

Some Characteristics of Basic Swimming Training for Teenagers in China

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Abstract. in order to strengthen China's swimming talent reserve, we need to start from the basic training of teenagers. This paper will formally analyze the current situation of its basic training, to find out the reasons for the emergence of some characteristics of its training. Among them, the research means include the investigation and test of the situation of multiple athletes, and the corresponding study of the results through mathematical means, hoping to reserve more talents for China's swimming sports through such means.

Keywords: teenagers; Swimming; Basic training; Characteristics of the study.

1. Significance of the Research on Characteristics of Basic Swimming Training for Teenagers

In any sports event, athletes participating in it will experience a decline in status due to age. In this way, if a country wants to maintain a certain competitiveness in a sports event, the training of young athletes cannot be ignored. In the past, due to the lack of attention paid to the basic training of young athletes in China, many talented teenagers failed to achieve their due results. Now, with the gradual attention paid to basic training in swimming events, China has made some achievements in some sports. However, after the statistics of the past world swimming performance, it is found that few athletes can maintain the stability of their performance for a long time, and certain characteristics can be summarized in this process. Through the study of these characteristics, it can help find out the reasons for the changes of China's athletes' performance[1].

2. Research Methods and Results

2.1 Research Methods

The research methods in this paper include 4 methods, namely literature research method and questionnaire survey method. At the same time, the data of designing China's youth athletes are all from the actual test. The specific situation of their athletes is shown in Table 1. In the end, mathematical statistics were carried out on the results of the study. In addition to the athletes from China who participated in the mathematical statistics, the young swimmers from the United States and Russia were selected.

Table 1. table of athletes participating in statistics

Athlete gender	6-9 years old	10-13 years old	14-16 years old	17-19 years old	total
male	5	10	11	6	32
female	9	14	9	7	39

2.2 Research Results

In order to clearly present the research results, the following four charts, namely, men's short distance, men's long distance, women's short distance and women's long distance, will be used to present the achievements of athletes from the three countries in major international competitions, as shown in Table 2-5 for details.

Table 2. comparison of male short-distance athletes in different countries

country	China	America	Russia
age	23.22±2.32	27.5±2.11	24.53±3.02
Age of first training	5.21±1.21	6.52±2.37	6.55±1.23
Peak age	18.56±2.01	22.37±2.65	21.53±2.21
Number of years of basic training	13.55±1.54	17.88±0.55	15.22±0.65
Achievement retention time	3.14±1.20	4.55±2.52	1.45±2.57
Participating the number	1.58±0.94	0.85±1.55	1.55±1.56

Table 3. comparison of male long-distance athletes in different countries

country	China	America	Russia
age	23.50±2.13	25.34±1.41	24.33±2.10
Age of first training	7.21±0.24	8.32±1.03	6.33±0.52
Peak age	19.88±1.22	22.53±0.41	19.56±2.14
Number of years of basic training	10.23±1.98	15.32±0.32	14.52±0.68
Achievement retention time	1.96±2.31	2.33±0.86	2.01±0.98
Participating the number	1.89±1.02	1.52±0.87	1.74±1.53

Table 4. comparison of women's short-distance athletes in different countries

country	China	America	Russia
age	25.12±0.88	25.13±2.76	21.44±0.89
Age of first training	5.40±1.92	5.63±1.86	6.99±0.89
Peak age	18.36±1.50	20.01±1.88	23.09±1.25
Number of years of basic training	10.83±2.11	13.55±1.89	12.67±2.33
Achievement retention time	3.11±0.22	3.56±1.53	2.14±2.55
Participating the number	1.53±0.55	0.88±0.87	0.50±1.35

Table 5. comparison of women long-distance athletes in different countries

country	China	America	Russia
age	19.25±1.22	21.55±0.89	23.66±0.85
Age of first training	6.33±0.22	7.88±0.89	6.35±0.21
Peak age	18.83±0.23	17.23±0.68	19.36±1.23
Number of years of basic training	12.00±2.1	13.52±0.98	11.11±0.89
Achievement retention time	2.36±0.56	3.56±0.12	3.44±0.22
Participating the number	1.15±1.12	0.99±1.11	0.86±0.55

By summarizing the above chart results, the author can summarize the data results of swimmers in China, the United States and Russia in terms of age. The following will summarize the body parameters of male adolescent athletes who participated in this study, as shown in Table 6 for details.

