

DEVELOPING THE ENDURANCE FOR THE MALE SOPHOMORES AT TOURISM DEPARTMENT (THANH HOA UNIVERSITY OF CULTURE, SPORTS AND TOURISM) IN FOOTBALL

Duong Dinh Tien

Thanh Hoa University of Culture, Sports and Tourism

Email: duongdinhtien@dvttd.edu.vn

Received: 10/01/2022

Reviewed: 28/3/2022

Revised: 19/4/2022

Accepted: 23/5/2022

Released: 30/5/2022

DOI: <https://doi.org/10.55988/2588-1264/82>

The paper selected 5 tests and 12 applied exercises to evaluate the endurance for the male sophomores at Tourism Department (Thanh Hoa University of Culture, Sports and Tourism) in football.

Key words: Developing the endurance; football; students at Thanh Hoa University of Culture, Sports and Tourism.

1. Introduction

Physical education in schools is an important and indispensable educational activity in the cause of education and training, contributing to the realization of the goal: "*Improve people's intelligence, train human resources, foster talents*". [1] for the country, so that each citizen, especially the young generation has the condition "develop in intellect, strengthen in body, enrich in spirit and brighten in morality" [2]. To meet the increasing needs of the industrialization and modernization of the country, it is necessary to improve the quality of human resources, in which the health factor is the most important. Recently, the Central Committee of the Communist Party of Vietnam issued Resolution No. 08-NQ/TW dated December 1, 2011 on strengthening the leadership of the Party, creating a strong development sport until 2020 [3].

Playing football contributes to the development of the exercising system, training the necessary physical qualities for life such as dexterity, endurance, quick response, strengthening the respiratory system, circulatory system, musculoskeletal system and reducing nervous system fatigue. In addition to the effect of improving health, football also has a great educational and propaganda effect. Football competition is not only attractive to participants but also to the audience. It helps each person have ambitions, dreams to become strong, skillful and courageous and know how to control his/her activities

In the system of physical education facilities, like many other sports, football is considered a sport of great value for physical development and human health. Playing football in a scientific way will make the body develop comprehensively and in balance. In the task of physical education for teenagers, football is always effective because it is enjoyed, practiced actively by young people voluntarily and regularly.

Developing professional endurance for students is an important task of training in schools. Understanding that importance, many authors have conducted research on athletes and students in different sports including football. Football endurance is the basis for the lecturers to conduct control and adjustment of the teaching process, to select the school's football team participating in the annual student football tournament, and also the basis for students to self-assess.

However, in fact, the development of professional endurance for students of the Tourism Faculty of Thanh Hoa University of Culture, Sports and Tourism has not been paid enough attention. The application of the system of exercises is not diverse. From the above practice, we conducted an applied research on football endurance development exercises for second year male students of Tourism Faculty at Thanh Hoa University of Culture, Sports and Tourism [4]], [5], [6].

2. Overview of the research

In football in particular and sports in general, the relationship between general fitness training and specialized physical training is very close. They promote each other's growth. The fact proves this is the direct translation circle of exercise. Perfect general fitness training will be a good basis for specialized physical training, conversely, good specialized physical training at a certain level will promote general fitness level. Thanks to practice, physical qualities are developed comprehensively, and students master exercising skills with a large amount of movement. The stimulation of the excitability of the nerve centers is to promote the mastery and perfection of exercising skills and techniques and have the effect of perfecting the autonomic nervous system respectively.

In Vietnam, many authors have been interested in researching this issue such as: Nguyen Minh Ngoc (2018); Nguyen The Truyen; Nguyen Kim Minh, Tran Quoc Tuan (2019)... In which, the research results of the authors such as Tran Quoc Tuan, Nguyen Minh Ngoc "*Testing the training level for football players*"; Nguyen The Truyen, Nguyen Kim Minh, Tran Quoc Tuan "*Initially assessing the training level and forming a model of young footballers aged 15 - 17 in the national program of sports*"... and a number of other research works by the authors published in the Journal of Sports Science Information have initially formed standards for assessing training levels in general and physical fitness levels in particular for young footballers. In this study, we only mention 2 researches written by Tran Quoc Tuan, Nguyen Minh Ngoc and Nguyen The Truyen, Nguyen Kim Minh, Tran Quoc Tuan.

3. Research approach and methods

In the study, the following methods were used, such as reading and analyzing documents, pedagogical observations, interviews, pedagogical tests, pedagogical experiments and mathematical statistics.

4. Results

4.1. Selection of test to assess professional endurance for second year male students of Tourism Faculty, Thanh Hoa University of Culture, Sports and Tourism

The test selection is carried out through the following steps:

- + Selection through document reference, pedagogical observations, direct interviews with experts and football coaches.
- + Selection through interview by questionnaire.
- + Determine the reliability and informability of the tests.

