

# Directions of improvement of training of young wrestlers of freestyle

**Yevhen Ruchka**

*Kharkov State Academy of Physical Culture, Kharkov, Ukraine*

**Purpose:** to prove the directions of improvement of training of young wrestlers of freestyle for the purpose of improvement of results of their competitive activity and sports skill.

**Material & Methods:** methods are used during the research: analysis and synthesis of data of scientific and methodical literature; pedagogical observations; poll (conversation, questioning); analysis of competitive activity of young wrestlers of freestyle; testing of physical fitness; pedagogical experiment; methods of mathematic-statistical processing of results of researches.

**Results:** it is proved that the improvement of technical-tactical training of young wrestlers of freestyle is required; the main problems in this process are defined.

**Conclusions:** the technique of training of young wrestlers of freestyle is proved and the expediency of its use for quick adoption of optimal technical-tactical solutions by them in the conditions of competitive activity is proved. Concrete ways of tactical preparation for each action and various combinations of basic actions are offered to include in the program of CYSS for free-style wrestling.

**Keywords:** free-style wrestling, technique, technical-tactical decision, competitive activity, algorithm.

## Introduction

Theoretic-methodological basis of the research are modern publications of the leading scientists, who deal with issues of the theory and technique of physical culture and sport: L. D. Aysuyev [1], S. V. Latyshev [3], S. L. Pakulin [4], Yu. M. Rogov [5] but other. However the problem of the improvement of training of young wrestlers of free-style taking into account modern requirements of competitive activity and the search of means and methods of formation of effective arsenal of competitive variable technical-tactical actions of young wrestlers are not enough considered in modern scientific publications. It caused the choice of the subject and need of carrying out separate research by us.

## Communication of the research with scientific programs, plans, subjects

The research is executed according to the Built plan of the research works of Kharkiv state academy of physical culture for 2011–2015 on the subject “Individualization of the training process of the qualified wrestlers”.

The purpose of the research: to prove the directions of improvement of training of young wrestlers of free-style for the purpose of the improvement of results of their competitive activity and sports skill.

## Material and Methods of the research

The following methods are used during the research: analysis and synthesis of data of scientifically-methodical literature; pedagogical observations; poll (conversation, questioning); analysis of competitive activity of young wrestlers of free-

style; testing of physical fitness; pedagogical experiment; methods of mathematic-statistical processing of results of researches.

## Results of the research and their discussion

The tendency of decrease in effectiveness of activity of part of young wrestlers of free-style in intense conditions of responsible competitions was found during the carried out by us questioning of sportsmen and coaches. It turned out that more than 54,6 percent from 37 interviewed young wrestlers acted in the first collision of the championship of Ukraine below the opportunities. The first signs of tension, nervousness, are connected with future competitions, appear at young wrestlers of free-style after the announcement of team lineup that is in 10–15 days before the competitions.

The experimental researches of dynamics of conditions of young wrestlers before competitions demonstrate the increase in comparison with activation background on tremor ( $p < 0,05$ ), and also increase in mood ( $p < 0,05$ ) and deterioration in physical health ( $p < 0,001$ ) after the notice of wrestlers on participation in future competitions. Increase in vegetative activation by the heart rate (HR) and reduction of desire to fight were also close to the level of reliability. The statistically significant increase in vegetative activation for HR ( $p < 0,05$ ), and also close increase in the central activation to reliability level on tremor, deterioration in physical health and mood was revealed in situation on the eve of the competitions. The sharp increase in HR ( $p < 0,001$ ) and deterioration in health ( $p < 0,001$ ) took place after the announcement of results of the draw. Besides, the tendency to increase in vegetative activation on electro-skin resistance (ESR) appeared. We recorded sharp strengthening of activation on all indicators ( $p < 0,01$

and  $p < 0,001$ ) and decrease in desire to fight ( $p < 0,05$ ) before collisions at young wrestlers. Increase in activation in combination with deterioration in subjective experiences allowed to estimate condition of young wrestlers in precompetitive and pre-starting situations as inadequate. Its signs answered emotional tension (S. K. Bagadirova, 2014–2015; L. D. Gissen, 2010; Is. P. Ilyin, 2009; A. M. Pyevnyeva, 2011; O. O. Prokhorov, 2010; A. V. Rodionov, 2010; V. M. Smolentseva, 2012).

