

Analysis of the Technical and Tactical Characteristics of Li Shifeng in 2023

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Abstract: ***Objective:** To explore and understand the skills and tactics used by the world's top badminton players in the competition, so that ordinary badminton lovers can understand and use the skills and tactics of badminton, improve the level of skills and combat, and expect to provide reference for improving the skills and tactics of the athlete Li Shifeng. **Methods:** Using the literature method, video observation method and mathematical statistics method, we analyzed the serve, reception, front court ball processing, midfield ball processing, back court ball processing and gain and loss in the competition, and summarized the characteristics of his skills and tactics in the competition. **Conclusion:** 1) Li Shifeng's serve is mainly backhand ball, and the serve is concentrated in areas 1 and 5 in front court; other areas are involved but not frequently. At present, there is a tendency of men's singles in badminton. 2) Li Shifeng's use of receiving service skills and tactics is mainly to rub and put the net and pick the ball, while the use of other technical balls is involved but not much. He has a high sense of defense, but also actively attack, trying to break free of the control of the opponent, actively strive for the initiative of the game, so the net in the return stage is also particularly important. 3) The use of forward ball skills often requires more energy into dealing with the opponent's return to gain the chance to dominate the game. Li Shifeng's front court attack is more active, like to rub the ball and pick the ball skills and tactics, so as to win the advantage in front of the net. 4) There is no obvious technical and tactical gap in the performance of Li Shifeng and his opponents in the midfield, and all the ball techniques are used. The straight line technology before the net is the most used, followed by the diagonal and pick the ball, and the flat ball is the lowest frequency. 5) Li Shifeng in the back using the ball and kill the ball tactical ability is better, the back is Li Shifeng in the back of the highest utilization technology, using the ball back, facilitate the best time to use the ball, and consciously and accurately control the point and Li Shifeng in the back is given priority to with the ball score, steady, fast, drop ball point precision, to the field of control consciousness is strong, control the rhythm of the tactical intention. 6) Li Shifeng loses too much points actively, which is in a phenomenon that he wants to actively grab the advantage but loses points due to poor technical treatment.*

Keywords: Badminton; Men's Singles; Skills and tactics.

1. INTRODUCTION

With the continuous improvement of China's social economy and the increasingly rich way of people's life, badminton is becoming more and more popular, and once became one of the sports with the highest participation of the people in China [1]. Badminton, as the overhead competition, has more similarities with table tennis, tennis and volleyball; as the core factor, the analysis and study of tactics are of great significance to the victory of the competition [2]. With the migration of Chinese badminton history, the competitive ability of Chinese badminton has also made an essential breakthrough. In the All England Open Badminton Championships (The All England Open Badminton Championships), which ended in March 2023, Chinese badminton player Li Shifeng all the way through, Has defeated the famous athletes Huang Zhiyong, Antoson, Meet with The 2018 British men's singles champion Shi Yuqi in the final, He beat Shi Yuqi 2-0 (26-24 / 21-5) to win the All England title, This is the first All England title since athlete Chen Hong in 2002, China won the 13th British title in the British men's singles event. Through the net, wan Fang Chinese database search found that academic research on badminton men's singles project tactics is rich, but there are only dozens about athletes Li Shifeng research literature, there is a big blank, so the research of athletes Li Shifeng in 2023 badminton English tactics used in statistical analysis research, in order to the development of men's singles project in our country and the use of ordinary badminton enthusiasts tactics to provide theoretical guidance and practical help.

2. STUDY SUBJECTS AND RESEARCH METHODS

2.1 Study subjects

This paper analyzed the technical and tactical characteristics used by athlete Li Shifeng in the five competitions of 2023 British England.

