

METHODOLOGY FOR DETERMINING INDICATORS OF GENERAL AND SPECIFIC PHYSICAL PREPARATION OF HIGHLY SKILLED BELT WRESTLERS BEFORE THE COMPETITION

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Abstract: This article presents the tests obtained on the basis of a set of special exercises, in addition to which a complex methodology was developed for the development and control of high-skilled belt wrestlers by identifying the general, specific physical training process.

Keywords: Belt wrestling, high qualification, general, special physical training, modern tools, tests, detection, shuttle run, pre-competition preparation.

МЕТОДИКА ОПРЕДЕЛЕНИЯ ПОКАЗАТЕЛЕЙ ОБЩЕЙ И СПЕЦИАЛЬНОЙ ФИЗИЧЕСКОЙ ПОДГОТОВКИ БОРЦОВ НА ПОЯСАХ ВЫСОКОЙ КВАЛИФИКАЦИИ ПЕРЕД СОРЕВНОВАНИЯМИ

Аннотация: В данной статье представлены тесты, полученные на основе комплекса специальных упражнений, в дополнение к которым была разработана комплексная методика развития и контроля высококвалифицированных борцов на поясах путем выявления общего, специфического процесса физической подготовки.

Ключевые слова: борьба на поясах, высокая квалификация, общая, специальная физическая подготовка, современные средства, тесты, выявление, челночный бег, предсоревновательная подготовка.

INTRODUCTION

In modern sports, new rules and changes introduced into sports competitions today put a number of demands on highly qualified belt wrestlers and professionals working in the field of sports. For example, the decree of the President of the Republic of Uzbekistan "Further development of the national sport "Kurash" dated October 2, 2017 No. PD-3306" by assessing the process of general physical fitness of highly qualified belt wrestlers, in single combat sports, such important issues as predicting sports achievements before all sports is demanding special attention and search for new modern tools and methods.

The purpose of the study. We used pedagogical testing methods to determine the pre-competition physical preparation and diagnosis of physical qualities of highly qualified belt wrestlers.

We included them in the following group of tests:

1) When determining general physical fitness: Pull-ups on the pull-up bar (times); Hold at 90 degrees while hanging on the pull-up bar (s); 100 meters distance running. Leaning forward on a gymnastic bench (cm); We used tests such as long jump from a standing position (cm) to assess general physical fitness. Tests were performed in an open stadium or gym.

2) When determining special physical training: rotations around the head in the bridge position in wrestling (s); 10 rollovers in the bridge position (s); 10 times forward rolls (s); We used a set of tests, such as 5-meter-rope climb without the help of legs (s).

In order to determine the effectiveness of the methodology developed by us, pedagogical experiments were conducted among a total of 28 highly qualified belt wrestlers in planning the pre-competition training of highly qualified belt wrestlers for the sport of belt wrestling, taking

into account their weight category, in the conditions of the sports school №1 of Uychi district, Namangan region. All participants of the pedagogical test (n=28) were divided into two groups: experimental group (EG) and control group (CG). Each group had the same number of highly skilled belt wrestlers (n=14).

The training process in the control group was conducted on the basis of the traditional program and regulations intended for the institutions of the sports school and on the basis of the methodology developed and proposed by us in the experimental group (see Table 1).