Table 1: Verification results of the tests through interviews with experts and coaches (n = 20)

No	Test	Interview results							
		Very suitable (3 points)		Suitable (2 points)		Not suitable (1 point)		Total	
		n	Point	n	Point	n	Point	Point	%
1	Running step by step 25m (s)	15	45	5	10	0	00	55	95.0
2	Run speed 5 times x 30m (s)	19	57	1	2	0	00	59	91.7
3	Leading the ball through the stake 30m to kick the goal (s)	18	54	2	4	0	00	58	95.0
4	Run 10 goals in a row (s)	15	45	5	10	0	00	55	91.7
5	Run 12 minutes (m)	19	57	1	2	0	00	59	98.3

Table 1 shows that all tested tests have a common opinion with the theoretical studies collected through researched documents. The result of verification through interview is about the lowest 91.7%, the highest 98.3% of the selected opinions related to agreement. That means the 5 selected tests for interview are all highly appreciated by experts and coaches. These are the appropriate tests to evaluate football professional endurance for male students from the Faculty of Tourism at Thanh Hoa University of Culture, Sports and Tourism.

4.2. Selection of exercises to develop football endurance for 2nd year male students of Tourism Faculty, Thanh Hoa University of Culture, Sports and Tourism

Based on the principles and methods of modern sports training, the current trend of specialized endurance training at home and abroad, using a variety of exercises with and without equipment, focusing on adjusting the amount of exercise, especially the intensity and duration of exercise.

Based on the actual training level, yard and equipment of the school to build exercises to ensure feasibility and fitness.

On the basis of the training objectives for second-year students of the Faculty of Tourism at Thanh Hoa University of Culture, Sports and Tourism, the process of selecting exercises based on the following criteria: specific assessment, the simple form is suitable for the characteristics of the audience, the practical conditions of football teaching and coaching at the Faculty of Tourism, Thanh Hoa University of Culture, Sports and Tourism, we have selected 12 Exercises to develop football endurance for second year male students of Faculty of Tourism, University of Culture, Sports and Tourism, Thanh Hoa.

Table 2: Results of verifying exercises through interviews with experts and coaches (n = 20)

No	Test	Results of interview							
		Very suitable (3 points)		suitable (2 points)		Not suitable (1 point)		Total	
		n	Điểm	n	Điểm	n	Điểm	Điểm	%
1	Running at breakneck speed to the top of the line	15	45	5	10	0	00	55	98.3
2	Running 1500m	19	57	1	2	0	00	59	91.7
3	High-speed running 20m, 40m, 60m	18	54	2	4	0	00	58	95.0
4	Running 100m fast, 100m slow	15	45	5	10	0	00	55	91.7
5	Running 3000m	19	57	1	2	0	00	59	98.3
6	Leading the ball at 5 times x 30m	17	51	3	6	0	00	57	95.0
7	Leading the ball through the stakes and shoot 5 goals in a row	18	54	2	4	0	00	58	96.7
8	Moving to head both sides continuously for 2 minutes	18	54	2	4	0	00	58	96.7
9	Scramble for the goal kick 10 times	15	45	5	10	0	00	55	95.0
10	Leading the ball with speed along the border and into the middle of the road	17	51	3	6	0	00	57	91.7
11	Leading the ball with the motion of the goalie	19	57	1	2	0	00	59	91.7
12	Match on small goal	19	57	1	2	0	00	59	96.7

Table 2 shows that all the exercises have a common opinion with the theoretical studies that have been collected through the researched documents. The results of the verification through the interview are about the lowest 91.7%, the highest 98.3% of the respondents agree, which means that the 12 selected exercises for the interview are highly appreciated by the experts and coaches and considered as the appropriate exercises to develop football endurance for second-year male students of Faculty of Tourism, Thanh Hoa University of Culture, Sports and Tourism.

4.3. Applying and evaluating the effectiveness of football endurance development exercises for second-year male students of the Faculty of Tourism, Thanh Hoa University of Culture, Sports and Tourism

Due to the regulations of the subject program, the 3rd and 4th modules are the courses to develop professional endurance in football for students. Therefore, the study focuses on second-year students of the Faculty of Tourism, Thanh Hoa University of Culture, Sports and Tourism. Module 3 (equivalent to the 3rd semester of the 2nd year) is applied exercises to improve professional endurance. Module 4 (equivalent to the 4th semester of the 2nd year) is applied exercises to improve professional endurance in module 3.

