

Features of the organization and holding of the "Ready for Labor and Defense" Festivals for students and teachers of the university

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Abstract. This study aims to determine the effectiveness of multi-day festivals "Ready for Labor and Defense" (GTO) at the university for students and teachers, as well as the feasibility of creation of educational and independent classes in physical education in accordance with the tests of the All-Russian physical culture and sports complex GTO for participants of the VI-XI stages. Analysis of the survey data of the 1st year students shows that 23% of them have experience in performing tests under the state program of testing physical fitness of the population "Ready for Labor and Defense". The polling of 4th year students shows that less than 3% of them took part in the GTO tests during their studies at university. This study included 1363 men and women belonging to the VI-XI stages of the All-Russian Physical Education and Sports Complex GTO. Students were offered an elective course (optional) in physical education. During the classes, they were trained to meet the standards included in the GTO program. The classes were based on the principle of circuit training and the method of continuous exercising. 82% of students and 100% of teaching staff of the Department of Physical Education of the Russian State University for the Humanities took part in testing of the complex "Ready for Labor and Defense" held during the "Week of Health". 23% of the participants of the GTO Festival received gold, silver and bronze badges. The GTO Festivals hold at universities helps solve the problem related to the logical transition from the training (gym) to the GTO Testing Centers, since both the preparation and direct performance of the physical fitness tests are carried out at the university campus.

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1 Introduction

The level of physical fitness of the nation is generally recognized as one of the most important indicators reflecting the quality of life, social well-being, physical and mental health, and the level of motor activity of citizens [1]. To date, it can be confidently asserted that the formation of a trend for the creation and popularization of organized physical fitness testing systems in society, aimed at improving the health of citizens, continues worldwide [2, 3].

Each economically developed country has its state set of tests and a corresponding scale for assessing the level of physical fitness of schoolchildren, students, workers of all ages, and the elderly, Table 1 [4].

Table 1. The systems of testing physical fitness used in various countries

Country	Testing system	Assessment system
Russia	All-Russian Physical Education and Sports Complex "Ready for Labor and Defense" (GTO)	Three classes: gold, silver and bronze badges
Germany	German Sports Badge	Three classes: gold, silver and bronze badges
Austria	Das Österreichische Sport und Turnabzeichen	Basic and intensive for each of the three classes: gold, silver and bronze badges
Sweden	School Sports Badge	Four classes: gold, silver, bronze and iron badges (for younger students)
USA	Presidential Trials, Sports self-improvement	Presidential Letter of Commendation, badge
Kazakhstan	Presidential tests	Two levels: presidential and national readiness. Awarding badges and certificates on behalf of the president.

In recent years, the popularization of national physical fitness complexes has become even more urgent due to the prolonged limitations caused by COVID-19, which affected all aspects of society.

So, the need to ensure safe execution of physical fitness tests comes to the forefront. It is ultimately important to correctly and rationally select an individual set of tests and, in accordance with this, the preparation program for participation in the test.

In Russia, the All-Russian Physical Education and Sports Complex "Ready for Labor and Defense" serves as such a regulatory and legal program for assessing the level of physical fitness of citizens.

The organization of a rational selection of tests adequate to the human body state and providing a systematic individual training process to meet the GTO norms make it possible to increase the indicators of physical and functional state of the examinees, properly conduct the educational process and the process of preparation for the normative

requirements, to achieve positive results, taking into account individual capabilities of each test participant [5]. For effective implementation of the listed measures, an accurate assessment of the initial level of functional and physical state of the students is crucial [6].

According to the performed survey and pooling of the 1st year students, about 23% of them already have a gold GTO badge of the V level. This is primarily explained by the fact that for applicants, the gold GTO badge means the mandatory addition of points to the unified state examination (USE) results, and this is an important factor motivating to get a gold badge. When becoming students, many of them stop training and participating in GTO events as they lose motivation to maintain a high level of their physical fitness, less than 3% of students took part in GTO events during their studies at university. This can be explained by several reasons. Firstly, many of them do not see enough motivation to maintain a high level of fitness, which makes it possible to get a gold GTO badge. Secondly, even if they have the desire and conditions for the training process, many face the fact that to get a gold GTO badge, one should be in good shape and devote a lot of time free from studies and work to the tests execution, as they are carried out in the testing centers.

