

DEVELOP CLASSIFICATION STANDARDS OF TRAINING LEVEL FOR MALE 100M SPRINT ATHLETES AGED 14-16 IN VIET NAM

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Abstract:

Using the common scientific research methods, we have selected 14 tests to evaluate the training level for male 100m Sprint athletes at the age of 14-16 in Vietnam. On such basis, we have developed transcripts and general transcripts to assess the training level for the subjects.

Key words: Standards, training level, male athletes, print, 100m running, aged 14-16, Viet Nam

INTRODUCTION

The process of summarizing the experiences of the sporting superpowers (USA, Germany, former Union of Soviet Socialist Republics and China) shows that the highlight in the training management is the sports planning. Therefore, the standardization of the aspects of training has increasingly played an important role in modern sports.

To achieve high performance in training athletes, it is necessary to assess accurately the training level of athletes then propose effective and appropriate solutions to promote the advantages and overcome the weaknesses of the training as well as each athlete. However, in fact the training of male 100m sprint athletes in Vietnam has not been properly concerned. Therefore, the development of standards for assessing the training level of athletes is necessary.

RESEARCH METHODS

The study has used the methods: Analysis and synthesis of documents; Interview; Pedagogical examination and mathematical statistics.

The subjects include 50 male sprint athletes at the training centers in the Northern Vietnam,

in which 17 athletes aged 14 ($n = 17$) 15 athletes aged 15 ($n = 15$) and 18 athletes aged 16 ($n = 18$). The athletes are at the initial stage of specialization with the training period of 2-3 years.

RESULTS AND DISCUSSION

1. Selection of tests for assessing training level of male 100m sprint athletes aged 14-16

We have selected tests to assess the training level for male 100m Sprint athletes at the age of 14-16 in the following steps:

- Select through references, pedagogical observation and direct interview with Athletic coaches
- Select through interview on a large scale by questionnaires
- Determine the reliability and informative characteristic of the tests

As a result, we have selected for 14 criteria, tests in the training and evaluation of the training level for male 100m Sprint athletes at the age of 14-16 divided into three groups of factors, including: Factors of morphology with 03 criteria; factors of psychological function with 04 criteria and factors of profession with 07 tests.

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2. Development of standards for assessing training level of male 100m sprint athletes aged 14-16

Before developing the standards, we have compared the test results of 14 selected criteria in 3 age groups (14, 15 and 16) by parameter t . Results show that: At the age of 14, 15 and 16, there is a significant difference ($|t_{\text{calculation}}| > t_{\text{table}} = 1.96$ at the probability threshold $P < 0.05$). In other words, with test results comparing the test results of 14 selected criteria in 3 age groups of the study subjects, in all the criteria, tests, the

performance of the subjects at higher age group is better than the lower age group and the difference is reliable at the probability threshold $P < 0.05$. While developing evaluation standards, it is necessary to develop specific evaluation standard for each age group.

The study has developed the transcripts for evaluating the training level for male 100m Sprint athletes at the age of 14-16 according to the evaluation scale C on the base of 14 selected criteria test results. The results are in Table 1, Table 2 and Table 3.

Table 1. Transcript for evaluating training level by specific criteria of male 100m sprint athletes aged 14

Criteria, tests	Point									
	10	9	8	7	6	5	4	3	2	1
Height (cm)	174.7	172.61	170.53	168.44	166.36	164.27	162.18	160.1	158.01	155.93
Weight (kg)	58.55	57.38	56.21	55.04	53.87	52.7	51.53	50.36	49.19	48.02
Quetelet index (g/cm)	340.38	336.47	332.56	328.64	324.73	320.81	316.9	312.99	309.07	305.16
Vital capacity (lit)	3.4	3.3	3.2	3.11	3.01	2.91	2.81	2.71	2.62	2.52
Back stretch force (kG)	116.18	113.04	109.91	106.77	103.64	100.5	97.36	94.23	91.09	87.96
Single reflection time (s)	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.2
Complex reflection time (s)	0.48	0.5	0.51	0.53	0.54	0.56	0.57	0.58	0.6	0.61
30m standing start run(s)	3.66	3.72	3.78	3.83	3.89	3.95	4.01	4.07	4.12	4.18
60m standing start run (s)	7.1	7.19	7.28	7.36	7.45	7.54	7.63	7.72	7.8	7.89
30m sprint (s)	3.07	3.11	3.16	3.21	3.25	3.3	3.35	3.39	3.44	3.49
Standing long jump (cm)	284.14	276.58	269.02	261.45	253.89	246.33	238.77	231.21	223.64	216.08
3-step long jump (cm)	823.06	804.32	785.57	766.83	748.08	729.34	710.6	691.85	673.11	654.36
300m standing start run (s)	35.88	37.13	38.39	39.64	40.89	42.14	43.39	44.64	45.89	47.15
100m crouch start run (s)	11.51	11.66	11.8	11.94	12.09	12.23	12.37	12.52	12.66	12.8

Table 2. Transcript for evaluating training level by specific criteria of male 100m sprint athletes aged 15

