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Soyibjon S. Tajibayev, senior lecturer, Uzbek State institute of physical culture

Dynamics Assessment Special Physical Training of Young Athletes on the Basis of Computer Monitoring (on the example of wrestlers of taekwondo)

**Key words:** young taekwondo sportsman, speed, force, high-speed and power qualities, endurance, dexterity, flexibility, general endurance, absolute force, relative force.

**Annotation**: in article results of research of dynamics of age features of development of the general and special physical fitness of young taekwondo's of 10-13 years who are engaged in groups of initial preparation are analyzed.

In our country necessary prerequisites for development of sport, especially children's sport are created that serves all-round harmonious development of younger generation, improvement of a gene pool of the nations (1).

It is known that the prospect of sport depends on volume and quality of training of a sports reserve. The important desire has the introduction of the Uzbek athletes on the world scene, increase competitively of ability of representatives of the Uzbek sport .the scientific organization of development of children's sport and development of effective remedies and methods of increase sports skill of young athletes.

In our republic one of the most popular types of single combats is taekwondo (VTF). Preparation of highly skilled taekwondists, who will adequately protect sports honor of the country in the championships of Asia and the world it has to be carried out at the initial stage of training of athletes.

In literature exist time of the works devoted to research of physical, technical and tactical, psychological preparation and taekwondists of different qualification and with various level of readiness (3, 4, 5, 6, 7).

However, questions of increases of the general and special physical training of young taekwondists of 10-13 years at a stage of initial preparation are studied insufficiently that proves relevance the elected of a subject of researches.

**The aim of research** – definition of dynamics of physical readiness of young taekwondists at a stage of initial preparation.

**Problem of research** – definition of dynamics of the general physical training of taekwondists of 10 - 13 years;

- Definition of dynamics of special physical fitness of taekwondists of 10 - 13 years.

**Methods of research** – the review scientifically – methodical literature, conversation pedagogical supervision, pedagogical testing, determination of special physical preparation of

taekwondists on the basis of the computer program (SPUDERG-4), methods of mathematical statistics.

**The organization of research** – researches were conducted in sports clubs "Orion" of Yunusabad district and "Ilsan" of Sergili district of Tashkent. The young taekwondists of 10 - 13 years in number of the 120 persons who are engaged on initial preparation participated in experiment.

We have revealed a condition of the general physical training of young taekwondists of 10-13 years with use of the control exercises developed for athletes of a stage of initial preparation of CYuSS.

In the analysis of results of the held pedagogical testing small distinctions between indicators of the general physical preparation of taekwondists of 10-11 and 12-13 years are revealed. In this regard the comparative analysis of results of taekwondists of 10 - 11 years and 12-13 years has been carried out.

Taekwondists of 11 - 13 years in run on 30 m have shown the result equal  $6.3\pm0.3$  sec. It is revealed that at athletes of 12 - 13 years high-speed qualities are 6.77% higher in comparison with taekwondists of 10-11 years. The difference between indicators has made 0.4 sec. The control standards established for athletes of 10 - 13 years don't meet the requirements.

Results of control exercises on definition dexterity of taekwondists are that.

The table 1. Dynamics of the general physical fitness of taekwondists of 10 - 13 years

$N_{\underline{0}}$	Tests	Unit of	10-11 years	12-13years
		measure	$\bar{\chi}_{\pm 6}$	$\overline{\chi}_{\pm 6}$
1	Running on 30 M	sec	6,3±0,3	5,9±0,1
2	Running on 3x 10 M	sec	8,8±0,4	$8,5\pm0,1$
3	Flexion and extension arms lying	number of	8±1,5	12±2,9
		times		
4	Pulling up on a crossbeam	number of	4,8±0,5	5,8±0,4
		times		
5	Leap length from place	metre	$1,58\pm2,1$	$1,72\pm2,5$
6	Standing, forward bend	sm	7,8±0,9	7,1±0,9
7	High jump (On Abalakov)	sm	25,33±2,14	26,35±2,28
8	Running on 8000 м.	sec	241±3,6	231±3,6

Differences in the development of physical quality dexterity of taekwondists between 10-11 years and 12-13 years, which amounts to 3.52%. In place of flexion and extension arms in the supine position taekwondists showed the following results, which were evaluated according to the program for the CYSS in the 3, 4, 5 times: athletes of 10years- respectively 4, 7, 11 times; 11-s respectively 5, 9, 13 times; 12 - years, respectively, 7, 11, 15 times; 13- s, respectively, 9, 13, 18 times.

According A.Achilov, J.Akramov and O.Goncharova (3), power quality begins to develop intensively with 13 years. In our studies, these data have been confirmed. According to our data, in athletes 10 - 11 years, the result was an average of  $8 \pm 1,5$  times, 12-13 years  $12 \pm 2,9$  times. The difference between the figure was 50%.

Taekwondists of 10-11 years and 12-13 years in the long jump with space showed an average result equal to, respectively,  $188\pm2.1$  and  $172\pm2.5$  cm. Growth of strength qualities between the ages was 8.86%. The jump height of children 10 - 11 years, the result was an average of  $25,33\pm2.14$  cm, while the taekwondists of 12 - 13 years -  $26,35\pm2.28$ . Age dynamics of the development of high-speed power qualities of sportsmen reached 4.02%.