Table 6. physical fitness of male athletes table

Age	6-9years old	10-13 years old	14-16 years old	17-19years old
weight	32.44 ± 4.52	40.2 ± 4.56	52.88 ± 9.23	74.12 ± 1021
Palm area	98.23 ± 14.12	108.52 ± 7.52	133.23 ± 54.21	158.23 ± 18.32
Streamline index	1.84 ± 0.21	1.75 ± 0.24	1.63 ± 2.21	1.52 ± 0.03
Lung capacity	1885.54 ± 552.2	2786.32 ± 453.2	3986.55 ± 1022.5	4098.32 ± 598.32
pull-ups	2.1 ± 0.8	4.5 ± 0.9	7.8 ± 1.2	27 ± 0.9
Standing long jump	1.59 ± 0.63	1.95 ± 2.2	2.22 ± 0.65	2.45 ± 0.65

In addition to the above analysis of the physical quality of male athletes, the author also conducted a corresponding survey on whether to add special training in early training and the coach's familiarity with the training program, and obtained relevant results. The following paragraphs will analyze and discuss the results[2].

3. Discussion on Results

Through the analysis of the results, it is found that Chinese swimmers who participate in major international competitions are younger at the time of entry and maintain a shorter peak state of sports. In addition, in the comparison with American and Russian swimmers, it is found that the peak of sports of Chinese athletes often occurs earlier. According to the statistical results of performance retention time, Chinese athletes' performance retention time is shorter than that of American athletes, which results in the lack of accumulation in the process of high-level training. In terms of the age of initial training, Chinese athletes' age of initial training is relatively large, but there is no significant difference in other indicators.

In the process of sports training, the training of teenagers is mainly based on basic training. In other words, the quality of basic training is closely related to the development of athletes in the later stage, which can directly affect the subsequent performance of athletes. For this reason in the process of basic training must set up a fixed training program, and the training program for thorough implementation. The designer of the training program is the coach, and the heart is the athlete himself[3]. At this time, the coach should play the role of guide and organizer. From the conclusion of the above results, it can be seen that the physical development of male swimmers enters the explosive stage from the age of 14 to 16 years old, and the performance will reach the peak after this stage. In contrast, female athletes will appear earlier. Therefore, it can be seen that in most cases, athletes' physical growth and peak performance are in a certain objective law, and the basic swimming training of Chinese teenagers is in a state of steady improvement.

In terms of early specialization, it is more important to influence the later stage of young athletes. Through early specialization, the most talented teenagers can be selected in advance to participate in the swimming sports, and the athletes can be more mature in terms of physical form, physical function and physical strength. Teenagers should try their best to choose teenagers with large palm area, small head and body proportion, broad shoulders and good water quality. According to the actual results of the research, it is found that the higher the attention paid by coaches to the early specialization, the more prominent it will be in the subsequent performance of athletes.

In terms of training system, in order to keep the stable of our country's juvenile swimmers team stability, in the aspect of training system can follow the relevant aspects of the developed countries, such as the United States in this respect, the use of the system management, the national total of relevant association, 2800, the national register of youth sports staff 320000 people, that is to say, every age group has nearly 30000 registered young athletes. Such means can not only provide a good sports environment for all athletes, but also ensure that they can improve their comprehensive quality in this process[4].

Finally, in the aspect of training system, the emphasis on the shaping of athletes' overall sports ability and the prevention of injuries will have an impact on their performance and sustainable development. We will not fail to get effective and timely treatment for the loss of talented young athletes due to injuries. At the same time, we will establish a scientific training system to ensure that China's youth swimming echelon is more compact.

4. Endnotes

Through the discussion of this paper, on the basis of the present our country juvenile swimmers and large event athletes training condition is summarized, in order to research on some characteristics that teenagers swimming basic training in our country, for the future to establish more stable juvenile

swimmers echelon strategy is put forward, hoping to contribute to China's swimming talents reserves, help cultivate more talents.

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