

Competitive Strength Analysis and Sports Development Strategy in China

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Abstract: Its purpose is for improving our country overall athletics strength, boosting our country Olympiad developing, location keeping best our country Olympic Games Corp. And research method such as law, number reason statistics law wielding comparison method, analysis, document, achievement is situation index appraising total horizontal our country athletics development with Olympiad competition, be in progress analysing in depth, compare to current competitive sports of our country strength and all competitive sports powerful country athletics strength, have brought forward the action tactics that our country level of competitive sports develops. The result studying is indicated: 1) part advantage athletics project still has bigger rise space; 2) all-round development competitive sports respond to with high technical ability specific gravity project, seizing new and developing is golden project, once carry off the gold project, woman athletics project, advantage and group project (or carry off the Jin Tong Qun project), Shan Ren athletics project, indirect athletics kind project being breach; 3) sets mind on the advantage of our country athletics project, the latent advantage athletics project again; 4) reasons concentrate on developing the advantage athletics project to all-round development competitive sports transition.

China's competitive sports level has leapt into the ranks of the world's competitive sports powers, and has been based on the first group in the Olympic Games. However, we should also be aware that: the expandable space of some competitive events in China is very narrow; the distribution of competitive strength structure in China is unbalanced; most of the physical leading events except weightlifting, such as handball, football, basketball, volleyball, water polo, baseball and other ball events, are still in an obvious backward position; the gold medal competition is gradually fierce and the trend of the distribution of Olympic medals is very scattered, etc. All these remind us that if we want to stabilize and maintain the position of the first group, we must make an in-depth analysis of the competitive strength of our country and other competitive sports powers, and guide the development of competitive sports in our country from a strategic height.

1. Characteristics of competitive strength structure of the United States, Germany, Russia

The strength structure of the world's competitive sports powers is an important reference for us to achieve the development goal of competitive sports. The gold medal ranking of large-scale comprehensive Games is the first choice index for comprehensive evaluation of a country or region's overall performance, which has a high validity and has become the international consensus [1]. Table 1 shows that during the 24th-29th Olympic Games in the United States, Russia and Germany, the gold medal events involved 8-10 event groups (it is found that the events can not be included in all the Olympic events according to the previous competitive ability leading factors, so in this study, the men's Decathlon and women's Heptathlon are divided into the comprehensive item group of physical leading type, the modern five items are classified as the comprehensive item group, and the triathlon three items are classified as the endurance item group of physical leading type.) and it is widely distributed among 9 to 15 sports.

Before the Beijing Olympic Games, the U.S. team won many gold medals, but most of them focused on the traditional competitive events such as track and field, swimming, etc. In the 28th Athens Olympic Games, the U.S. team won 12 gold, 9 silver and 10 copper in the swimming event, and 8 gold, 12 silver and 7 copper in the track and field. In the two major events, the U.S. team won 20 gold, 21 silver and 17 copper, accounting for 57% of the total gold medals. 1%, the importance of swimming and track and field to the American team can be seen. In the 29th Olympic Games, the situation that the American dominated the track and field events is being broken, but the American team has also made many breakthroughs in non swimming and track and field events, increasing many gold medals. The men's basketball team has become the monopoly of the American team again; in competitive gymnastics, Johnson and Liujin have also won the balance beam and individual all-around champion; the two-way shooting and wrestling of men's flying saucers have also achieved a breakthrough, and these new gold medal growth points to some extent make up for the backwardness of some competitive items in the United States. Swimming and track and field teams in the United States are facing fierce challenges, and the United States team itself is also changing, mainly reflected in more events to enhance competitiveness, which may be a model for countries to follow in the future. In the 29th Olympic Games, they won six team gold medals in men's volleyball, men's basketball, women's football and men's sand volleyball. The U.S. team not only has a wide distribution of medals, but also has a balanced distribution of bronze, silver and gold medals. If the bronze and silver medals are transformed into gold medals, it will have a great impact on China's medals and gold medals. We have reason to believe that for quite a long time to come, the US team will remain our strong opponent.

