

to his social and psychological development, help to find a way out of difficult situations and teach the principles of interaction in society. Thus, we can say that physical culture in higher education also affects the development of students' communication skills. Undoubtedly, school physical education classes also play an important role in the formation of personality, but it is the classes held in higher education institutions that help prepare a person for adult life. Reduction of the network of sports and health facilities, sports clubs, commercialization of sports centers with increasing cost of training and health services led to a decrease in physical activity of various groups of children, development of chronic diseases and progression of physical defects, deterioration of physical fitness.

The problem of physical education of children with various health disorders is still acute and, unfortunately, in many schools is not solved. Such children are simply exempted from physical education, while weakened children need even more beneficial effects on the body of various means of physical culture and sports [2].

The need to promote physical culture and sports among children, adolescents and youth is due not only to the demands and rights of students, age, developmental conditions, constantly changing, but also the "social order" of society to form a healthy generation.

Conclusions. Слід зазначити, що існуючі підходи до вирішення проблеми розвитку фізичної культури та спорту у вузах країни тривалий час були пов'язані переважно з удосконаленням змісту навчально-тренувального процесу спортсменів, що веде до зростання спортивних результатів. Ці підходи фактично спрямовані на обмежену кількість тих, хто займається і не зачіпають вирішення проблем, пов'язаних з розвитком фізкультурно-спортивної діяльності значної маси студентства. Проведення внутрішньо-вузівських та міжвузівських спартакіад з обов'язковим набором традиційних видів спорту є ефективним засобом залучення студентів до фізкультурно-спортивної діяльності, але охоплює лише частину студентів. Більшість студентської молоді не залучена до фізкультурно-спортивної діяльності. У цій масі приховані невикористані можливості формування індивідуальної мотивації зміцнення здоров'я засобами фізичного вдосконалення. Завдання закладів вищої освіти активізувати прагнення до самоствердження та особистого пізнання справжніх цінностей фізичної культури.

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#### PHYSICAL TRAINING FOR 7-9 YEAR OLD JUDOISTS

*Judo is a detailed system of movements that allows you to govern the body as a harmoniously single organism capable of developing the physical abilities and functional fitness of athletes. In the conditions of competitive activity in judo the individual multivariate way of technical and tactical performance in the form of the throws, restraints, painful and suffocating locks is observed. Performing all these techniques requires strength, endurance, instant speed and coordination skills. The purpose of the article is improvement the methods of general and special physical training development for 7-9 year-old judokas. The experimentation facility was Children's and Youth Sports School № 11, Zaporizhzhia. It was attended by 43 boys aged 7-9 who were divided into control (n=21) and experimental (n=22) groups, all boys were classified in the main medical group. All*

sportsmen were in the primary training stage. The research paper describes the improved method of 7-9 year-old judokas training. The method determines and theoretically justifies correspondence of physical exercises and proportionality of muscle loading with functional peculiarities for child's body. The method is based on multifaceted special preparation that helps to broaden motion behavior experience of young judokas and create appropriate base for their general technical preparedness. The efficiency of the developed method was investigated when comparing the obtained indicators in the control and experimental groups. The percentage increase in indicators was divided into three groups: the smallest, average and highest. But in the experimental group all indicators improved, in the control group - some of them improved slightly, others did not undergo significant changes. In accordance to the research, there is a positive influence of the improved methodology on the development of general and special physical preparedness level among 7-9 year-old judokas.

**Key words:** judo, method, boys, physical abilities, types of sports training.

**Шуба Л.В., Шуба В.В. Фізична підготовка дзюдоїстів 7-9 років.** Дзюдо – детально розроблена система рухів, яка дозволяє володіти тілом, як гармонійно єдиним організмом, здатним розвивати фізичні якості та функціональну підготовленість спортсменів. В умовах змагальної діяльності в дзюдо спостерігається індивідуальний багатоваріативний спосіб виконання техніко-тактичних дій у вигляді кидків, утримань, больових і задушливих прийомів. Виконання всіх цих прийомів вимагає прояву сили, витривалості, миттєвої швидкості і координаційних якостей. Мета дослідження – удосконалити методику розвитку загальної та спеціальної фізичної підготовки дзюдоїстів 7-9 років. У дослідженні взяло участь 43 хлопця 7-9 років (21 – контрольна група, 22 – експериментальна група), які за станом здоров'я були віднесені до основної медичної групи і були на етапі початкової підготовки. В роботі висвітлена удосконалена методика, теоретично визначено та обґрунтовано відповідність фізичних вправ, які поєднують співмірність навантажень функціональним можливостям зростаючого організму. Специфіка заснована на різнобічній спеціальній підготовці, яка дозволяє розширити руховий досвід юних дзюдоїстів. Виявлено позитивний вплив удосконаленої методики на рівень розвитку загальної та спеціальної фізичної підготовленості дзюдоїстів 7-9 років.

**Ключові слова:** дзюдо, методика, хлопці, фізичні якості, різновиди фізичної підготовки.

**Articulation of issue.** Judo is a universal method of physical development and education for the individual. It is a combination of ancient martial arts, modern sports techniques and the philosophy of constant self-improvement. The principles of judo can be applied not only to physical development, but also to many other aspects of life [1, 3, 4].

