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METHODS FOR THE DEVELOPMENT OF PHYSICAL QUALITIES OF STUDENTS

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Abstract:: The article will tell about the method of circular exercises in the acquisition and education of physical qualities of students, based on their physical fitness and physical qualities. When insufficient attention is paid to the complex of circular exercises in the traditional organization of the physical education process, opposite situations are observed in the approach to exercises. For this reason, despite the fact that a number of studies have been conducted, the expected result has not yet been achieved. The theoretical and practical solution of the revealed contradictions requires the preparation of additional scientific, scientific and methodological developments on the methodology of physical development based on the use of an improved method of circular exercises, taking into account the physical qualities of students of higher educational institutions, individual characteristics of their body and adequate content of motor activity.
Key words: immunity, physical performance, physical fitness, speed, physical qualities, pedagogical experience, healthy generation.

In many countries of the world, the issues of raising a healthy generation, the development of physical culture and sports, and improving the health of the population remain among the priorities.The complex processes that are currently taking place all over the Earth not only prepare the human body for changes taking place in the external environment, but also strengthen the immune system of the body of all segments of the population, in particular, it imposes a requirement on students to increase their physical activity.To this end, based on the ongoing work to solve common problems, related to the determination of ways to increase the importance of using approaches such as individualization of physical activity in the world education system, a number of circular training methods are used in the practice of physical training of children and younger schoolchildren [1,2,3,4,5].

In world practice, a large number of research works have been carried out on certain components that make up innovative educational technologies in the educational process of students in higher educational institutions, namely, on the organization of the educational process taking into account the physical fitness of students, obtaining and monitoring results. The issues of improving the physical development and physical fitness of students of higher educational institutions are investigated. In particular, the researchers have scientifically substantiated the issues of the formation of correct posture with the help of special exercises during circular exercises, increasing joint mobility, maintaining active working capacity, improving physical fitness indicators at different ages.Based on the use of modern tools that take into account the morphofunctional features of the body of students, not enough research has been conducted on the problems of improving their physical fitness. Today, based on the social conditions of the world, it becomes important to scientifically substantiate research

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aimed at improving the motor skills and physical qualities of students using circular exercises [6,7].

The analysis of the scientific and methodological literature shows that the physical fitness of schoolchildren of boys and girls is noted in the scientific and methodological literature as a very important problem. It should be emphasized that scientifically based developments to improve the physical fitness of schoolchildren of boys and girls using the method of circular exercises were not analyzed within the limits of the possible.

With insufficient attention to the complex of circular exercises in the traditional organization of the physical education process, opposite situations are observed in the exercise approach. For this reason, despite the fact that a number of studies have been conducted, the expected result has not yet been achieved. The theoretical and practical resolution of the revealed contradictions requires the preparation of additional scientific, scientific and methodological developments on the methodology of physical development based on the use of an improved method of circular exercises, taking into account the physical qualities of students of higher educational institutions, individual characteristics of their body development and adequate content of motor activity.

The object of research is the process of physical education of students of higher educational institutions.

The subject of the study is the physical condition of students of higher educational institutions adjectives.

The purpose of the study is to study the physical speed qualities of students of higher educational institutions.

It is expedient as the objectives of the study to identify students of higher educational institutions of interest in physical culture and sports, physical qualities of dexterity.

In the course of the research, such research methods were used as studying the physical qualities of speed in physical education lessons and evaluating them using circular exercise methods.

Organization of the study: The study was conducted at Ferghana State University, it was attended by a total of 236 students of the 1st stage aged 17-21 years. The University organized experimental studies of students to improve their physical qualities. The experimental work was carried out in two stages for three months at the physical education lessons of students, at the training sessions of students with different levels of physical qualities. At the beginning of the school year, control tests were conducted to determine the state of development of physical qualities of students. Based on the data received from him, control exercises aimed at the development of physical qualities, hypotheses were put forward about changes in comparison with his previous training. Therefore, this experimental work was aimed specifically at developing the physical qualities of students in the experimental group, And classes in circular exercises were planned according to the methodology.

Also, students of Fergana State University who are specialists in physical education were selected for the experiment. Of the 161 students selected for the experimental group, 81 were girls and 80 were boys. 75 students (37 girls, 38 boys) were selected for the control group.

Indicators of students by initial physical qualities are given in the tables below.