2.2 Study Methods

1.2.1 Literature and data method

According to the research content, the literature search was conducted through "badminton", "men's singles" and "techniques and tactics" through the CNKI, and the paper books on badminton were analyzed through the library of Zhejiang Normal University, so as to provide a theoretical basis for the research. A total of 212 academic journals and 138 master's papers were retrieved, screened according to the needs of research, and finally 21 journals and 4 master's papers; only 11 were obtained by searching "Li Shifeng", which shows that there were few studies on Li Shifeng's skills and tactics, which further explained the significance of research.

1.2.2 Video recording observation method

With the help of video media such as live broadcast and playback of the Chinese Badminton Association, watch the video of Li Shifeng in the men's singles in 2023. When watching the video, use the technical analysis, especially the key technology analysis, playback and repeated watching, and record the various technical and tactical data used by Li Shifeng in the competition.

1.2.3 Mathematical and statistical method

For the data obtained from watching the game video, the Excel2021 statistical software was used to make mathematical statistics on the number of Li Shifeng's serving, receiving, front court, midfield, backcourt and losing points in the game, and the results were obtained as the data support for the research.

3. RESULTS AND ANALYSIS

3.1 All the competitions of Li Shifeng in 2023

Li Shifeng won the All England Open on March 19, 2023! The information he participated in is as follows:

Table 1: Data of Li Shifeng in 2023

Competition players	Match stage	Total score
Li Shifeng VS Wu Jialang	1 / 16 final	2:0
Li Shifeng VS Zhao Junpeng	1 / 8 final	2:0
Li Shifeng VS Huang Zhiyong	1 / 4 Final	2:0
Li Shifeng VS Antonson	semifinal	2:1
Li Shifeng VS Shi Yuqi	final	2:0

3.2 Basic theory of badminton techniques and tactics

According to different sports characteristics, there are different technical characteristics. Chinese scholars Tian Maijiu and Liu Daqing pointed out: "The way to complete sports movement is technology, and the separation of sports movement and sports technology is the most important difference between sports technology and the technology referred to by other disciplines. Exercise techniques must be attached to body movements, which are the external manifestations of exercise techniques. Technical action mainly has two requirements. On the one hand, the action technology must follow the rules and standards in the basic principles of human motion mechanics; on the other hand, the individual technology is developed into its own specialty technology according to the individual characteristics" [3]. Badminton technology is a reasonable way to give full play to the physical potential ability and effectively complete the movement within the scope of the competition rules [4]. Zhu Jianguo believes in the Badminton Sports Teaching and Training Course that badminton tactics refer to the strategies and actions taken by athletes to show a high level of competition and defeat their opponents in the competition. Physical ability and psychological quality are important components of tactics and technology, and play an important role in mutual correlation and mutual restriction. Technical and physical quality are the basis of tactical construction, while psychological quality is the key to ensure the tactical implementation of [5]. In today's

badminton competition, we can not only rely on technology or tactics to win the competition, but also win the combination of comprehensive skills and tactics and sports intelligence under the leadership of physical strength. Mao Qiuming pointed out that badminton tactics refer to the strategies and actions taken by athletes in badminton competitions to show a high level of competition and defeat their opponents. Through the application of various technical training and tactical strategies, it aims to limit the opponent in a complex and changeable environment, achieve the initiative, and win the [6]. To sum up, badminton technology is a reasonable method that conforms to the principle of human scientific exercise. It can give full play to the potential ability of the body and effectively complete the movement within the scope permitted by the competition rules. In order to distinguish, the article divides techniques into service technique, receiving technique, net technique, midfield technique and backcourt technique. In the study of badminton tactics, it generally holds that badminton tactics refers to the scope of legal rules, to realize the victory or expected result of the competition.

3.3 Technical characteristics analysis of Li Shifeng

3.3.1 Analysis of the technical characteristics of serve and serve landing point

In badminton matches, serve and receiving serve are the first beat of the server and the receiver respectively, which is the beginning of tactical execution. It can control the rhythm of the game and execute the tactical play of this round, and is the key to the successful score [7]. Serve technology is the first to use a technology, serve the use of tactical key in a game, although not can directly score, but high quality serve can let players quickly dominate the rhythm of the field, get priority initiative, also can better control opponents behind and create favorable offensive scoring opportunities.