Criteria, tests	Point									
	10	9	8	7	6	5	4	3	2	1
Height (cm)	178.19	176.04	173.88	171.73	169.58	167.43	165.28	163.13	160.98	158.82
Weight (kg)	60.51	59.3	58.09	56.88	55.67	54.46	53.25	52.04	50.83	49.62
Quetelet index (g/cm)	346.37	342.39	338.41	334.43	330.44	326.46	322.48	318.49	314.51	310.53
Vital capacity (lit)	4.19	4.07	3.95	3.83	3.71	3.59	3.47	3.35	3.23	3.11
Back stretch force (kG)	122.54	119.23	115.92	112.61	109.31	106	102.69	99.39	96.08	92.77
Single reflection time (s)	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19
Complex reflection time (s)	0.45	0.46	0.48	0.49	0.5	0.52	0.53	0.54	0.56	0.57
30m standing start run(s)	3.55	3.6	3.66	3.72	3.77	3.83	3.89	3.94	4	4.06
60m standing start run (s)	6.92	7.01	7.09	7.18	7.26	7.35	7.44	7.52	7.61	7.69
30m sprint (s)	3	3.05	3.09	3.14	3.18	3.23	3.28	3.32	3.37	3.41
Standing long jump (cm)	297.21	289.3	281.39	273.48	265.57	257.66	249.75	241.84	233.93	226.02
3-step long jump (cm)	855.64	836.15	816.67	797.18	777.7	758.21	738.72	719.24	699.75	680.27
300m standing start run (s)	34.38	35.57	36.77	37.97	39.17	40.37	41.57	42.77	43.97	45.17
100m crouch start run (s)	11.31	11.45	11.59	11.73	11.87	12.01	12.15	12.29	12.43	12.57

Table 3. Transcript for evaluating training level by specific criteria of male 100m sprint athletes aged 16

Criteria, tests	Point									
	10	9	8	7	6	5	4	3	2	1
Height (cm)	181.27	179.12	176.98	174.83	172.68	170.53	168.38	166.23	164.08	161.94
Weight (kg)	61.97	60.81	59.65	58.49	57.32	56.16	55	53.83	52.67	51.51
Quetelet index (g/cm)	362.33	356.59	350.86	345.12	339.38	333.64	327.9	322.16	316.42	310.69
Vital capacity (lit)	4.49	4.36	4.23	4.1	3.97	3.84	3.71	3.58	3.45	3.32
Back stretch force (kG)	137.1	133.4	129.7	126	122.3	118.6	114.9	111.2	107.5	103.8
Single reflection time (s)	0.14	0.15	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18
Complex reflection time (s)	0.43	0.44	0.45	0.47	0.48	0.49	0.5	0.52	0.53	0.54
30m standing start run(s)	3.47	3.52	3.58	3.63	3.69	3.74	3.79	3.85	3.9	3.96
60m standing start run (s)	6.78	6.86	6.95	7.03	7.12	7.2	7.28	7.37	7.45	7.54
30m sprint (s)	2.94	2.98	3.03	3.07	3.12	3.16	3.2	3.25	3.29	3.34
Standing long jump (cm)	310.9	302.63	294.35	286.08	277.8	269.53	261.26	252.98	244.71	236.43
3-step long jump (cm)	889.39	869.14	848.88	828.63	808.37	788.12	767.87	747.61	727.36	707.1
300m standing start run (s)	32.96	34.11	35.26	36.41	37.56	38.71	39.86	41.01	42.16	43.31
100m crouch start run (s)	11.03	11.18	11.32	11.46	11.61	11.75	11.89	12.04	12.18	12.32

From the transcripts, we have developed a general transcript for evaluating the training level for male 100m Sprint athletes at the age of 14-16 at 5 levels: Very good, Good, Average, Weak and Poor. The results are in Table 4.

Table 4. general transcript for evaluating level of male 100m sprint athletes aged 14-16

Classification	Achieved total point by age group		
	Age of 15 (Maximum total point of 140)	Age of 16 (Maximum total point of 140)	Age of 17 (Maximum total point of 140)
Very good	> 119.00	> 119.00	> 119.00
Good	92.00 - 119.00	92.00 - 119.00	92.00 - 119.00
Average	64.00 - 91.00	64.00 - 91.00	64.00 - 91.00
Weak	35.00 - 63.00	35.00 - 63.00	35.00 - 63.00
and Poor	< 35.00	< 35.00	< 35.00

As assessing the athlete's training level, to achieve the total point in a particular classification, it is unnecessary to achieve the point as high as standard point of each test. They can take the high point of one test to cover the low point of the other test providing that the total point is within the range of the general transcript (Table 4) and no more than 3 test point is weak and poor, especially the professional factors (physical strength, technique and tactics)

CONCLUSION

1. The research process has selected a system of 14 criteria, tests to evaluate the training level of male 100m sprint athletes at the age of 14-16 divided into 3 groups of factors, including including: Factors of morphology with 03 criteria; factors of psychological function with

04 criteria and factors of profession with 07 tests.

2. The study has develop transcripts and a general transcript to evaluate the training level of the athletes at each age group

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