To date, the issue of popularization and active participation of students in the performance of GTO norms becomes one of the priority areas of educational and pedagogical work of the university. The management of the university and the heads of departments of physical education keep records of the number of students who have received GTO badges, as the number of students with GTO badges is one of the important indicators of the effective work of the university. Several universities included in the "5-100" program introduce special scholarships awarded to students who receive a gold GTO badge with the mandatory condition of good performance (the state project "5-100" is aimed at increasing the competitiveness of Russian universities in the world educational services, the main goal of the project is for 5 Russian universities to be included in the top 100 best universities in the world educational rating) [7]. Teachers who have received gold GTO badge receive bonus one-time payments. It is important to note, that to get a gold badge it is important not only to have good physical indicators, but also to master the applied skills and abilities, such as swimming, shooting, cross-country skiing, which is impossible without making adjustments to the curriculum and content of independent study programs.

This study aims to determine the effectiveness of multi-day festivals "Ready for Labor and Defense" at the university for students and teachers, as well as the feasibility of building training and self-study on physical education in accordance with the types of tests of the All-Russian Physical Education and Sports Complex GTO for participants of the VI-XI stages.

2 Materials and Methods

In accordance with the chosen direction of research, the main work methods included analysis and synthesis of scientific and methodological literature, conducting a pedagogical experiment, mathematical processing of the data obtained, as well as the interpretation of the results of the study.

The study was conducted from October to May 2020/2021 at the Russian State University for the Humanities (Moscow, Russian Federation). To solve the problem of increasing the number of students and teachers with gold badges of the VI-X stage, an elective course (optional) was introduced to prepare students and teachers for the GTO tests.

It was planned to hold a multi-day GTO festival on campus in the second half of the spring semester, organized with the participation and support of Moscow City Department for the Physical Culture and Sport Moscomsport.

A total of 1,347 male and female students of 1-3 courses (898 men and 449 women) belonging to the VI stage, and 16 teachers (9 men and 8 women) of the Department of Physical Education belonging to the VI-XI stages took part in the study. All participants had a basic medical group of health and medical allowance to participate in the execution of the GTO norms. Physical education classes were based on the principle of "circular training" according to the method of continuous exercise aimed at the development of motor qualities, skills and abilities included in the GTO program [8].

The program consisted of basic exercises (GTO tests), and auxiliary preliminary exercises, the execution of which contributes to the preparation for the GTO tests of the VI-XI stages.

Classes were held in three areas, and the students were divided into three large groups according to the types of GTO testing: hall tests, stadium tests, and applied tests (Table 2).

Table 2. Grouping of GTO tests

GTO test groups*		
Educational Directions		
Hall	Stadium	Applied
1. Pulling up from the high/low bar; 2. Bending and unbending arms from the prone position 3. Bend forward while standing on a gymnastic bench 4. Lifting the torso from back-lying 5. Standing long jump by pushing with both feet 6. Shuttle run 3 times 10 m.	1. 30 m run 2. 60 m run 3. 2 km run (women) 4. 3 km run (men) 5. Nordic walking 3 km / mixed movement 2 km (Teachers of the X XI stages).	1. Swimming 50 m; 2. Electronic gun shooting (10 m)
*Bold font indicates mandatory tests		

This set of GTO tests was chosen based on the material and technical conditions of the university and provided, in case of their successful completion (4 mandatory and 5 optional tests), the test participants receive a gold badge. Students and teachers who had a sports degree or sports rank had to perform one less standard to receive a gold GTO badge (4 mandatory and 4 optional).