Table 2: Schematic diagram of the landing point area of badminton singles serve

					2		4
					5		6
					1		3
3		1					
6		5					
4		2					

As shown in table 2, in badminton singles project, serve position into 1,2,3,4,5 and 6 position, 1,5,2 front serve range, and 3,6,4 range for the back court serve range, by watching the English game replay, we can analyze Li Shifeng being serve area condition and tactical situation in the game.

Table 3: Statistical table of serving landing point area in Li Shifeng Competition

	1	2	3	4	5	6
WuJialang	17	0	3	0	7	1
ZhaoJunpeng	31	0	1	0	9	0
HuangZhiyong	23	0	0	0	18	1
Antonsen	33	2	1	1	16	7
Shi Yuqi	39	1	0	0	6	0
total	143	3	5	1	56	9
Mean per game	28.6	0.6	1	0.2	11.2	1.8
frequency (%)	65.9%	1.4%	2.3%	0.4%	25.9%	4.1%

Table 4: Statistical table of Li Shifeng's service technology

	Back hand hair net before	The backhand sends a high ball	Before the forehand net	The forehand is high
WuJialang	24	4	0	0
ZhaoJunpeng	40	1	0	0
HuangZhiyong	41	1	0	0
Antonsen	51	9	0	0
Shi Yuqi	46	0	0	0
total	202	15	0	0
Mean per game	40.4	3	0	0
frequency	93.1%	6.9%	0	0

Due to the characteristics of badminton men's singles event, Li Shifeng uses backhand service, and the backhand net forehand, accounting for 93.1%, occasionally using the backhand backhand, accounting for 6.9%; The serving area is mainly concentrated in areas 1 and 5, where area 1 has the highest proportion, 65.9%, followed by area 5, 25.9%. In terms of bureau means, no. 1 region has the most means, with 28.6 means, and no. 4 region has the least means, with 0.2 means. Therefore, it can be considered that Li Shifeng prefers the backhand ball to the 1st position, followed by the 5th position.

Excellent and high-level men's singles players generally adopt the way of fast attack in the back field, and have the ability to control the enemy at one shot. Therefore, in order to avoid being passive from the beginning, men's singles players usually choose to send the small ball in front of the net, and rarely steal the back field ball. Players have a strong sense of defending the rear. To this end, players usually need to use flexible service technology, such a service is not easy to be predicted by the opponent, to the opponent's execution of the skills and tactics to bring pressure, maintain their offensive advantage [8]. Therefore, Li Shifeng serves mainly in the 1 and 5 positions in front of the net, whose aim is to force the opponent to return the ball, and Li Shifeng has the advantage of height and arm length, he can quickly receive the ball to the back line; if the ball is not in place, he can limit the opponent to the net or choose a shot to win. Choose hair net before the ball than backcourt an objective reason is: today the rhythm of badminton men's singles project is very fast, players generally want to seize the advantage of continuous offensive score, want to quick, this time occasionally combined with change serve, can effectively disrupt the rhythm of the opponent, it is also a kind of serve tactics. Less choose after the ball is, after the ball movement long trajectory, this gives the opponent have sufficient reaction time to deal with the ball, to the next, and after the ball is high ball, men's singles project athletes physical quality is good, it is easy to opponents active pressure to lose points, after the ball will also bring greater pressure to itself, to always ensure their active attack, not only need highly concentrated attention, also need their strong explosive force and physical strength as support.

3.3.2 Analysis of technical characteristics of receiving service

In the game, the reception service can rarely be directly scored, more is a good connection with the next beat, so whether doubles or singles, return technology is particularly important [9]. In the link of serving, is both sides occupy the active and passive watershed, is to strive for the initiative. In the single receiving technology, it is usually divided into two kinds of receiving in the front ball and the back ball, the receiving front ball technology is divided into rub, pick, push, hook and ball, and the back ball is divided into hanging, kill and high ball 3 techniques.