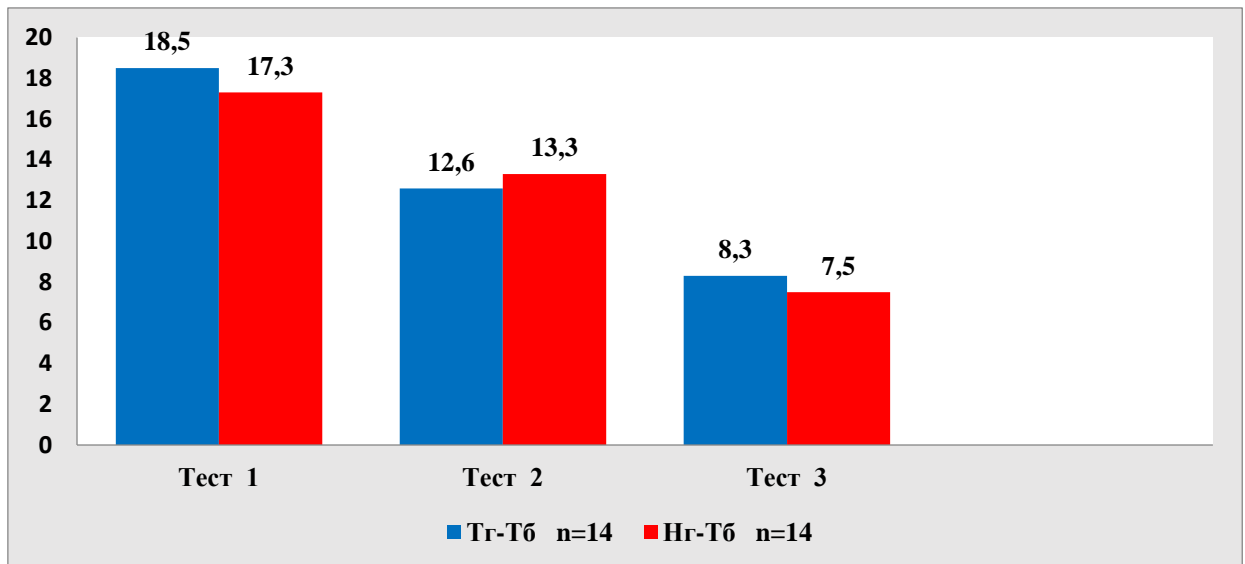
Table 1
Comparative statistical analysis of general and special physical preparation indicators of highly skilled belt wrestlers at the beginning of pedagogical experiment(n=28)

Control tests		Experiment group n=14		Control group n=14		t	P
		($\bar{X} \pm s$)	V	($\bar{X} \pm s$)	V		
GPP	Pull-ups on the pull-up bar (times)	16.7± 1.6	9,58	16,5 ± 1,1	6,66	0,57	P>0.05
	Hold at 90 degrees while hanging on the pull-up bar (s)	39.4 ± 3,5	8,88	40,1 ±3,3	8,22	0,62	P>0.05
	100-meter run (s)	13.7 ± 1.4	10,21	13,9 ±1,2	8,63	0.68	P>0.05
	Gym bench forward bend in (cm)	5.7±0.70	12.28	6.6±0.66	10	1.96	P>0.05
	Jump from a standing position (cm)	247,4 ± 4,4	1,77	246,9 ± 5.6	2,26	1,85	P>0.05
SPP	Rotations around the head in the bridge position (s)	12.3± 1.2	9,75	12.6 ± 1.1	8,66	1,71	P > 0.05
	10 rollovers in bridge position (s)	19,2±2,0	10,41	19,6 ±2,1	10,71	0,77	P>0.05
	10 forward rolls (s)	12,5 ±1,1	8.8	12,8 ± 1,2	9,37	1.2	P>0.05
	5-meter-rope climb without the help of legs (s)	13,1±1,2	9,16	13,7 ±1,4	10,21	1,8	P>0.05

Comment: GPP- General physical training; SPP - Special physical training; EG - Experiment group; CG- Control group;

n - the number of participating athletes.

According to the information obtained at the beginning of the study, the following was determined (see Table 1). In the table we can observe improvement in all fifteen indicators. For example, according to the pull-ups test (times) while hanging on the pull-up bar we found reliable statistical differences at the beginning of the experiment.

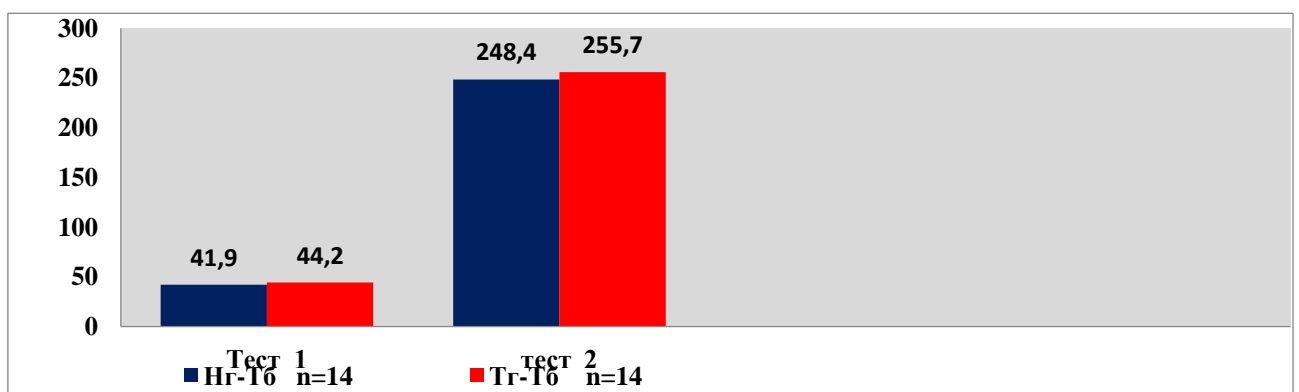


Comment: Test: 1 Pull-upsg on the Pull-up bar (times), Test: 2 Running 100 meters (s), Test: 3 Bending forward on a gymnastic bench (cm).