The distribution characteristics of the gold medal events in the United States, Russia and Germany have given us the basic pattern of the strength structure of the competitive sports power: that is, to ensure the competitive advantage of the events, to expand the gold medal points, in each event group, there are a group of players who can participate in the gold medal competition, the distribution of bronze, silver and gold medals is balanced, at the same time, in more than nine sports can win the gold medal, the advantages of collective events are obvious. If we want to maintain the position of the world competitive sports power, we must take this road.

Table 1 Number of gold medals and gold medal events in the United States, Russia and Germany in the 24th-29th Olympic Games

Session	Category	United States	Russia	Germany
24	Gold medals	36 (3)	55 (1)	48 (2)
	(ranking) Medals			
	(ranking)	94 (3)	132 (2)	142 (1)
	Project	12	15	14
25	Gold medals	37 (2)	45 (1)	33 (3)
	(ranking) Medals			
	(ranking)	108 (2)	112 (1)	82 (3)
	Project	12	12	13
26	Gold medals	44 (1)	26 (2)	20 (3)
	(ranking) Medals			
	(ranking)	101 (1)	63 (3)	65 (2)
	Project	13	9	9
27	Gold medals	39 (1)	32 (2)	14 (5)
	(ranking) Medals			
	(ranking)	97 (1)	88 (2)	57 (5)
	Project	12	15	6
28	Gold medals	35 (1)	27 (3)	14 (6)
	(ranking) Medals			
	(ranking)	103 (1)	92 (2)	48 (5)
	Project	15	12	8
29	Gold medals	36 (2)	23 (3)	16 (5)
	(ranking) Medals			
	(ranking)	110 (1)	72 (3)	41 (6)
	Project	14	9	10

Table 2 Group attribution of gold medal events in the Olympic Games in the United States, Russia and Germany

Country	United States							Russia							Germany									
Session	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	4	5	6	7	8	9	4	5	6	7	8	9	4	5	6	7	8	9	4	5	6	7	8	9
speed	1	1	1	1	1	1	6	6	4	1		2	1	4	1	2	7	4						
	4	8	9	9	9	6	6	6	4	1		2	5	4	1	2	7	4						
Endurance	6	3	2	4	2	4	9	5	4	1	4	4	1	1	8	8								3

													4	3						
Strength	3	3	4	3	2	1	1	0	8	2	2	6	2	5	4	3	1	1		
Comprehensiveness	1	1	1			1							1							
difficulty	2	4	3	2	2	3	1	1	4	1	3	4	4	5	3	5	2	3	3	
accuracy	1	1	3	1	2	2	4	5	3	1	3		2	2	2		2			
Netting	3	2	4	3	1	4	1			1		1	1	1						
Field	1	1	3	3	2	3	3	2		1				1			1	1		
Combating	5	4	4	2	4	2	1	0	9	9	1	1	8	9	5	5	1	1	1	3
attack			1	2	1								1							
Comprehensiveness												1	1	1					1	
Σ	3	3	4	3	3		5	4	2	3		2	4	3	2	1	1	1	1	
	6	7	4	9	5		5	5	6	2		3	8	3	0	4	4	6	6	

2. Comparative analysis on the strength of China

Distribution of gold medal events and characteristics of China's Olympic Games. The number of gold medals won by Chinese athletes in the past six Olympic Games is increasing year by year: the 24th to 29th Olympic Games are 3, 7, 9, 9, 14 and 16 respectively (Table 3). Compared with the United States, Russia and Germany, our distribution of gold medals has reached the standard of competitive sports power.