Table 5: Statistical table of receiving service in Li Shifeng Competition

Receive service technology								
Opponent	Rub put	lift	Pushball	An overhead kick	Cartwheel block	Parrel truck	Smash	High clear
WuJialang	3	0	10	1	0	0	0	0
ZhaoJunpeng	12	4	10	1	0	0	0	0
HuangZhiyong	10	5	4	2	0	2	0	0
Antonsen	18	15	16	0	0	0	1	1
Shi Yuqi	13	7	2	7	0	0	0	0
total	56	31	42	11	0	2	1	1
Bureau average	11.2	6.2	8.4	2.2	0	0.4	0.2	0.2
frequency	38.9%	21.5%	29.2%	7.6%	0	1.4%	0.7%	0.7%

In serve and serve the game, the opponent will according to their own stance and constantly adjust serve landing position, but because of the men's singles project characteristics, also rarely appear after the ball, so Li Shifeng mostly in the game before the ball, in the process of the processing of the ball, with the most number of ball, averaging 11.2, frequency of 38.9%, and because in the top international competition, the opponent's service is a high quality, so no ball, the number of 0. In the process of receiving the back of the ball, high, hanging, kill were used, among which the hanging ball is used the most times, 2 times, the number of killing and high ball is 1 time. Receiving service skills as a prelude to a player's attack, in order to prevent himself from being at a disadvantage, Li Shifeng used the most to rub and played the ball, using more techniques to put the ball before the net, which is a characteristic of actively grabbing the net and limiting the opponent's attack. Rub put the ball technology and push the ball technology, can secretly use some fake, induce opponents grab net advantage, once induced success,

players themselves can suddenly use power to push the ball, let the ball fly to the back court, thus upset the rhythm of the opponent, even affect the tactical play, cause opponents in the next flap back to high quality ball, and even affect its play error and lose points. Secondly, Li Shifeng uses the technique of pushing the ball and picking the ball frequently in the middle and high frequency, which shows that Li Shifeng wants to use the back ball to force the opponent to return to the ball passively, so as to create favorable opening conditions for himself. In general, in men's singles project, when players send high ball, receiving tend to use technology such as kill ball, it also reflects the player tends to actively attack play state, but in Li Shifeng receiving four high ball, and only use a kill ball, and use more ball, it shows that Li Shifeng receiving attention in front net, and opponents steal a backcourt ball into a passive state, not in the advantage of kill ball, so the hanging ball to passive transition to look for opportunities.

3.3.3 Analysis of the technical characteristics of the front net ball

Nowadays, the attack rhythm and speed of the badminton men's singles are accelerating, and the men's singles players have to pay more attention to the control of the net. The front ball requires players to invest more energy to improve themselves and their ability to control the court, so as to lay an important foundation for the back attack. The front field area refers to the area near the front service line to the net. Meanwhile, the front field techniques include picking the ball, pushing the ball, rubbing the ball, putting the ball, making the diagonal ball and flapping the ball [10].

Table 6: Statistics of the net in Li Shifeng

Net ball technology						
Opponent	Lift	Pushball	Chop	String	The hook against the corner	Cartwheel block
WuJialang	21	21	13	15	4	2
ZhaoJunpeng	29	22	28	36	10	7
HuangZhiyong	27	26	39	26	11	5
Antonsen	73	47	49	71	14	16
Shi Yuqi	75	5	54	23	21	8
total	252	121	183	171	60	38
Mean per game	50.4	24.2	36.6	34.2	12	7.6
frequency	30.5%	14.7%	22.2%	20.7%	7.3%	4.6%

