

EVALUATING THE DEVELOPMENT ABOUT PROFESSIONAL PHYSICAL FITNESS AND BASIC TECHNIQUES OF TALENTED MALE VOLLEYBALL ATHLETES FROM 12 TO 13 YEARS OLD AFTER A TRAINING YEAR OF AN GIANG PROVINCE

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ABSTRACT

The study aims to evaluate the development of professional physical fitness and basic techniques related to the effective training of talented male volleyball athletes from 12 to 13 after a training year of an Giang province. The study was conducted through some methods, namely integrated research and relevant literature reviews, pedagogical observation, interview, pedagogical examination, and statistic mathematics. The author has selected 10 tests about professional physical fitness and 7 basic techniques tests for talented male volleyball athletes in order to evaluate the effective training and the development of talented male volleyball athletes of an Giang province.

Keywords: Volleyball, professional physical fitness, basic techniques.

1. INTRODUCTION

Today, sport has become cultural phenomenon of great magnitude and complexity. Its scope is awesome; nearly everybody has become involved in some or other way in it. It has got mass participation. Various research studies conducted by experts in physical education and sports have emphasized the importance of investigating the specific structures (Xuyen, 1995), co-related with the various sports activities (Truyen, Minh, & Tuan, 2002), for the selection and development of talent in sports and for better performance at different levels of sports competition (Toai, 1996).

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There are numerous factors which are responsible for the performance of a sportsman. These are physical, mental, technical and tactical (Thuc, 2015). Among them, physical abilities are most important (Taware, Bhutkar, & Surdi, 2013). Performance also depends on skills, training, motivation and physiological factors. The poor performance of athletes and sportsmen at the international competition has been of great concern, especially to the coaches, physical educationists and sports scientists. Efforts have been made to improve the standards of our sportsmen since long; however, little success has so far been achieved in this respect (Sheppard, Nolan, & Newton, 2012).

As many other sports, volleyball not only needs physical health features but also professional physical fitness and basic techniques. Moreover, its particularity is a highly rational and variable (Astrand & Rhyning, 1954). It requires each athlete about physical fitness, speed, strength, endurance and ability to combine movements and basic techniques such as passing the ball with high and low hands, throwing and hitting the ball, etc (Lam, 1998). Based on the development about professional physical fitness and techniques after a training process, the author has re-evaluated the initial selection and continue to choose the athletes for advanced training. Evaluating athletes after training is an essential job.

To know about the development of professional physical fitness, basic techniques and scientific evidences for the training of talented male volleyball from 12 to 13 years old of An Giang is suitable. Keeping in mind the above issues, researchers conducted the study to evaluate the development about professional physical fitness and basic techniques of talented male volleyball athletes of An Giang province.

2. METHODS AND MATERIALS

The study was conducted through some methods, namely integrated research and relevant literature reviews, interview, pedagogical observation, pedagogical examination, and statistic mathematics.

Athletes whom researchers work on were taken from the pool of talented male volleyball athlete from 12 to 13 years old of An Giang province of Vietnam. The number of chosen subjects were 14 male athletes. The study was conducted in the academic session of 2016-2017. The study identified the tests about evaluating profession physical fitness and basic techniques of talented male volleyball athletes from 12 to 13 years old of An Giang province.

After the interview, researchers selected the tests over 75%. Checking the reliability and reporting of the test, the study was chosen 10 tests about professional physical fitness and 7 tests about basic techniques of talented male volleyball athletes from 12 to 13 years old of An Giang province.

Tests about professional physical fitness were viz a viz. Running 30ms high starter (s), Throwing the ball 1kg (m), High jump with momentum (cm), High jump without momentum (cm), Long jump 3 steps (cm), Long jump without momentum (cm), Running 1500ms (s), running 4x10ms (s), Standing bend body (cm), and running pine (s).

Tests about basic techniques were- Passing high hands in front of the face (time), Passing high hands after the head (time), Passing low hands (time), Passing high hands (time), hitting the ball No.4 (time), Hitting the ball No.2 (time), and Hitting the ball medium No.32 (time).

After a training year, the study was conducted tests to check professional physical fitness for talented male volleyball athletes from 12 to 13 years old of An Giang. On the basis of the data collected, the result of the study was shown in Table 3.1.