Second year students of Tourism Faculty has 2 classes: K8A Hotel Management and K8B Travel and Tourism Service Management, with a total of 60 students. In which, we chose 30 students of K8A Hotel Management class as the control object, 30 students of K8B Travel and Tourism Service Management class as experimental subjects. The results of the test to evaluate the effectiveness of the selected exercises are presented in detail in Tables 3, 4 and 5 below.

Table 3: Comparison of the results of self-comparison of professional endurance tests at the time of pre and post-experiment and post of module 3 from the control group and experimental group (n=30)

Module	Test	The control group						The experimental group					
		Pre-experiment		Post-experiment		t	W %	Pre-experiment		Post-experiment		t	W%
		\bar{X}	σ	\bar{X}	σ			\bar{X}	σ	\bar{X}	σ		
Module 3	Running step by step 25m	37.3	1.36	36.6	1.33	1.36	1.89	36.7	0.85	34.8	1.53	4.03	5.31
	Running with speed 5 times x 30m	23.1	0.49	23.2	0.49	0.32	0.43	23.5	0.44	23.1	0.38	2.46	1.72
	Leading the ball 30m through the goalposts to kick	9.65	0.34	9.47	0.49	0.64	1.88	9.58	0.27	9.11	0.25	2.08	5.03
	Running and kicking the goal 10 times	47.6	1.14	46.8	1.33	1.64	1.69	48.2	1.87	45.6	1.43	4.54	5.54

in a row														
Running minutes	12	2782	13.6	2813	14.5	1.81	1.07	2795	11.7	2866	17.6	4.20	2.48	

Table 4: Comparison of self-comparison test results of professional endurance tests at the time of pre-experiment and post-experiment of module 4 from the control group and experimental group (n=30)

Module	Test	The control group						The experimental group					
		Pre-experiment		Post-experiment		t	W %	Pre-experiment		Post-experiment		t	W%
		\bar{X}	σ	\bar{X}	σ			\bar{X}	σ	\bar{X}	σ		
Module 4	Running step by step 25m	36.1	1.342	35.6	1.33	1.45	1.39	35.1	32.5	32.5	1.9	6.20	7.69
	Running with speed 5 times x 30m	23.1	0.45	22.9	0.46	1.70	0.87	22.5	21.7	19.7	0.5	6.84	13.27
	Dẫn bóng 30m luân cộc sút cầu môn	9.6	0.3	9.4	0.4	2.19	2.11	9.2	8.7	8.7	0.7	3.59	5.59
	Run and kick the goal 10 times in a row	47.9	1.1	46.1	1.3	5.79	3.83	46.7	45.3	45.3	1.2	4.51	3.04
	Running 12 minutes	2813	13.3	2863	14.2	1.69	2.12	2758	293	2869	18.7	3.96	3.92

Table 5: Growth rate of the group's professional endurance tests of experimental and control groups through the modules of the research process (n=30)

No	TEST	The results of the test of the experimental modules of the experimental group ($\bar{X} \pm \sigma$)						Growth rate W%		
		Pre-experiment		Module 3		Module 4		W ₁₋₂	W ₂₋₃	W ₁₋₃
		\bar{X}	σ	\bar{X}	σ	\bar{X}	σ			
1	Running step by step 25m (s)	36.4	0.87	34.9	1.52	32.5	1.9	4.21	7.12	11.32
2	Running with speed 5 times x 30m (s)	23.8	0.41	23.2	0.37	19.7	0.5	2.55	16.32	18.85
3	Leading the ball 30m through the goalposts to kick (s)	9.59	0.25	9.2	0.51	8.7	0.7	4.15	5.59	9.73
4	Running to kick 10 goals in	48.1	1.83	45.8	1.46	45.3	1.2	4.90	1.10	6.00

No	TEST	The results of the test of the experimental modules of the control group ($\bar{X} \pm \sigma$)						Growth rate W%		
		Pre-experiment		Module 3		Module 4		W ₁₋₂	W ₂₋₃	W ₁₋₃
		\bar{X}	σ	\bar{X}	σ	\bar{X}	σ			
		a row (s)								
5	Running 12 minutes (m)	2795	11.5	2866	17.5	2869	18.7	2.51	0.10	2.61
1	Running step by step 25m (s)	37.1	1.39	36.5	1.32	35.6	1.33	1.63	2.50	4.13
2	Running with speed 5 times x 30m (s)	23.2	0.48	23.1	0.48	22.9	0.46	0.43	0.87	1.30
3	Leading the ball 30m through the goalposts to kick (s)	9.62	0.31	9.48	0.47	9.4	0.4	1.47	0.85	2.31
4	Running to kick 10 goals in a row (s)	47.3	1.12	46.6	1.37	46.1	1.3	1.49	1.08	2.57
5	Running 12 minutes (m)	2782	13.2	2813	14.2	2863	14.2	1.11	1.76	2.87

The results from Tables 3 to 5 reveals that.

