

# Research on the Popularization and Development Strategies of Niche Sports in China: A Case Study of Curling

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**Abstract.** Winter niche sports are gradually gaining prominence in China; however, compared to traditional summer sports, these sports still face various development and popularization challenges. This study takes curling as an example and delves into the current state of winter niche sports in China, with the aim of identifying key issues and feasible solutions. Firstly, this paper reviews the historical development of winter niche sports in China. However, despite these significant governmental efforts, sports like curling, among other winter niche sports, exhibit relatively lower recognition and participation in China, accompanied by numerous challenges. Secondly, the research highlights the characteristics and potential of curling. Nonetheless, when compared to traditional winter sports like skiing and ice hockey, curling's infrastructure and popularity in China still require significant enhancement. Furthermore, the study analyzes the root causes of the challenges in the popularization of curling, including insufficient promotion and education, inadequate infrastructure, and limited knowledge of curling rules and techniques. To address these issues, the paper presents a series of recommendations, such as intensifying the promotion of curling, improving infrastructure development, and conducting curling training and promotional activities, all aimed at facilitating wider adoption of the sport. Lastly, the research summarizes the prospects of winter niche sports in China, underscoring the necessity of collaboration and efforts among the government, sports organizations, and businesses in promoting these sports.

**Keywords:** Niche sports; Winter sports; Curling; Sports Promotion.

## 1. Introduction

As China endeavors to bolster its position as a sporting powerhouse, it actively pursued the bid for the 2022 Winter Olympics. This strategic move aimed to propel the development of sports in China, foster citizen participation in winter sports, and enhance the overall physical well-being of the nation. Acknowledging the existing gaps in the country's ice and snow sports infrastructure, China introduced the ambitious objective of "Involving 300 Million People in Winter Sports" following the successful Olympic bid. This goal is rooted in the realities of China, with the aspiration of engaging more individuals in ice and snow sports, allowing them to experience the joys of these activities, and thereby contributing significantly to the growth of China's sports industry and the cultivation of an ice and snow sports culture.

Particular emphasis is placed on youth engagement in ice and snow sports and the development of these activities within educational institutions. This paper employs a literature and data-driven approach to analyze the promotion and communication strategies of curling in the Chinese market, with a specific focus on adolescents. The ensuing sections will comprehensively cover five key aspects of curling, namely the evolution of curling in China, the present state of Chinese curling, global curling competition dynamics, the obstacles and challenges encountered in popularizing curling, and strategies for the promotion and development of curling in China.

## **2. Literature Review**

### **2.1. Overview of Winter Olympic Games**

In the nascent stages of China's reform and opening-up policy, the nation had just begun to embrace global engagement. During this period, the sporting equipment used by Chinese delegations for international competitions remained quite rudimentary. The majority of advanced equipment from foreign countries had yet to make its way into China, and even when it did, achieving recognition in international competitions posed a formidable challenge due to the country's relative unfamiliarity with such advanced technology.

The Winter Olympics, a grand sporting event, has been hosted 23 times, with the preponderance of these events taking place in European and North American countries. Within this context, Asia has hosted the Winter Olympics on three occasions, with Japan serving as the host nation in Sapporo in 1972 and Nagano in 1998, while South Korea took on this prestigious role in Pyeongchang in 2018. In 2022, China proudly assumed the responsibility of hosting the 24th Winter Olympics, marking a significant milestone as the third Asian nation to undertake this endeavor.

This development signifies China's growing stature and commitment to international sports, as it not only embraced the Winter Olympics but also made history by hosting the event. The 2022 Winter Olympics held in Beijing exemplified China's dedication to advancing its presence on the global sporting stage, showcasing its prowess in organizing and hosting major international events.

### **2.2. Overview of Curling**

Curling is an ice-based team sport often referred to as the "chess on ice," demanding a combination of physical and mental skills.

In a typical curling match, two teams, each comprising four players, compete over ten rounds. During the game, players from both teams take turns to throw the curling stones, with each player having two opportunities to make a throw. The order of throwing follows a sequence: lead, second, third, and skip. As a player releases the stone, two teammates with brushes in hand briskly sweep the ice surface in front of the stone to guide it accurately towards the center of the playing area. Simultaneously, members of the opposing team can also sweep the ice surface to alter the stone's trajectory, trying to keep it away from the center.

The player delivering the stone assumes a squatting position and uses an ice pedal to push off forcefully, causing themselves to slide forward on one knee. While sliding, they grip the curling stone and propel it from the center of the playing area circle. As the stone crosses the midpoint line, the player releases the stone to continue its course, either in a straight path or with a curved trajectory towards the center of the playing area. Team strategy may also involve using the stone to knock out an opponent's stone from the playing area or position their own stone at the center of the circle, guided by the skip's instructions.