HR indicators, tremor and self-assessments of health [8] were the most sensitive indicators of condition of young wrestlers.

Comparison of indicators of competitive activity of young wrestlers of free-style with training data showed statistically significant increase in technical activity in competitions for 35,2% ( $p < 0,05$ ) and close decrease in efficiency of tactical-technical actions to reliability level by 24,9%.

Shifts of indicators of state in precompetitive and pre-starting situations had 12 statistically significant correlations with indicators of measure of decrease in efficiency of tactical-technical actions in competitive collisions. And five more coefficients were close to the reliable level. The essence of results of the correlation analysis is in the following. It was characteristic for young wrestlers of free-style that have to a lesser extent reduced efficiency of tactical-technical actions in competitive collisions: positive shifts of desire to fight in all situations ( $p < 0,05$ ), the big accuracy of differentiation at "notice", after draw ( $p < 0,01$ ) and before collisions ( $p < 0,01$ ), smaller activation of the autonomic nervous system on the eve of the competitions ( $p < 0,05$ ), after draw ( $p < 0,05$ ) and before collisions ( $p < 0,05$ ), the highest central activation on tremor before collisions ( $p < 0,01$ ) and tendency to the bigger level of self-assessment of mood after draw and before collisions are more expressed.

Wrestlers had more adequate shifts of key parameters of activity, whose condition in precompetitive situations was characterized by less expressed vegetative activation on HR and ESR, preservation or increase in accuracy of power differentiation and subjective experiences in competitive collisions [9]. Conditionality of changes of activity from states grows in pre-starting situations [1, p. 202]. Adequate shifts of activity and efficiency of tactical-technical actions had young wrestlers of free-style, whose condition after the announcement of results of draw, differed in the smaller growth of vegetative activation, the bigger accuracy of differentiation and the highest indicators of subjective experiences, moods, desires to fight [9]. Adequate shifts of state before collisions were characterized by less expressed vegetative activation, big level of excitement of the central nervous system on tremor, the bigger accuracy of differentiation and the highest level of subjective experiences.

Shifts of indicators of accuracy of differentiation of effort, HR, ESR, tremor, and self-assessments of desire to fight had the greatest number of correlations with external criterion.

Results of the correlation analysis between indicators of states and properties of nervous system showed the existence of essential individual conditionality of the first in all analyzed situations. Indicators of force of nervous system had the greatest number of significant correlations. ESR indicators (12 correlations), HR (8), tremor, errors of differentiation, self-assessment

of activity (9), self-assessment of health (7) had the greatest number of communications from state indicators. The greatest psychophysiological conditionality of states took place on the eve of the competitions (13 correlations), after draw and before collisions (on 8) and a little smaller – at the notice on inclusion in team (4). The sense of the found conditionality consists in the following. Young wrestlers of free-style against big level of nervous system had the power the smaller level of vegetative activation in all precompetitive and pre-starting situations, the bigger level of the central activation on tremor before collisions. Besides, the highest level of force of nervous system caused the highest indicators of self-assessment and especially health self-assessment practically in all situations, and before collisions also more expressed desire to fight.

Researches showed that at the young wrestlers differentiated by the level of force of nervous system, change of state at stage of direct preparation for participation in competitions occur unequally [10]. This circumstance demands strictly the individual approach to the selection of means and methods of management of the sportsmen.

The need of improvement of technique of study of young wrestlers of freestyle [7] grows in modern dynamic conditions. It is caused by the natural development of free-style wrestling both in Ukraine, and in the world. Based on studying of competitive activity of the leading wrestlers of free-style, we tried to finish the close interrelation between the initial study and the highest sports skill, thereby having proved organic interrelations between them in the research.

