

SELECT EXERCISES TO DEVELOPE SPEED STRENGTH FOR MALE ATHLETES OF VIET TRI UNIVERSITY OF INDUSTRY'S FOOTBALL TEAM

Nguyen Dinh Chung¹, Dao Duy Dong²

Abstract:

Using the common scientific research methods, the study has selected 20 exercises of speed strength development for male athletes in Viet Tri University of Industry's football team, initially applied in practice and evaluated their performance. Therefore, the selected exercises have made highly effective in developing strength of speed for male athletes of Viet Tri University of Industry's football team.

Key words: Exercises, speed strength, male athletes, football team, Viet Tri University of Industry...

INTRODUCTION

By observing performances of Viet Tri University of Industry's football team in football tournament in the province, region or the national student games, we found that the specialized physical capacity of the students is weak, especially the speed strength aptitude expressed through the running (speed, sprint) drill, tackling, shoot a goal. Because of the above issues, in order to develop the speed strength for Viet Tri University of Industry's football team, we have conducted the research: Selection of speed strength development exercises for male athletes in Viet Tri University of Industry's football team.

RESEARCH METHODS

In the research, we have used the methods of document analysis and synthesis; interview and discussion, pedagogical test; pedagogical experiment; mathematical statistics.

RESULTS AND DISCUSSION

1. Selection of speed strength development exercises for male athletes of Viet Tri University of Industry's football team

1.1. Choosing exercises

The study has selected exercises through steps:

- The study has used the materials related to the topic and conducted pedagogical observation to record the application of speed strength development exercises for male athletes in Viet Tri University of Industry's football team.

We have interviewed 32 trainers, teachers, football coaches in clubs, football teams from universities and colleges by questionnaires.

On the interview results, we have selected 20 speed strength development exercises for male athletes in Viet Tri University of Industry's football team, which belong to 3 groups including;

Group I: Exercises without ball

1. Jump forwards and backwards for 20 times x 3 performances, 2- minute break between each performance.

2. Speed-up running exercises for 10m x3 performances, 2- minute break between each performance.

3. Jump from a height of 1m for 10 times x 3 performances, 2- minute break between each performance.

4. Jumping swing with squatting 20kg weight for 20 times x 3 performances, 2- minute break

1. PhD, Bac Ninh Sport University

2. Master, Viet Tri University of Industry

between each performance.

5. Shuttle box jump in 20s x 3 performances, 2- minute break between each performance, the podium is 25 cm high, 10cm wide.

6. Standing long jump for 10 times x 3 performances, 2- minute break between each performance

7. 30m standing start run x 3 performances, 2- minute break between each performance.

8. Knee tuck jump on the sand pit for 15s x performances, 2- minute break between each performance

Group II: Exercises with ball

1. Squat and jump to make a header 15 times x performances, 2- minute break between each performance

2. Juggle, jump, jump through obstacles 5 times x performances, 2- minute break between each performance

3. Continuously kick 5 times with 5m run x 3 performances, 2- minute break between each performance

4. Combination exercises between receive the ball, dribble and shot a goal x 3 performances, 2- minute break between each performance.

5. Work in pair to shoot a goal 5 times x 3 performances, 2- minute break between each performance

6. Repeatedly jumping to make a header 10 times x 3 performances, 2- minute break between each performance

7. Fast dribble in 30m x 3 performances, 2-minute break between each performance

Group III: Games and competition exercises

1. Jumping games, play in 30 minutes/ times

2. Follow me games, play every 30 minutes/times

3. Carry on one's back and compete in small field, play 15 minutes a half x 2 half, 5-minute break between 2 half.

4. Conditional play for 30 minutes per time

5. Spider-ball, play for 30 minutes per time

1.2. Selection of test

The study has selected tests to assess the level of strength speed for male athletes in Viet Tri University of Industry's football team through such steps: Document reference,

interview and determine the informative characteristics and confident degree of the test. We have selected 4 qualified tests that are to evaluate the level of speed strength for the subjects: Throw -in (m); 30m standing start run (s); 5m running continuous kick 5 times (s); Standing long jump (cm).

2. Applying speed strength development exercises for male athletes in Viet Tri University of Industry's football team

2.1. Organizing experiments

* The study has used method of parallel comparison experiment.

* Experimental time based on training programs in 2015 and 2016.

- Phase 1: From September 1, 2015 to December 30, 2015 (4 months)

- Phase 2: From January 1, 2016 to April 30, 2016 (4 months)

* We have conducted the experiment on 32 athletes divided into two groups by random.

- The experimental team includes 16 athletes. The experimental team and the control experimental team have same training program, but the experimental team do selected developing speed strength development exercises.

- The control experimental group consisted of 16 athletes. The control experimental group followed the old program of the team.

Building up the experimental process

With 20 selected exercises, the study builds the experimental procedure according to the school's training program in two phases.

Experimental content

After grouping, we have carried out the experiment at the same time on both experimental and control groups with the number of lesson plans and progress in the training program for male athletes in Viet Tri University of Industry's football team. There are 2 training sessions per week with 20 – 25 minutes for speed strength development exercises in each session. Athletes do speed strength development exercises immediately after general and professional startups, as the body is fully fit.

The control group (16 students) practices the

old lesson plan with the strength speed exercises developed by the coach. The training conditions are relatively uniform.

The experimental group (16 students) practices selected 20 exercises. In each training session, athletes take from 2 to 4 exercises for speed strength development.

2.2 Results of application of speed strength development exercises for male athletes in Viet Tri University of Industry's football team

Before conducting the experiment, we have made a comparison on the capacity of speed strength between the experimental and control groups. The results show that there no significant difference in the probability threshold $P > 0.05$ or in other words, the performance of the two groups is similar.

After 8 months of experiments, the subject has continued a test on speed strength of the two



The power of speed in professional football activities is reflected in both attack, defense and counter attack

groups with 4 tests done in stage 1. The results show that the speed strength level by the experimental group is higher than the control group, the difference is statistically significant ($P < 0.05$).

The study has calculated the growth rate of the indicators between the two groups. Results are in Table 1.

Table 1. Comparison of power growth rate between two groups after 8 months of experiment (nA = 16, nB = 16)

No.	Group Test	Control group W (%)	Experimental group W (%)	Difference
1	30m standing start run (s)	4.86	7.32	2.46
2	Throwing-in (m)	5.5	9.8	4.3
3	Standing long jump (cm)	5.6	9.2	3.6
4	5m running continuous kick 5 times (s)	5.12	9.89	4.77

Table 1 shows that after 8 months of experiment, both groups have good growth rate. However, the experimental group had a higher growth rate than the control group with the difference from 2.46 to 4.77%.

CONCLUSION

1. We have selected 4 tests and 20 exercises for speed strength development for male athletes in Viet Tri University of Industry's football team.

2. Initial application of selected exercises and the experimental procedure on male athletes in Viet Tri University of Industry's football team has shown practical effectiveness. Thus, the selected exercises and the experiment have been highly effective in developing the speed strength

for male athletes in Viet Tri University of Industry's football team

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Main responsible: Nguyen Dinh Chung; Email: nguyendinhchungtdtbn@gmail.com)