

Determine Physical Fitness Assessment Tests For Vietnamese Traditional Martial Arts Athletes In Tay Ninh Province

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Abstract:

On the basis of synthesizing and analyzing the opinions and knowledge of experts, selecting general and professional fitness assessment tests to improve the training efficiency and competition performance for male VietNameese traditional martial arts athletes in Tay Ninh province. Through the study, 09 general fitness assessment tests and 08 professional fitness assessment tests have been identified to test traditional martial arts athletes with sufficient reliability and high informability.

Keywords: *fitness, athletes, Traditional martial arts, Tay Ninh...*

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I. Set Problem:

In Tay Ninh province, **VietNameese** traditional martial arts has been receiving the attention and investment of relevant branches and leaders. **VietNameese** Traditional martial arts was developed in Tay Ninh province in 2010 with the gold medal of combat athlete Do Thi Thu Truc. After a short time, it was discontinued until 2017 to return. In traditional martial arts, in addition to technical factors, physical factors also contribute to determining the outcome of a match. If you want to improve your achievements, you must improve the physical strength as well as endurance of the athletes to bring their achievements up and down. It is about the above important factors in terms of physical fitness. That is the reason for choosing the study: "*Identifying physical fitness assessment tests for traditional martial arts athletes in Tay Ninh province*".

Research methods: In the process of research, methods of synthesizing and analyzing documents, interview methods, and statistical methods were used.

II. Research Results:

To determine the selection of physical fitness assessment tests of traditional martial arts athletes, the research is carried out according to the following steps:

Step 1: Synthesize physical fitness assessment tests for traditional martial arts athletes.

Step 2: Select tests to assess the physical fitness of traditional martial arts athletes through interviews.

Step 3: Check the reliability of the tests

Synthesis of physical fitness evaluation criteria for male traditional martial arts athletes.

Through the synthesis of many research materials in the field of Traditional Martial Arts, and at the same time consulting with experts, the study has synthesized 27 general tests and 32 professional tests used in general and professional fitness tests for Traditional Martial Arts athletes. Specifically, presented in Tables 1 and 2

Table 1. The results of the interview selected the criteria for assessing the general physical fitness level for Traditional Martial Arts athletes in Tay Ninh province.

STT	Quota	1st time (30 votes)		2nd time (32 votes)	
		SP	%	SP	%
1	Run 30m xpc/time	25	83	26	81.25
2	Run 60m xpc/time	19	63	17	53.13
3	Running at a speed of 10m/time	14	46	13	40.63
4	Run 100m/time	15	50	17	53.13
5	Curl Ups 1 minute/time	26	87	27	84.38
6	10mx10m Shuttle Run	15	50	14	43.75
7	Push Up (Maximum) for 1 minute/time	23	77	24	75
8	Run 3000m	27	90	28	87.5
9	Sitting and pushing shoulders on the weight machine/time	14	46	17	53.13
10	Sit and push the leg weights/time	12	40	15	46.88
11	Jump rope speed/time	10	33	12	37.5
12	Lying on your stomach with your legs bent to lift the barbell / time	19	63	17	53.13
13	On-site remote on/time	24	80	26	81.25
14	Lying on your stomach with your stomach open at a time	23	77	25	78.13
15	Jump later/once	9	30	7	21.88
16	Carrying weights and changing legs/time	10	33	12	37.5
17	Run 800m/time	23	77	24	75
18	Run 1500m/time	19	63	17	53.13
19	Run 400m/time	15	50	12	37.5
20	Hexagonal jumps/time	14	46	16	50
21	Rope climbing/time	12	40	13	40.63
22	Turn on the change direction/time	8	27	7	21.88
23	Run the stairs at a time	10	33	12	37.5
24	Thigh Lift/Time	9	30	15	46.88
25	Stretch your arms with dumbbells	13	43	12	37.5
26	Horizontal Twist	25	83	27	84.38
27	Vertical Scroll	24	80	26	81.25

Table 2: Results of the interview on the selection of indicators to assess the professional fitness level of traditional martial arts athletes in Tay Ninh province.

