

## INDIVIDUALIZATION OF THE TRAINING PROCESS IN PREPARING YOUNG TAEKWONDO PLAYERS FOR BELT ATTESTATION

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### **Abstract.**

The article covers the process of preparing young teenage (11-12 years old) taekwondo athletes for belt certification. It sets out the personalized pedagogical foundations of the training process at the stage of initial specialization, the issues of taking into account the personal functional characteristics of young taekwondo athletes, and the content of the personality-oriented approach. The article describes the structure of the certification program, theoretical training, requirements for technical actions and general physical training, as well as the system of tests used in assessing physical qualities. A comparative analysis of the results of the pedagogical experiment conducted in the control and experimental groups is highlighted.

**Keywords:** taekwondo, adolescence, certification, individual approach, training process.

**Login..** The Law of the Republic of Uzbekistan "On Education" defines one of the main tasks of the education system as creating the necessary conditions for the realization of the individual's potential. The formation and development of self-awareness and the ability to self-evaluate in adolescence is of great importance in fulfilling these requirements.

In the system of sports training, especially in striking martial arts, individualization of the training process of young athletes is one of the important pedagogical factors in increasing the effectiveness of training. The organization of the training process in taekwondo training, taking into account individual functional characteristics, allows for the balanced development of the technical, physical, and mental preparedness of athletes.

### **Material and research methods.**

Analysis of scientific and scientific-methodological literature on psychological-pedagogical and physiological aspects made it possible to identify the main trends, prospects, and current problems of the pedagogical process related to the preparation of young taekwondo athletes for certification.

Issues of individualization of the training process, aimed at teaching motor actions, cultivating moral and volitional qualities, and developing physical fitness, have been widely discussed in pedagogy, psychology, physiology, and the theory and methodology of sports training.

Analysis of scientific research conducted by A.R. Abdurakhmanov, O.V. Petunin, V.A. Lavrov, A.V. Lavrov, and S.A. Sergeev shows that the issue of increasing the effectiveness of the training process in shock martial arts, including taekwondo, has been studied in various directions [4, 6, 7, 11, 15]. In particular, such areas as the use of special methods of teaching motor actions, the development of visual characteristics of perception [14], the use of special training devices [12], the improvement of pedagogical interaction and the upbringing of the



taekwondo individual [8], as well as taking into account the personal and functional characteristics of temperament [16], are of particular importance.

Based on the analysis of sources, it was established that one of the main factors in increasing the effectiveness of the training process of young taekwondo athletes at the stage of initial specialization is the development and implementation of pedagogical conditions aimed at individualizing this process.

Analysis of the materials of existing scientific and methodological literature and research results showed that the mastery of the 9th-10th level stages of the taekwondo program is carried out in the training process by teaching young athletes technical movements, acquiring theoretical knowledge, and cultivating moral, ethical, and physical qualities.

Requirements for general physical training include: the athlete must perform at least 20 bends and straightening of the arms in the supporting position, at least 25 raises of bent knees while hanging on a pole, as well as splits lengthwise and crosswise (the distance from the leg to the floor should not exceed 35 cm).

In order to comprehensively assess the level of physical fitness, during the experimental period, the physical fitness of young taekwondo athletes was determined using special tests.

In the research conducted by Silfidis L.K., the concept of pedagogical cooperation in the training of young taekwondo athletes is substantiated, which is interpreted as the result of the joint activity of coaches and trainees aimed at mastering martial arts and taekwondo culture [16].

According to the data of Kerimov F.A., the indicators of general physical fitness of the athletes participating in the study were within the limits of the normative indicators established for children of this age category [5]. This confirms that at the initial stage of training, the levels of physical development of young taekwondo athletes were formed at a normal and physiologically justified interval.

**Mechanism of individualization of the training process.** During the pedagogical experiment, training sessions with younger adolescents (11-12 years old) of the experimental group were organized 3 times a week, each for 90 minutes. Individualization was achieved by differentiating the content, volume, and intensity of exercises, rather than the number of sessions.

For this purpose, before the start of the experiment, the level of physical fitness of each participant, the rate of mastery of technical movements, and personal functional characteristics (level of movement coordination, speed, strength, and flexibility) were determined. Based on the data obtained, individual training tasks were determined for each athlete.

In the training process, the division into groups was carried out mainly in three directions:

- technical training - the range of motion, speed, and number of combinations during the execution of strikes were adapted to individual capabilities;
- general physical training - exercises aimed at developing arm muscle strength, speed-strength, and flexibility were divided into groups according to the number of repetitions and rest intervals;
- coordination abilities - the level of complexity and rhythm of movements were selected depending on the level of preparedness of each athlete.