Computer software (F without signal max) was used to determine the special physical readiness of taekwondo. "The definition of special physical readiness of high skilled boxers", developed by prof. R.D.Khalmukhamedov, S.S.Tajibaev (7)

The results of the tests to determine the state of special physical readiness of young taekwondists were analyzed with the division of athletes into the following sub-groups; **Group A** - taekwondo at the age of 10 years with weight 29.15 kg, group **B** - Athletes from 10 years with a weight of 38.38 kg, **group A** - competitors aged 11 years with a weight of 31.75 kg, **group B** - athletes 11 years with a weight of 42.13 kg, **group A** - taekwondists at the age of 12 years with a weight of 33.33 kg, **group B** - the athletes with the weight of 42 kg, **group A** - athletes 13 years of age with a weight of 32.5 kg, **group B** - taekwondists 13 years with weight of 40.8 kg

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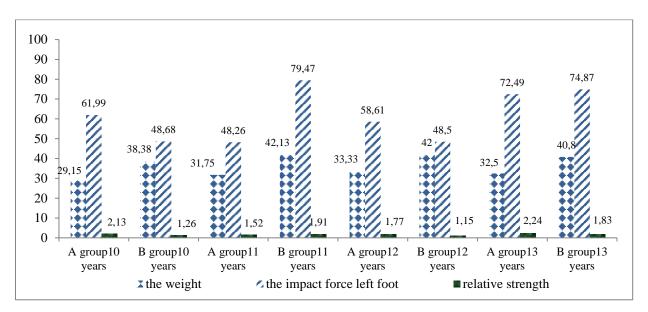


Figure 1. Dynamics of power hitting left-footed (Thule fungus) in young taekwondists 10 -13 years.

Results of taekwondists of 10 years in group A place kick. "Thule fungus" left foot shows that the absolute strength (F) impact was on average 61.99 kg, 2.13 kg relative (Figure 1). In Group B taekwondists of 10 years the force of impact (F) "Thule fungus' left foot was on average: absolute - 48.68 kg, 1.26 kg relative. Comparative analysis of the results shows the maximum force up 27.34% compared with the results of the athletes group B. This situation can be

explained by the fact that the means and methods used in the training process, is used without taking into account the individual characteristics of the students.

It was found that 11 years of taekwondists of group A relative impact force "Thule fungus' left foot equals 1.52 kg. Their result compared with the results of group athletes of group B in the same age was at 25.65%, between indicators of strength difference was 31.21 kg. (Figure 2).

In group A of tackwondists 12 years the absolute force of impact (F) was 58.61 kg, relative -1.77 kg. If we compare the results of the group. B, the force results in the absolute difference can be determined at 20.94%.



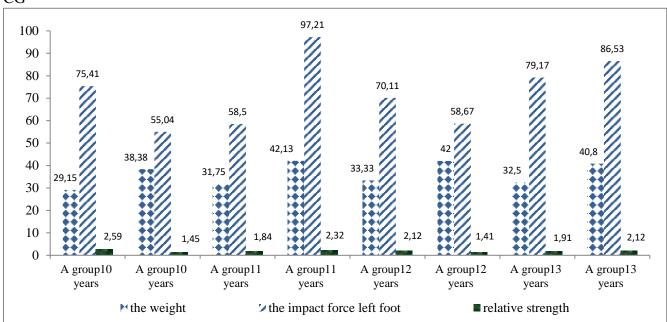


Figure 2. Dynamics of impact force right foot (Thule fungus) of taekwondists 10 - 13 years.

In taekwondo for 11 years of the group A relative impact force "Thule fungus" was 1.84 kg. In the B group of athletes of the same age absolute strength was 97.21 kg. If we compare the results of both groups, it is possible to identify the difference in terms of absolute strength at 38.71 kg.

When determining the age dynamics of indicators of impact force "Thule fungus' right foot was a comparative analysis of the results taekwondists of 10 years of group A with the results of athletes 13 years of group A.

It was revealed that the absolute strength performance in athletes 13 years and above relative to 4,981, on the contrary, lower at 35,601. Revealed between indices of athletes 10 years of group B and 13 years of tackword group B. In the absolute power of an increase of 57.21% and 46.20% in the relative.

The results of a study to identify the dynamics of the collision force "Thule fungus" in young taekwondo 10-13 years make it possible to conclude the following, that there are differences in the growth of power qualities of young taekwondo, to identify the difference is the result of natural growth of the athletes.

## Conclusion

Despite the fact that in the age dynamics, there are differences, they did not meet the regulatory requirements imposed on the general physical preparation of young athletes.

You need to make time changes in the means and methods, applicability, taking into account the individual characteristics of young athletes.

As the teacher observations, despite the fact that coaches appreciate the importance of using dynamic games in training process, the old regulated exercise hitherto dominated in teaching methods.

It is recommended to organize the training process with the use of means and techniques for the development of general physical preparation of young taekwondo fighters of 10-13 years in the initial stage of training based on age characteristics.

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