

APPLYING SPECIALIZED PHYSICAL CAPACITY DEVELOPMENT EXERCISES IN SPORTING RIFLE CONTENT FOR SPORTS SHOOTING ATHLETES IN THE NATIONAL YOUTH TEAM AT BAC NINH SPORT UNIVERSITY

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Abstract:

Through the basic research methods, the topic has selected 12 specialized physical capacity development exercises in sporting rifle content for sports shooting athletes in the National Youth team at Bac Ninh Sport University. The article focuses on analyzing the effectiveness of the exercises during the 4-month experiment.

Key words: Exercise, specialized physical capacity, athletes, shooting, national youth team, Viet Nam.

INTRODUCTION

Despite some achievements obtained in recent years, there are still some limitations that affect the performances of athletes, especially the limitation of specialized physical capacity. One of the main reasons is that the specialized physical capacity development exercises system has not been scientifically researched, is lacking in quantity and does not guarantee proper amount of exercises. Therefore, the research on choosing the specialized physical capacity development exercises for shooting sports athletes, sporting rifle content in the National Youth team.

RESEARCH METHODS

The research used the following research methods: Analyzing and synthesizing materials; Interviews and discussion; Pedagogical examination; Pedagogical experiments; mathematical statistics.

RESULTS AND DISCUSSION

1. Select the exercises and evaluation tests of specialized physical capacity in sporting rifle content for shooting sports athletes in the National Youth team at Bac Ninh Sport University

Using the methods of analyzing and synthesizing materials and interviews, we have selected 12 exercises to develop specialized

physical capacity in sporting rifle content for shooting sports athletes in the National Youth team at Bac Ninh Sport University:

- Shoot with no bullet, predict targets and hold gun on hands (40 times x 1 minute).
 - Shoot small target.
 - Shoot with required speed.
 - Hold gun on hands with extra weight of 0.5 kg (1 min x 15 times) x 3 sets.
 - Stand on a 15cm high platform holding gun (1 minute x 20 times) x 3 sets.
 - Hold the gun in standing position with different forms and minimize the base area (3 min x 5 times) x 2 sets.
 - Hold the gun and practice pulling the trigger two times continuously without bullets (40 times x 2 sets).
 - Hold gun on hands for 1 minute 30s - shoot after (20 shots x 2 sets).
 - Exercise of after each shot - hold gun on hands (1 minute 30s x 20 shots) x 2 sets.
 - Exercises of increase the time in one position (40 minutes x 2 sets).
 - Predict shooting with and without bullets alternately 20 shots x 2 sets.
 - Hold the gun on one hand with gun sling in lying and kneeling positions 10 minutes x 5 times.
- At the same time through the interview

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method, determined the informing character and reliability, 7 tests have been selected to assess the level of specialized physical capacity in sporting rifle content for sports shooting athletes in the National Youth team at Bac Ninh Sport University, including:

Hold gun on hands for 3 minutes with extra weight of 1kg, evaluate stability (s)

Point counted shooting in standing position 30 shots with required time (point / minute);

Point counted shooting in lying position 30 shots with required time (point / minute);

Point counted shooting in kneeling position 30 shots with required time (point / minute);

One-spot-focus shooting in standing position 30 shots with required time (cm / min);

One-spot-focus shooting in lying position 30 shots with required time (cm / min);

One-spot-focus shooting in kneeling position 30 shots with required time (cm / min).

2. Apply the exercises to develop specialized physical capacity in sporting rifle content for sports shooting athletes in the National Youth team at Bac Ninh Sport University

2.1. Organize experiments

- Experimental method: Experimental self-comparison method.

- Experimental time: This is conducted in 4 months, 3 times a week on Monday, Wednesday and Saturday.

- Experimental subjects include 5 male and 7 female sports shooting athletes in the National Youth team, in sporting rifle content and are trained with the exercises chosen by the research topic.

- Experimental location: Bac Ninh Sport University.

2.2 Results of applying the exercises to develop specialized physical capacity in sporting rifle content for sports shooting athletes in the National Youth team at Bac Ninh Sport University

Before experiment results.

Initial results obtained in 7 tests assessing the specialized physical capacity level in sporting rifle content of the sports shooting athletes in the National Youth team at Bac Ninh Sport University

have average values, only reached the average level, the level of focusing on one sports shooting in standing position is still low. It shows that the specialized physical capacity of the athletes is limited, does not meet the practical requirements of training and competition.

