

Developing Standards For Evaluating The Training Level Of Male Road Cyclists In Dong Nai City

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Abstract:

Using basic research methods: literature synthesis and analysis, interviews, pedagogical tests, and statistical mathematics; the research conducted the selection of indicators and the development of a scoring system to evaluate the training level of male road cyclists in Dong Nai City; contributing to improving training efficiency and competition results at national-level competitions.

Keywords: *training level, scoring system development, Road cycling, Dong Nai.....*

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I. Introduction:

Road cycling in Dong Nai is developing strongly with athletes achieving certain results, winning Gold medals in National competitions in recent years such as Nguyen Hoang Sang, Nguyen Pham Quoc Khang, Dang Thanh Duoc,...; Towards national and international competitions, athletes need to be fully equipped with physical fitness, technique, and other qualities to meet competition requirements, especially as the previous generation of athletes are aging and gradually moving into coaching roles, and young athletes are being supplemented and nurtured to become the core force in the coming years. Therefore, researching and developing standards to evaluate training level is a necessary task at the present time. This is the reason for choosing the research: “***Building evaluation standards for the training level of male road cyclists in Dong Nai City***”.

Research Methods and Subjects: During the research process, methods of literature analysis and synthesis, the interview method, pedagogical test method, and statistical mathematics method were used.

II. Research Results:

Selecting tests to evaluate the training level of male road cyclists in Dong Nai City.

Through the steps of synthesizing literature, systematizing tests, interviewing experts, and verifying the reliability of selected tests, the research has selected 20 tests to evaluate the training level. These tests are scientific and objective, ensuring reliability for evaluating the training level of male road cyclists in Dong Nai City, presented in Table 1.

Table 1. Tests to evaluate the training level of male road cyclists in Dong Nai City

FACTOR	TEST
TRAINING LEVEL OF FITNESS	Cardiovascular function
	Peak power (W)
	Average power (W)
	Power drop (W/kg)
	Hand-eye reaction (ms)
	Foot-eye reaction (ms)
	Complex reaction (ms)
	VO2 max (ml.kg.min)
	Pulmonary ventilation (liters/min)
	Oxygen/heart rate index (ml)

	20m shuttle run (s)
	Dominant hand grip strength (kg)
	Back strength (kg)
	Thigh strength (kg)
	Pedaling cadence (rpm)
	High-speed 200m cycling (s)
	1000m cycling (s)
	10,000m cycling (s)
	Cycling between 2 cones (s)
	Figure-8 cycling 8 intersections (s)

Developing a scoring system to evaluate the training level of male road cyclists in Dong Nai City.

The study was conducted to build a scoring scale to evaluate the training level of male road cyclists in Dong Nai City according to a C scale. After conducting the tests, the determination of the achieved score was carried out by comparing the results of the set criteria with the criteria to be looked up in the table just extracted to determine the achieved score for that criterion, presented in Tables 2 and 3.

Establishing standards for evaluating the training level of male road cyclists in Dong Nai City

From the results obtained in table 2 and 3 it helps to specifically evaluate the performance of each test for the athlete, but it does not yet evaluate the overall training level;

Table 2. Comprehensive scoring table for the training level classification of male road cycling athletes in Dong Nai.

Classification	TOTAL SCORE					
	Function Power	Reflex	Aerobic Capacity	Physical Strength	Technique	Total Score
Excellent	32 - 40	24 - 30	24 - 30	104 - 130	16 - 20	160 – 200
Good	24 - < 32	18 - < 24	18 - < 24	78 - < 104	12 - < 16	120 - < 160
Average	16 - < 24	12 - < 18	12 - < 18	52 - < 78	8 - < 12	80 - < 120
Poor	8 - < 16	6 - < 12	6 - < 12	26 - < 52	4 - < 8	40 - < 80
Very Poor	0 - < 8	0 - < 6	0 - < 6	0 - < 26	0 - < 4	0 - < 40

Table 3. Scoring scale for training level evaluation tests for male road cyclists in Dong Nai City.

