

MODERN APPROACHES OF ORGANIZING THE PROCESS OF PHYSICAL TRAINING OF YOUNG JUDOKAS

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Abstract

At present, in order to register high sports achievements in judo, an athlete is required to have high level of physical fitness. There is a constant need to improve training phases and the structure of individual trainings.

The purpose of the research: to clarify the methods and means used in the process of physical training of young judokas, to discover the ways to improve it.

Methods and organization of the research. The following methods were used to solve research's problems: study and analysis of literature sources and training-educational documents, sociological survey, mathematical statistics. Based on the issues raised during the research, in 2021 from February to June, a sociological survey was conducted with 30 coaches of the Republic of Armenia.

Results and discussion. The analysis of the results of the sociological survey once again proves that innovative methods should be used in the process of physical training. Almost half of the respondents (43.3%) are familiar with the CrossFit training methodology. This definitely shows that CrossFit is a modern method of physical training. According to the results, almost half of the coaches (45%) consider it appropriate to use CrossFit in the process of physical training. This percentage speaks for itself about the expediency and necessity of using CrossFit.

Conclusion. Both theorists and most coaches appreciate the role of physical fitness in the training process of young athletes and most coaches recommend using CrossFit in the process of physical training of young judokas.

Keywords: young judoka, physical training, workout, motor skill, CrossFit.

СОВРЕМЕННЫЕ ПОДХОДЫ К ОРГАНИЗАЦИИ ПРОЦЕССА ФИЗИЧЕСКОЙ ПОДГОТОВКИ ЮНЫХ ДЗЮДОИСТОВ

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Аннотация

В настоящее время для достижения высоких спортивных результатов в дзюдо от спортсмена требуется высокий уровень физической подготовленности. Практика постоянно диктует необходимость совершенствования организационной структуры этапов подготовки, улучшения организации тренировочных занятий, использования новых, более эффективных средств и методов подготовки спортсмена.

Цель исследования: уточнить методы и средства, используемые в процессе физической подготовки юных дзюдоистов, выявить пути его совершенствования.

Организация и методы исследования. В качестве методов исследования были использованы изучение и анализ литературных источников и учебно-тренировочных документов, социологический опрос, математическая статистика. В ходе исследования с февраля по июнь 2021 года был проведен социологический опрос 30 тренеров спортивных школ и клубных команд Республики Армении. Средний стаж их деятельности составил 13 лет.

Результаты исследования и их обсуждение. Анализ результатов социологического опроса тренеров еще раз показал, что в процессе физической подготовки юных дзюдоистов

целесообразно использовать инновационные методы. Практически половина респондентов (43,3%) знакомы с методикой кроссфит-тренировок. Это определенно говорит о том, что кроссфит – это современный метод физической подготовки. По результатам опроса установлено, что почти половина тренеров (45%) считают целесообразным использование кроссфита в системе физической подготовки. Это свидетельствует о целесообразности и необходимости применения кроссфита.

Заключение. Большинство специалистов и тренеров высоко оценивают роль физической подготовки в общей системе подготовки юных дзюдоистов. Многие из них рекомендуют использовать кроссфит как эффективную систему общей физической подготовки юных дзюдоистов.

Ключевые слова: юный дзюдоист, физическая подготовка, спортивная тренировка, двигательные навыки, кроссфит.

INTRODUCTION

Judo is a form of martial arts in which athletes exert high-intensity efforts to gain an advantage over a competitor [6].

To use strength most efficiently, it is vital to break the opponent's balance. In line with the principle of dynamics, he is then vulnerable and can be brought down with a minimum of effort. Breaking an opponent's balance is called kuzushi. The basis of kuzushi is pushing and pulling, which are done with the whole body, not just the arms. To execute a throw (kake), after breaking your opponent's balance you must move your body into position for the throw. This is known as tsukuri [4].

However, this is not always the case. In order to defeat the opponent, it is necessary to have a high level of physical, technical-tactical, psychological and theoretical readiness. But in order to achieve a high level of physical fitness, it is necessary to have well-developed motor skills.

At present, in order to register high sports achievements in judo, an athlete is required to have high level of physical fitness. There is a constant need to improve training phases and the structure of individual trainings [12]. Among these circumstances, the annual changes in the rules of competition, the reduction of the age of gaining high achievements, the variety of recovery means, force coaches to look for new ways to carry out the process of training athletes more effectively.

According to some studies, training with sandbags improves the level of physical fitness of judokas [8].

The aim of the research is to clarify the methods and means used in the process of physical training of young judokas, to discover the ways to improve it.