### Results and discussion

The effectiveness of the formation of motor skills and abilities is directly related to the applied individualized training methodology, which implies pedagogical influence during the training process, taking into account the level of physical and technical preparedness of each athlete. Also, the effective formation of motor skills and abilities is largely determined by the level of development of coordination abilities.

The most intensive phase of coordination ability development occurs between the ages of 7 and 12. According to the results of some studies, the sensitive period in the development of these abilities covers the age range of 7-11 years in girls and 7-12 years in boys.

In the process of effective development of coordination abilities, the differentiated application of didactic methods used in the organization of training activities is of great importance. In particular, ideomotor training, verbal explanations of the coach, comments given in the process of mastering the movement, means of encouragement, forms of demonstration, rhythm of exercises, and their variety should be selected based on an individual approach.

Specialists emphasize the need for special training of coaches to ensure a personality-oriented approach to the organization of training and educational work with young athletes. This expands the possibilities of pedagogical influence, taking into account the individual functional characteristics of each student.

Within the framework of the study, testing was conducted in the control and experimental groups to determine the level of initial training and personal functional characteristics of young taekwondo athletes. During the testing process, the physical fitness indicators of the participants, the level of readiness of young adolescents (11-12 years old) to undergo certification for the belt of taekwondo athletes, and the parameters of general physical development were assessed.

All research work was organized on the basis of a unified methodology and was aimed at determining the level of completion of the certification program for the belt of young taekwondo athletes (11-12 years old). The certification program and the main criteria defined in it are presented in Figure 1.

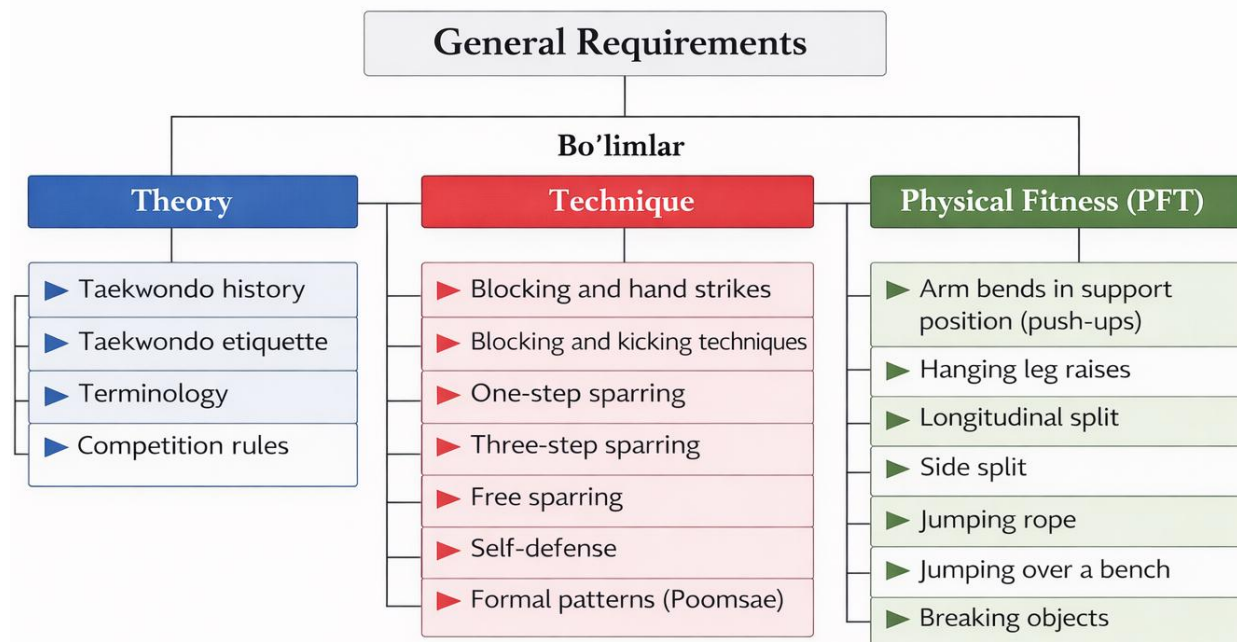


Figure 1. Belt certification scheme according to general requirements

**Research participants and organizational conditions.** The experimental group consisted of 12 participants, of whom 5 were 11 years old and 7 were 12 years old. All participants belonged to the junior adolescent age category, and the group composition was distributed equally by sex (6 girls and 6 boys). Participants had experience in Taekwondo from 6 months to 2 years. Participants were distributed according to qualification levels as follows: 3 athletes

received a white belt with a yellow ribbon (Kip level 9), 5 athletes received a yellow belt (Kip level 8), and 4 athletes received a yellow belt with a green ribbon (Kip level 7).