According to the game data of Li Shifeng, the use of picking the ball, playing the ball and putting the net is the top three in the front field skills and tactics. The use of picking the ball technology can limit or mobilize the opponent, but it is easy to lose the dominance of the field. The pick ball was used 252 times, with 50.4 per field average, accounting for 30.5%. Rub ball and put tennis is mainly used to limit the opponent's attack skills and tactics, to win a good advantage before the net for themselves, the player themselves easy to score directly, or for the opportunity to attack. Compared with rubbing and picking, Li Shifeng has less prominent use of throwing, pushing and flapping in the front field, with 121 balls pushing, averaging 24.2, accounting for 14.7%; only 38 and 60, 7.6 and 12 respectively, accounting for 4.6% and 7.3% respectively, which is the lowest utilization rate. The use of fast push ball technology, will make the opponent's return ball form obstacles, the opponent's return difficulty is high, the quality of the ball will also be affected. Therefore, when the player handles the ball, the good processing ability can control the ball, so that it meets the expected route.

From the statistical situation of this use, Li Shifeng's technical and tactical characteristics in the front field is to use the combination of rubbing, ball and ball picking, so as to win the advantage in front of the net. Whether in the return of serve, or the use of other front court techniques, Li Shifeng tends to take the initiative to fight for his advantage in the front of the net, and attaches a high importance to this position. High quality front net technology can not only score directly, but also can pressure the opponent to reduce the quality of the ball, off the net or passive high ball, seize the offensive advantage, good front net technology is to find the right offensive opportunity. Here, we can judge, to some extent, that the player Li Shifeng has been fighting for the net control and leading the rhythm of the game.

3.3.4 Analysis of the technical characteristics of the midfield ball

Compared to the front court, the use of midfield skills is often a flexible transition between attack and defense. There are four kinds of techniques and tactics in midfield, namely, block straight line, block diagonal, block and pick ball and draw the ball. The technical and tactical use of midfield ball is to ensure the flexible conversion and

connection of technology. Good use of midfield skills can occupy a favorable situation for players, such as defensive counterattack, killing and turning to attack. Its main role is passive processing of the ball, is a very important part of badminton technology, the use of midfield technology is also a large part of the trend of the game [11].

Table 6: Statistics of the net in Li Shifeng

Midfield ball technology				
Opponent	Block straight line	Block diagonal	Block pick the ball	Flat drive
WuJialang	24	5	28	2
ZhaoJunpeng	31	9	8	6
HuangZhiyong	31	17	8	11
Antonsen	72	26	21	27
Shi Yuqi	30	12	0	2
total	188	69	65	48
Mean per game	37.6	13.8	13	9.6
frequency	50.9%	18.6%	17.6%	12.9%

As can be seen from Table 6, Li Shifeng used the straight line technology before blocking the net for 188 times, with an average of 37.6 times per game, and the utilization rate was 50.9%, more than half. The number of diagonal and block picks was similar, 69 and 65 times respectively, an average of 13.8 and 13 times per game, accounting for 18.6% and 17.6% respectively, while the utilization rate of flat ball was the lowest, only 48 times, accounting for 12.9%. The use of the technique before the net is conducive to the defense of the players, and the frequent use of the net before and the diagonal shows that Li Shifeng flexibly uses the midfield skills and tactics to transition the opponent's attack. Combined with the game video, it can be seen that Li Shifeng's active defense in the midfield, and as properly as possible to pick the ball to break the opponent's attack, played a role of anti-control. The use of flat ball skills and tactics is not much, Li Shifeng in the midfield to defense, is good at switching different defensive skills, choose to pick the ball can fight for more time for themselves. In midfield, the technique before the net is often in order to disturb the rhythm of the opponent, especially in the opponent's fast attack, the frequent use of the ball is needed to deal with, and the ball and the corner is used to induce the opponent to run greatly so as to consume physical energy and limit the opponent's attack. The skills and tactics of the midfield are mainly based on defense and limit the attack of the opponent. Li Shifeng uses this ball technique to consume the physical strength of the other side, and then creates favorable attacking conditions and advantages for the back field, so as to facilitate the continuous and rapid killing of the back field. Midfield tactics use balanced, flexible application, flexible transformation of the ultimate goal is to disrupt the rhythm of the opponent, as much as possible to limit or destroy the opponent's attack, defense, the destruction rhythm at the same time, also hope that the opponent error directly score or gain offensive advantage, and attack in the back quickly, strive for a ball to win.

