

SELECTION AND APPLICATION OF EXERCISES TO IMPROVE THE EFFICIENCY OF SHOOTING WITH THE INSTEP AREA FOR MALE STUDENTS OF THE HUNG YEN UNIVERSITY OF TECHNOLOGY AND EDUCATION

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Abstract:

Using conventional scientific research methods, we have selected 18 exercises to improve the efficiency of shooting the ball frontally with the instep area and 3 tests to assess the ability to shoot frontally with the instep area of students from Hung Yen University of Technology and Education. We have initially applied the selected exercises in practice and evaluated the effectiveness. As a result, the exercises were highly effective for the research subject in improving their efficiency in shooting the ball frontally with the instep area.

Keywords: Exercises, shoot frontally with the instep area, male students, Hung Yen University of Technology and Education...

INTRODUCTION

In football, the technique of shooting the ball frontally with the instep area is one of the most basic techniques. It is quite used widely and commonly in competing, these shots, when executed with correct technique and precision will have a very high scoring efficiency. The technique of shooting frontally with the instep area can help score a goal from any distance, in any situation. So to achieve this, the players must be thoroughly prepared with their physical strength, as well as competitive mentality and especially technical level. Stemming from these issues, in order to contribute to improving the technical efficiency of shooting frontally with the instep area, we conducted the research: Selection of exercises to improve the efficiency of shooting with the instep area for male students of the Hung Yen University of Technology and Education

RESEARCH METHODS

During the research process, the following research methods were used: Methods of analysis and synthesis of documents; Methods of interview and discussion; Pedagogical observation method; Method of pedagogical

examination; Experimental pedagogical method and statistical mathematical method.

RESULTS AND DISCUSSION

1. Selecting exercises to develop professional stamina for female 800m runners aged 16-18, Sports and Physical Training School of Nam Dinh Province

1.1. Selecting exercises

The selection of exercises to improve the efficiency of shooting with the instep area for male students of the Hung Yen University of Technology and Education is done through the following steps:

- Selection through reference materials, pedagogical observations;
- Selection via direct interviews with experts, teachers, coaches;
- Selection by large-scale interviews with questionnaires.

The results are 18 selected exercises to improve the efficiency of shooting with the instep area for the research subjects, including:

- Exercise 1: Dribble through poles, then shoot
- Exercise 2: Suddenly turn around and shoot.
- Exercise 3: Overcome obstacles then shoot.
- Exercise 4: Perform a one-two pass then shoot.
- Exercise 5: Push the ball forward then shoot.

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- Exercise 6: Shoot the ball from the spot.
- Exercise 7: Perform a fake movement to outmaneuver the opponent then shoot.
- Exercise 8: Shoot a long ball with momentum.
- Exercise 9: 10 consecutive shots into the goal.
- Exercise 10: Shooting a moving ball with a run-up.
- Exercise 11: Performing a volley.
- Exercise 12: Sprint and shoot with 1-touch.
- Exercise 13 Movement simulation exercises.
- Exercise 14: Fast dribble then shoot.
- Exercise 15: Free-kick with fences.
- Exercise 16: Exercises to support stamina improvement.
- Exercise 17: Exercises to develop thigh strength.
- Exercise 18: Perfecting the movement techniques through competition

1.2. Selecting tests

We proceed to select tests to evaluate the ability to shoot frontally with the instep area through these following steps: Selecting through reference materials, pedagogical observations; Selecting through direct interviews with experts, teachers, and coaches; Selecting through extensive interviews with questionnaires; Determining the notification of the test; Determining the reliability of the test.

At the end, 3 tests were selected to evaluate the research subjects' ability to shoot frontally with the instep area:

Test 1: Shoot balls in motion with momentum (balls);

Test 2: Run and shoot 10 consecutive balls (balls);

Test 3: Dribble through poles then shoot 30 balls (balls).

2. Application of exercises to improve the efficiency of shooting with the instep area for male students of the Hung Yen University of Technology and Education

2.1. Organizing the experiment

- Experimental method: Parallel comparisons experiment
- Experimental time: The experiment was conducted in 03 months. The improving of the efficiency of shooting with the instep area for

students was conducted twice a week, with 40-45 minutes at the end of each training session (the students have 3 sessions/week, 120 minutes each).

- Experimental subject: 20 students from Hung Yen University of Technology and Education, divided into 2 groups of 10 with similar level of technique in shooting with the instep area:

Group 1 (experimental group): including 10 students, who practiced the 18 exercises that the research has chosen to improve the efficiency of shooting with the instep area for male students of the Hung Yen University of Technology and Education.

Group 2 (experimental group): including 10 students who practiced exercises that were normally used during training sessions in the Hung Yen University of Technology and Education.

- Experimental location: Hung Yen University of Technology and Education

- Test and evaluation: Use 03 selected tests of the research to check the technical efficiency of shooting with the instep area of the control and experimental groups at the time before and after the experiment.

- The experimental process is detailed in Table 1.

3. Assess the effectiveness of the exercises, used to improve the efficiency of shooting with the instep area for male students of the Hung Yen University of Technology and Education football team

Before the experiment, we used 3 selected tests to check and compare the differences in the control and experimental groups' ability to shoot with the instep area. The results showed in Table 2.

