

BUILDING PHYSICAL STRENGTH ASSESSMENT CRITERIA FOR ATHLETES FROM STUDENT FOOTBALL CLUBS IN COLLEGES OF THAI NGUYEN UNIVERSITY

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Abstract:

Using basic scientific research methods, we have identified 5 scientifically ensured tests to check and assess the physical strength of athletes from Student football clubs in colleges of Thai Nguyen University and built 01 table of strength classification criteria according to each test; 01 grading table on the scale of 10 according to each test; 01 table of combined strength assessment for male athletes of student football clubs at colleges of Thai Nguyen University.

Keywords: Criteria, assessment, strength, Football, club, Thai Nguyen University.

INTRODUCTION

Over the past few years, Thai Nguyen University has excellently carried out its teaching duties as well as organizing many extra-curricular activities in the form of sports clubs, contributing to the proficiency improvement of physical education in the university. However, to advance further in teaching and training, we need to research “Building physical strength assessment criteria for athletes from Student Football Clubs in colleges of Thai Nguyen University”. The research results will be the basis for applying exercises and strength training methods for students, thereby improving the quality of training.

RESEARCH METHODS

In the research process, the following research methods were used: Methods of analyzing and synthesizing documents; Methods of interview and discussion; Pedagogical observation method; Pedagogical test method and statistical math method.

RESULTS AND DISCUSSION

1. Research and select the strength assessment test for male athletes of student football clubs at colleges of Thai Nguyen University

By analyzing and synthesizing materials related to the strength training of football players, materials related to assessing the level of training and characteristics of football players,... Especially through the observation of training sessions, periodic tests, as well as the selection of athletes in gifted classes, local teams, through discussions, direct interviews with experienced experts, teachers, coaches.... Through testing to determine reliability and topicality, we have chosen 5 tests to test the strength of male athletes of student football clubs at colleges of Thai Nguyen University. Which are the followings: Long ball (m); Throw-in without momentum (m); Header on the spot (m); Long jump from the spot (cm); High jump on the spot with a board (cm).

2. Develop standards and test strength assessment standards for male athletes of student football clubs at colleges of Thai Nguyen University.

2.1. Construct a strength classification table for male athletes of student football clubs at colleges of Thai Nguyen University for each test

We conducted strength classification according to the 2 σ rule. The results are presented in Table 1.

In order to rank an athlete's strength test results, the tester must follow the following

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Table 1. Standard table for strength classification of male athletes of student football clubs at colleges of Thai Nguyen University

№	Test	Classification				
		Bad	Poor	Average	Fair	Good
1	Long ball (m)	< 41.21	41.21 – 43.67	43.68 – 46.14	46.15 – 48.61	≥ 48.61
2	Throw-in without momentum (m)	< 16.28	16.28 – 17.35	17.36 – 18.43	18.44 – 19.51	≥ 19.51
3	Header on the spot (m)	< 13.97	13.97 – 14.64	14.65 – 15.32	15.33 – 16.00	≥ 16.01
4	Long jump from the spot (cm)	< 187.25	187.25 – 198.51	198.52 – 209.78	209.79 – 221.05	≥ 221.06
5	High jump on the spot with board (cm)	< 251.42	251.42 – 264.66	264.67 – 277.91	277.92 – 291.16	≥ 291.17

procedures: Step 1: Determine the test results of the research subjects; Step 2: Based on the corresponding classification tables for evaluation. Using the results from a 5-levels classification, the tester can evaluate the strength of the athletes on each separate test without necessarily conducting calculations.

2.2. Construction of a strength rating scoreboard for male athletes of student football clubs at colleges of Thai Nguyen University

Next, we constructed a strength assessment scale through a C-scale to convert the test results of the tests to a 10-point scale (see Table 2).

Table 2. Strength rating scoreboard for male athletes of student football clubs at colleges of Thai Nguyen University

№	Test	Score									
		10	9	8	7	6	5	4	3	2	1
1	Long ball (m)	49.85	48.62	47.38	46.15	44.91	43.68	42.44	41.21	39.97	38.74
2	Throw-in without momentum (m)	20.06	19.52	18.98	18.44	17.90	17.36	16.82	16.28	15.74	15.20
3	Header on the spot (m)	16.35	16.01	15.67	15.33	14.99	14.65	14.31	13.97	13.63	13.29
4	Long jump from the spot (cm)	226.69	221.06	215.42	209.79	204.15	198.52	192.88	187.25	181.61	175.98
5	High jump on the spot with board (cm)	297.79	291.17	284.54	277.92	271.29	264.67	258.04	251.42	244.79	238.17

When using this scoreboard, the score of each criterion is determined by upper or lower asymptote, that is, whichever corresponding value of score the test result is closer to, then that score is taken. Thus, the evaluation by a scale on each test allows the calculation of points from 1 to 10 for athletes in any test and resolves the conflict in measurement unit between the tests, thereby helps assess the strength of male athletes

of student football clubs at colleges of Thai Nguyen University in practice.