The following problems have been solved for the realization of the goal:

clarify the range of advanced motor skills of young judokas and discover the methods and means of their development.

study the methods and means currently used in the process of physical training of young judokas in the regions of the Republic of Armenia and Yerevan city.

METHODS AND ORGANIZATION OF THE RESEARCH

The following methods were used to solve research's problems: study and analysis of literature sources and training-educational documents, sociological survey, mathematical statistics.

RESULTS AND DISCUSSION

To win, you need to reach the ippon (the highest point in Japanese martial arts) by performing a throw, sore or choking trick [3].

It is known that the sportsmanship of judokas is due to the development of motor skills such as strength, endurance, speed resistance, agility and coordination [5].

According to the author [2], in order to succeed in high-level tournaments, judokas must develop muscular strength, absolute strength, strength endurance and general endurance. In this process, different training methods and means are used.

However, it is important to understand which strength abilities need to be developed the most in martial arts, particularly in judo. According to F.G. Ghazaryan and D.S. Khitaryan [10], in judo, the most powerful strength abilities are absolute strength, strength agility, as well as strength endurance, for the development of which the authors offer the methods of repetitive, circuit, until the end and the short efforts method.

Specialists recommend to use running, gymnastics, acrobatics, athletics, sporting games, weightlifting, kettlebell swings, jumping, pull ups and push-ups, also cross-country skiing, rope climbing in the process of physical training [11].

Based on the issues raised during the research, in 2021 from February to June, a sociological survey was conducted with 30 coaches of the Republic of Armenia. Let us add that six of them had the qualification of RA Honored Coach. They work in sports schools of Hrazdan, Charentsavan, Abovyan, Gyumri, Maralik, Vanadzor, Sisian, Armavir and Yerevan.

The youngest of the coaches is 21, and the oldest is 68 years old, the average age is 42. Their coaching experience ranged from 2 to 40 years, averaging 13 years.

All the proposed questions were logically included in two groups. The first group of questions was aimed at clarifying the methods and means currently used in the process of physical training of young judokas, as well as the volume of general physical training, the duration of training and the maximum number of them per week.

Through the second group of questions, we tried to find out the coaches' aware-

ness of the various aspects of CrossFit, the possible development of motor skills through it, and the effectiveness of that process.

Experts describe CrossFit as a system for developing motor skills. Moreover, the means of developing those abilities can be various. The workouts mainly include exercises using circuit training method.

Crossfit training is characterized by high intensity of exercises performed, stimulation of all muscles of the body, which is shorter than traditional strength or endurance training, as it usually lasts 20 to 60 minutes [7].

In general, fitness training programmes for children must be: individual-specific, taking into account factors such as a child's gender, age, BMI, injury history, developmental level and skill set; sport-specific and context-specific, with awareness of the level of play, relevant weather conditions and season length informing all training recommendations. Modifiable risk factors, including poor physical fitness, should be identified and addressed to ensure that children may participate in sporting activities as safely as possible. Perhaps most important is to remember that it is the ultimate responsibility of involved adults – coaches, parents, trainers and teachers – to ensure the health and safety of each child [1].

During the survey, the opinion of the coaches on the role of the physical component in the training process of young judokas was clarified (Figure 1).

Analysis of the data shows that the vast majority of coaches (83.3%) assess the role of general physical fitness in the training process of young judokas as very important or important.

We also agree with the idea that special physical fitness is built on general physical fitness, the high level of which is one of the initial factors for success in fight.

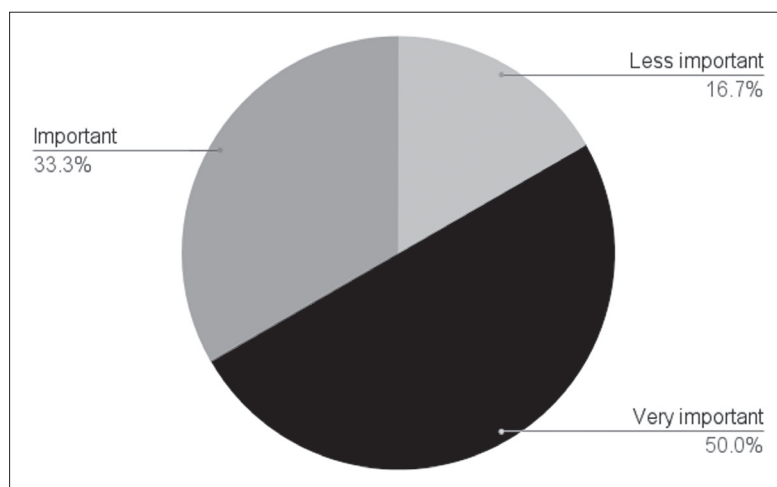


Figure 1 – The opinion of the coaches about the general physical training in the process of training judokas

According to V.P. Filin and N.A. Fomin [9] a high level of physical fitness is crucial to record high athletic achievements.

