

BUILD OF STANDARDS OF SPECIALIZED TESTS IN TRAINING LEVEL ASSESSMENT BY TAEKWONDO HIGH-CLASS ATHLETES

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Abstract:

The study has built the tables of classification standards of and general transcripts to assess the training levels of Taekwondo high-class athletes. The tables are important database for assessing athlete levels, and adjusting the training program to fit the training purpose, little by little putting science into training to improve their performances.

Key words: Taekwondo, High-class athletes, training...

INTRODUCTION

From the documents and scientific research in the field of high performance sports, in the training of modern sports, especially in the selection and training of high-class athletes, the technology of training the athletes is a complicated issue, always associated with new scientific and technological progress. Therefore, the study "Build of standards of specialized tests in evaluating training levels of Taekwondo high-class athletes" has scientific and practical significance in gradually bringing science and technology into the training, which helps coaches and athletes evaluate and evaluate themselves during training to adjust to fit the purpose and tasks in the annual training cycle to firmly improve sports performance.

RESEARCH METHODS

The study has used the methods of document analysis and synthesis, interview and discussion, pedagogical tests and mathematical statistics.

Experimental subjects: 15 national team's athletes in 2014-2015 (06 women and 09 men)

Interviewees: 25 people (including coaches, experts and managers who have been working in Taekwondo training).

Experimental location: Training Center for High-level Athletes in Hanoi

Time of experimental data collection: The first stage of the annual training cycle

RESULTS AND DISCUSSION

1. Selection of specialized tests applied to Taekwondo high- class athletes training level assessment

By general and professional document analysis and synthesis, interview and determination of the confident and informative degree, we have identified 11 qualified tests to apply to the assessment of professional training level for the research subjects, including:

Test 1: Standing Long Jump (cm), Test 2: 30m Standing Start Run (s), Test 3: Jump Rope in 2 minutes (number), Test 4: Front Leg Roundhouse Kick in 10 seconds (number), Test 5: Double Roundhouse Kick on target in 30 seconds (number), Test 6: 1-leg Roundhouse Kick + Half Moon Kick in 15 seconds (number), Test 7: Skip Roundhouse Kick in 30 seconds (number), Test 8: Kick on 2 2.5m-opposite targets in 10 seconds (number), Test 9: 1-leg Roundhouse Kick Technique in 10 seconds (peak of strength, reflection time, number of times), Test 10: Extreme Roundhouse Kick Technique (peak of strength, collision time, reflection time), Test 11: Extreme Back Kick Technique (peak of strength, collision time, reflection time).

2. Build of standards of specialized tests applied to Taekwondo high- class athletes training level assessment

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Table 1. Table of classification standards of specialized tests in assessing Taekwondo high- class women's athletes training level

Classification	Specialized physical strength tests								Specialized technical tests							
	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8	Test 9				Test 10			
									F (KG)	T (ms)	Number	F (KG)	T (ms)	t(ms)	F (KG)	T (ms)
Very Good	<4.86	>232.4	>327	>23	>14	>13	>43	>85	>137	<0.601	>20	>204	<0.559	<0.115	>166	<0.146
Good	4.86-4.88	228.2-232.4	316-327	22-23	13-14	12-13	41-43	82-85	116 -137	0.601-0.715	18-20	159-204	0.559-0.627	0.115-0.155	136-166	0.146-0.425
Average	4.89-4.93	219.8-28.19	291-315	19-21	11-12	10-11	35-40	76-81	74-115	0.716-0.943	14-18	69-159	0.627-0.763	0.156-0.177	74-135	0.427-0.983
Weak	4.94-4.96	215.61-219.8	278-290	17-18	9-10	8-9	32-34	73-75	52-73	0.944-1.057	12-14	24-68	0.763-0.831	0.177-0.277	42-73	0.984-1.262
Poor	>4.96	<215.61	<278	<17	<9	<8	<32	<73	<52	>1.057	<12	<24	>0.831	>0.277	<42	>1.262

Table 3. Table of transcripts of assessing Taekwondo high- class women's athletes training level

Point scale	Specialized physical strength tests								Specialized technical tests							
	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8	Test 9				Test 10			
									F (KG)	T (ms)	Number	F (KG)	T (ms)	t(ms)	F (KG)	T (ms)
1	4.961	216	279	16	10	9	32.5	73	52.43	1.057	12	24.26	0.831	0.277	41.6	1.26
2	4.949	218	285	17	10.7	9.5	34	74.5	63	1	13	46.73	0.797	0.227	57.2	1.121
3	4.937	220	291	18	10.5	10	35	76	73.63	0.943	14	69.21	0.763	0.177	72.8	0.982
4	4.925	222	297	19	10.2	10.5	36.6	77.5	84.23	0.886	15	91.68	0.729	0.127	88.4	0.843
5	4.913	224	303	20	11	11	38	79	94.83	0.829	16	114.16	0.695	0.077	104	0.704
6	4.901	226	309	21	11.2	11.5	39.4	80.5	105.5	0.772	17	136.63	0.661	0.027	119.6	0.565
7	4.889	228	315	22	11.5	12	41	82	116	0.715	18	159.11	0.627	0	135.2	0.426
8	4.877	230	321	23	11.7	12.5	42	83.5	126.6	0.658	19	181.58	0.593	0	150.8	0.287
9	4.865	232	327	24	12	13	43.5	85	137.2	0.601	20	204.05	0.559	0	166.4	0.148
10	4.853	234	333	25	12.2	13.5	45	86.5	147.8	0.544	21	226.53	0.525	0	182	0.009