2.3. Construction of integrated strength assessment scoreboard for male athletes of student football clubs at colleges of Thai Nguyen University

The research results in the above sections show that there are 5 tests to check and assess the strength of male athletes of student football

clubs at colleges of Thai Nguyen University. The maximum score of each test is 10 points, so the maximum total score of each athlete in 5 test is 50 points, generally assessed by 5 levels: Good, fair, average, poor and bad, so each rating scale is 10 points apart.

However, the problem here is that there need to be an overall assessment of the strength of male student-athletes in general and not in each separate criterion. To solve this problem, we take the data in the strength classification table (Table 1) and compare it with the data in the strength rating scoreboard (Table 2) to determine the score for each criterion, then summarize. On that basis, we have a standardized strength assessment of male athletes of student football clubs at colleges of Thai Nguyen University. The results are presented in Table 3.

Table 3. Standards for assessing the strength of male athletes of student football clubs at colleges of Thai Nguyen University

General rating	Score scale
Good	41 - 50 points
Fair	31 - 40 points
Average	21 - 30 points
Poor	11 - 20 points
Bad	0 - 10 points

In order to assess the general strength of male athletes of student football clubs at colleges of Thai Nguyen, the following steps need to be performed: Step 1: Calculate the points earned by each player; Step 2: Calculate the total score of the criteria and then compare the total results with Table 3 to determine the strength achieved.

2.4. Application of general evaluation criteria in strength assessment for male athletes of student football clubs at colleges of Thai Nguyen University

We conducted testing on 75 male athletes from student football clubs at colleges of Thai Nguyen University (Pedagogical University: 18 athletes; University of Industrial Engineering: 16 athletes; University of Medicine and Pharmacy: 13 athletes; University of Agriculture

and Forestry: 14 athletes; University of Information Technology and Communications: 14 athletes). Test results are presented in Tables 4 to 8.

The tables from 4 to 8 show that:

- Ratio of athletes who are excellent in terms of strength in student football clubs at colleges of Thai Nguyen University is rather low, there are 3 clubs which have athletes rated good (Pedagogical: 02 athletes; Industrial Engineering: 01 athletes; Information Technology and Communications: 01 athletes), 4/75 athletes, accounting for 5.3%). Most of the

Table 4. General classification of strength for male athletes from student football clubs of Agriculture and Forestry University (n = 14)

General rating	Rating result	
	m_i	%
Good	0	0
Fair	2	14.40
Average	8	57.10
Poor	4	28.50
Bad	0	0

Table 5. General classification of strength for male athletes from student football clubs of the University of Medicine and Pharmacy (n = 13)

General rating	Rating result	
	m_i	%
Good	0	0
Fair	2	15.40
Average	9	69.20
Poor	2	15.40
Bad	0	0

Table 6. General classification of strength for male athletes from student football clubs of the University of Industrial Engineering (n = 16)

General rating	Rating result	
	m_i	%
Good	1	6.25
Fair	4	25.00
Average	10	62.50
Poor	1	6.25
Bad	0	0

Table 7. General classification of strength for male athletes from student football clubs of the University of Information Technology and Communications (n = 14)

General rating	Rating result	
	m _i	%
Good	1	7.10
Fair	2	14.30
Average	10	71.50
Poor	1	7.10
Bad	0	0

Table 8. General classification of strength for male athletes from student football clubs of Pedagogical University (n = 18)

General rating	Rating result	
	m _i	%
Good	2	11.10
Fair	7	38.90
Average	6	33.30
Poor	3	16.70
Bad	0	0

rest lie in the fair and average categories, 17/75 fair athletes, accounting for 22.7%; 43/75 average athletes, accounting for 57.3%); There are 11/75 athletes with poor rating, accounting for 14.7%. Thus, it can be said that the strength of male athletes at Thai Nguyen University's students' football clubs is not too good, they fall mainly on average ratings, while fair and good ratings are very few.

During the process of the research, these strength assessment tests and criteria have proven to be suitable for athletes from student football clubs at colleges of Thai Nguyen University. Overall strength assessment criteria have a strong correlation with the classification results according to the rating standards of Bac Ninh University of Sports and Physical Education.

CONCLUSION

The research results identified 05 strength tests for athletes from student football clubs at colleges of Thai Nguyen University, ensuring notification and reliability: Long ball (m); Throw-in without momentum (m); Header on

the spot (m); Long jump from the spot (cm); High jump on the spot with board (cm), and has constructed Standard table for strength classification for each test; 01 scoreboard on the scale of 10 for each test; 01 general strength assessment scoreboard for male athletes of student football clubs at colleges of Thai Nguyen University. The standard classification of strength we built is perfectly suited. This is shown through the correlation between the result of general strength rating and rating results according to rating standards of Bac Ninh University of Sports and Physical Training and expressed through verification results in strength assessment at student football clubs of Thai Nguyen University.

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