



## IMPROVING THE LEVEL OF PHYSICAL FITNESS OF CADET GIRLS USING CROSSFIT TOOLS AND METHODS

Mirzakulov Akrom Gafurzhanovich

Teacher of the department of combat and physical training  
of the Academy of the MIA  
e-mail: akrom.mir1988@gmail.com  
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**Abstract:** There is a growing demand for female employees in the republic today, as well as their interest in sports. A special place in the professional training of boys and girls cadets of the Academy of the Ministry of Internal Affairs is given to physical training. Therefore, "The education system at the Academy will be focused on targeted professional training, and the priority will be the implementation of combat and physical training, starting from the 1st year, in an in-depth state." This article provides a scientific justification for the fact that the physical training of female cadets is developing with the help of means and methods of crossfit, which is currently one of the new sports that meet modern requirements.

**Keywords:** crossfit, physical fitness, coefficient of variation, relative height, sports test, cadet, absolute height, deviation, arithmetic mean.

**Introduction.** Today, special attention is also paid to women's sports in our republic. In particular, in the decision of the President of the Republic of Uzbekistan on measures to further improve the system of supporting women, ensuring their active participation in the life of society, PQ-5020 dated March 5, 2021, to increase the activity of women in all aspects of the country's economic, political and social life, to provide comprehensive assistance in, the places covered the issues of forming a "women's notebook" and bringing to a qualitatively new level the work on the systematic study, analysis and solution of the problems, needs and interests of women included in it.

To date, Sports and physical education have become an integral part of the lifestyle of people. It is important to provide young people with a wide range of opportunities, conditions, to guide them in the right way, to educate them in the right way, to become a mature person in every possible way. Our youth should not only be comprehensively educated and spiritually beautiful, but also healthy, satisfied, physically energetic. To be like this, it will be necessary to pay attention to the publicity of the sports movement, develop physical education, to instill the willpower qualities of young people, to prepare young people and girls for work and defense physically. The involvement of girls in sports, the creation of the necessary conditions for their regular participation in mass sports are some of the important directions of the development of sports in our country. In ensuring the popularity of sports at the national level, with a special emphasis on the development of children's sports, in particular, women's sports, the goal of improving the gene pool of the nation is embodied in the healthy birth, growth, upbringing of children of Uzbekistan and, ultimately, the goal.

Literature analysis. A number of our authors in our republic, theoretical foundations of sports training Salamov R.S, 2005, theory and usuliyati of sports wrestling, Kerimov F.A, 2005, Abdullayev M.J., Radjapov U.R., Mukhametov A.M. physical education, 2020, Bobomurodov



A.E, sports theory and usuliyati of physical education (classification of generalizations of physical qualities), 2020, functional multicurash Kulihev R.S., Maqsudov Q.A., Rachmatullaeva L.A, 2021, Kochkarov A. on the technology of increasing the physical fitness of cadets using modern fitness programs "CrossFit".A.,2022, physical education Normurodov A.N, 2022, and has been the subject of conceptual research into the field by other experts.

One of the priorities of physical education at the Academy of the Ministry of internal affairs is to maintain and strengthen the health of cadets and listeners and form the values of their healthy lifestyle. Today, innovative technologies of physical education, sports and health are relevant, as well as methods for the formation of physical fitness, aimed at the personality-oriented, comprehensive nature of Education. The sport of functional multi-sport (CrossFit), along with the development of body muscles, further increases a healthy lifestyle and sports interests between cadets and listeners.

**Methodology.** In the process of research, we received the necessary information by conducting a questionnaire survey and mathematical-stastic calculation of the results obtained.

The physical fitness of Cadet Girls is considered one of the important components of organizing sports activities using functional multicooker (CrossFit) methods, and physical qualities - a process aimed at developing strength, endurance, flexibility, agility and agility.

The general physical fitness of Cadet Girls is the foundation, the necessary basis for achieving high results. It also provides for the solution of tasks mainly for the comprehensive harmonic development of the organism of Cadet Girls, increasing its functional capabilities, developing physical qualities and strengthening health.

The special physical training of Cadet Girls is carried out mainly in the training hall and is aimed at developing the most important qualities of movement in the composition of movement qualifications. Therefore, competition exercises are used, involving various possible complications as the main tools of special physical training. Such complex exercises enhance the effect on the body of Cadet Girls. For example, working with a load with a relatively heavier weight, or training is performed using functional multicooker (CrossFit) methods, etc.k. All these exercises serve to develop one or another mechanism of energy supply, and also have an integrated effect on the engagement of Cadet Girls, and at the same time increase her physical fitness.

The main task of the incessant training of cadets girls is to make the most of the training tools, which are able to provoke a very rapid course of adaptation processes. The dimensions of the total sum of the volume and intensity of the load given in the training process, large-load training are planned on a large scale. This ensures the structure and formation of the physical preparation process and, in turn, causes the order of exercises in training to change and the number of their excitation to increase dramatically.

A survey of the questionnaire developed by us involved a total of 268 cadet girls from Stage 1 (99 persons), Stage 2 (93 persons) and Stage 3 (76 persons) of the MIA Academy, the answers of the cadet girls to the survey questions (for convenience, the answers are marked as high, medium and low levels) were summarized and presented in Table 3.1 below.