The traditional technique of study of young wrestlers of free-style is directed to the development of techniques with their gradual inclusion in fight. It should be noted that the due attention is not paid to studying of main elements of fight now (stands, distances, movements, clutches, ways of release from clutches, stamping, maneuvering, pushes, bursts, hooks but other). Poll of coaches found out that the development of these actions by wrestlers happens in the course of educational duels in itself. And results of the research of competitive activity of wrestlers show need of the primary studying of these operations as they make the basis of conducting fight in a duel.

The discrepancy between need of mastering bases of maintaining single combat and inefficiency of the solution of this problem traditional technique of study is observed. In our opinion, the solution of this problem is possible on the basis of application of private technique with use of game method of study. Using it, the coach can fill gap between strictly regulated method of study and competition, carrying out consistently study of young wrestlers of free-style both technique, and tactics. The game method of study gets the increasing distribution in free-style wrestling. It is necessary to use specialized outdoor games more actively in free-style wrestling for training of young wrestlers. Results of our research show, that they are rather effective both concerning direct influence on physical and technical-tactical fitness of young wrestlers of free-style, and concerning preservation of high rate of gain of the main indicators of their competitive activity. The game orientation of classes creates conditions for quick assimilation of main elements of free-style wrestling and basic actions. At the same time games attract keen interest of children, increase their activity, emotionality, force independently, to approach creatively the solution of motive tasks. It is indisputable that

thereby they promote formation of physical and mental qualities at young wrestlers of free-style.

Indicators of special physical fitness of young wrestlers of free-style to use of game method of study by means of specialized outdoor games for the development of variable movement skills in young wrestlers of free-style are given in the table 1.

Indicators of special physical fitness of young wrestlers of free-style after the experiment are given in tab. 2.

Dynamics of indicators of special physical fitness of young wrestlers of free-style is observed during the experiment which is characterized by data of tab. 3.

The analysis of the results of research, which are presented in tab. 3, confirms the following reliable differences on indicators of special physical fitness between groups of wrestlers. The best dynamics of indicators of special physical fitness of young wrestlers of free-style of the experimental group, where acceleration of performance of running around the chairman of 10 times on 1,29, is observed with fall overs from emphasis the head in carpet on "wrestler's bridge" and in the opposite direction – on 1,29 s, exercises "pass at legs" – on 0,23 s, running added steps around hands of 10 times on 0,16 s. It testifies to the best high-speed opportunities of reconstruction of special skills young wrestlers of free-style of the experimental group.

The technique and tactics in free-style wrestling are exclusively various, and the variety them constantly grows [6]. The development of technique and tactics of free-style wrestling is caused by the unrelenting sports competition on the international scene, change of competition rules [2]. At the same

time, as conducted by us survey found, 11 leading experts on free-style wrestling of the Kharkiv region, technique, in combination with tactics is basis of sports skill of the wrestler whereas other parties of preparation play supporting role in relation to it resultant component of activity.

## Conclusions

1. The use of technique of preparation, which is aimed at quick adoption of optimal technical and tactical solutions in the conditions of competitive activity, significantly improves sports results, develops mental capacities of young wrestlers of free-style. The private technique of study which consists of the system of tasks, problems and methodical instructions, which cornerstone performance of special exercises, elements, phases, parts of technique and their combinational actions in general is, by means of which optimum conditions for the correct assimilation of basic actions of free-style wrestling are created gets at the development of technical elements of free-style wrestling and basic actions of young wrestlers of importance. Basic elements of free-style wrestling are the basic provisions of wrestlers in stand and parterre, distance between rivals, ways of movements, directions of maneuverings, clutches, emphasis, pushes, bursts and releases from them, performance of basic technique, protection and counter-technique, use of tactical training, combinations.