3. RESULTS

Table 1: The development about professional physical fitness of talented male volleyball athletes of An Giang Province

Tests	The beginning		After a year		D	W	t	p
	\bar{X}	σ_x	\bar{X}	σ_x				
Running 30ms high starter (s)	4.14	0.23	3.97	0.23				
Throwing the ball 1kg (m)	10.29	1.08	12.87	0.71	2.58	22.28	4.31	<0.01
High jump without momentum (cm)	263.93	10.22	279.14	5.99	15.21	5.60	2.59	<0.05
High jump with momentum (cm)	269	10.56	282.64	5.71	13.64	4.95	3.04	<0.01
Long jump without momentum (cm)	183.43	10.81	194.29	10.46	10.86	5.75	3.42	<0.01
Long jump 3 steps (cm)	243.21	20.63	251.21	65.42	8	3.24	2.53	<0.05
Running 1500ms (s)	672.86	73.98	786.43	65.15	113.57	15.57	8.33	<0.01
Running 4x10ms (s)	15.67	1.51	15.18	1.15	-0.49	3.18	6.28	<0.01
Standing bend body (cm)	16.36	5.09	17.96	4.5	1.6	9.32	3.50	<0.01
Running pine (s)	25.33	0.88	24.62	0.58	-0.71	2.84	3.22	<0.01

According to the data in table 1, the study was shown that- after a training year, the average achievement of evaluating about professional physical fitness tests of talented male volleyball athletes from 12 to 13 years old of An Giang province was increased significantly $p < 0.05$ and $p < 0.01$, since t result $> t_{0.01} = 2.977$.

The achievements of 10/10 test about professional physical fitness of talented male volleyball athletes from 12 to 13 years old was increased significantly from 2.84% to 22.28%, while the achievement of throwing the ball 1 kg test was the highest increase (22.28%) and Running pine (s) test was the lowest increase (2.84%).

Table 2: The achievement of basic techniques tests of talented male volleyball athletes from 12 to 13 years old of An Giang

Tests	The beginning		After a year		D	W	t	p
	\bar{X}	σ_x	\bar{X}	σ_x				
Passing high hands in front of the face (time)	5.57	0.76	7.86	0.75	2.29	34.10	5.77	<0.01
Passing high hands after the head (time)	5.83	0.8	7.57	0.73	1.74	25.97	5.15	<0.01
Passing low hands (time)	5.71	0.83	7.89	0.65	2.18	32.06	14.02	<0.01
Passing high hands (time)	5.82	0.89	7.54	0.52	1.72	25.75	11.06	<0.01
Hitting the ball No.4 (time)	5.53	1.02	6.71	0.91	1.18	19.28	8.87	<0.01
Hitting the ball No.2 (time)	5.81	0.98	7.93	0.73	2.12	30.86	9.14	<0.01
Hitting the ball medium No.32 (time)	6.53	0.86	8.29	0.83	1.76	23.75	6.02	<0.01

Table 3.2 shows that after a training year, the average achievement of evaluating about the basic technique tests of talented male volleyball athletes from 12 to 13 was increased significantly $p < 0.01$, t result $> t 0.01 = 2.977$.

All the seven tests about basic techniques of talented male volleyball athletes from 12 to 13 years old of An Giang province was increased significantly from 19.28% to 34.10%, while passing high hands in front of the face (time) was the highest increase (34.10%) on the other hand hitting the ball No.4 was lowest (19.28 %).

4. DISCUSSION

Discussing about the growth of basic techniques of talented male volleyball athletes from 12 to 13 years old of An Giang after a training year. It is important to practice any sports that is athletes must be interested in physical fitness and professional techniques because each movement affects the level of the player. Volleyball is a sport with various techniques. To gain good results the players must have the competent techniques. Basic techniques are a foundation to decide that volleyball players can become perfect or not.

Therefore, the practicing will actively support to have good and exactly techniques. For example, if the players are a power, it will give them a good result.

After a training year, professional physical fitness tests were increased significantly, the lowest growth rate was the running pine and the highest was throwing the ball (Lam, 1998). The average value of technical achievement was increased after a training year, the lowest growth rate was hitting the ball and the highest test was passing high hands in front of the face.

Some physical fitness elements and basic techniques of talented male volleyball athletes 13-15 years old of An Giang province were increased. The growth was completely suitable the rules of development in the field of sports and this demonstrated that the training process we applied completely scientific. It was realized that professional physical fitness and basic techniques of talented male volleyball athletes were increased significantly after a training year.

5. CONCLUSION

Based on objectives and research results, the study has drawn the conclusion that the training plan is suitable for talented male volleyball athletes from 12 to 13 years old of An Giang province. The content of the training plan includes the basic training contents. Professional physical fitness is suitable with the ability to receive techniques and tactics. There is endurance, strength and the speed of the movement- Basic techniques of volleyball.

After a training year, the elements about professional physical fitness and the basic techniques of the talented male volleyball athletes from 12 to 13 years old were regularly increased except long jump 3 steps test. Specifically, professional physical fitness increased from 2.84% to 22.28%; Basic techniques increased from 23.05% to 34.10%. This result has identified that the training plan for talented male volleyball athletes from 12 to 13 in An Giang province was gained good results.

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