



ANALYSIS OF COMPETITIVE
ACTIVITY OF YOUNG MALE
ATHLETES IN TAEKWONDO WTF

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Анотація

У статті розглядається сучасна техніко-тактична структура змагального поєдинку в тхеквондо WTF. Результати дослідження показали, що найбільш результативними ударами в змагальних поєдинках юних тхеквондистів є «пандаль-чаги», «Долю-чаги», «твіт-чаги» і «Неріо-чаги», які складають 95% від загальної кількості ударів, оцінених судьями. Ці удари використовуються тхеквондистами в основному у всіх атакуючих і контратакують діях. Діапазон часу, що витрачається спортсменами на активні технічні дії в одній хвилині раунду, становить від 10 до 35 секунд.

Ключові слова: змагальна діяльність, кількісні показники, ефективність технічних дій, юні тхеквондисти.

Аннотация

В статье рассматривается современная технико-тактическая структура соревновательного поединка в тхэквондо WTF. Результаты исследования показали, что наиболее результативными ударами в соревновательных поединках юных тхэквондистов являются «пандаль-чаги», «долю-чаги», «твит-чаги» и «нерио-чаги» и составляют 95 % от общего количества ударов, оцененных судьями. Эти удары используются тхэквондистами в основном во всех атакующих и контратакующих действиях. Диапазон времени, затрачиваемый спортсменами на активные технические действия в одной минуте раунда, составляет от 10 до 35 секунд.

Ключевые слова: соревновательная деятельность, количественные показатели, эффективность технических действий, юные тхэквондисты.

Introduction. Taekwondo WTF was included in the official program of Olympic Games and it led to important change in the competition rules at this kind of martial arts [1, 2, 5]. These changes include: higher estimation by judges complex technics used in fights; usage of electronic systems PSS marking results of performing technical actions at certain zones of athlete's body without judges participation.

Besides new versions of the competition rules in taekwondo WTF appeared. For example – “kerugi TK-5” where team fights are conducted (five athletes in each team) in “non-stop” mode with common team scoring. In this version performing complex technics with high density of fight conducting is privileged.

At the 27th General Assembly WTF on the 15-th of November, 2016 in Canadian Burnaby next changes in taekwondo WTF competition rules were offered and approved. All current changes were directed to four main factors:

- 1) competition fights must be held with high athletes' activeness;
- 2) fights stops must get minimal;
- 3) quality of refereeing must get improved; despite the use of PSS and system of replaying;
- 4) taekwondo WTF must be understandable for broad audience.



As to scoring it was offered to estimate foot kick in the body at two points. We believe that this decision will let stimulate athletes for more various technical actions not concentrating on kicks of a front leg in a head. A kick in a head estimates at three points as it used to be. For the performance of more complex technical actions in the body and in the head referees give an additional point if electronic system of fixation scores this kick. Such technical actions include difficult in coordination kicks with different kinds of rotation and jumps. Besides, for the early victory it was offered to change the gap from 12 to 20 points. This decision is connected with compensation of raise of body kicks rating as well as violations.

“Kyong-go” – warning (minus half-point) was liquidated. “Gam-jeom” (one point to the opponent) is for absolutely all violations. This change is connected with compensation of body kicks increasing. Besides, any violation influences the result of the fight at once. These changes are directed to increasing quality of competition activity.

New rules have come into operation since January 2017 and fully concern both top-class athletes and young ones (cadets and juniors) [5].

Specifics of competitive activity in taekwondo WTF has important meaning for construction of teaching and training process with the aim of increasing and constant improvement of sport skill of young taekwondists. That is why it is necessary, first of all, to understand the modern technical and tactical structure of a competition fight.

It is necessary to mention that specialists have already conducted such researches [1, 3, 4] at different stages formation of taekwondo a kind of sport. However, new rules, to our mind, changed the picture of a modern fight considerably. In this relation the necessity of holding of analysis of competitive fights of young taekwondists appears. It will allow not only to estimate the level

of their preparedness but also to correct educational and training process and to define important aspects of technic, tactic and other kinds of preparation.

The Purpose is to define features of competitive activity of 11-13 years old taekwondists-cadets at modern stage.

The task of the research are:

1. To identify quantitative indexes of technic actions of young taekwondists in competitive fights.

2. To estimate effectiveness of technic actions of young taekwondists in competitive fights.

3. To determine range of time of active technic actions of young taekwondists in competitive fights.

Results of the research and their discussion. The analysis of competitive activity of 11-13 years old young taekwondists was conducted according to video recording of regional and All-Ukrainian competitions which have been conducted since the end of 2016. In total it was analyzed 156 fights. We took into account:

1) volume and versatility of technic actions;

2) time that was spent for active technic actions and for preparatory technic actions;

3) effectiveness of attacking and counterattacking technic actions.

In the analysis of quantitative data (volume and versatility of technic actions) it was determined that among great range of various actions 11-13 years old taekwondists mainly use seven kinds of foot kicks in fights. Among these seven kicks in fights. Among these seven kicks kick “phandal-chagi” is used most often. The athletes used this kick 4693 times, that is equal to 50,3 % of total quantity of kicks. These kicks were done during the fights which were analyzed. The kick “neriyo-chagi” was done by the young taekwondists 2019 times (21,7 %). After the kick “doliyo-chagi” goes – 1876 times (20,1 %). The kick “twit-chagi” was used by the cadets 253 times that is equal to 2,7 % of total quantity of technic actions. The next

are “jop-chagi” – 229 kicks (2,4 %), “twit-doliyo-chagi” – 147 kicks (1,6 %), and “miro-chagi” is used in 1,1 % case (107 kicks). So, while comparing percentage of foot kicks to the all hits done within the whole fight by the cadets it was found that about 94 % of kicks in a competitive sparring were done by athletes with the help of four technical actions. They are “phandal-chagi”, “neriyo-chagi”, “doliyo-chagi” and “twit-chagi”, while “phandal-chagi” is the most frequent.