STT	Quota	1st time (30 votes)		2nd time (32 votes)	
		SP	%	SP	%
Speed					
1	Left Roundhouse kick 10s/time	28	93	28	87.5
2	Right Roundhouse kick 10 seconds/time	24	80	26	81.25
3	Punch 2 hands continuously into the sandbag 10 seconds/time	19	63	18	56.25
4	The Right - hook 10 seconds/time	17	57	18	56.25
5	The Left - hook 10 seconds/time	12	40	13	40.63
6	Right hand sine punch 10s/time	14	46	17	53.13
7	Left hand sine punch 10s/time	15	50	17	53.13
8	Front Kick straight at Ramly 10s/time	19	63	17	53.13
9	Side Kick at Ramly 10s/time	13	43	15	46.88
Durability					
10	Left hand spandex punch 30 seconds/time	26	87	25	78.13
11	Right hand spandex punch 30 seconds/time	25	83	27	84.38
12	Carry lead 1kg/foot to kick horizontally on the spot 30s/time	17	57	15	46.88
13	Kick back legs with 30s/1 elastic band	25	83	24	75
14	Ring punch (sinus) of the back hand with elastic 30s/time	24	80	26	81.25
15	Hook back hand with elastic 30s/time	15	50	18	56.25
Speed Power					
16	Jab spandex punch 10s/time	12	40	15	46.88
17	Cross spandex punch 10s/time	17	57	14	43.75
18	Sit down and stand up to kick the back leg hoop every 10 seconds	8	27	7	21.88
19	Front leg kicks the ball circle with elastic band 10s/time	10	33	12	37.5
20	Lead bearing 1kg/leg, 1 leg without a goal 10s/time	13	43	19	59.38

21	Bring lead 1/kg of horizontal kick legs to 2 targets 3m apart, 10s/time	9	30	7	21.88
Aerophilic endurance					
22	Kick the 2-legged ball ring at Ramly every 2 minutes	17	57	15	46.88
23	Kick the front foot bridge ring into the sandbag every 2 minutes	19	63	18	56.25
24	Kick the back foot ball 3m from the finish line, every 2 minutes	14	46	16	50
25	Rock Ramly every 2 minutes	23	77	24	75
Anaerobic Strength					
26	Punch 2 hands continuously into the sandbag 30 seconds/time	15	50	12	37.5
27	2-legged bridge ring 3m from the destination, 30s/time	26	87	25	78.13
28	Horizontal kick with 2 legs 3m from the goal, 30s/time	14	46	17	53.13
29	Kick 1 foot horizontally continuously into the sandbag 30 seconds/time	19	63	17	53.13
30	Kick straight 2 feet 3m from the goal, 30s/time	14	46	12	37.5
31	Kick the 1-foot bridge ring into the sandbag 30s/time	12	40	15	46.88
32	Punch Ramly with his back hand 30s every time	17	57	13	40.63

Selection of physical fitness assessment tests for traditional martial arts athletes in Tay Ninh province

Thus, in 2 interviews, there were 62 responses, of which 40 votes of the coach accounted for 64.52%, 12 opinions of the referee accounted for 19.35%, and 10 opinions of the lecturer accounted for 16.13%.

The specific results after 2 interviews are processed according to each component indicator and are presented in tables 1 and 2. In the topic, we only select the responses of experts, coaches, managers, and lecturers who regularly use 70% or more through 2 interviews, the rest if it is less than 70%, it is unsatisfactory and disqualified.

Therefore, only 17 indicators have an opinion that they regularly use more than 70% in both interviews.