**The answers of the cadet girls of the Academy of the MIA to the questions of the questionnaire**



Quest	The content of the question	Answer options (number / % )		
		high	Medial	Low
1.	Express your attitude to physical education classes sports.	135 / 50,37	90 / 33,58	43 / 16,04
2.	sports discharge and title your attitude towards the cadet girls you have	104 / 38,81	95 / 35,45	69 / 25,75
3.	JT in your life and activities and how do you assess the importance of sports	138 / 51,49	85 / 31,72	45 / 16,79
4.	Sport in capturing Outlaws (JT). importance	115 / 42,91	80 / 29,85	73 / 27,24
5.	Healthy lifestyle rules of order to what extent do you know	106 / 39,55	74 / 27,61	88 / 32,84
6.	To what extent does a healthy lifestyle follow the rule order you follow	94 / 35,07	89 / 33,21	85 / 31,72
7.	Mia Academy cadet girls physical education how do you evaluate the requirements of the lesson system	86 / 32,09	113 / 42,16	69 / 25,75
8.	IIV Academy of Cadet Girls in the system of physical education classes use of modern information technology rate the level	66 / 24,63	92 / 34,33	110 / 41,04
9.	MIA Academy cadet girls physical education later modern on the system of classes acquire sufficient knowledge, skills and skills in the use Information Technology assess your capabilities	63 / 23,51	96 / 35,82	109 / 40,67
10.	use of modern information technology sources of methodological literature on the level existence	61 / 22,76	94 / 35,07	113 / 42,16
11.	Sports clubs under the MIA Academy evaluate performance	69 / 25,75	95 / 35,45	104 / 38,81
12.	Assess what will be the importance of Information Technology in the future activities of iiolari staff	141 / 52,61	61 / 22,76	66 / 24,63

Thus, most of the respondent-cadet girls who participated in the survey recognized that they have a high interest in physical education and sports training, are fond of and strive for cadet girls who have a sports discharge and title, that physical education and sports are of high importance in future labor activities, and even the importance of sports and levels of physical. Naturally, among the respondent-cadet girls, there are also those who, although in relatively small quantities, expressed a negative opinion on the mentioned issues.

**Results.** At the beginning of pedagogical experience, the MIA Academy (studying in the direction of Prevention of violations), which belongs to the control and Experimental Group, summarizes and analyzes the materials of scientific and methodological literature for the



purpose of determining the level of physical fitness of Cadet Girls, as well as the results recorded on selected physical fitness tests based on our personal practical experience data, analysis of the number values of the indicators of the mean quadratic or standard deviation and variation coefficient from the main statistical characteristics calculated by the general concept and formulas based on their results made it possible to determine whether the values of the standard deviations in both groups are very close to each other, and whether the sizes of the variation coefficient in.

In Table 1 below, the main statistical characteristics calculated on the basis of the results recorded at the beginning of the pedagogical experiment on the performance of physical fitness tests of Cadet Girls of the MIA Academy (studying in the direction of Prevention of violations) belonging to control and experimental groups, the results of each test calculate the critical values of the average arithmetic, data is provided for statistical reliability estimates determined by the number of specified degrees of freedom and the degree of significance.

**Table 1.**

**Comparison of statistical characteristics of the results recorded at the beginning of the pedagogical experiment on the performance of physical fitness tests of Cadet Girls of the MIA Academy (studying in the direction of Prevention of violations) belonging to the control (n=20) and experimental (n=20 ) groups**

Physical fitness tests	Results recorded at the beginning of the experiment							
	Group	$\bar{X}$	$\sigma$	V, %	Absolutyut	Relative %	$t$	p
1-test	CG	17,96	2,26	12,59	0,26	1,48	0,37	>0,7
	EG	17,69	2,29	12,95				
2-test	CG	1,98	0,29	14,63	0,02	1,11	0,24	>0,8
	EG	1,96	0,29	14,95				
3-test	CG	46,51	5,38	11,57	0,63	1,35	0,37	>0,7
	EG	45,88	5,49	11,97				
4-test	CG	5,22	0,71	13,61	0,08	1,50	0,35	>0,7
	EG	5,14	0,72	13,97				
5-test	CG	22,60	3,52	15,58	0,45	1,99	0,40	>0,6
	EG	22,15	3,54	15,98				
Mean relative difference					1.49			

In the course of pedagogical experiment, the results of the tests of the studied five physical fitness indicators of the cadet girls of this group were assessed on the basis of critical values of the Student distribution of average arithmetic values at the level of satisfactory significance ( $t = 2.08$  with  $T = 2.14$  range and  $P < 0.05$ ) at the level of statistical reliability in comparison to the observed, the results of the three were found to be statistically reliable at high significance level ( $t = 4.46$ ;  $t = 4.44$  and  $T = 4.48$  range and  $P < 0.001$ ) and statistically



reliable positive changes (increases) at Good significance level ( $t = 3.52$  and  $t = 3.54$  and  $P < 0.05$ ).