Ultimately, after both teams have exhausted their throws, the winner is determined by the proximity of the stones on the field to the center of the circle, with each stone earning one point. The team with the highest score emerges victorious.

## **3. The Development of Chinese Curling**

### **3.1. The Origin and Early Development of Chinese Curling**

The journey of curling in China saw significant milestones following its initial introduction. It was in 1995 that Heilongjiang Province, with support and cooperation from countries like Canada and Japan, began to gain recognition and understanding of the sport, gradually laying the foundation for its introduction.

Fast forward to the year 2000, and China marked a pivotal moment with the formation of its first curling team, the Harbin team. This endeavor was marked by its fair share of challenges, signifying the nascent stage of curling in the country.

By 2003, a critical development occurred with the birth of the first national brand team. This team not only symbolized the growth of curling but also signaled China's commitment to the sport on a national scale.

In the same transformative year of 2003, China took a significant step by becoming a member of the World Curling Federation. This milestone granted Chinese athletes the opportunity to participate in international curling competitions, marking their entry onto the global stage.

This progression reflects the gradual evolution of curling in China, from its initial introduction to the establishment of national teams and international participation. It underscores the dedication and collaboration that have been pivotal in shaping the development of curling within the country.

### **3.2. The Progress of Curling in China**

Another noteworthy fact is that during the four-year cycle of preparing for the Winter Olympics, China's curling sport has made significant progress, and the curling population has also undergone rapid changes. The future development trend of China's curling sports equipment and accessories industry is also very optimistic. With the promotion of curling by the country, more enthusiasts of curling will purchase more curling equipment and accessories, thereby promoting the rapid growth of the industry market size.

In addition, technological improvements in the curling sports equipment and accessories industry will also accelerate industry development. With the continuous popularization of new technology applications, relevant enterprises will invest more funds and energy in developing more advanced curling sports equipment and accessories, thereby enhancing product competitiveness and expanding the industry market.

## **4. Current Situation of Curling Development in China after 2022 Winter Olympics**

### **4.1 The Basic of Chinese Curling and the Number of Participants**

By 2022, according to industry estimates, there are about 20,000 curling enthusiasts in China, and only half of them are really familiar with curling, which is a very small proportion for the 1.4 billion population. This is due to the high cost of participation in curling, fewer professional venues and other factors, resulting in a small number of people participating in curling. Because curling is a niche sport with a small number of participants, there is little demand for curling coaches, and professional curling coaches are even scarcer due to the small number of registered professional athletes in curling. According to statistics from the curling industry, there are less than 100 professional curling coaches in China.

### **4.2 Curling matches and events that Team China Faces**

The overall level of the Chinese national curling team is still some gaps compared with the world's traditional curling teams. For example, in the most recent world match from this article, on February 19, 2023, in the women's curling round robin of the Pyeongchang Winter Olympic Games, the Chinese team lost 4-10 to the United States, suffering two consecutive big losses. With a record of 3-4, China has almost lost any hope of advancing to the top four. There are 10 teams competing in the Winter Olympics, with the top four advancing to the final semifinals and final. China, which finished seventh in the last Sochi Winter Olympics, sent Wang Bingyu and Zhou Yan, two veterans of the Vancouver Games, but the results showed that the two veterans have not been steady in this Winter Olympics.

## 5. Problems and Challenges Facing the Popularization of Curling

Difficulties and challenges of popularization have three parts. The first part is history. Chinese curling had only just begun to develop in 1980, which meant that we had no history, no good culture and no good coaches, and it was only after the establishment of the International Curling Federation that China began to prepare and participate in international competitions. In 2000, Harbin City Team, the first curling team in China, was established. In 2003, the first national team appeared, the same year, China joined the World Curling Federation, after which the world curling arena has a Chinese athlete figure. After years of development, Chinese curling has gradually come to be known in the world. [1] Solution is not hard, In the future, the biggest challenge for Chinese curling is how to train more excellent players and coaches. So that's why Chinese curing should strengthen the training and management of the curling team and introduce high-level coaches to provide better technical support for the development of Chinese curling.

