

Based on sports management theory: an analysis of the factors influencing the Chinese women's national volleyball team under Lang Ping

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Abstracts: *The Chinese women's volleyball team, under the leadership of Lang Ping, successfully won the Rio Olympics and renewed the glorious history of the Chinese women's volleyball team. The report analyses the Chinese women's national volleyball team through VMOST and PESTLE. In the analysis of the internal and external factors of the Chinese women's volleyball team, it is concluded that the reason for the outstanding achievements of the Chinese women's volleyball team is the adoption of an internal framework with the primary goal of achieving the championship, the promotion of the women's volleyball spirit as the central vision and the adoption of the "Magnifying national team" as the primary strategy. External influences such as national policy and financial support, as well as social support, have contributed to its success.*

Keyword: *sports management; volleyball team; Lang Ping*

1. Introduction

The Chinese women's national volleyball team is the pride of every Chinese and one of the most outstanding representatives of China's competitive sports teams (Pan & Gao, 2008).[1] Since the 1980s, when the Chinese women's volleyball team, represented by Lang Ping, won the world's only five consecutive volleyball titles, the Chinese women's volleyball team has experienced great ups and downs over the past 30 years. Still, overall its performance has been at the top of the world (Deng, 2004).[2] However, after the retirement of the older generation of athletes in 2008, the Chinese women's national team's performance declined significantly. The Chinese Volleyball Association hired Lang Ping to coach the Chinese women's volleyball team during a crisis. After several years of Lang's coaching, the Chinese women's volleyball team won the 31st Olympic Games in Rio de Janeiro, Brazil, and returned to the world's top (Lei, 2017).[3] From the perspective of the national team, the construction of the national team includes the three process elements of national team formation, training and competition. In comparison, the management of the national team is the process of optimising and integrating the three process elements in terms of people, finance, materials, information and ideas (Liu, 2020). [4] During her tenure as head coach from 2013 to 2021, Lang Ping attached great importance to the construction of a composite team for the national team, which is a team composed of a head coach, assistant coaches, accompanying coaches, doctors, rehabilitators, physical trainers, nutritionists, scientific research, information research, data statistics and other professionals (Yang & Li, 2019) [5], with different personnel corresponding to various functional departments in the national team. At the same time, Lang Ping also put forward the "Magnifying national team" management concept. The main objective of this report is to use management theories to analyse the management model and framework of the women's national volleyball team under the coaching of Lang Ping from 2013 to 2021 and give some recommendations.

2. Internal Factors

In analysing the internal environmental factors of the Chinese women's national volleyball team, the report uses the VMOST framework (Vision, Mission, Objectives, Strategy and Tactics).

2.1 Vision

The Vision is the ideal state the organisation being analysed wants to achieve in the future. The Chinese women's national volleyball team has made an outstanding contribution to Chinese sport since

its inception as an exceptional representative of Chinese athletics. From winning the 1984 Olympic Games in Los Angeles, where they became the first team in the world to win five consecutive titles, to winning the 2004 and 2016 Olympic Games, the tenacity of the Chinese women's national team has become part of the spirit of the Chinese people and even the country. In an interview during the 2019 Women's Volleyball World Cup, head coach Lang Ping said, "It is our duty and mission to fight for the glory of our country. We aim to raise the national flag and play the national anthem(Zhao & Zheng, 2020).";[6] It is, therefore, the ambitious vision of the Chinese women's volleyball team to inherit and carry forward this spirit that inspires the patriotism of the Chinese people and the primacy of the motherland.

2.2 Mission

The Mission is the outline set to achieve the Vision, and the ability to accomplish the Vision once it is presented is the key to testing whether the Mission is suitable for the Vision. For the Chinese women's national volleyball team, the key to continuing the vision of the "spirit of women's volleyball" is to consolidate the women's ability to win gold in world competitions. However, the team's ability to maintain a high level of performance is affected by several factors, such as the turnover of new and old players, the change of coaches, changes in training guidelines and adjustments to training methods etc. That the lowest periods for the Chinese women's volleyball team were during "The frequent change of coaches". "The frequent turnover of coaches inevitably affected the continuity and succession of training and management and led to a decrease in trust between athletes and coaches (Zhang et al., 2017)". [7] This inevitably has a massive impact on the performance of the Chinese women's national team in the three major volleyball tournaments (Olympic Games, World Championships and World Cup). Therefore how to overcome these influencing factors in the future when the Chinese women's volleyball team is faced with the Mission of consolidating its strength in winning gold is a question to be seriously considered.