The main statistical characteristics of the cadet girls, calculated on the basis of the results recorded at the end of the pedagogical experiment on the performance of physical fitness tests, the results of each test calculate the average arithmetic values of absolute and relative differences and the critical values of the St'yudent distribution of absolute differences, data on statistical reliability estimates determined by the number of degrees of freedom and the degree of significance are given (Table 2).

Table 2

**Comparison of statistical characteristics of the results recorded at the end of the pedagogical experiment on the performance of physical training tests of Cadet Girls of the Academy of MIA (studying in the direction of Prevention of violations) belonging to the control (n=20) and experimental (n=20 ) groups**

Physical fitness tests	Statistical characteristics of the results recorded at the end of the experiment of Cadet girls belonging to NG and TG							
	Group	$\bar{X}$	$\sigma$	V, %	Absoluty	Relative %	$t$	p
1-test	CG	16,35	1,98	12,11	1,56	9,51	2,61	<0,01
	EG	14,79	1,79	12,10				
2-test	CG	1,78	0,25	14,13	0,19	10,65	2,52	<0,05
	EG	1,59	0,22	14,12				
3-test	CG	43,71	4,87	11,14	3,40	7,79	2,30	<0,05
	EG	40,30	4,48	11,12				
4-test	CG	4,85	0,64	13,13	0,44	9,02	2,27	<0,05
	EG	4,40	0,57	13,11				
5-test	CG	25,20	3,81	15,12	2,45	9,72	1,93	>0,05
	EG	27,65	4,19	15,15				
Mean relative difference					9,34			

Analysis of the data presented in this table at the end of pedagogical experiment, the results of tests to determine the level of physical fitness of Cadet Girls of the MIA Academy (studying in the direction of Prevention of violations) belonging to control and experimental groups showed an absolute difference in arithmetic values of the average of 0.20 to 2.65 (improved in the increased by more than 1.39 units from the indicator), relative differences from control group indicators in the range of 7.79% to 11.35% (greater than the interval range of 1.99% with mos 1.11% in the control group by 6.68 and 9.96%), made it possible to determine if their average in the five Tests studied was 9.84% (improved by 8.35 %).

**Discussion.** The results of the five studied physical fitness tests of the cadet girls of the experimental group during the pedagogical experiment showed an absolute increase in the average arithmetic values of 3.01 s.ni (the MoS in Ng is 1.52 s. 1.49 s compared to the

indicator. more improved to), while their relative growth was 17.26% (an increase of 8.54% or 1,978 times higher than the mos 8.72% in Ng, also the results of these five physical fitness tests are statistically reliable in the range of  $t = 2.40$  with  $t = 2.24$  and  $P < 0.05$ ) and statistically reliable in the other two ( $t = 1.73$  and  $t = 1.74$  and  $P > 0.05$ ) in the results of three out of five in the control group compared to the observed statistically unreliable positive changes (increases,

the fact that the results of the three were observed at high significance level ( $t = 4.46$ ;  $t = 4.44$  and  $t = 4.48$  range and  $P < 0.001$ ) statistically reliable and in the other two at Good significance level ( $t = 3.52$  and  $t = 3.54$  and  $P < 0.05$ ) statistically reliable positive changes (increases) was observed in control group cadet girl training with respect to tools and methods applied in accordance with the current program, the experimental group proves the effectiveness of crossfid special actions used in.

### Conclusion

The following conclusions can be drawn from the study of the collected sources of literature on the topic on a scientific article, carried out observation, conducted research, pedagogical testing and analysis of the results of pedagogical experience:

As a result of the research, through the analysis of domestic and foreign literature, it became known that it is the employees and cadet girls who are currently serving in law enforcement agencies who are not sufficiently scientifically studied on the issue of increasing the physical fitness of Cadet Girls by engaging in this sport, in addition to the functional multi-sport (CrossFit) content. According to the results of a scientific study carried out by us, it was found that the levels of physical fitness of Cadet girls were improved precisely through the means and methods of functional multicooker (CrossFit).

Scientific research with the participation of Cadet girls involved in the study, in turn, based on the results obtained from them, found that after the implementation of the systematized program on the basis of a one-year set of exercises developed to improve the physical fitness indicators of Cadet Girls, the results of physical training of Cadet Girls improved.

The 4 functional multicooker (CrossFit) exercises, developed by us, which, in addition to improving the results of exactly 5 tests, also influenced the change in physical fitness to the positive side, served not only to improve the test standards of Cadet Girls, but also to improve their physical fitness.

In the course of the study, it was found that while the selected cadet girls to the control group reported a moderate increase in strength quality indicators, training processes improved on the basis of exercises adapted to speed improvement. It was found that if it was observed that by the end of the study of Cadet girls selected for the experimental group, strength quality indicators improved with the introduction of functional multicooker (CrossFit) methods into the training process, this indicates an improvement in strength quality in them. It was observed that program criteria introduced into systematized training and training processes based on functional multicooker (CrossFit) tools and methods have exerted their influence on the improvement of the speed quality of Cadet Girls in the experimental group more uniformly with the traditional program..

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