Judo purposefully and positively affects the natural properties of the human body. When using physical exercises and other means of physical education it is possible to change the functional state of the organism in a certain range, which leads to progressive adaptive changes [1, 2, 8]. Influencing thus on physical abilities, under certain conditions reach essential change of level and a direction of their development. This is expressed in the progress of certain motor abilities (strength, speed, etc.), improving the overall level of efficiency and improving health [3, 4, 7].

**Literature route.** Analysis of scientific works M. Callan – long-term training in martial arts [1]; D. Detanico, R. Kons, D. Fukuda, A. Teixeira, I. Kriventsova, G. Ogar, O. Panina, – physical training for judokas [2, 10]; E. Dominy – theory and methods of development for judo [3]; T. Goffe, C. Palmer, T. Kuffner – games for development of physical abilities in the training process for judokas [6, 11]; J. Franssen, J. Pion, J. Vandendriessche, B. Vandorpe, R. Vaeyens, R. Lenoir, R. Philippaerts, A. Gaetano, D. Kirk – the influence of general forms, methods and principles that help increase the level of physical activity for primary school children [4, 5, 9] and etc., this is evidenced by the importance to modernize and look for new ways to improve the general and special physical training for judokas, taking into account the huge steps in the development of theoretical and practical science.

Aspects of improving the method of the educational process in judo, in the scientific literature in Ukraine is not sufficiently reflected, so our research is relevant and timely.

**The purpose of the article is** improvement the methods of general and special physical training development for 7-9 year-old judokas.

#### **Presentation of the main study material.**

The experimentation facility was Children's and Youth Sports School № 11, Zaporizhia. It was attended by 43 boys aged 7-9 who were divided into control (n=21) and experimental (n=22) groups, all boys were classified in the main medical group. All sportsmen were in the primary training stage.

Physical training is one of the most important components of sports training, which is aimed at the development of motor abilities – strength, speed, endurance, flexibility, coordination skills [1, 3]. Primary training stage – is the "foundation" of the sports activities of a young judoka [6, 9].

Improved method aimed at:

- providing different types of sports training, physical development and health promotion for sportsmen;
- increasing the level of physical training, improving technical and tactical skills;
- strengthening of locomotor system;
- optimal compliance with control standards;
- providing emotional well-being of young judokas.

The method provides strict consistency and continuity of the whole training process for 7-9 year old judokas. Systematic in solving the tasks of the method: strengthening health and harmonious development, education of moral and volitional abilities and sustained interest in training, purposefulness in mastering judo techniques, development of physical

abilities, creating conditions for achieving high sports results - will help maximize the sporting potential of youth judokas.

The structure of the advanced method contains educational material from the following sections of training: theoretical, general and special physical, technical and tactical, and also games for development of physical abilities.

Based on the annual planning, we have developed method in accordance with the structure of macrocycles, mesocycles and microcycles.

The macrocycle is a large training cycle of the semi-annual type (in some cases 3-4 months). The mesocycle is an average training cycle lasting from 2 to 6 weeks, which includes a relatively complete series of the microcycles.

Table 1 show in details the percentage distribution of sports training in the experimental and control groups.

Varieties of sports training for both groups in percentage

№	Types of sports training	I	II		III		IV		
		Mesocycle							
		CG & EG	CG	EG	CG	EG	CG	EG	
1.	Theoretical training	10%	10%	5%	5%		5%		
2.	General physical training	40%	35%	30%	35%	20%	30%	15%	
3.	Special physical training	20%	25%	30%	30%	40%	30%	40%	
4.	Technical and tactical training	10%	10%	15%	15%	25%	20%	35%	
5.	Games of physical skill	20%	20%		15%	10%	15%	5%	

A microcycle is a short training cycle, usually lasting a week or nearly a week, that usually includes one or several trainings.

The mesocycle included 8 microcycles (8 weeks). There were four trainings each week. Microcycles were constructed taking into account the percentage of activities in the mesocycle. Increasing the range of the training load with a slight increase in the general intensity for training. Although the intensity of exercise increases, the degree of its increase is normalized to a narrower extent than the increase in total range. It is necessary to control every step of young judokas in the present-day conditions of the educational and training process [1, 8, 10].

At the same time, the desired result can be achieved only with shrewd planning of the pedagogical process, which will take into account the development of physical abilities and motivation to train [2, 5, 6].

At the beginning and at the end of the research, all pupils met the control standards which allowed determining the level of development of physical abilities and level of physical preparedness [12]:

1. Floor dips (number of times) – testing strength abilities of the muscles of the hands.
2. Standing long jumps (cm) – testing of speed-strength abilities.
3. Do sit-ups for 1 minute (number of times) – testing abdominal muscle strength abilities.
4. Chinup (number of times) – testing strength abilities of the muscles of the hands.
5. Wrestler's bridge (number of times/seconds) – testing strength abilities of the muscles of the neck.