No.	ScoreContent		0	1	2	3	4	5	6	7	8	9	10
1	Function - Power (Wingate test)	Cardiac function	8.7	8.0	7.2	6.5	5.8	5.0	4.3	3.5	2.8	2.1	1.3
2		Peak power (W)	8.6	8.8	9.0	9.2	9.3	9.5	9.7	9.9	10.1	10.3	10.5
3		Average power (W)	7.1	7.2	7.3	7.5	7.6	7.7	7.8	8.0	8.1	8.2	8.4
4		Power drop (W/kg)	7.5	6.9	6.4	5.8	5.3	4.7	4.2	3.6	3.0	2.5	1.9
5	Reflex	Hand-eye reflex (ms)	201	197	192	188	183	179	175	170	166	161	157
6		Foot-eye reflex (ms)	323	314	306	298	289	281	272	264	256	247	239
7		Complex reflex (ms)	558	532	505	479	452	426	399	373	347	320	294
8	Aerobic capacity (Bruce test)	VO2 max (ml.kg.min)	29.3	32.5	35.7	38.9	42.1	45.3	48.5	51.7	54.9	58.1	61.3
9		Pulmonary ventilation (L/min)	14.9	20.6	26.2	31.8	37.4	43.0	48.6	54.3	59.9	65.5	71.1
10		Oxygen/heart rate index (ml)	6.9	9.4	11.9	14.4	16.9	19.3	21.8	24.3	26.8	29.3	31.7
11	Physical Strength	20m shuttle run (s)	11.02	10.64	10.26	9.88	9.50	9.12	8.75	8.37	7.99	7.61	7.23
12		Dominant hand grip strength (kg)	25.1	26.1	27.1	28.1	29.1	30.1	31.0	32.0	33.0	34.0	35.0
13		Back strength (kg)	86	90	95	100	104	109	114	118	123	128	132
14		Thigh strength (kg)	72	84	96	107	119	131	143	154	166	178	190
15		Pedaling cadence (rpm)	133	137	141	146	150	154	158	163	167	171	175

16		High-speed 200m cycling (s)	20.47	20.14	19.81	19.48	19.14	18.81	18.48	18.15	17.82	17.49	17.15
17		1000m cycling (s)	94.9	93.0	91.1	89.2	87.3	85.4	83.5	81.7	79.8	77.9	76.0
18		10,000m cycling (s)	843	831	818	806	794	781	769	757	744	732	720
19	Technique	Cycling between 2 cones (s)	20.63	20.32	20.01	19.71	19.40	19.10	18.79	18.48	18.18	17.87	17.57
20		Figure-8 cycling 8 course (s)	21.17	20.81	20.45	20.09	19.74	19.38	19.02	18.66	18.30	17.94	17.59

To solve this problem, the study was conducted to establish standards for evaluating the training level of male road cyclists in Dong Nai City according to a scoring scale 100, with 5 levels: Excellent, Good, Average, Poor, and Very Poor. The results are presented in Table 4.

Table 4. Scoring convention for the training level of male road cyclists in Dong Nai City

CLASSIFICATION LEVEL	TOTAL SCORE
Good	9 - 10 points
Fair	7- < 8 points
Average	5 - < 7 points
Poor	3- < 5 points
Very Poor	0- < 3 points

This standard table allows for a comprehensive assessment of the training level of male road cyclists in Dong Nai province, and also serves as an important basis for coaches in athlete selection and a more realistic assessment of the training process. From there, adjustments can be made to the content, form, and training load accordingly.

III. Conclusion

Through research, 20 selected tests to assess the training level for male road cyclists in Dong Nai province have been identified. Through the research process, a classification table, scoring scale, and a comprehensive scoring table for assessing the training level of male road cyclists in Dong Nai province have been developed.

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