2.3 Objectives

Objectives are manageable goals that can be achieved in the short or long term. The essence of objectives is to break down the organisation's vision and mission into small achievable units and to achieve the organisation's vision and mission by completing each of these units. The objectives of the Chinese women's national team can be broadly divided into three. The first is to win the three major tournaments (Olympic Games, World Championships and World Cup), the second is to focus on developing reserve talent, and the third is to innovate various technical and tactical play styles. The most important of these three objectives is to win in the three leagues. "National governing bodies can be considered as 'hybrid' organisations due to four characteristics. They have a social orientation that is different from the prioritisation or systematic search for profits that characterises commercial organisations (Bayle & Robinson, 2007)."[8] the primary goal of the national team as a national governing body is to achieve excellence in international competitions, which is one of the important criteria to measure the national team's success. The second objective of the national team is to maintain a high level of performance of the women's volleyball team as a whole: the cultivation of reserve talent for competitive sports. If the first objective is to focus on the "present", then the second is to focus on sustaining the "future" of the first Objective. The third Objective of the Chinese women's volleyball team is to innovate several technical and tactical styles of play at the technical level, and a sport's technological and tactical innovation must be in line with the sport's rules. "The rules of volleyball are like a double-edged sword, guiding and limiting technical and tactical invention (Yang & Zhang, 2011)."[9] Therefore, it is an important goal for the Chinese women's national team to make efficient use of the game's rules for technical and tactical innovation.

2.4 Strategy

Strategy refers to the methods that an organisation will implement to achieve the organisation's objectives. Since Lang Ping became the head coach of the Chinese women's national team, she has vigorously pursued the "Magnifying National Team" strategy. The so-called "Magnifying National Team" is: "based on concentrating the best domestic volleyball players, focusing on the exploration of "newcomers" with potential for development, thus achieving a high degree of integration of the existing human resources of China's women's volleyball(Jiang, 2017)."[10] In general, the traditional women's volleyball national team trains with about 17-18 players, but under the guidance of Lang Ping's "Magnifying national team", the first national team training list of the Chinese women's volleyball team

was expanded to 30 players, and the number of players participating in each national team training was guaranteed to be more than 20. In terms of staffing, the gradient is arranged by the principle of combining the old with the young, thus ensuring that three to four people are competing for each position, thus triggering a "butterfly effect" within the Chinese women's volleyball team to improve the overall performance. Therefore, it can be said that "the "Magnifying National Team" model has broken the traditional training and cultivation model of women's volleyball by introducing new players, activating the competition mechanism and focusing on team building, which has led to a positive and healthy development of Chinese women's national volleyball team (Wang, 2013)".[11] In addition, the "Magnifying National Team" strategy has, to a certain extent, provided a guarantee for the "training of reserve talents" and "technical and tactical innovation" in Objectives.

2.5 Tactics

Tactics are the actions and procedures taken to achieve a strategy. During Lang Ping's tenure as head coach of the national team, the overall style of play of the Chinese women's volleyball team at the technical level changed dramatically. From the 28th Olympic Games, where the team "insisted on implementing a fast, high hitting point and varied style of play (Xiao & Qu, 2006)" [12] to the 31st Olympic Games under Lang Ping, where the team "arranged different players to play as starters or substitutes according to the offensive and defensive characteristics of our opponents, and organised multiple sets of different technical and tactical combinations to achieve the effect of disrupting the rhythm of the opponents' blocking and defence (Zhao, 2017)". [13] Therefore, the Chinese women's national team's tactical development and transformation at the technical level can be seen in this. Regarding management, the Chinese National Volleyball Management Centre promised Lang Ping significant autonomy, so she could boldly use foreign staff to build a 'composite team'. The core intention of creating a "composite team" is to "take the lead from us, learn from the long skills of the foreigners and avoid the shortcomings, so that the world's most progressive ideas can be used for the training and development of the national women's volleyball team (Zhao, 2018)", [14] thus ensuring that the "Magnifying national team" strategy can be implemented effectively.

3. External Factors

In discussing the external influences on the Chinese women's national team, the report uses the PESTLE tool to analyse them. The PESTLE tool is "a strategic planning tool used to evaluate the impact of political, economic, social, technological, environmental and legal factors might have on a project(Rastogi & Trivedi, 2016)", [15] which facilitates the investigator to grasp the potential risks and problems of the organisation. As PESTLE is divided into six aspects, the following gives will provide an external analysis of these six aspects of the Chinese women's national team.

3.1 Political

In May 2016, the General Administration of Sports of China released the "Thirteenth Five-Year Plan for Sports Development", in which the guidelines for Chinese women's volleyball were clearly stated: "Based on promoting a significant improvement in the overall level of volleyball in China, Chinese women's volleyball will maintain its leading position in Asia and the advanced level in the world, and will remain among the leaders in the Rio 2016 Olympic Games and the Tokyo 2020 Olympic Games (Department of Political Science and Law, 2016)". This sets out precise requirements for the training objectives of the Chinese women's national team. In addition to the exact requirements for Chinese women's volleyball, the policy also guides the development of Chinese sports in the five years from 2016 to 2020 from various perspectives, such as: accelerating the development of sports commercialisation, innovating the training programmes for reserve sports talents, improving the implementation of China's Olympic Games etc. The recommendations in this policy have influenced the development and direction of the Chinese women's national team to vary degrees. Most notably, following the release of the policy, the women's national team began to allow athletes (such as Zhu Ting) to play for clubs in foreign leagues during non-Olympic preparations. This will enable Zhu Ting to learn advanced technical concepts abroad and bring them back to China; simultaneously, this epitomises the move towards the commercialisation of competitive sports in China.