Table 1

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Quality indicators of spirometry of control-experimental group students with different physical development at the beginning of the pedagogical experiment

Control Tests	Group of experiments Girls n=81, Boys n=80			Group of experiments Girls n=37, Boys n=38			Relative increase, %	t	P
	$\bar{X}$	σ	V %	$\bar{X}$	σ	V %			
Girls									
60-meter race (seconds)	12,89	1,63	12,65	12,56	1,53	12,18	2,56	1,06	>0,05
30 meter race (seconds)	7,40	0,95	12,84	7,80	0,96	12,31	5,41	2,11	<0,05
Jump above the standing position (cm)	31,60	4,84	11,63	32,70	4,87	11,41	2,64	1,14	>0,05
Boys									
100 meter race (seconds)	17,30	2,04	11,79	17,10	1,95	11,40	1,16	0,51	>0,05
60 meter race (seconds)	12,80	1,52	11,88	12,50	1,41	11,28	2,34	1,05	>0,5
Jump above the standing position (cm)	38,30	6,15	12,73	37,70	5,86	12,29	1,24	0,51	>0,05

Before the experimental study, the difference in the performance of students of the experimental and control groups in the control tests for the quality of speed was the same high. The experimental group ran 60 meters on average in 12.89 seconds for female students, and the control group - in 12.56 seconds (0.33 millisecond difference) for female students. The experimental 30-meter running group showed an average of 7.40 seconds for female students, and the control group showed an average of 7.80 seconds (0.4 millisecond difference) for female students. In the experimental group, jumps above the standing position for female students averaged 31.6 centimeters, and in the control group - an average of 32.7 centimeters (the difference was 1.1 centimeters) for female students.

the average indicator of running 100 meters in the experimental group among young students 17.30 seconds, the control group showed an average of 17.10 seconds (0.2 millisecond difference) in male students.In the experimental group, jumps above the standing position for male students averaged 38.30 centimeters, and in the control group - 37.70 centimeters (0.6 centimeters difference) for male students.

The experimental and control groups found that students' academic performance in all physical qualities studied before the study was almost at the same level in girls and boys-students. (See Table 1).

Physical education with students during the round-robin and correctional training, the motivational principle of student support was implemented in the classroom, which included training in methods of self-control of the functional state of one's body during training, volitional tension to overcome subjective difficulties and relaxation exercises after physical exertion.

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The introduction of the method of circular training by physical exercises contributed to the development of the student's body in the pedagogical specialty, the process of solving the tasks of the main part of the training included 10-12 stations.

During the pedagogical experiment with students, personal body weight, exercises with various subjects, exercises in pairs were widely used. At each lesson, objective and subjective indicators of the functional state of students were monitored.

During the period of experimental observations, the number of people who were considered as a means of passing the "test" of physical education in higher education decreased by 4 times, while it was noted that the number of students willing to show creativity and initiative increased by 2 times.

The effectiveness of the observed changes was such that the content of physical exercises was determined taking into account the individual characteristics of students, which ensured the rapid development of general physical fitness of students studying at a higher educational institution.

Table 2

Dynamics of changes in the course of pedagogical experience in the indicators of speed quality of students and girls of the experimental and control groups, whose physical development differs (%)

Control Tests	At the beginning of the experiment			At the end of the experiment			Relative increase, %	t	P
	$\bar{X}$	σ	V %	$\bar{X}$	σ	V %			
Experiment group, girls n=81									
60-meter race (seconds)	12,89	1,63	12,65	12,08	1,48	12,25	6,28	3,31	<0,01
30 meter race (seconds)	7,40	0,95	12,84	6,93	0,84	12,12	6,35	3,34	<0,01
Jump above the standing position (cm)	31,60	4,84	11,63	33,57	4,84	11,11	4,74	2,59	<0,05
Control group, girls n=37									
60 meter race (seconds)	12,56	1,53	12,18	11,87	1,41	11,88	5,40	1,02	>0,05
30 meter race (seconds)	7,80	0,96	12,31	7,36	0,85	11,55	5,64	2,09	<0,05
Jump above the standing position (cm)	31,60	4,87	11,41	33,57	4,64	10,41	4,40	1,70	>0,05
Experiment group, boys n=81									
100 meter race (seconds)	17,30	2,04	11,79	16,05	1,81	11,28	7,23	4,13	<0,001
60 meter race (seconds)	12,80	2,81	12,89	12,23	2,86	12,47	5,23	2,56	<0,05
Jump above the standing position (cm)	38,30	6,15	12,73	41,55	6,26	12,14	6,73	3,33	<0,01
Control group, boys n=38									
100 meter race (seconds)	17,10	1,95	11,40	16,22	1,78	10,97	5,15	1,03	>0,05