New blood and atmosphere, those two parts have a lot to do with each other. Because there is no good atmosphere, there is no new blood flowing in. The reason why the curling atmosphere is so bad is mainly because curling in the Chinese environment has no tradition and cultural support. China has a rich and diverse range of sports, some of which, such as badminton, table tennis and basketball, have a traditional and broad base in China. In contrast, curling in China, compared with traditional winter sports, the lack of broad awareness and cultural background, which limits its popularity, while the media does not put a lot of resources on the promotion of curling, curling is a sport with low public participation, people's attention is low, which leads to the lack of promotion of curling through radio, television and other media. At the same time, the promotion of curling culture is not balanced, the promotion of curling culture in some northern provinces is slightly better, but the promotion of curling culture in the southern region is little due to the few curling venues and the small number of participants. Secondly, in addition to a curling venue in Shanghai, there are less than 10 professional curling venues in China, all concentrated in several cities with better development of curling in the north. [2]A severe shortage of professional curling venues limits the possibility of participating in the sport, which requires professional facilities and cost inputs. The sport requires special curling venues and equipment, and building and maintaining such facilities requires significant funds and resources. In China, these professional facilities are relatively few, the lack of sufficient curling venues and training bases limits the development and promotion of curling, and the lack of these resources means that it is very difficult to contact it, a set of curling costs 180,000 yuan, which is very difficult for students or enthusiasts to buy a set on their own. In the past few years, it has been difficult to find the Chinese team doing well in the world competition, finding only three competitions. The first was third place at the 2007 Asian Winter Games, the second was third place at the 2010 Winter Olympics, and the last was fourth place at the 2014 Winter Olympics and 2018 Winter Olympics. Even Chinese team didn't win the title; it is encouraging and admirable to achieve such a result with weak curling. So Chinese curling can build on this, because these are all good results for Chinese curling in the world competition [3]. First of all, it proves that they are capable of achieving good results. What's more, these stories can serve as a good way to publicize the public and attract more people to join the sport. Finally, these aspects will encourage more people to recognize it and join it through people's efforts.

## 6. Promotion and Development Strategy of Chinese Curling

### 6.1 Grassroots Promotion and Youth Training Plan

To cultivate interest and participation in curling at the grassroots level, the Chinese government has taken proactive measures to promote the sport nationwide. [4] Curling clubs and facilities have been established in various provinces, cities, and regions, providing accessible platforms for individuals to engage in the sport. These clubs organize regular training sessions, competitions, and community events to introduce curling to a wider audience and encourage participation. [5]

Furthermore, the Chinese government has implemented a youth training plan that identifies and nurtures promising young curling talents. Specialized training centers and programs have been established to provide comprehensive coaching, technical guidance, and competitive opportunities for young athletes. These initiatives aim to cultivate a new generation of skilled curlers who can represent China in national and international competitions.

## 6.2 Support for Ice and Snow Sports Policies

China has recognized the substantial potential of ice and snow sports, including curling, and has implemented a range of supportive policies to foster their growth. Notably, the government has made significant investments in the construction of ice arenas and curling rinks. This strategic infrastructure development ensures that there are ample venues available for training, competitions, and grassroots participation in curling. [6] This initiative not only benefits athletes but also plays a pivotal role in catalyzing the growth of the ice and snow sports industry across China.

Furthermore, the Chinese government has proactively promoted collaborative efforts among sports organizations, educational institutions, and professional athletes to further the development of curling. These collaborative endeavors have led to partnerships with well-established international curling associations and countries with a rich curling tradition [7]. These partnerships serve as platforms for the exchange of knowledge, expertise, and coaching resources. As a result, these collaborations have significantly advanced curling techniques and strategies in China, equipping Chinese curlers with the skills and knowledge required to compete at the highest international levels.

In addition to infrastructure and international collaborations, the Chinese government has implemented supportive policies that prioritize ice and snow sports, including curling. Financial incentives, sponsorship programs, and talent development schemes have been introduced to support athletes, teams, and associations involved in curling. These policies aim to create a favorable environment for the sustained growth and success of curling in China [8].

In conclusion, the promotion and development strategy of Chinese curling encompass grassroots promotion and youth training plans, as well as support for ice and snow sports policies [9]. By fostering interest and participation at the grassroots level, identifying and nurturing young talents, investing in infrastructure, and implementing supportive policies, the Chinese government is building a solid foundation for the growth and success of curling in the country. With these strategic initiatives in place, Chinese curling is poised to further flourish, and the nation can aspire to achieve excellence in this exciting winter sport [10].

## 7. Conclusion

The location of Chinese provide possibility for people to engage in the curling. The Northeast region is a good province to participate in the curling. However, only few people are willing to let their kids to join the curling. Compared with basketball and football, curling isn't that compatible because of the limit sites and fames. However, there are still only improvement of curling in these day's development.

The help of liquid synthetic ice technology and land curling will benefit teenagers' physical and mental health because they can have more opportunities to play curling, making them stronger and healthier. Also, Land curling saves costs and breaks geographical restrictions. It is conducive to actively promoting curling in colleges and universities across the country. Finally, the talent reserve is conducive to the construction of the echelon, and China will be able to have more achievements in curling. Youth participation is conducive to talent reserve, and more people can get better professional results, which can be a virtuous circle.

## Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

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