Table 2. Table of classification standards of specialized tests in training Taekwondo high- class men’s athletes

		Specialized physical strength tests								Specialized technical tests							
Classification	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8	Test 9			Test 10			Test 11		
									F (KG)	T (ms)	Number	F (KG)	T (ms)	t(ms)	F (KG)	T (ms)	t(ms)
Very Good	<3.995	>277.4	>388	>23	>15	>15	>47	>106	>167	<0.454	>20	>215	<0.573	0	>207	<0.54	<0.053
Good	3.98-4	266.2-277.4	354-388	22-23	14-15	14-15	43-47	101-106	154-167	0.454-0.587	19-20	192-215	0.573-0.633	0-0.026	178-207	0.54-0.628	0.053-0.066
Average	4.1-4.3	243.81-266.1	284-353	21-20	12-13	12-13	35-42	93-100	128-153	0.588-0.853	17-18	144-191	0.633-0.754	0.027-0.14	121-177	0.629-0.804	0.067-0.092
Weak	4.31-4.41	232.62-243.8	249-283	19-20	10-11	10-11	31-34	88-92	115-127	0.854-0.986	15-16	121-143	0.755-0.813	0.15-0.197	92-120	0.805-0.892	0.093-0.105
Poor	>4.411	<232.62	<249	<19	<10	<10	<31	<88	<115	>0.986	<15	<121	>0.813	>0.197	<92	>0.892	>0.105

Table 4. Table of transcripts of specialized tests in assessing Taekwondo high- class men’s athletes training level

Point scale	Specialized physical strength tests							Specialized technical tests									
	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8	Test 9			Test 10			Test 11		
									F (KG)	T (ms)	Number	F (KG)	T (ms)	t(ms)	F (KG)	T (ms)	t(ms)
1	4.411	232.62	249	19	11	10.2	31	89	114.85	0.985	15	120.56	0.813	0.196	91.78	0.892	0.105
2	4.359	238.22	267	19.5	11.5	10.4	33	91	121.35	0.919	15.5	132.42	0.783	0.168	106.21	0.848	0.098
3	4.307	243.81	284	20	12	10.6	35	93	127.86	0.853	16	144.28	0.753	0.14	120.64	0.804	0.092
4	4.255	249.4	302	20.5	12.5	10.8	37	95	134.36	0.786	17.5	156.14	0.723	0.111	135.07	0.76	0.085
5	4.203	255	319	21	13	11	39	97	140.87	0.72	18	168	0.693	0.083	149.5	0.716	0.079
6	4.151	260.6	336	21.5	13.5	11.2	41	99	147.37	0.653	18.5	179.85	0.663	0.054	163.92	0.672	0.072
7	4.099	266.18	354	22	14	11.4	43	101	153.88	0.587	19	191.71	0.633	0.026	178.4	0.628	0.066
8	4.047	271.78	371	22.5	14.5	11.6	45	103	160.38	0.52	19.5	203.57	0.603	0.002	192.78	0.584	0.059
9	3.995	277.37	389	23	15	11.8	47	105	166.89	0.454	20	215.43	0.573	0	207.21	0.54	0.053
10	3.943	282.96	406	23.5	15.5	12	49	107	173.39	0.387	20.5	227.29	0.543	0	221.64	0.496	0.046

On the theoretical and practical bases of selecting the 11 above tests, we have built a set of standards applied to the assessment of Taekwondo high- class athletes training level. The results presented from Table 1 to Table 4.

From results of the tables, we have developed general standards of specialized tests in assessing the training level of Taekwondo high- class athletes in the following manner:

The maximum point for each test and parameter is 10 points and the total maximum point of all tests and parameters is 170 points (including 8 tests and 9 parameters). Then $X_{\max} = 170$, minimum points is 17 points, $X_{\min} = 17$. Therefore, when evaluating the total points of specialized tests in assessing the training level of Taekwondo high- class athletes in five categories: Very Good, Good, Average, Weak and Poor, the distance of point between 5 grades will be calculated as follows:

$$\frac{X_{\max} - X_{\min}}{5} = \frac{153}{5} = 30.6 \text{ (dim)}$$

The results presented in Table 5.

Table 5. Table of general standards of specialized tests in assessing training level of Taekwondo high- class athletes

Classification	Point
Very Good	>139.4
Good	108.8 – 139.4
Average	78.2 – 108.7
Weak	47.6 – 78.1
Poor	< 47.6

As we see, the table of standards built by the study can be used to assess the training level of Taekwondo high- class athletes in details of each test as well as the general specialized standards of 5 degrees: Very Good, Good, Average, Weak and Poor.

This is the first step for the coach to approach the scientific and thorough assessment of his athletes. Then, they have directions and adjustments of training programs in a more appropriate and effective way to improve the performance of athletes.

CONCLUSION

On such basis of rationale and practice, the study have selected 11 specialized tests (8 physical strength tests, 3 technical tests) with enough confident and informative degree to apply to assess the training level of Taekwondo high- class athletes. The study has built the table of classification standards and general transcripts to apply to assess the training level of Taekwondo high- class athletes in a scientific and convenient way.

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