3.2 Economic

China's sports industry is based on the "Whole-Nation System", "which is a hierarchical structure that functions as top-down administration (Si et al., 2015)".[16] The training funds for the different national teams are allocated by the State General Administration of Sports to the different sports management centres under its jurisdiction, giving them to the national teams under the sports management centre's authority. In addition, according to the policies issued by the General Administration of Sports, such as the "Thirteenth Five-Year Plan for Sports Development", national sports are divided into "Olympic sports" and "non-Olympic sports". There is a significant difference in the financial allocations for these sports. Tables 1 and 2 compare the funding difference between volleyball as an 'Olympic sport' and wushu as a 'non-Olympic sport' in sports training.

3.3 Social

From a social perspective, Chinese society has incorporated the spirit of the Chinese women's volleyball team into its mainstream values. It can be said that the nature of Chinese women's volleyball has been internalised as a unique Chinese national and contemporary spirit, which has current value in enhancing national self-confidence, practising core socialist values and building the Chinese dream. When Chinese President Xi Jinping met with the coaches and athletes of the Chinese women's volleyball team, he said, "The whole country is watching you, and hundreds of millions of people are cheering for you in every match(Song, 2022)".[17] This illustrates the status of the Chinese women's volleyball team in the hearts of the whole country and shows that it is precisely because of its proud achievements that the Chinese women's volleyball team has won the attention and focus of society at large. Therefore, it is worth further studying how to develop the spirit of the Chinese women's volleyball team in the future to meet the expectations of society and how to integrate the contemporary "spirit of the Chinese women's volleyball team" into the construction of a harmonious society.

3.4 Technological

The impact of the use of modern technology on the sports industry is enormous, to the extent that it can rewrite the rules of the competition and even influence the outcome of matches. Two technology currently being used in the volleyball industry are the Eagle Eye challenge system, used in tournaments, and Data Volley, designed to summarise and analyse volleyball teams before and after training. The Eagle Eye challenge system guarantees the fairness of volleyball matches. In the event of a disputed call during a game, "the referee cannot simply observe the reactions of both teams, but should make the call by the Eagle Eye challenge rules(Liu & Wei, 2016)".[18] This technology has dramatically improved the game's fairness and accuracy of the calls and, to a certain extent, reduced the occurrence of black whistles. Meanwhile, Data Volleyball software has significantly improved the efficiency of the volleyball team's statistics, simplifying the analysis of live statistics and sending the results back to the coaching staff, helping them achieve the desired outcome. At the same time, all data is saved during the match and "view as many statistical charts as needed (Liu, 2022)" [19] to help the coaching staff with post-match analysis and review.

3.5 Legal

From a legal point of view, the whole of China's sports industry is based on the "Sports Law of the People's Republic of China". No sporting activity may contravene the regulations set out in the Sports Law. Article 39 of the Sports Law states that "The State shall promote the development of competitive sports, encourage athletes to improve their athletic performance, create excellent results in sporting events and win honour for the country and the people " and Article 42 "The State shall strengthen the training and management of athletes and provide them with education in patriotism, collectivism and socialism, as well as morality, discipline and the rule of law" (The National People's Congress of the People's Republic of China, 2022). All other regulations begin with the word "state", emphasising the state's leadership role in developing sport. While this facilitates the rapid development of women's volleyball through state resources, it is questionable whether this overemphasis on state leadership is conducive to the market-oriented development of women's volleyball.

3.6 Environmental

Mainstream volleyball matches are dominated by indoor volleyball, and there is less research on the

association of indoor volleyball with the environment. Most of the topics related to volleyball and the environment are dominated by beach volleyball. Therefore the study of indoor volleyball about the environment could be a new direction for research.

4. Conclusions

This report analyses the internal and external influences on the Chinese national women's volleyball team through two theoretical tools, VMOST and PESTLE. The analysis reveals that the Chinese women's national volleyball team is dominated internally by its athletic performance through the strategy of 'Magnifying national team', 'innovation of multiple technical and tactical combinations' and 'composite team' tactics to ensure that China's women's volleyball team is a leader in the international arena. In turn, the vision of inspiring the Chinese people to strive for excellence is realised through impressive sporting achievements. Therefore, the success of the Chinese women's national volleyball team is measured by whether or not they have won the three leagues.

As the state leads Chinese sports, the external analysis shows that the POLITICAL factor strongly influences the women's national team. It provides a clear direction and requirements for the women's volleyball team's training goals and achievements. It also directly impacts the women's national team's training funds. In terms of sports technology, the application of new technologies will positively affect the training and competition of the women's volleyball team. It will contribute to the healthy development of women's volleyball careers.

5. Recommendations

In an internal analysis, it was learned that the Chinese women's national team relies on winning international competitions to achieve its goals and vision, but if the Chinese women's volleyball team does not achieve impressive results in international competitions, does it mean that the strategies and tactics adopted by the women's volleyball team are failures? Therefore, in the future, scholars can further analyse and advise on the advantages and disadvantages of this "medal-only" goal for the Chinese women's volleyball team.

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