Figure 1.1. General Physical preparation indicators of highly skilled belt wrestlers

Here, the result in the experimental group was 16.7 ± 1.6 times, and in the control group it was 16.5 ± 1.1 times ($t=57$; $p>0.05$). 100-meter-run we got the following results in terms of indicators: The test was performed in an open stadium or gym (s), at the end of the experiment we had statistically reliable differences, in which the experimental group – 13.7 ± 1.4 seconds, the control group – 13.9 ± 1.2 second data showed that the experimental group highly skilled belt wrestlers had a significant advantage over the control group highly skilled belt wrestlers and this was confirmed by statistical analysis ($t=68$; $p>0.05$). However, according to the results of the test of forward bending (cm) on the gymnastic bench, at the end of the experiment, in the experimental group - 5.7 ± 0.70 cm, in the control group - 6.6 ± 0.66 cm, ($t=1.96$; $p>0.05$).

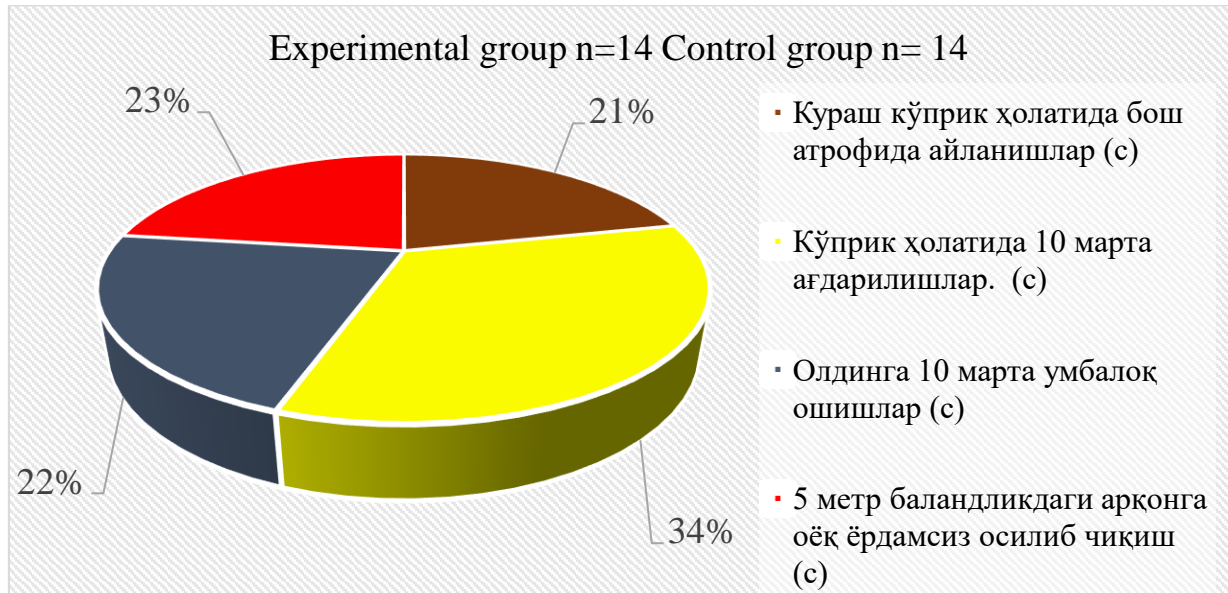
According to the data obtained at the beginning of the study, the following was determined. It turned out that there are no reliable statistical differences for all indicators. The training method proposed by us gave a positive result and was reflected in the indicators of physical preparation.



Comment: Test: 1 Hold at 90 degrees while hanging on the pull-up bar (s), Test: 2 Long jump from a standing (cm).

Figure 1.1.2. General physical preparation indicators of highly skilled belt wrestlers

Hold at 90 degrees while hanging on the pull-up bar (s), reliable differences were 39.4 ± 3.5 seconds in the experimental group and 40.1 ± 3.3 seconds in the control group ($t=62$; $p>0.05$) were found at the end of the experiment. We also found statistical differences in the long jump (cm) test, in the experimental group - 247.7 ± 4.4 cm, in the control group - 246.9 ± 5.6 cm. No significant statistical difference was found in mathematical development ($t=2.2$; $p>0.05$).