In the 29th Olympic Games, China's 51 gold medals came from 7 event groups, 15 major events and 17 sub items, including 9 gymnastics, 8 weightlifting, 1 archery, sailing, fencing, swimming, wrestling, rowing, taekwondo, canoeing, 7 diving, 5 shooting, 4 table tennis, 3 judo, 3 badminton, 2 boxing, 2 trampoline. Table tennis, gymnastics, diving, shooting, weightlifting, badminton, judo and other seven competitive events won a total of 39 gold medals, accounting for 76.5% of the total number of gold medals, a certain increase over the previous Athens Olympic Games (71.9%). Archery, fencing, rowing, trampoline, sailing and boxing are six new gold medal winning projects. These six projects are distributed in four major groups, three of which belong to China's advantage group, which is inseparable from our successful strategy of focusing on the development of China's potential advantage projects. The rowing event won the gold medal in the Olympic Games for the first time in China, which should be paid great attention to by us. In the future training, we should strengthen the training of this event and other events of the same event group (physical endurance event group). In fact, in the previous Olympic Games, we also won the gold medal and medal in this event group (such as women's 10km and 20km walking race; women's 5000m race; women's 5000m race) 10000 meters). The dominant competitive events in our country are mainly distributed in the five major groups, namely, the strength group dominated by physical ability, the difficulty and beauty group dominated by skill, the accuracy group dominated by skill

and mind, the separated net group dominated by skill and war, and the fighting group dominated by skill and war (Table 4).

In the 29th Olympic Games, China won 51 gold medals, 24 gold medals for men, accounting for 47.06% of the total number of gold medals, 27 gold medals for women, accounting for 52.94% of the total number of gold medals. It can be seen from this that women win more gold medals than men and win more gold events than men, but the gap is gradually decreasing [2], women's competitive events group has more advantages than men's competitive events group; according to the classification of the leading factors of competitive ability, except for the fast strength sports group of physical ability, the other leading sports group of physical ability is auxiliary events group, and skill leading events group is the main gold medal winner of China's Olympic Games Physical event group, in which the skill dominated performance difficult to beautiful event group and the skill and combat ability dominated separated net antagonistic event group are the core event groups of China's Olympic gold medal winning; according to the number of participants, the single event group is the main event group of China's athletes, the two person cooperative event group is the secondary event group of China's athletes, the multi person collective event group is the weak event group of China's athletes; according to the nature of competition According to the classification of competition tactics, indirect competitive event group is the main event group for China's Olympic gold medal[3].

Table 3 China's gold medal in the past six Olympic Games

Session	China	Project
24	Gymnastics, diving, table tennis	3
25	Gymnastics, diving, table tennis, shooting, judo, track and field, swimming	7
26	Gymnastics, diving, table tennis, shooting, judo, track and field, swimming, weightlifting, badminton	9
27	Gymnastics, diving, table tennis, shooting, judo, track and field, weightlifting, badminton, taekwondo	9
28	Gymnastics, diving, table tennis, shooting, judo, track and field, weightlifting, badminton, taekwondo, swimming, tennis, wrestling, rowing, volleyball	14
29	Gymnastics, diving, table tennis, shooting, judo, weightlifting, badminton, taekwondo, swimming, wrestling, rowing, fencing, archery, trampoline, sailing	16

Table 4 Scores of China's competitive events in the 29th Olympic Games

Project	Gold medal	Silver medal	Bronze Medal	Total	Top three scores	
					Score	%
diving	7	1	3	11	88	11.4
Weightlifting	8	1		9	79	10.2
Gymnastics	9	2	5	16	125	16.1
shooting	5	2	1	8	65	8.4
table tennis	4	2	2	8	62	8.0
badminton	3	2	3	8	59	7.6
judo	3		1	4	33	4.3
Σ	39	10	15	64	511	66.0

3. Development strategies and suggestions for China's Olympic Games

3.1 Transition from key development of competitive sports to comprehensive development of competitive sports

According to the characteristics of the strength structure of China and the world's competitive sports powers, the distribution of gold medals in the 24th-29th Olympic Games of the United States is in 9 or above event groups, while China is in 7 or below event groups. China's gold medal strength foundation is still weak, the structure of the winning sports is not balanced, the overall lack of thickness, part of the competitive advantage has reached the limit, it is difficult to maintain the same winning rate in the future competition. Some competitive events fluctuate greatly, and track and field, swimming and collective antagonistic events are still in a state of obvious backwardness. The strategy of developing competitive events with key advantages has been implemented for many years in China, and has made gratifying achievements. Nowadays, with the gap of competitive strength between countries being gradually reduced, we have to turn the strategic focus to the comprehensive development of competitive sports. On the basis of traditional competitive events, we should actively explore new growth points of gold medals and medals. In each event group (especially the backward ones), we should train a group of players who are able to participate in the competition of medals and gold medals, and evenly distribute bronze, silver and gold medals.