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60 meter race (seconds)	12,50	1,41	11,28	11,94	1,41	11,81	4,48	1,73	>0,05
Jump above the standing position (cm)	37,70	5,86	12,29	40,06	6,03	12,05	4,95	1,71	>0,05

In the experimental group, the relative indicators for control test exercises obtained for the speed qualities of female students at the beginning and end of the study of Growth Dynamics in the 60-meter run averaged 12.89 seconds at the beginning of the experiment and 12.08 seconds (0.81 milliseconds difference) at the end of the experiment. The 30-meter run took an average of 7.40 seconds, while the experiment ended with an average of 6.93 seconds (a difference of 0.47 milliseconds). The jump above the standing position averaged 31.60 centimeters, while the average value was 33.57 centimeters (the difference was 1.97 centimeters) at the end of the experiment.
Relative indicators of control test exercises taken to assess the speed qualities of boys at the beginning and end of the study showed growth dynamics in the 100-meter run by an average of 17.30 seconds, with an average of 16.05 seconds (a difference of 1.25 seconds) at the end of the study.The jump above the standing position averaged 38.30 centimeters, at the end of the study - up to 41.55 centimeters (the difference is 3.25 centimeters).
The control group students show that there were no changes in some of their indicators based on the test, which was conducted on the basis of the educational system program, but was obtained in the form of physical acceleration.

Conclusion

1. The results of the pedagogical experiment showed that the physical quality of speed at the beginning of the experiment for female students at a distance of 60 meters running averaged 12.89 seconds at the beginning of the experiment and an average of 12.08 seconds at the end of the experiment (the difference is 0.81 milliseconds). The 30-meter run averaged 7.40 seconds at the beginning of the experiment and 6.93 seconds (0.47 millisecond difference) at the end of the experiment. Jumping above the standing position showed an average of 31.60 centimeters at the beginning of the experiment, an average of 33.57 centimeters (1.97 centimeters difference) at the end of the experiment, running 100 meters in male students averaged 17.30 seconds at the beginning of the experiment and an average of 16.05 seconds (1.25 seconds difference) at the end of the study.Jumps above the standing position averaged 38.30 centimeters at the beginning of the experiment and 41.55 centimeters (a difference of 3.25 centimeters) at the end of the study ($R<0.01$).
2. According to the results of pedagogical experiments, the physical fitness of female students from the control group who were engaged in traditional training showed an average of 7.80 (seconds) at the beginning of the experiment and 7.36 seconds (0.44 milliseconds difference) at the end of the study. Jumps above the standing position at the beginning of the experiment amounted to 31.60 centimeters, at the end of the study - 33.05 centimeters (the difference is 1.45 centimeters), which indicates an incredulous development.

References

1.Эрназаров Г.Н. Attitude of a modern student to a walky lifestyle. European journal of Research and Reflection in Educational Sciences, Volume 8, Number 8,2020 Part II.Progressive Academic Publishing, P.183-187. [13.00.00 № 8]
2. Эрназаров Ғ.Н. Талабаларнинг жисмоний маданияти қадриятларини ўрганиш. “Фан спортга” //“ Илмий-назарий журнал.–Чирчиқ, 2020-йил 3-сон. Б-66-68. [13.00.00 №3]

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https://westerneuropeanstudies.com/index.php/1
ISSN (E): 2942-1896 Open Access| Peer Reviewed

3. Эрназаров Ғ.Н. Dependence of body weight of student of the faculty of physical culture on the culture of nutrition an optimal motor activity. // European journal of Research and Reflection in Educational Sciences, Volume 8,Number 12, 2020 Part II,P.68-72.[13.00.00 № 8]
4. Эрназаров Г.Н. Мониторинг дифференцированного подхода к развитию физических качеств студенческой молодежи. Международная научно практическая online-конференция Интеграция в мир исвязь наук, baku-2020, -Б. 64-65.
5. Эрназаров Г.Н. Исследование изменений ростово-массовых показателей студентов педагогического вуза. Научно-методический журнал. Достижения науки и образования №12(66), 2020г,-Б.62-64. http://scientificpeblications.ruemail:info@scientificpeblications.ru
6. Эрназаров Ғ.Н. ”Жисмоний тарбия жараёнида айланма машқларнинг қўллаш технологияси” номли ўқув услубий қўлланма Фарғона 2020 й.108-б. ISBN:978-99435262-3-5.
7. Эрназаров Г.Н. Обоснование метрологической доступности контрольных тестов по физической подготовленности. Тадқиқот УЗ Педагогика ва психологияда инновациялар. Тошкент-2020 й. 11 сон, 3 жилд 37-42 ст. [13.00.00 №8]