Comment, 1) Spins around the head in the bridge position (s), 2) 10 times rollovers in the bridge position (s), 3) 10 forward rolls (s), 4) climbing a 5-meter-rope without the help of legs (s)

1. Figure 1.3. Special physical preparation indicators of highly skilled belt wrestlers

We found that at the beginning of the experiment, the result of the rotations (s) around the head in the bridge position was 12.3 ± 1.2 (s) in the experimental group, and 12.7 ± 1.1 (s) in the control group. This indicates a reliable statistical difference ($t=2.3$; $r > 0.05$). 10 rollovers in the bridge position. (s) t was 19.2 ± 2.0 (s) in the experiment group, 19.6 ± 2.1 (s) in the control group, here we also found statistical differences ($t=.77$; $p>0.05$). 10 forward rolls test results increases (s) were 12.5 ± 1.1 (s) in the experimental group, and 12.8 ± 1.2 (s) in the control group, statistical differences were observed at the beginning of the experiment ($t=1.2$; $p>0.05$). Climbing a 5-meter-rope without the help of legs (s) was 13.1 ± 1.2 seconds in the experimental group and 13.7 ± 1.4 (s) in the control group, statistical differences were observed at the beginning of the experiment ($t=1, 8$; $p>0.05$).

In the planning of pre-competition training of highly qualified belt wrestlers in the sports school №1 of Uychi district, Namangan region, pedagogical experiments were conducted among a total of 28 highly qualified belt wrestlers, the system including general and special physical training, functional movements and physical qualities based on the development of highly qualified belt wrestlers for all types of wrestling was created. A pedagogical experiment was conducted in order to justify the effectiveness of our methodology aimed at evaluating and monitoring pre-competition preparation indicators of highly qualified belt wrestlers.

According to the data obtained at the end of the study, the following was determined (see Table 2). In the table we can observe improvement in all 9 indicators. For example, we found reliable statistical differences at the end of the experiment on the pull-ups test (times) while hanging on the pull-up bar.

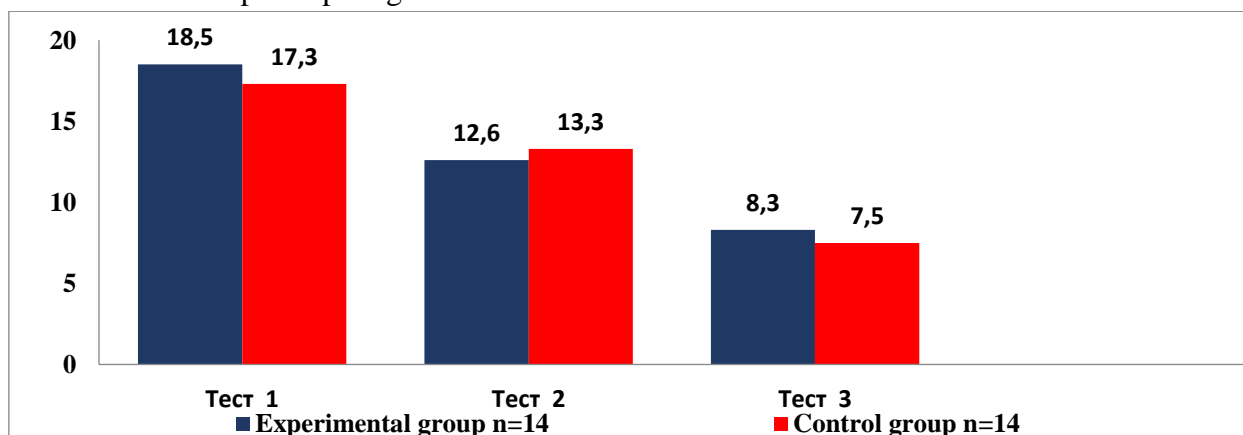
Table 2 Comparative statistical analysis of general and special physical preparation indicators of highly skilled belt wrestlers at the end of pedagogical experience (n=28)