The analysis of the next question revealed that 37.9% of the coaches in the process of training young judokas find it expedient to organize 2 general physical fitness workouts per week, 34.5% of the answers – 1, 10,3% – in 3 separate workouts, 10,3% mentioned that in case of 3-4 trainings it is necessary to organize one, and in case of 5 and more trainings – two separate workouts per week. In the literature it is common to spend 2-3 physical fitness workouts during the weekly micro-cycle in the process of training young athletes [9, 13]. It can be noticed that the answers given by the coaches on this question largely coincide with the opinions of famous specialists.

During the survey, we also found out the opinion of the coaches on the impact of physical fitness on the process of fortifying and improving technical tricks. According to 30% of the answers, it became clear that the respondents highly or very highly assess the importance of physical fitness in the process of fortifying and improving technical tricks, and 40% assess it as average.

Physical fitness is one of the most important structural components of sports training, aimed at developing motor skills: strength, agility, endurance, flexibility, coordination. It consists of general and special physical trainings [14].

Therefore, it was important to find out whether coaches prefer general or specific physical training.

16.7% of coaches prefer general physical training, 13.3% of them – specific physical training, and 70% prefer to use both.

And during one training 20.7% of the coaches allocate 10-15 minutes for general physical training, 30% – 20, 20.7% – 30, 10.3% – 40 or 20-30 minutes.

It was important to find out the choice of condition for performing exercises by the coaches. In general physical training, coaches use the following conditions for performing the exercises: 13.3% with own body weight, 10% answers per partner's body weight and with weights, 23.3% – with own body and with partner's body weight. About 43% of coaches use the following three conditions for performing exercises during the physical training of judokas.

It is known that the process of training athletes can be organized in different ways.

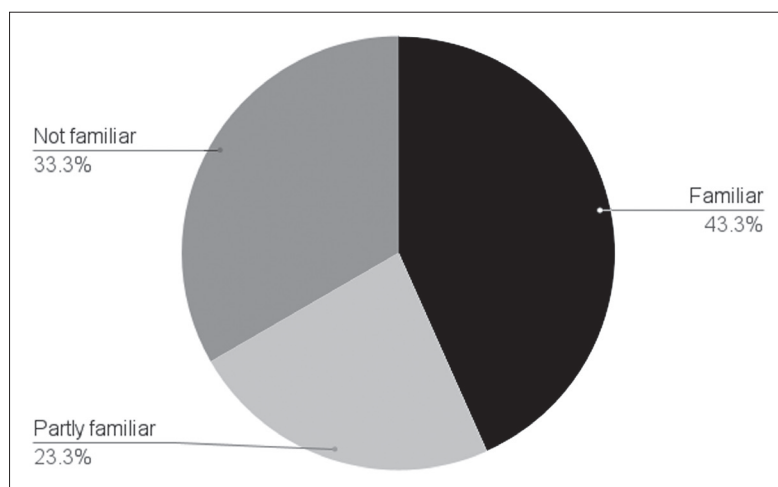


Figure 2 – The level of awareness of coaches about CrossFit training

The survey found that 23.3% of coaches use group training, 13.3% – individual, 36.6% – group-individual, 6.6% – group, individual and personal training method.

The next important question of the survey was about the time allotted by the coaches for the general physical training during the week. The analysis of the answers revealed that 48.3% of the coaches spend more than an hour a week on general physical training, 44.8% – spend an hour, and 6.9% – spend up to an hour.

Examining the documents of the training, it turned out that in the first and second years of the initial preparation for long term athletic development, the general physical training is given 6 hours per month, and during the first year of the training phase it is 8 hours per month. During the second and third years, the share of general physical training increases to an hour per month, and during the fourth to fifth years, it is ten hours per month.

The second group of questions revealed the level of awareness of coaches about one of the modern systems of physical training – Crossfit.

The survey revealed the level of awareness of coaches about CrossFit training method (Figure 2).

Figure 2 shows that almost half of the respondents (43.3%) are familiar with Crossfit training method. This definitely indicates that Crossfit is a modern method.

It was very important to clarify the opinion of the coaches on the main direction of using Crossfit in the process of physical training of judokas.

The analysis of the opinions revealed that 20% of the coaches use CrossFit in the process of general physical training, 10% – in the process of special physical training, and 55% use it during two. The response of 15% of respondents is notable, according to which they do not use CrossFit in physical training at all.