For the period of preparation for the GTO Festival, students were offered free attendance at any of the training departments (hall, stadium, pool, and shooting gallery) upon the condition that he/she should attend at least 8 classes in each of them (total 24 classes per semester). For the period of distance (hybrid) work of the university, students performed independent training programs using mobile fitness applications [9]. The classes lasted two semesters (from September to May). The central event was the "Week of Health", which included the GTO Festival. From April to the end of the semester (end of May) the judges (representatives of the GTO Testing Center of the Moscow City Department for the Physical Culture and Sport Moscomsport) attended the training classes and assisted teachers of the department in accepting the GTO standards. They coordinated

and guided the work of judges, confirmed the results of the GTO tests in the personal office of test participants, organized and centralized issuance of certificates and GTO badges (Figure 1).

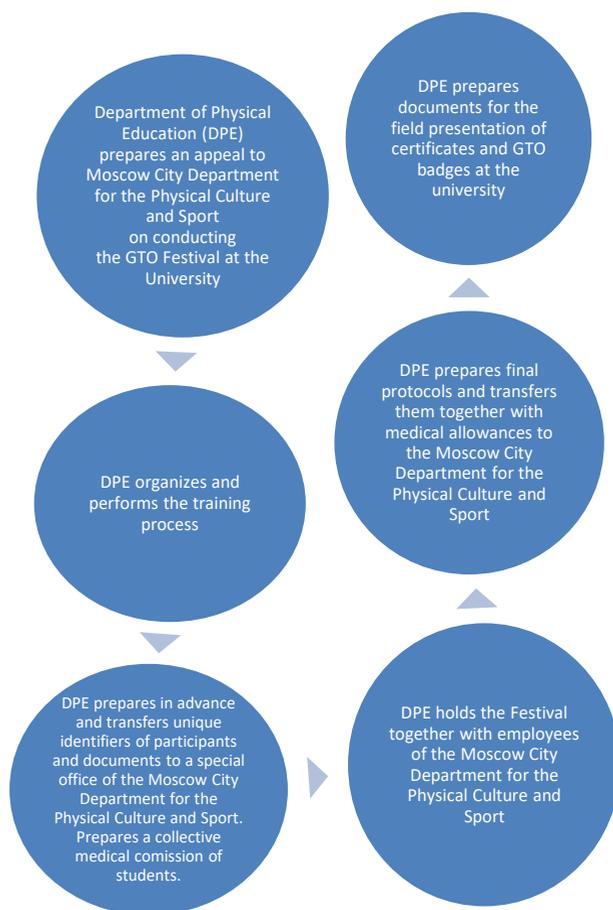


Fig. 1. Algorithm of interaction between universities and Moscomsport for the organization of the GTO Festival

During the GTO Festival, teachers of the Physical Education Department conducted a thorough warm-up of all participants of the sporting event using special preparatory exercises, after which employees of the GTO Testing Center performed acceptance of control tests. Teachers also participated in the testing and performed tests for their age. The results of the GTO tests, which satisfied the students and teachers, were recorded into the personal account of the participants of the GTO Festival. If for any reason the result was not satisfactory to the student and the teacher could predict that after 45 days the result could be improved, the student was invited to retake the test, but only after the mandatory training program for the appropriate section of the GTO tests, which consisted of 8 training sessions. All interested teachers and employees of the university participated in the standards execution.

At the end of the GTO Festival, a detailed analysis of the number and quality of GTO tests was carried out. The percentage of students and teachers involved in the tests was

calculated. The number and quality of retakes of the standards and the final results, expressed in the number of awarded marks of the GTO, were assessed.

3 Results

According to the results of the GTO Festival among students and teachers, protocols were obtained for 1,363 participants who performed one or more tests. The test results are presented in Table 3 and Figure 2.