The test is performed for 30 seconds. Standing on your head put your feet apart wider than your shoulders. Put your hands near your head shoulder-width apart. When performing the test, pay attention to the correctness of execution. If the technique of performing the exercise is incorrect, the attempt is not credited.

6. Rope-climb (m) – testing of the arms and shoulders strength.
7. Stretch the surgical tubing (number of times/seconds) – testing of the arms muscular endurance.

The test is performed for 30 seconds. Preparatory position: stand with feet wide astride, hands holding a surgical tubing in front of them, legs bent. Raise your arms to sideward-upward with the maximum arm pulling backwards.

8. Chinese get&down-up (number of times/seconds) – testing of the legs muscle strength and balance.

Preparatory position: stand with feet astride standing back to back with a partner. Squat in pairs at the same time. It is important that the performers are about the same height and weight.

9. 30-metres race (seconds) – testing of speed abilities.

At the signal, the students start running from a high start one by one. Trying to overcome the distance as soon as possible. Time to overcome the distance, determined with an accuracy of 0,1seconds.

10. Angled position (cm) – testing of flexibility.

One of the most promising areas for optimizing physical education is the rational use of effective tools, methods and technologies to improve motor abilities in order to increase physical development, strengthening health.

Table 2 presents level of the physical abilities indicators before and after the implementation of experimental method.

Table 2

Statistical indicators of the motor abilities development before and after the research

Tests	Before research		P	After research		P
	CG (n=21)	EG (n=22)		CG (n=21)	EG (n=22)	
	$\bar{x} \pm m$			$\bar{x} \pm m$		
Floor dips, number of times	16±0,1	16±0,1	>0,05	317±0,2	20±5,1	<0,01
Standing long jumps, cm	137±2,2	136±2,2	>0,05	141±2,4	150±2,2	<0,01
Do sit-ups for 1 minute, number of times	22±0,8	23±0,9	>0,05	26±0,8	31±0,6	<0,05
Chinup, number of times	5±0,1	5±0,1	>0,05	9±0,4	14±0,5	<0,01

Wrestler's bridge (number of times/seconds)	15±1,1	14±1,8	>0,05	17±0,8	21±0,6	<0,01
Rope-climb, m	3±0,3	3±0,4	>0,05	4±1,6	5,5±1,8	<0,05
Stretch the surgical tubing (number of times/seconds)	21±3,1	22±3,3	>0,05	24±3,9	27±2,7	<0,01
Chinese get&down-up, number of times/seconds	16±0,5	15±0,5	>0,05	18±1,5	21±1,8	<0,05
30-metres race, seconds	6,1±0,4	6,1±0,5	>0,05	5,9±0,9	5,4±0,6	<0,05
Angled position, cm	5,4±0,8	6,9±0,9	>0,05	5,3±1,9	10,1±1,4	<0,01

The obtained data, on the level of physical development in young judokas 7-9 year old, presents that the groups are more homogeneous in terms of all tests.

Also analyzed the percentage increase in the development of physical abilities.

The smallest increase in indicators was in the tests: "Chinup": in the control group increased by 5,03% and in the experimental group increased by 7,71%; "Floor dips" in the control group increased by 5,18% and in the experimental group increased by 8,12%; "Rope-climb": in the control group increased by 5,88% and in the experimental group increased by 8,17%; "Wrestler's bridge": in the control group increased by 6,00% and in the experimental group increased by 9,65%.

The average increase in indicators was in the tests: "Stretch the surgical tubing": in the control group increased by 6,25% and in the experimental group increased by 10,06 %; "Standing long jumps": in the control group increased by 7,06% and in the experimental group increased by 11,09%.

The highest increase in indicators was in the tests: "30-metres race": in the control group increased by 8,51% and in the experimental group increased by 13,55%; "Do sit-ups for 1 minute": in the control group increased by 9,75% and in the experimental group increased by 14,21%; "Angled position": in the control group increased by 9,36% and in the experimental group increased by 14,38%; "Chinese get&down-up": in the control group increased by 9,71% and in the experimental group increased by 16,01%.

Analyzed the results, we note that the different increase in the physical abilities development 7-9 year old judoists, indicates, that the using experimental method contributed to the more intensive development of general and special physical training for children in the experimental group.

It should be noted that for the effective physical abilities development in the control and experimental groups, the decisive factor was the consideration of sensitivity periods and a comprehensive approach to judo.

The introduction of experimental method during the training process has increased the motivation to exercise and sport, contributed to the development of basic physical abilities and improve the health of children.

**Conclusions.** Analyzed the state of existing methods and means of general and special physical training development for the primary school judokas, which prompted us to modernize existing methods.

The efficiency of the developed method was investigated when comparing the obtained indicators in the control and experimental groups. The percentage increase in indicators was divided into three groups: the smallest, average and highest. The highest increase in indicators was in the tests: "30-metres race", "Do sit-ups for 1 minute", "Angled position" and "Chinese get&down-up". But in the experimental group all indicators improved, in the control group - some of them improved slightly, others did not undergo significant changes.

We note that the improved method is really positive and can be used during training process in for 7-9 year-old judokas.

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