3.3.5 Technical characteristics analysis of the backfield ball

Badminton after half of the ball technology collectively known as the backcourt technology, the back technology is the main scoring technology in the badminton game, backcourt technology mainly includes high, ball, ball, its main role is transition, transfer, attack, which is the main weapon of attack, through the rapid pressure violence make badminton quickly, make the opponent in a completely passive state, grasp the initiative of the backcourt ball is the key to winning badminton players [12].

Table 7: Statistical table of backcourt ball in Li Shifeng competition

Backfield ball technology					
Opponent	High clear	Parrel truck	Smash	An over-lobbing drive	Drive
WuJialang	27	21	25	7	13
ZhaoJunpeng	1	23	43	0	3
HuangZhiyong	8	25	47	5	5
Antonsen	22	59	86	4	27
Shi Yuqi	2	43	38	0	9
total	60	171	239	16	57
Mean per game	12	34.2	47.8	3.2	11.4
frequency	11%	31.5%	44%	3%	10.5%

In the current research on the analysis of the backfield ball technology of the men's singles match, the consistent conclusion is that the utilization rate of the backfield technology from high to low is: killing ball, hanging ball and high ball [13]. Compared with the judgment of scholars, Li Shifeng's use of backfield technology in this competition is basically in line with this judgment. According to Table 7, the usage frequency of Li Shifeng in this competition is kill, hanging and high ball, in which the number of kills is 239,47.8,40,44%; secondly, 171, 34.2, 31.5%, 12, and the frequency is 11%. The lowest use frequency of the backfield technology is the flat high ball, totaling 16 times, averaging 3.2 times per game, and the frequency of use is only 3%.

According to the video of the field, Li Shifeng in the back court ball skills and tactics, focus on the use of aggressive kill ball to win the initiative for themselves. A dunk down from the high point is a huge threat to the opponent's defense, which can generally score directly or score because of the opponent's poor defense. In a high-level badminton game, when the ball is hit to the bottom line of the backcourt, the ball is basically lowered, such as hanging ball and killing the ball, because the player will take the initiative to attack, killing the ball, attacking, Can not find the opportunity to attack, often will choose to play a few more high ball, and then look for the opportunity to attack. The backfield high ball and a high flight line, The characteristic of a longer time, Generally difficult to intercept directly, Could even force opponents back to the bottom-line zone of the backcourt, To defend the net front position, reaction and adjustment time is relatively sufficient, Easy to let yourself control the rhythm of the game; Hanging ball and high ball are often used with each other, Hanging a front ball, Play another high shot, To maximize the mobilization of their opponents, Has the effect of draining the opponent's physical strength, When judging an opponent's return, The body center of gravity is unstable or the opponent returns the ball Angle to choose passive ball or passive ball, And to avoid attacking, But the passive ball quality tends to drop easily, Chtaken by the opponent, Lead to lost points. Li Shifeng is better in the technical and tactical ability in the backcourt, which allows the opponent to run back and forth to the greatest extent and creates offensive opportunities for himself. When the other side's physical ability is slightly weak, he will directly kill the ball and easily score. The ball in the back court is the technology with the highest utilization rate of Li Shifeng in the back court. He uses the ball technology to actively induce the other side to return the ball, so that he can use the ball at the best time and consciously and accurately control the landing point. In addition, Li Shifeng in the back court to kill the ball score, steady rhythm, fast speed, accurate ball point, a strong sense of control of the field, and has the tactical intention to control the rhythm of the field. In men's singles, killing ball, hanging ball and high ball are several ball techniques used more in the back game. The combination of high ball and hanging ball is to defend the rear area. At the same time, the combination of these two ball skills can well transition the state of players and create the next attack opportunity for themselves.parrel truck.