In the experimental group, all were higher than the control group, specifically in Table 1, the control group had only 1 test out of 5 tests, which was statistically significant $t_{\text{calculating}} > t_{\text{table}}$ at the threshold of statistical probability $p < 0.05$. In the experimental group, there was a significant difference in all the contents of the professional endurance test, $t_{\text{calculating}} > t_{\text{table}}$ at the threshold of statistical probability $p < 0.05$.

Table 2 implies that the control group has only 2 tests out of 5 tests, statistically significant $t_{\text{calculating}} > t_{\text{table}}$ at the threshold of statistical probability $p < 0.05$. In the experimental group, there was a significant difference in all the contents of the professional endurance test, significant $t_{\text{calculating}} > t_{\text{table}}$ at the threshold of statistical probability $p < 0.05$. That proves that the selection and application of training facilities as well as a system of exercises are highly effective in developing professional endurance of football for 2nd year male students of the Faculty of Tourism at Thanh Hoa University of Culture, Sports and Tourism.

Table 5 compares the growth rate between the experimental group and the control group, both of which have steadily increased growth during the experimental period. When comparing the experimental and control groups, the experimental group had a higher growth rate than the control group in all selected tests.

After a period of experimentation in modules 3 and 4, the system of specialized exercises selected has brought a remarkable effect in the development of professional endurance related to football for 2nd year male students of Tourism Faculty at Thanh Hoa University of Culture, Sports and Tourism. It can confirm that the system of exercises selected and applied has brought about the effectiveness of professional endurance in football

of the second year male students of Tourism Faculty at Thanh Hoa University of Culture, Sports and Tourism.

5. Conclusion

In order to perform the training task well, the physical education in the school has been assessed by the Party Committee and the Management Board as an important aspect in the overall educational process of the school. In the past time, the Faculty of Physical Education and Sports has made great efforts in researching, improving, innovating to overcome difficulties, and in collaboration with functional departments in the school to implement the PE curriculum in general and the subject curriculum of Football in particular. In fact, there are still many existing problems that do not meet the new requirements. The perception of some officials and students about the physical education is not correct. They disregard the position and role of the subject in the general education system of the school. We only research deeply to identify and select exercises to develop physical fitness for students of Tourism Faculty at Thanh Hoa University of Culture, Sports and Tourism.

Developing students' physical health is necessary. The study has contributed remarkably to the process of teaching PE for students.

6. Conclusion and recommendations

6.1. Conclusion

The research chose 5 tests to assess football endurance and 12 exercises to improve professional endurance in football for students of Faculty of Tourism, Thanh Hoa University of Culture and Sports. Sports and Tourism.

After the pedagogical experiment in modules 3 and 4, the system of professional exercises selected has brought a remarkable effect in the development of professional endurance in football for the second year male students of Tourism Faculty at Thanh Hoa University of Culture, Sports and Tourism.

6.2. Recommendations

The research results can be used as a reference for lecturers to put into practice teaching in universities.

In order for the subject of physical education to be effective, it is necessary to apply the exercises chosen in the research to football for students of Thanh Hoa University of Culture, Sports and Tourism.

References

- [1]. The Central Committee of the Communist Party of Vietnam (2009), *Documents of the 10th National Congress of Deputies*, National Political Publishing House, pp.34, 35, 96, 98, 207.
- [2]. The Central Committee of the Communist Party of Vietnam XI (2013), Resolution No. 29-NQ/TW on “*Fundamentally and comprehensively renovating education and training to meet the requirements of industrialization and modernization in the context of a market-oriented economy, socialism and international integration*”.

[3]. Politburo (2011), Resolution No. 08-NQ/TW dated December 1, 2011 on *"Strengthening the leadership of the Party, creating a strong development in physical training and sports until 2020"*.

[4]. Ma Tuyet Dien (1999), *Football - Tactical techniques and training methods*, Translator: Dang Binh, Sports Publishing House, Hanoi.

[5]. Duong Nghiep Chi (2004), *study on the applicability of science and technology to improve the training and competition level of young football (kindergarten to 18 years old)*, State-level independent scientific project, Institute of Sports Science , Hanoi.

[6]. Nguyen Dang Chieu (2004), *Research on physiological movement of footballers aged 15 - 16 and 17 - 18 in the period of basic preparation*, PhD thesis in Education, Institute of Sports Science , Hanoi.