Control tests		Experimental group n=14		Control group n=14		t	P
		($\bar{x} \pm s$)	V	($\bar{x} \pm s$)	V		
GPP	Pull-ups on the pull-up bar (times)	18.5±2.2	12, 2	17, 3 ± 1, 8	10, 7	2, 1	P<0.05
	Hold at 90 degrees while hanging on the pull-up bar (s)	44.2 ± 3, 7	8, 4	41.9 ± 3.5 ---	8, 5	2, 3	P<0.05
	100-meter run (s)	12.6 ± 1.1	8.6	13, 3 ± 1, 3	9, 4	2.2	P<0.05
	Gym bench forward bend in (cm)	8.3±0.92	11.1	7.5±1.1	14.5	3.1	P < 0.01
	Jump from a standing position (cm)	255.7 ± 13.5	5, 3	24 8, 4 ± 11.1	4, 6	2.2	P<0.05
SPP	Rotations around the head in the bridge position (s)	11.4±1.1	9, 5	12, 1 ± 1, 2	10, 1	2, 3	P<0.05
	10 rollovers in bridge position (s)	1 8, 1 ± 1, 6	8, 8	1 9, 1 ± 1, 9	10, 2	2, 2	P<0.05
	10 forward rolls (s)	11.7 ± 1.2	10.2	12, 3 ± 1, 1	8, 1	2.1	P<0.05
	5-meter-rope climb without the help of legs (s)	11, 8 ±1, 3	10, 8	12, 6 ±1, 2	9, 3	2, 4	P<0.05

Comment: GPP- General physical preparation; SPP - Special physical preparation;

EG - Experimental group; CG - Control group;

n - the number of participating athletes.



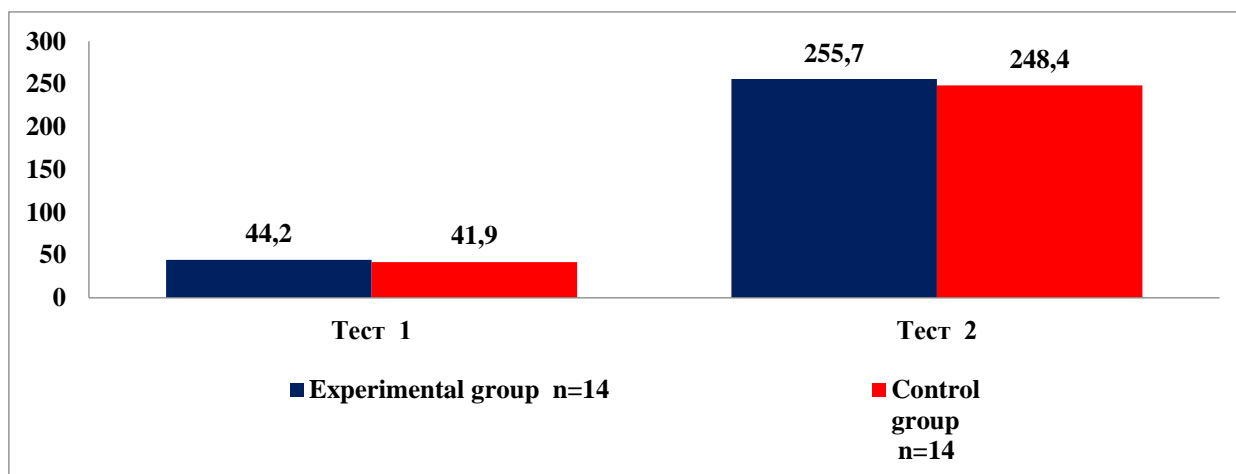
Comment : Test: 1 Pull-ups on the pull-up bar (times); Test: 2 100-meter-run (s); Test: 3 Forward bends on the gymnastic bench (cm).

2.1 - picture. General physical preparation indicators of highly skilled belt wrestlers

Here, the result in the experimental group was 18.5±2.2 (m), and in the control group it was 17.3±1.8 (m) (t=2.1; r<0.05). 100-meter-run test we got the following results: at the end of the experiment we had statistically reliable differences, in which in the experimental group – 12.6±1.1 (s), in the control group – 13.3±1,3 (s) data revealed that the experimental group of

highly skilled belt wrestlers had a significant advantage over the control group of highly skilled belt wrestlers, and this was confirmed by statistical analysis ($t=2.2$; $r<0.05$).