Table 3. Number of participants in each individual test and score

Types of GTO tests		Number of results / % of the number of students	Number of retakes (45 days later)	Result		
				Gold	Silver	Bronze
Hall	1. Shuttle run 3 x 10 m	1124 / 82 %	711	227	549	121
	2. Standing long jump	988 / 72 %	621	328	236	589
	3. Pulling up from the high bar	422 / 30 %	221	122	192	54
	4. Push-ups from the floor	921 / 67 %	385	370	239	43
	5. Pulling up from the low bar	299 / 21 %	98	59	22	45
	6. Bend forward while standing on a bench	1363 / 100 %	722	374	259	352
	6. Torso lifting	1363 / 100 %	322	257	354	283
Stadium	7. 30 m run	622 / 45 %	355	122	254	346
	8. 60 m run	525 / 38 %	202	194	124	75
	9. 2 km run	388 / 28 %	121	92	71	112
	10. 3 km run	422 / 30 %	154	115	12	59
	11. Nordic walking 3 km	10 / 100% (PPC)	0	10	0	0
Applied	12. 50 m swimming	202 / 14 %	96	172	46	40
	13. Shooting with e-weapons (10 m)	722 / 52 %	511	202	245	323



Fig. 2. Total number of GTO badges issued based on the results of the GTO Festival

4 Discussion

Analyzing the results of 1,363 test participants, it was noted that the most difficult tests of the GTO are:

- The men's flexibility test "forward bend from a standing position on a gymnastic bench". Only 12% of boys met the standard of the gold badge;
- The applied test "shooting with electronic weapons" in all categories of examinees, which is primarily due to the fact that most examinees do not have time to form in a short time the necessary skill, in addition, many complain about poor eyesight and lack of glasses.
- Endurance test "running for 2 (3) km" in all categories of examinees, which is explained by a low level of general endurance, and by the fact that performance of this test is extremely labor intensive, and requires more moral mobilization and physical preparedness. Only 18% of boys and 15% of girls met the standard of the gold badge [7, 9];
- The smallest number of participants executed the swimming tests (202 14%), which is due to the fact that a large group of students and teachers are not able and do not like to swim.

5 Conclusions

Analyzing the protocols of 1,363 participants of the GTO Festival, the following results were obtained:

- About 82% of all 1st-3rd year students and 100% of teachers in the Physical Education Department participated in the GTO Festival by completing one or more GTO tests;
- 67% of participants who wanted to retake any of the tests improved their results on the second attempt after 45 days.
- 313 participants (23%) were awarded gold, silver and bronze badges based on the results of the protocol. The "inverted pyramid" effect was observed, with an exceeding number of gold badges than silver and bronze ones. This is primarily because GTO is based on the principle that all preferences are given for having only a gold badge. So, one often observes the following situation: after failing any test (for example, for silver or bronze badge), a participant loses motivation at all and gives up doing the GTO tests.
- A final GTO relay race was organized, in which the best students (with the best results in certain types of GTO tests GTO) participated. The race results made it possible to identify the best departments and students who qualify for sports scholarships.

- 55 students out of 1347 (4%) took part in further testing of their physical fitness in the testing centers of GTO Moscow City Department for the Physical Culture and Sport of Moskomspor outside the university to improve their final results. The students performed the following addition: cross-country run, throwing sports equipment, skiing race.

6 Recommendations

The multi-day GTO Festival solves a very important problem associated with retesting, when having one or two unsuccessful tests, the participant doesn't get a badge and stops participating in the GTO tests, losing motivation.

When holding the GTO Festival for several days, students can choose the most appropriate moment to perform the tests and, therefore, perform testing in optimal physical form. In addition, the GTO Festival is held under competitive conditions, which is a prerequisite for the correct organization of participants testing.

The interaction between the departments of physical education and the testing centers of the Moscow State University of Physical Education and Sport allows Moskomspor to solve the problem of involving a large number of students in the GTO activities and receiving their badge.