After experiment results

After 4 months of pedagogical experiment on the subjects studied, the topic examined the level of specialized physical capacity in sporting rifle content of sports shooting athletes in the National Youth team at Bac Ninh Sport University. The results are presented in Table 1.

Table 1 shows that: With the results obtained when assessing the level of specialized physical capacity in sporting rifle content of male sports shooting athletes in the National Youth team at Bac Ninh Sport University through 7 tests have reflected the overall development of specialized physical capacity of the research subjects. The results obtained through the statistical method are $t_{\text{calculate}} = 3.10$ to $5.11 > t_{\text{control}}$ at the threshold of $p < 0.05$. This confirms that the exercises chosen are effective in enhancing the specialized physical capacity for athletes. The results obtained when testing on female athletes also tended to be similar to the results obtained in male athletes. The results obtained in the 7 tests were $t_{\text{calculate}} = 4.17$ to $5.32 > t_{\text{control}}$ at the threshold of $p < 0.05$ level. Thus, the effectiveness of the exercises was proved again in the development of specialized physical capacity in sporting rifle content for sports shooting athletes in the National Youth team at Bac Ninh Sport University. In order to further confirm the effectiveness of the selected exercises, the topic also assessed the growth rate of the results obtained through the pre-experimental and post-experimental tests of the research subjects. The results are shown in Table 2 with male athletes' growth rate reached 0.69% to 12.39%, and female athletes reached 1.39% to 16.0%. This is an important evidence confirming the effectiveness of the exercises selected and applied in the training process for athletes contributing to improving the specialized physical capacity and athletic performances of athletes.

Table 1. Examination results after the experiment of the level of specialized physical capacity in sporting rifle content of shooting sports athletes in the National Youth team at Bac Ninh Sport University (n = 12)

No.	Tests	Before Experiment		After Experiment		Comparision		
		$\bar{x}$	$\pm \delta$	$\bar{x}$	$\pm \delta$	t	W	P
	Male Athletes (n=5)							
1	Hold gun on hands for 3 minutes with extra weight of 1kg, evaluate stability (s)	16.35	1.2	17.92	0.9	5.23	9.16	<0.05
2	Point counted shooting in lying position 30 shots with required time (point / minute)	289	2.16	291	2.07	3.34	0.69	<0.05
3	Point counted shooting in kneeling position 30 shots with required time (point / minute)	274	2.54	279	2.43	5.11	1.81	<0.05
4	Point counted shooting in standing position 30 shots with required time (point / minute)	268	2.33	272	2.18	4.27	1.48	<0.05
5	One-spot shooting in lying position 30 shots with required time (cm / min)	1.5	0.12	1.35	0.21	3.1	10.53	<0.05
6	One-spot shooting in kneeling position 30 shots with required time (cm / min)	2.4	0.14	2.12	0.12	4.59	12.39	<0.05
7	One-spot shooting in standing position 30 shots with required time (cm / min)	3.5	0.16	3.2	0.33	4.09	8.96	<0.05
	Female Athletes (n=7)							
1	Hold gun on hands for 3 minutes with extra weight of 1kg, evaluate stability (s)	14.35	1.1	16.06	1.2	4.35	11.25	<0.05
2	Point counted shooting in lying position 30 shots with required time (point / minute)	285	2.1	289	2.15	5.32	1.39	<0.05
3	Point counted shooting in kneeling position 30 shots with required time (point / minute)	267	2.08	270	2.13	4.05	1.12	<0.05
4	Point counted shooting in standing position 30 shots with required time (point / minute)	263	2.34	268	2.17	5.17	1.88	<0.05
5	One-sports shooting in lying position 30 shots with required time (cm / min)	1.7	0.17	1.51	0.12	4.39	11.84	<0.05
6	One-sports shooting in kneeling position 30 shots with required time (cm / min)	2.7	0.21	2.3	0.24	4.78	16	<0.05
7	One-sports shooting in standing position 30 shots with required time (cm / min)	3.8	0.14	3.4	0.16	4.17	11.11	<0.05

CONCLUSION

The research results have selected 12 advanced exercises and 7 tests evaluating the specialized physical capacity in sporting rifle content for sports shooting athletes in the National Youth team at Bac Ninh Sport University.

After 4 months of practice, the exercises selected were effective in enhancing the specialized physical capacity in sporting rifle content for sports shooting athletes in the National Youth team at Bac Ninh Sport University.

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