3.2 In order to develop competitive sports in an all-round way, we should take the projects with high proportion of skills, new gold winning projects, previous gold winning projects, women's competitive projects, projects with the same group of advantages (or projects with the same group of gold winning), single competitive projects and indirect competitive projects as the breakthrough points.

In the Olympic Games, we can often see that some gold medals or medals have been won by the athletes of some countries or regions who have never won before. Chinese athlete Yin Jian won the gold medal in the sailing competition of the 29th Olympic Games. This gold medal has created a new chapter of China's sailing sport, and so has Liu Xiang's success, which shows that in the long history of any sports event There is no permanent overlord, as long as their overall competitive

ability has reached the height that should be achieved, any country or region, any race can succeed in any project. Therefore, we need to build up confidence, boldly explore new gold medals or medal growth points, firmly grasp new gold medal events, and make them develop into competitive events of our country as soon as possible. In order to develop competitive sports in an all-round way, we should take the past gold medal winning events as a breakthrough. Some sports, such as women's volleyball, 110m hurdle, high jump, long jump, tennis, women's 10km, 20km race walk, women's 5000m, women's 10000m, etc., have achieved excellent sports results in the Olympic Games, which shows that we have achieved success in these events before, and then we can achieve success. There is no need to doubt it. The key is hard work from all sides. The phenomenon of ups and downs of China's competitive sports is caused by a variety of reasons (no more details here). Therefore, we can take this as a breakthrough to develop competitive sports in an all-round way. As we all know, the dominant events in our country are mainly concentrated in the skill dominated event group. Therefore, the events with high skill proportion are our breakthrough, such as track and field events, walking, jumping, throwing and so on. In the 1980s, we predicted that China's rhythmic gymnastics, trampoline, figure skating and figure swimming will develop and improve faster than other backward projects, and now we have been verified. Now we can also use this method to develop our new card winning events (such as other endurance sports in the same group with sailboats), in order to promote the overall competitive level of our country. Single player sports are the main events for Chinese athletes to win gold. Taking this as a breakthrough point, they gradually spread to the cooperative events for two people and the collective events for many people, and finally realize the all-round development of competitive sports. Indirect competitive event group is the main event group for winning gold in China's Olympic Games. The dominant event group in China is mainly indirect competitive event group. In order to realize the all-round development of competitive sports, we must have the ability to compete for gold medal in each event group. Therefore, we can expand the indirect competitive event group to the direct competitive event group based on the indirect competitive event group. At present, China has achieved the goal in the direct competitive event group. Remarkable achievements have been made in judo, taekwondo, wrestling and boxing.

3.3 Re identify potential advantages and competitive events in China

China has won gold medals in kayaking, taekwondo, fencing, archery, rowing, trampoline, sailing and boxing. Some potential advantages such as canoeing, taekwondo and wrestling won gold medals in the Olympic Games for two or more years in a row. It has been many years since the standards for defining Olympic advantage and potential advantage projects recognized by China at present, and some potential advantage projects may have been transformed into advantage projects. Therefore, in formulating the development strategy of competitive sports in the next Olympic period in China, it is necessary to re identify the potential competitive events and competitive events.

3.4 Attention should be paid to the instability of sports performance to improve the space of some competitive events

It has always been our advantage to show the difficult and beautiful item group in skill leading category. There is still a large space for many small items in this big item to develop. In this item group, the United States and Russia are our strongest rivals, and we should pay more attention to them in the future training. China's gymnastics fluctuated the most in the past Olympic Games (in fact, not only gymnastics, women's volleyball, women's football, women's basketball and so on, but also the causes need to be studied). There is still a considerable space for competition in weightlifting, gymnastics, shooting and judo. In the future training, we should pay attention to the small items in these big items. Some of the events that won bronze or silver medals were lost by a small margin. These events should carefully sum up the experience and lessons, learn from each other, and strive to win the gold medal in the next Olympic Games.

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