Table 8: Statistical analysis of Li Shifeng's gain and loss score

Gain and loss points statistics				
opponent	Active score	Passive score	Take the initiative to lose points	Passive loss of points
WuJialang	10	19	8	5
ZhaoJunpeng	22	20	12	10
HuangZhiyong	32	10	12	10
Antonsen	35	26	14	36
Shi Yuqi	17	30	11	18
total	116	105	57	79
frequency	23.2	21	11.4	15.2
Mean per game	52.5%	47.5%	41.9%	58.1%

In Table 8, we find that the score of Li Shifeng is balanced, and active score is similar to passive score: 116 points and passive score 105 points. The average of both is 23.2 and 21 respectively, accounting for 52.55% and 47.5%; in loss, active and passive points are unbalanced, 57 and 79 points in total, 11.4 points, while passive points lose 79 points and 15.2 points, accounting for 58.1% of the total. From the overall analysis, Li Shifeng actively lost too many points in the game, averaging 11.4 points per game due to his own mistakes.

3.4 Overall analysis of Li Shifeng's tactical application

From the analysis results and video, li Shifeng's tactical play has the following characteristics:

(1) The application characteristics of serving tactics

Li Shifeng is used to send the small ball in front of the net, and the consciousness of seizing the position in front of the net is strong. The serve is concentrated in positions 1 and 5, and the ball in this area has a short flight time in the air, and the opponent needs to quickly track the ball, but is unable to seize and dominate the rhythm. The drop point is involved in other positions, and it is not easy for the opponent to detect his intention, which is often a backup technique to use to change the rhythm of the game.

(2) The application characteristics of the receiving and service tactics

Li Shifeng's tactics are mostly using a variety of receiving techniques, which is not easy to be predicted by the opponent, and the second is to effectively destroy the rhythm of the opponent. Through high-quality receiving techniques, turn defense to attack, and Li Shifeng's receiving tactics are handled quickly and decisively. Li Shifeng uses the combination of rubbing the ball and picking the ball to use the tactics, which is easy to grab the opportunity to attack or score because of the opponent's mistakes.

(3) The use characteristics of the front field ball tactics

Li Shifeng is used to the coherent use of rub ball and ball picking technology, rub ball is mainly used to limit the opponent's attack skills and tactics, to win a good advantage in the net, the player themselves easy to score directly, can win the opportunity to attack. In addition, for other technical balls, Li Shifeng has flexible use. While taking the initiative to attack, he pays attention to the conversion of various ball techniques, attaches great importance to the position in front of the net and actively strives for them.

(4) The application characteristics of the midfield ball tactics

The use of the technology before the net is conducive to their own defense. The frequent use of the net before and the diagonal is enough to see Li Shifeng's active defense, and as appropriately as possible to pick the ball to break the opponent's attack, which plays a role of counter-control.

(5) The application characteristics of the backcourt ball tactics

Li Shifeng's backcourt tactics is the best tactics for his offensive scoring, and the most used is the online tactics. Most of Li Shifeng's smash ball kills the diagonal line, which is a great threat and can often limit the opponent to block the slightly higher ball in the middle and front court and make the shot online. The combination of hanging ball and killing ball is also one of Li Shifeng's preferred tactics. Through the hanging ball in the back court, the opponent is forced to play the ball high, turning himself into the active attacking side and finding the best time to press down. The accumulation of techniques and tactics in the early stage has accumulated advantages for the attack of the back court. The frequent use of smash techniques and tactics in the back field is the outstanding characteristic of Li Shifeng and his strong personal offensive ability.