The control group consisted of 13 athletes, whose composition was almost identical to the experimental group in terms of age, sex ratio, and qualification levels. 5 girls and 8 boys participated in this group. The distribution by qualification levels was as follows: 5 participants received a white belt with a yellow ribbon (Kip 9 level), 5 participants received a yellow belt (Kip 8 level), and 3 athletes received a Kip 7 level.

In order to determine the level of physical fitness of young taekwondo athletes, additional studies were conducted based on standard tests widely used in the practice of physical education of preschool and school-age children. The results of the preliminary study are presented in Tables 1 and 2.

Table 1

**Results of the certification of young adolescents (11-12 years old) before the start of the pedagogical experiment ( $M \pm m$ )**

Groups	Theory	Technique	GFT	Overall rating
Control group (n=13)	$3.8 \pm 0.11$	$3.7 \pm 0.06$	$3.1 \pm 0.10$	3.53
Experimental group (n=12)	$3.7 \pm 0.12$	$3.9 \pm 0.07$	$3.2 \pm 0.09$	3.60
Difference	0.10	-0.20	-0.10	-0.07
p.	>0.05	>0.05	>0.05	>0.05

The results presented in Table 1 show that the certification indicators of adolescent taekwondo athletes in the control and experimental groups before the start of the pedagogical experiment are practically the same in theory, technique, general physical training, and integral assessment. The identified differences in all indicators are statistically insignificant ( $P > 0.05$ ), which confirms the equality of the initial level of preparation of the groups and the methodologically correct formulation of the comparative pedagogical experiment.

Table 2

**Indicators of general physical fitness of young taekwondo athletes before the start of the pedagogical experiment ( $M \pm m$ )**

Groups	Flexing arms in support (times)	Standing Long Jump (cm)	Forward Bend (cm)	1000m Run (s)	Run 30 m (s)	Run 3×10 m (s)
Control group (n=13)	$11.1 \pm 0.67$	$139 \pm 1.48$	$4.5 \pm 0.12$	$294 \pm 7.9$	$5.6 \pm 0.06$	$8.3 \pm 0.16$
Experimental group (n=12)	$10.9 \pm 0.66$	$141 \pm 1.52$	$4.6 \pm 0.08$	$288 \pm 9.4$	$5.5 \pm 0.13$	$8.7 \pm 0.13$
Difference	0.02	-2.00	-0.10	5.5	0.07	-0.34
P	>0.05	>0.05	>0.05	>0.05	>0.05	>0.05

The data of Table 2 show that the indicators of general physical fitness of young taekwondo athletes in the control and experimental groups before the start of the pedagogical experiment are

practically the same for all tests. The identified differences are not statistically significant ( $P>0.05$ ), which confirms that the groups are equal in physical fitness levels and were methodologically correctly selected for further comparative pedagogical experiment.

In order to more accurately and differentially assess the level of general physical fitness of young taekwondo athletes, boys and girls were tested separately. Within the framework of the study, the complex of physical qualities was assessed using the following standard tests: arm muscle strength (bend and straightening of the arms on the support in a lying position), speed-strength training (standing long jump), flexibility (leaning forward), general endurance (running 1000 meters), speed qualities (running 30 meters from a high start), and coordination abilities ( $3\times 10$  m sprinting).

The results of a comprehensive test of young female taekwondo athletes in the control and experimental groups showed no statistically significant differences between them ( $P>0.05$ ). This confirms that the groups are practically identical in terms of initial levels of physical fitness.

The test results for the indicators of general physical fitness of young taekwondo athletes are presented in Table 3.

Table 3

Indicators of General Physical Fitness of Young Adolescent Taekwondo Boys (11-12 years old) Before Pedagogical Experience

( $M\pm m$ )

Groups	Flexing arms in support (times)	Long jump (cm)	Forward Bend (cm)	1000 m (s)	30 m (s)	$3\times 10$ m (s)
Control	$21.7\pm 0.71$	$145\pm 1.6$	$2.9\pm 0.51$	$274.3\pm 6.3$	$5.3\pm 0.07$	$8.0\pm 0.13$
Experiment	$22.8\pm 1.64$	$141\pm 1.6$	$2.8\pm 0.57$	$268.9\pm 5.7$	$5.3\pm 0.12$	$9.3\pm 0.09$
Difference	-1.1	4.	0.1	5.4	0.05	-1.24.
p.	$>0.05$	$>0.05$	$>0.05$	$>0.05$	$>0.05$	$>0.05$

No statistically significant differences were found between the results of the combined testing of young taekwondo athletes of the control and experimental groups ( $P>0.05$ ). This circumstance confirms that the athletes participating in the study were formed according to the level of preparedness before the start of the pedagogical experiment, equal and suitable for comparative analysis.