Table 2 shows that: Before the experiment, all 3 tests obtained the result of $t_{\text{calculation}} < t_{\text{table}}$ at threshold $P = 0.05$. This means that the difference between experimental and control groups is not statistically significant, In other words, before the experiment, the ability to shoot with the instep area of the two groups are the same.

After 3 months of experimenting according to the constructed plan, we conduct a retest of the 2 control and experimental groups' ability to

Table 1. Experimental process

Exercises	July 2019												August 2019												September 2019											
	Week 1			Week 2			Week 3			Week 4			Week 1			Week 2			Week 3			Week 4			Week 1			Week 2			Week 3			Week 4		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Ex 1	x			x	x			x		x	x	x		x		x		x		x		x		x		x		x		x		x				
Ex 2		x		x			x		x			x			x		x			x			x			x			x		x					
Ex 3			x		x			x	x			x			x	x		x			x			x			x			x						
Ex 4		x			x	x		x		x	x		x		x		x		x		x		x													
Ex 5	x			x	x			x		x			x		x		x		x		x			x			x			x		x				
Ex 6		x		x			x		x			x			x	x		x			x			x			x			x		x				
Ex 7			x					x	x		x			x			x		x		x		x		x		x	x		x						
Ex 8		x			x	x		x				x			x		x		x		x		x									x				
Ex 9	x			x	x			x				x	x		x		x		x		x			x			x	x		x						
Ex 10				x			x	x		x			x	x		x			x		x		x		x		x	x	x							
Ex 11			x				x		x		x	x		x		x		x		x		x		x		x	x									
Ex 12		x			x			x			x	x		x		x		x		x		x				x										
Ex 13	x			x		x		x	x			x	x		x			x		x		x		x		x	x					x				
Ex 14		x		x		x	x		x				x	x		x		x		x		x		x		x	x					x				
Ex 15			x		x			x		x			x		x		x	x		x		x			x	x			x	x						
Ex 16					x		x	x		x	x			x		x			x		x		x		x		x					x				
Ex 17	x			x		x		x		x			x						x		x		x			x						x				
Ex 18		x		x				x		x			x	x						x		x										x				

Table 2. Results comparison of the two control and experimental groups' ability to shoot with the instep area before the experiment (n=20)

№	Test/ Subject	Experimental group	Control group	t _{calculation}	t _{table}	P
		$\bar{x} \pm \delta$	$\bar{x} \pm \delta$			
1	Shoot balls in motion with momentum (balls)	5.8 ± 0.79	5.4 ± 0.88	1.096	2.101	0.05
2	Run and shoot 10 consecutive balls (balls)	7.2 ± 1.14	7.1 ± 0.99	0.209	2.101	0.05
3	Dribble though poles then shoot 30 balls (balls)	6.5 ± 0.85	6.2 ± 0.92	0.759	2.101	0.05

shoot the ball frontally with the instep area, in order to assess the effectiveness of the chosen exercises. The results showed in Table 3.

Table 3 shows that: After 3 months of experimenting, the results of the 2 groups were significantly different in all tests, which is shown in $t_{calculation} > t_{table}$ at threshold $P < 0.05$.

This shows that our selected exercises are much more effective than the old traditional

exercises used at the T&T Hanoi Club.

To see more clearly the growth of the two experimental and control groups, we compared the growth rates of the two groups after 3 months of experimenting. The results showed in Table 4.

Table 4 shows that: After 3 months of experiment, the ability to shoot the ball frontally with the instep area of both groups went under

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Table 3. Results comparison of the two control and experimental groups' ability to shoot with the instep area after the experiment (n=20)

№	Test/ Subject	Experimental group	Control group	$t_{\text{calculation}}$	t_{table}	P
		$\bar{x} \pm \delta$	$\bar{x} \pm \delta$			
1	Shoot balls in motion with momentum (balls)	6.2 ± 0.42	5.6 ± 0.7	2.326	2.101	<0.05
2	Run and shoot 10 consecutive balls (balls)	8.3 ± 0.92	7.5 ± 0.7	2.67	2.101	0.05
3	Dribble though poles then shoot 30 balls (balls)	7.2 ± 0.68	6.3 ± 0.82	2.662	2.101	0.05

Table 4. Comparing the growth of 2 experimental and control groups after 3 months of experiment

No.	Tests	Groups					
		Experimental			Control		
		Before the experiment	After the experiment	W%	Before the experiment	After the experiment	W%
1	Shoot balls in motion with momentum (balls)	5.70	6.20	8.40	5.40	5.60	3.60
2	Run and shoot 10 consecutive balls (balls)	7.20	8.30	14.20	7.10	7.40	4.10
3	Dribble though poles then shoot 30 balls (balls)	6.50	7.20	10.20	6.20	6.30	1.60

significant growth, but the growth rate of the experimental group is greater than that of the control. This shows that the exercises we had chosen have a better effect for male students of the Hung Yen University of Technology and Education on improving the efficiency of shooting the ball frontally with the instep area.

CONCLUSION

The research results had selected 18 exercises and after 3 months of application, the results showed that their effectiveness in improving the Hung Yen University of Technology and Education students' ability to shoot the ball frontally with the instep area is quite high.

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