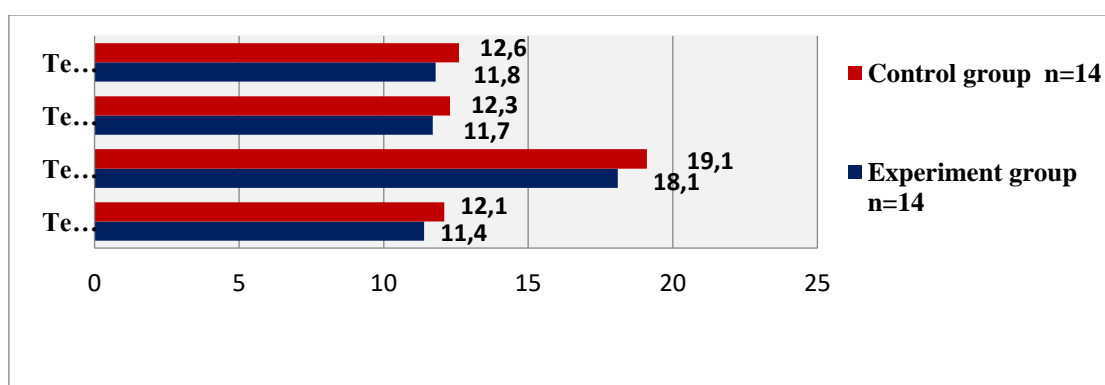
However, according to the results of the test of forward bending (cm) on the gymnastic seat, at the end of the experiment, in the experimental group - 8.3 ± 0.92 (cm), in the control group - 7.5 ± 1.1 (cm), ($t=3.1$; $r < 0.01$).



Comment: Test: 1 Keeping 90 degrees while hanging on the pull-up bar (s) ; Test: 2 Long jump from a standing position (cm).

Figure 2.2 . General physical preparation indicators of highly skilled belt wrestlers

It turned out that there are reliable statistical differences for all indicators. The methodology proposed by us gave a positive result and was reflected in the indicators of physical preparation. Holding at 90 degrees while hanging on the pull-up bar (s), reliable differences were shown at the end of the experiment in the experimental group of 44.2 ± 3.7 (s), and in the control group 41.9 ± 3.5 (s) ($t=2.3$; $r<0.05$). We also found statistical differences in the long jump (cm) test, in the experimental group - 255.7 ± 13.5 (cm) , in the control group - 248.4 ± 11.1 (cm) . A significant statistical difference was found in mathematical development ($t=2.2$; $r<0.05$).



Comment: Test: 1 Rotation(s) around the head in wrestling bridge position; Test: 2 10 rollovers in the bridge position (s); Test: 3 Forward rolls 10 times(s); Test: 4 Climbing 5-meter-rope without the help of legs (s).

Figure 2.3. Special physical preparation indicators of highly skilled belt wrestlers

We found that at the end of the experiment, the result of the rotations (s) around the head in the bridge position was 11.4 ± 1.1 (s) in the experimental group, and 12.1 ± 1.2 seconds in the control group. This shows a reliable statistical difference ($t=2.3$; $r<0.05$). 10 rollovers in the bridge position (s) in the experimental group it was 18.1 ± 1.6 (s), in the control group it was 19.1 ± 1.9 seconds, here we also found statistical differences ($t=2.2$; $r<0.05$). The forward rolls (10 times) test results increase (s) in the experimental group was 11.7 ± 1.2 (s), and in the control group it was 12.3 ± 1.1 (s), statistical differences were observed at the end of the experiment ($t=2.1$; $r<0.05$). Climbing a 5-meter-rope (s) test result was equal to 11.8 ± 1.3 (s) in the experimental group and 12.6 ± 1.2 (s) in the control group, statistical differences were observed at the end of the experiment ($t=2.4$; $r<0.05$).

Conclusion: Based on the above information, the following general conclusions were made. A pedagogical experiment was conducted in order to justify the effectiveness of our methodology focused on evaluation and monitoring indicators of pre-competition preparation of highly qualified belt wrestlers for all types of wrestling.

Pedagogical research in the planning of pre-competition training of highly qualified belt wrestlers in the sports school №1 of Uychi district, Namangan region, pedagogical experiments were conducted among a total of 28 highly qualified belt wrestlers, the system including general and special physical training, functional movements and physical qualities based on the development of highly qualified belt wrestlers for all types of wrestling was created. A pedagogical experiment was conducted in order to justify the effectiveness of our methodology aimed at evaluating and monitoring pre-competition preparation indicators of highly qualified belt wrestlers. Participants in the pedagogical experiment ($n=28$) were divided into two groups: experimental group (EG) and control group (CG). The number of wrestlers in both groups was the same ($n=14$). Exercises in the control group continued on the basis of traditional, program and charter, and in the experimental group, it was conducted based on the exercises developed by us. According to the information we received at the end of the research, the following was determined. In the table we can observe improvement in all 9 indicators.

List of used literature.

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