The results of the conducted research indicate the acceptability and necessity of applying a differentiated, personality-oriented approach in the process of preparing athletes of this age category for belt certification.

Table 4

Results of certification of young teenage (11-12 years old) taekwondo athletes for their belts after pedagogical experience

( $M\pm m$ )

Groups	Theory	Technique	OFT	Overall rating
Control group (n=13)	$4.0\pm 0.08$	$4.1\pm 0.06$	$4.1\pm 0.07$	4.06
Experimental group (n=12)	$4.7\pm 0.05$	$4.9\pm 0.07$	$4.8\pm 0.05$	4.80
Difference	-0.7	-0.8	-0.7	-0.74



p	<0.05	<0.01	<0.01	<0.01
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The results presented in Table 5 show that, according to the results of the pedagogical experiment, the level of general physical fitness of boys in the experimental group showed positive dynamics in all assessed indicators. In particular, the differences identified in three main indicators were assessed as statistically significant ( $P < 0.05$ ), which confirms the effectiveness of the applied pedagogical influence.

**Table 5**

**Indicators of general physical fitness of male taekwondo athletes of adolescence after the pedagogical experiment**  
( $M \pm m$ )

Groups	Flexing arms in support (times)	Long jump (cm)	Forward Bend (cm)	1000 m (s)	30 m (s)	3×10 m (s)
Control	22.3±1.1	156.9±1.5	2.8±0.1	244±3.7	5.3±0.1	7.98±0.2
Experiment	30.1±1.1	173.5±1.9	3.1±0.08	240±3.2	4.8±0.1	7.75±0.1
Difference	-7.8	-16.6	-0.3	0.04	0.46	0.23
p.	<0.001	<0.05	>0.05	>0.05	<0.05	>0.05

According to the results of the pedagogical experiment, positive changes in the indicators of general physical fitness were also observed in the girls' group. The quantitative results obtained for this group are presented in Table 6.

**Table 6**

**Indicators of general physical fitness of female taekwondo athletes of adolescence after the pedagogical experiment**  
( $M \pm m$ )

Groups	Flexing arms in support (times)	Long jump (cm)	Forward Bend (cm)	1000 m (s)	30 m (s)	3×10 m (s)
Control	18.6±0.9	148.2±1.6	3.4±0.1	256±4.1	5.6±0.1	8.12±0.2
Experiment	24.9±1.0	160.7±1.8	3.9±0.1	250±3.8	5.1±0.1	7.85±0.1
Difference	-6.3	-12.5	-0.5	6.0	0.5	0.27
p.	<0.001	<0.01	<0.01	>0.05	<0.05	>0.05

According to the data in Table 6, at the end of the pedagogical experiment, positive changes in a number of indicators of general physical fitness were noted in the experimental group of female taekwondo athletes compared to the control group. In particular, the indicators of arm muscle strength, speed-strength training, and flexibility improved statistically significantly ( $p < 0.01-0.001$ ). Although the differences in individual indicators are not statistically significant, the general trend confirms the effectiveness of the individualized training methodology.

At the same time, the absence of statistically significant differences in some indicators is explained by the limited size of the sample and the relatively uniform rate of physical

development at this age stage. The obtained results confirm that the individualized training approach serves the effective development of the physical fitness of young taekwondo athletes.

### Conclusion.

The results of the conducted pedagogical experiment confirmed the high effectiveness of applying an individualized, personality-oriented approach in the process of preparing young teenage (11-12 years old) taekwondo athletes for belt certification. Differentiation of the content, volume, and intensity of training in accordance with the functional and individual-typological characteristics of young athletes contributed to a reliable improvement in the quality of mastery of technical movements and indicators of general physical fitness.

In the experimental group, statistically significant positive changes were noted in the results of belt certification, as well as in the indicators of arm muscle strength, speed-strength training, and flexibility ( $p < 0.05-0.001$ ). This circumstance confirms the acceptability of the proposed means of pedagogical influence.

The research results indicate the need for a systematic introduction of an individual approach to the organization of the taekwondo training process in children's and youth sports schools, and scientifically substantiate the possibility of applying this methodology in practice.

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