4. CONCLUSION

Li Shifeng's serve is mainly backhand shot, and the serve is concentrated in areas 1 and 5 in front court; other areas are involved but not frequently. At present, there is a tendency of men's singles in badminton.

Li Shifeng's use of receiving service skills and tactics is mainly to rub and put the net and pick the ball, while the use of other technical balls is involved but not much. He has a high sense of defense, but also actively attack, trying to break free of the control of the opponent, actively strive for the initiative of the game, so the net in the return stage is also particularly important.

The use of forward ball skills often requires more energy into dealing with the opponent's return to gain the chance to dominate the game. Li Shifeng's front court attack is more active, like to rub the ball and pick the ball skills and tactics, so as to win the advantage in front of the net.

Li Shifeng has no obvious technical and tactical gap in the performance of Li Shifeng and his opponents in the midfield, and all the ball techniques are used. The straight line technology before the net is used most, followed by the diagonal and pick the ball, and the flat ball is the lowest frequency.

Li Shifeng in the back using the ball and kill the ball tactical ability is better, the back is Li Shifeng in the back of the highest utilization technology, using the ball technology to use the ball, and consciously and accurately control

the point and Li Shifeng in the back is given priority to with kill the ball score, steady, fast, drop ball point precision, to the field of control consciousness is strong, control the rhythm of the tactical intention.

Li Shifeng loses too much points actively, which is in a phenomenon that he wants to actively grab the advantage but loses points due to poor technical treatment.

REFERENCES

- [1] Luo Wenli. From competition to symbiosis: oral history of badminton in mass sports in Chengdu [D]. Tutor: Shen Jianfeng. Sichuan Normal University, 2022.
- [2] Chen, Zhang Hui. Construction and application of the "Three-section evaluation method" in the singles competition of excellent female badminton players [J]. China Sports Technology, 2015,51(03):63-67.DOI:10.16470/j.csst. 201503008.
- [3] Luo Jianying, Cheng Yongmin. Thoughts on the development trend of modern badminton sports and its development countermeasures in China [J]. Sport, 2002, (1): 60-62.
- [4] Chen Fushou, Wang Wen Jiao, the editor. badminton [M]. Beijing: People's Sports Press, 1959.
- [5] Zhu Jianguo, the chief editor. Teaching and training course for badminton sports [M]. Beijing: Tsinghua University Press. 2019.
- [6] Qiu Ming, Liu Jia. Badminton, a series of optional sports courses in colleges and universities [M]. Changsha: Hunan University Press, 2009:8 0-81.
- [7] Chao Deng. Study on the technical and tactical characteristics and development trends of world outstanding Women's badminton singles players [D]. Tutor: Yu Ying. Liaoning Normal University, 2021.
- [8] Lin Wenchao. Study on the tactical characteristics of Li Zi, a men's badminton player [D]. Tutor: Gu Xinwen. Harbin Normal University, 2022.
- [9] Li Lin. Analysis on the technical and tactical application of Chen Yufei, a Chinese badminton women's singles player [J]. Fujian Sports Science and Technology, 2021,40 (04): 56-59.
- [10] Xiao Jie, the chief editor. Theory and practice of badminton sports [M]. Beijing: People's Sports Press, 2005:17,53.
- [11] Wang Xinyi, Guo Taiwei. 2021 Sudirman Cup Badminton Championship final men's singles Shi Yuqi VS Momata [J]. Fujian Sports Science and Technology, 2023,42 (02): 78-81 + 86.
- [12] Tao Xingwang. Analysis of the difference between the technical and tactical application of Dai Ziyang and Chen Yufei. Take the women's singles final of the 2020 Tokyo Olympic Games as an example [J]. Sports Science and Technology Literature Bulletin, 2022,30 (09): 82-84 + 175.
- [13] Chen Suiqin. Study on the relationship between technical and tactical actions and performance in the backcourt of men's singles [J]. Sports Science and Technology Literature Bulletin, 2022,30 (01): 34-36.