References

1. L.I. Lubysheva, Sh.Z. Khubbie, D.B. Selyukin. Sportization as factor of involvement of population in mass sports, *Theory and practice of physical culture*, 3, 30 (2020).
2. N.V. Altynova, V.K. Talantseva. On improving the process of forming the physical readiness of future managers. *Proceedings of the First International Volga Region Conference on Economics, Humanities and Sports (FICEHS 2019). Advances in Economics, Business and Management Research*, volume 114. Paris: Atlantis Press, 624-628 (2020).
3. I.V. Kondrakova, K.E. Stolyar, R.P. Pikhaev, S.Y. Vit'ko, Organizational and methodological approaches to a comprehensive assessment of students' physical fitness. *Theory and practice of physical culture*, 9, 9-11 (2016).
4. Yu.B. Almazova, A.N. Korolkov, N.N. Uvarova, R.Yu. Bulychev Sociological analysis of opinions of adult population on their participation in GTO complex tests. *Theory and practice of physical culture*, 3, 9-11 (2021).
5. V.V. Bobkov, L.G. Ryzhkova, M.A. Kuzmin, A.P. Strizhak. Use of method of "circular training" in preparation of students for performance of standards of the GTO complex. *Theory and practice of physical culture*, 6, 39-42 (2020)
6. L.G. Ryzhkova, V.V. Bobkov, Assessment of reserve capacities of senior pupils and students for preparation for taking GTO norms. *Theory and practice of physical culture*, 5, 62-65 (2018).
7. L.I. Lubysheva, Physical training and sports in higher education: realities and prospects. *Theory and practice of physical culture*, 6, 93 (2019).
8. L.G. Ryzhkova, V.V. Bobkov, M.A. Kuzmin, T.A. Ignatenko. Bobkov, M.A. Kuzmin, T.V. Ignatenko. Factors hindering the preparation and performance of norms of the All-Russian sports federation by university students. *Theory and practice of physical culture*, 5, 39-42 (2019).

9. L.G. Ryzhkova, M.L. Bergovina, V.V. Bobkov, The use of mobile applications in training students to meet the standards of the GTO in distance learning. Theory and practice of physical culture, 8, 49-51 (2021).
10. Y.B. Almazova, E.A. Lubyshev, K.E. Stolyar, G.B. Kondrakov. Actualization of personal sense of students' participation in training and passing the standards of the All-Russian sports federation. Theory and practice of physical culture, 9, 21-23 (2019).
11. N.N. Vengerova, L.V. Luyk, O.E. Piskun. Realization of FGOS "3+" on physical culture in higher school. Theory and practice of physical culture, 6, 12-14 (2016).
12. V.P. Guba, V.V. Konovalov, V.V. Presnyakov. Morphobiomechanical individualization as an effective method of integrating GTO into the system of general education. Theory and practice of physical culture, 11, 94-97 (2016).
13. T.Y. Kolyaskina, V.S. Sherin, A.V. Zamyatin E.A. Sherina, Mobile application as a factor in the effective preparation of a person for the implementation of the GTO Complex standards. Theory and practice of physical culture, 4, 89-90 (2017).
14. S.M. Lukina, Mastering the discipline "Physical Education and Sports" at the university with the use of innovative technologies. Theory and practice of physical culture, 4, 44-46 (2019).
15. A. Osipov, M. Kudryavtsev, P. Fedorova, Z. Serzhanova, E. Panov, L. Zakharova, A. Savchuk, M. Yanova, T. Zhavner, Y. Klimuk, Components of positive impact of exposure on university physical culture and sports on students' physical loads. Journal of Physical Education and Sport, 2, 871-878 (2017).
16. I. Samokish, A. Bosenko, G. Dishel', Optimization of teaching physical education at higher educational institutions on the basis of students' functional capacity monitoring. Nauka i osvita, 8, 151-157 (2016)
17. V.M. Sergiienko, The system of motor abilities control of student youth: the theory and methodology of physical education. Sumy: Sumy Condition University (2015).