the planned results and the degree of development of theoretical knowledge of his

students during the school year. It is necessary to begin to rethink the content and technology of conducting lessons of physical culture, taking into account the activity approach being introduced. At the lessons of physical culture, it is necessary to actively apply practice-oriented, creative and research tasks of various kinds. This will contribute to a fuller mastery of basic theoretical information in the field of physical culture and sports, as well as a clearer formation of their practical skills in physical education and sports activities.

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