Mentioned kicks are used by athletes mainly in all attacking and counterattacking actions as they are the most effective in competitive fights.

Analysis of effectiveness of attacking and counterattacking actions discovered that mainly 15-25 % of kicks reach the goal and are estimated by referees. The most effective are the kicks as follows, “phandal-chagi” is 1018 points is equal to 22,1 % of the total amount of these kicks; “neriyo-chagi” is 567 points (9,3 %). “Doliyo-chagi” brought to the athletes 1095 points (19,5 %) and referees estimated “twit-chagi” as 285 points (41,1 %). The kick “twit-doliyo-chagi” was estimated as 348 points (59,1 %), “jop-chagi” brought 90 points (it is equal to 13,1 % of total amount of kicks), “miro-chagi” is 48 points (22,4 %).

So the most effective kicks in competitive fights of cadets are the following: “phandal-chagi”, “doliyo-chagi”, “twit-chagi” and “neriyo-chagi”. They are 90 % of total amount of kicks estimated by referees. Besides, these very kicks are used in competitive fights of young taekwondists most often. In average during a fight an athlete performs 58 kicks and earns 21 points.

While the analysis and determination of the range of active actions and preparatory technical actions during every minute of a fight, it was found that the range of time spent for active technical actions during the first minute of sparring is from 11 to 20 seconds but the time spent for



preparatory technical actions from 40 to 49 seconds. While the analysis of the same indexes during the second minute of the fight it was found that the time of active technical actions is in the range from 26 to 37 seconds, preparatory actions from 23 to 34 seconds. The analysis of the third minute of sparring showed that the time of active technical actions is in the range from 18 to 28 seconds, that of the preparatory from 32 to 42 seconds. During the fourth minute of a sparring for active technical actions athletes spend from 24 to 37 seconds and from 23 to 36 seconds are spend for preparatory ones. During the fifth minute of a fight striking technique takes from 13 to 36 seconds, preparatory actions take about 24-47 seconds. The sixth minute of cadets' fight is conducted within 17-30 seconds for striking ones and within 33-43 seconds for preparatory actions.

The seventh and the eighth minutes of a fight should be paid a special attention. It is the fourth round. According to the rules of competitions the fourth round is conducted in case the score after three rounds is equal. Additional round is conducted till the first point and lasts one minute. It is necessary to mention that the additional round is conducted quite seldom. Among 156 fights analyzed by us in only 12 the winner is determined during the fourth round. During additional time athletes use active technical actions from 15 to 25 seconds. Preparatory actions cover from 35 to 45 seconds.

So the time that cadets spend for

active technical actions during the first round is quite low. Most of the time is used by athletes for preparatory actions. The second minute of a fight is conducted in more intensive mode. Time range for active and preparatory technical actions is nearly equal. By the third minute (early second round) the time interval of the active technical actions decreases again and increases to the fourth minute. In the analysis of the fifth and sixth minutes of a competitive fight (third round), it is revealed that the time spent on active actions, is reduced, and the time spent on preparatory actions, increases.

It should also be noted that the active actions in taekwondo are "strike" technique, preparatory ones belong to the movement on the spot, to the sides and forward - backward. These movements are very important in preparation for attacking and counterattacking actions.

During the analysis the time range of active and preparatory technical actions of young athletes, it was found that the full range of time spent by athletes on an active technical actions in one minute is from 10 to 37 seconds, the preparatory ones - from 23 to 50 seconds.

Conclusions. Thus, the analysis of competitive activity of male taekwondoist of 10-13 years old, it was found that 95% of the kicks in sparring athletes perform with the help of four technical actions: "phandal-chagi", "twit-chagi", "dolio-chagi" and "nerio-chagi". These kicks are used by Taekwondo athletes mostly in all attacking and counterattacking

actions, as they are the most effective (are often evaluated by the judges) in taekwondists' competitions. The range of time spent by athletes on active technical actions within one minute round is from 10 to 35 seconds. The decrease in the number and speed of strikes performing by the fifth and sixth minutes of the third round indicates insufficient level of male taekwondists' special endurance.

Literature

1. Лукіна О.В. Вдосконалення техніко-тактичних дій у спортивних єдиноборствах / Лукіна О.В. // Спортивний вісник Придніпров'я. – 2014. – № 3. – С.58-61.
2. Рогожников М.А. Обучение юных тхэквондистов безопасным сложно-координационным техническим действиям: автореф. дис. ... канд. пед. наук: 13.00.04 // Санкт-Петербург, 2016. – 23 с.
3. Савченко В.Г. Провідні компоненти фізичної та технічної підготовленості юних спортсменів-єдиноборців тхеквондистів / В.Г. Савченко, О.В. Лукіна // Спортивний вісник Придніпров'я. – 2016. – № 1. – С. 111-116.
4. Эпов О.Г. Некоторые аспекты исследования тактико-технических действий и тактико-технических структур в тхэквондо // Учёные записки университета им. П.Ф. Лесгафта. – 2009. – № 3. – С. 89-92.
5. www.worldtaekwondofederation.net.