• Regarding general physical fitness:

- Run 30m xpc/time. 83% - 81.25%
- Abdominal muscles 1 minute at a time. 87% - 84.38%
- Lie on your stomach for push-ups every 1 minute. 77% - 75%
- Run 3000m. 90% - 87.5%
- On-site remote on/time. 80% - 81.25%
- Lie on your stomach with your stomach stretched out/time. 77% - 78.13%
- Run 800m/time. 77% - 75%
- Horizontal swivel. 83% - 84.38%
- Vertical Rotation.80% - 81.25%

• Regarding professional physical fitness:

- Round the left foot bridge every 10 seconds. 93% - 87.5%
- Round the foot bridge every 10 seconds. 80% - 81.25%
- Left hand spandex punch 30 seconds/time. 87% - 78.13%
- Right hand spandex punch 30 seconds/time. 83% - 84.38%
- Ring punch (sinus) with elastic in the back hand 30s/time. 80% - 81.25%
- The back leg kicks the ball around the bridge with an elastic band every 30 seconds. 83% - 75%
- Kick Ramly every 2 minutes. 77% - 75%
- The 2-legged bridge is 3m from the finish line, every 30s. 87% - 78.13%

Evaluate the reliability of selected tests

***Test the reliability of the tests:**

A test is used to evaluate the subject of the study if and only if it is guaranteed to be sufficiently reliable. Therefore, the 17 interviews above first need to be tested for their reliability. Reliability test through repeated test 2 times in 7 days. The results of the reliability test of general and professional fitness tests are introduced in table 3.

Table 3. Reliability test results of tests

TT	QUOTA	Measurement 1	Measurement 2	r	p
		$X1 \pm \delta_1$	$X2 \pm \delta_2$		
1	Run 30 m XPC	4.56± 0.25	4.37± 0.30	0.82	0.05
2	Abdominal muscles 1 minute/time	59.21±4.23	61.08 ± 4.49	0.97	0.05
3	Lie on your stomach for push-ups for 1 minute/time	44.83 ± 9.72	46.79 ± 9.64	0.98	0.05
4	Run 3000m	13.62 ± 1.1	12.82 ± 0.84	0.80	0.05
5	On-site far/cm	2.46 ± 0.2	2.58 ± 0.16	0.86	0.05
6	Back muscles/time	62.42 ± 7.12	65.38 ± 7.39	0.98	0.05

7		800m Run	2.74 ± 0.4	2.51 ± 0.39	0.86	0.05
8		Horizontal Twist	9.6 ± 3.22	7.4 ± 3.02	0.87	0.05
9		Vertical Scroll	8.27 ± 2.99	6.48 ± 2.67	0.93	0.05
1	Body	Round the left foot bridge 10s/time	20.79 ± 1.28	22.58 ± 1.47	0.82	0.05
2		Right foot bridge ring 10s/time	20.58 ± 0.97	22.46 ± 1.02	0.81	0.05
3	force	Left hand spandex punch 30s/time	59.28 ± 4.74	62.54 ± 4.37	0.91	0.05
4		Right hand spandex punch 30s/time	61.17 ± 3.55	64.63 ± 3.77	0.84	0.05
5	assiduous	Punching the back hand with elastic 30s/time	39.08 ± 2.41	41.58 ± 2.55	0.85	0.05
6		Rear leg bridge ring with elastic 30s/time	20.04 ± 1.63	22.08 ± 1.47	0.80	0.05
7		Ramly kick 2 minutes every time	49.29 ± 4.12	53.79 ± 2.23	0.88	0.05
8	band	Kick around the bridge with 2 legs 3m/30s/time away from the finish line	31.42 ± 2.08	33.54 ± 2.60	0.89	0.05

Table 3 shows that 17/17 tests all have a $r \geq 0.8$ and a $P < 0.05$, so it is reliable enough to use.

III. Conclusion

Through the study, 17 selected tests were identified, including 09 general fitness assessment tests and 08 professional fitness assessment tests used to test traditional martial arts athletes in Tay Ninh province with sufficient reliability with $r \geq 0.8$ (from 0.80 to 0.98). The above tests will be used in research to assess the current situation and test the physical fitness assessment after the exercise experiment period to improve the physical fitness of traditional martial arts athletes in Tay Ninh province.

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