As it turned out, more than half of the coaches (55%) use CrossFit both in the process of general and special physical training. From the results of the survey it can be concluded that the use of CrossFit in the process of physical training can effectively substitute the traditional methods and means.

We tried to find out another important problem through a sociological survey: “In which age group do coaches find it expedient to use CrossFit as a general or special physical training mean?”. Analyzing the data, we found that 45% of coaches find it

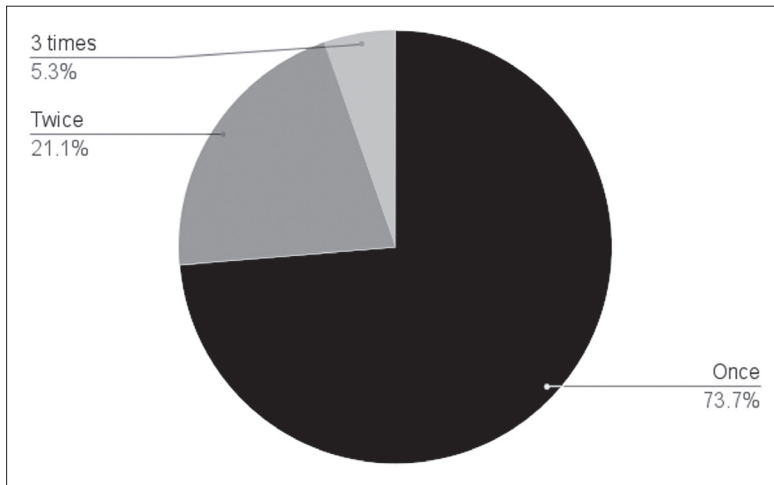


Figure 3 – Respondents' opinion on the number of CrossFit trainings during the week

advisable to use CrossFit in all age groups, 15% – at the age of 16-17, 10% – at the age of 13-20, and 5% said, that it is necessary to apply it according to the age with the appropriate load.

According to the results, almost half of the coaches (45%) guess that it is expedient to use CrossFit in the system of physical training. This percentage ratio speaks for itself about the expediency and necessity of using CrossFit.

It was important to find out the number of CrossFit trainings in the weekly micro-cycle. The results of the survey revealed that in the process of physical training of 10-12-year-old judokas, more than 73% of coaches find it expedient to use CrossFit once a week, 21.1% twice, and 5.3% three times (Figure 3).

The survey revealed that 10.5% of coaches prefer traditional, the same percentage – CrossFit in the training of young judokas, and 78.9% prefer using both methods. While answering the question “What motor skills should be developed through Crossfit?”, 26.6% of coaches chose all the listed motor skills (strength, agility, flexibility, speed, endurance, coordination and balance), 6.6% – strength and endurance,

and the rest of the group had a small number of opinions for the development of motor skills.

The analysis of the results of the sociological survey once again proves that innovative methods should be used in the process of physical training. It can be stated that the coaches working with young judokas in The Republic of Armenia are mostly aware of the effective use of innovative means and methods. Among other possible circumstances, it is extremely important to take into account the age characteristics of the athletes and the state of training.

CONCLUSION

Thus, by comparing the existing literature resources with the analysis of the results of the sociological survey on the issue under study, we come to the following conclusions:

1. Both theorists and most coaches appreciate the role of physical fitness in the training process of young athletes.

2. Considering the fact that general and special physical trainings are interconnected, most coaches find it expedient to give preference to both general and special

physical trainings in the process of physical fitness.

3. Most coaches recommend using CrossFit in the process of physical training of young judokas.

4. It is advisable to use CrossFit once a week in the process of physical training of young judokas.

5. Most of coaches suggest using CrossFit to develop motor skills such strength, agility, flexibility, speed, endurance, coordination and balance.

6. The use of CrossFit in the process of physical training can effectively substitute the traditional methods and means.

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Поступила в редакцию 11 января 2022 г.

Принята к публикации 18 апреля 2022 г.

ОБРАЗЕЦ ЦИТИРОВАНИЯ

Chatinyan, A. A. Modern approaches of organizing the process of physical training of young judokas / A. A. Chatinyan, A.V. Avetisyan // Наука и спорт: современные тенденции. – 2022. – Т. 10, № 2. – С. 84-91. DOI: 10.36028/2308-8826-2022-10-2-84-91

FOR CITATION

Chatinyan A. A., Avetisyan A.V. Modern approaches of organizing the process of physical training of young judokas, Science and sport: current trends, 2022, vol. 10, no.2, pp. 84-91 (in Russ.) DOI: 10.36028/2308-8826-2022-10-2-84-91