2. The successful formation of motive function of young wrestlers of free-style in many respects depends on study method to fight elements. The choice of methods and methodical receptions is defined by the concrete pedagogical task, features of maintenance of training material, age and level of prepared-

**Table 1**  
Indicators of special physical fitness of young wrestlers before the experiment

Indicators	EG (n=11)	CG (n=11)
Fall overs from emphasis the head in carpet on "wrestler's bridge" and in the opposite direction 10 times, s	23,81+0,13	24,05+0,15*
Exercise "pass at legs", s	25,21+0,92	25,74+1,21
Running around the head of 10 times, s	26,68+0,31	25,79+0,29*
Running added steps around hands of 10 times, s	22,17+1,19	23,01+1,27*

**Note.** \* –  $p < 0,05$  at sportsmen of CG in comparison with wrestlers of EG.

**Table 2**  
Indicator of special physical fitness of young wrestlers of free-style after the experiment

Indicators	EG(n=11)	CG (n=11)
Fall overs from emphasis the head in carpet on "wrestler's bridge" and in the opposite direction 10 times, s	22,76+0,14	24,11+0,17*
Exercise "pass at legs", s	24,98+0,87	25,34+1,14
Running around the head of 10 times, s	25,39+0,35	25,68+0,27*
Running added steps around hands of 10 times, s	22,01+1,22	22,57+1,13*

**Note.** \* –  $p < 0,05$  at sportsmen of CG in comparison with wrestlers of EG.

**Table 3**  
Dynamics of indicators of special physical fitness of young wrestlers of free-style during the experiment

Indicators	EG (n=11)	CG (n=11)
Fall overs from emphasis the head in carpet on "wrestler's bridge" and in the opposite direction 10 times, s	-1,05	0,02
Exercise "pass at legs", s	-0,23	-0,07
Running around the head of 10 times, s	-1,29	-0,02
Running added steps around hands of 10 times, s	-0,16	-0,14

ness of young wrestlers of free-style. It is possible to allocate methods of ensuring presentation and methods of use of the word in the form of the leadership in the educational process and the direct communication of the coach with young wrestlers of free-style. The exercise method is applied to mastering main elements of fight and basic actions. The choice and application by the coach of the optimum method significantly accelerates the process of studying of technique and tactics by young wrestlers in the conditions of the dynamic development of free-style wrestling as Olympic sport, promotes the improvement of effectiveness of competitive activity.

3. It is easier for coach to find mistakes in its structure in the analysis of the attacking operation which is performed by the pupil. Such approach allows optimizing the study process, thereby increasing management efficiency of it. It is easier for the coach to control the different parties of their preparation at the same time in the analysis of all indicators which gives the chance to divide young wrestlers of free-style on more and less perspective by ability to assimilation of training material.

4. The ability of the young wrestlers of free-style against honor to get out of the situations, which arise during a duel, increases with increase in number of ways of tactical preparation of the attacking action. At the same time the analysis of programs of CYSS on free-style wrestling demonstrates that it is necessary to include concrete ways of tactical preparation for each action and different combinations of basic actions in them. Study technique questions to technique at the initial stages are still a

little investigated. The condition of this problem was revealed us during questionnaire of the leading coaches of the Kharkiv region. So, it is not known to what techniques, defense and counter- techniques, it is necessary to teach for year in what sequence, how many techniques, how many time it is necessary to repeat technique which is studied, in one classes how many times to carry out it to assimilation that it was possible to apply in educational collisions and, the main thing, in the conditions of competitions of young wrestlers of free-style.

5. Indicators of overall physical fitness in comparison with indicators before the experiment are improved after application of the author's program on improvement of physical training of young wrestlers on extent half a year, wrestlers who entered into the experimental group. Time of performance of exercises was reliable less ( $p < 0,05$ ), than at wrestlers of the control group by the author's technique. Sportsmen, who entered into the control group of comparison, have not found the significant improvement of indicators of special physical fitness. The proved expediency of use of the author's technique of study of young wrestlers to variable technique of free-style wrestling against the help of specialized outdoor games for the development of variable movement skills at young wrestlers of free-style.

**Prospects of the subsequent researches in this direction** – the improvement of technique of study of young wrestlers to technique of fight taking into account modern requirements of competitive activity.

**Conflict of interests.** The author declares that there is no conflict of interests.

**Financing sources.** This article didn't get the financial support from the state, public or commercial organization.

## References

1. Aysuev, L., Sagaleev, A. & Tapkharov, M. (2003), "Theoretical aspects and methodological basis of teaching techniques of wrestling", *Vestnik Buryatskogo universiteta. Seriya 8. Teoriya i metodika obucheniya v vuze i shkole* [Bulletin of Buryat University. Series 8. Theory and methods of teaching in the University and the school], Issue 7, pp. 200–209. (in Russ.)
2. *Istoriia vynyknennia vilnoi borotby* [The history of wrestling], available at: <http://pathofscience.org/index.php/ps/article/view/70> (date of appeal 26.01.2016). (in Ukr.)
3. Latyshev, S. & Latyshev, N. (2008), *Metodika kolichestvennoj ocenki special'noj vynoslivosti borcov* [Methods of quantitative evaluation of special endurance of fighters], DonNUJeT, Doneck, Ukraine, 24 p. (in Rus.)
4. Pakulin, S., Ananchenko, K. & Perebiinis, V. (2016), "The improvement of technical and tactical training judo at the stage of exit from the sport of higher achievements", *Traektoriya nauki: Mezhdunarodnyy elektronnyy nauchnyy zhurnal* [The trajectory of science: International electronic scientific journal], No 2(7), available at: <http://goo.gl/F799b3> (date of appeal 15.05.2016). (in Ukr.)
5. Rogov, Ju., Gozhin, V. & Dement'ev, V. L. (2013), "Methods of forming the image of the attacker's actions have young fighters", *Sportivnyy psiholog*, No2(29), pp. 20–26 (in Russ.)
6. Ruchka, Ie. (2016), "Improving training young fighters in the dynamic development of wrestling", *Traektoriya nauki: Mezhdunarodnyy elektronnyy nauchnyy zhurnal* [The trajectory of science: International electronic scientific journal], No 2(7), available at: <http://pathofscience.org/index.php/ps/article/view/71> (date of appeal 15.05.2016). (in Ukr.)
7. Ruchka, Ie. (2016), "The improving of precompetitive training of freestyle young wrestlers", *Traektoriya nauki: Mezhdunarodnyy elektronnyy nauchnyy zhurnal* [The trajectory of science: International electronic scientific journal], No 6(11), available at: <http://pathofscience.org/index.php/ps/article/view/185/206> (date of appeal 12.06.2016). (in Ukr.)
8. Tapharov, M. (2007), *Metodika obuchenija tehnikе vol'noj bor'by v sootvetstvii s sovremennymi trebovanijami sorevnovatel'noj dejatel'nosti* [Methods of teaching the art of wrestling in accordance with modern requirements of competitive activity] (Unpublished doctoral dissertation). Ulan-Udje, Russia, 129 p. (in Rus.)
9. Ananczenko, K., Jagiełło, W., Kalina, R., Klimczak, J., Ashkinazi, S., Kalina, A. & Kalina R. (2015), "Fun forms of martial arts in positive enhancement of all dimensions of health and survival abilities", *Proceedings of the 1st World Congress on Health and Martial Arts in Interdisciplinary Approach, HMA 2015 (17–19 September 2015, Czestochowa, Poland)*, Archives of Budo, Warsaw, pp. 32–39.
10. Rovnyy, A., Rovnaya, O. & Galimskiy, V. (2015), "Optimization development coordinated young karate sportsmen abilities at the stage of preliminary base training", *Slobozhansky Herald of Science and Sport*, No 3, pp. 75–79, available at: [http://journals.uran.ua/sport\\_herald/article/view/59580](http://journals.uran.ua/sport_herald/article/view/59580)

Received: 08.11.2016.  
Published: 31.12.2016.

**Yevhen Ruchka:** Graduate Student, Kharkov State Academy of Physical Culture: Klochkovska Street 99, Kharkov, 61058, Ukraine.

**ORCID.ORG/0000-0002-7805-4418**

**E-mail: Ruchka@gmail.com**