

The Dilemma of Audience Attendance of Niche Sports Events and Its Solutions: The Curling Sport as an Example

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Abstract: With the rapid development of Chinese sports industry, popular sports such as basketball and table tennis have attracted a wide range of audiences and gained widespread attention and support. In contrast, some sports with relatively small scale of operation and small audience groups, such as curling, still face the dilemma of audience attendance. Past studies have focused on attendance analysis and development of marketing strategies for popular sports, resulting in niche sports being gradually marginalized and receiving less and less attention. This study aims to take curling as an example, using the problem-tracking method in case studies and the literature review method to help niche sports find practical ways to get out of the dilemma of low attendance. The author analyzes the differences in economic volume between sports to find out the differences in the level of importance; finds out the generation mechanism of low attendance based on the influence of celebrity benefits, consumer income theory and the effect of the national team's performance; and applies the stakeholder theory and the sports community theory to find feasible solutions for the curling tournament organizers, marketers and the government.

Keywords: Niche sports, Curling, Audience Attendance Rate, Stakeholder theory, income theory.

1. Instruction

In today's rapidly developing Chinese sports industry, popular sports such as basketball and table tennis attract a wide range of audiences and gain widespread attention and support. In contrast, some less popular sports with relatively smaller scale and smaller audience groups, such as curling, still face the dilemma of audience attendance. Currently, researchers in the field of sports economics often focus on issues related to spectator attendance. They focus on factors such as audiences' behavioral decisions, or the factors that influence the consumers' decisions; consumer income; and related marketing strategies and promotional activities to increase spectator attendance [1]. Consumer behavior is an essential part of the context of research seating studies. Consumer behavior involves the decision-making process of consumers in selecting and purchasing a product or service, and in the case of curling events, also includes consumer participation and viewing of the game. By understanding consumer behavior, spectators' needs, preferences, and interests in curling can be better understood to provide targeted strategies for the planning and promotion of curling events. Consumer income is another important factor that influences the context of the study. Consumers' economic status and consumption ability directly affect their willingness to participate in curling sport events

and their ability to purchase seats. By studying consumers' income levels and spending power, the positioning of ticket prices for curling events can be better determined, and spectators can be provided with seating options that match their economic status, thus increasing seat occupancy rates. Since curling is a professional sport, its economic size and influence is important indicators for assessing seating demand. By understanding the economic volume of curling, the market potential and development prospects of curling events can be better grasped and reasonable seat demand and sales strategies can be determined. Currently, sports attendance research is limited to exploring the influencing factors of popular sports attendance and proposing solutions for clubs and leagues of popular sports such as basketball and soccer, in contrast, the attendance of niche sports has received less attention. This study aims to analyze the mechanisms of attendance generation in niche sports and try to figure out possible solutions.

The research method used in this research is the process tracing method in case study. Firstly, the author will discuss the current situation and problems of curling sports' attendance. Secondly, the author will analyze the influencing factors of curling attendance, and finally, the author will find out the practical solutions to improve the attendance of niche sports events. Audience participation and support can not only help sponsors to bring economic returns, but also enhance the popularity and influence of sports events. It is of great significance to study the dilemma of audience attendance of niche sports events in depth and find corresponding cracking paths to promote the development and promotion of niche sports. By studying the audience attendance problem of niche sports events, it is possible to gain an in-depth understanding of the influencing factors of the audience's behavioral decision-making, participation motivation, and viewing experience. This helps to expand the theory of audience behavior and reveal the relationship between audiences' perceptions, interests, and needs for niche sports events.

2. The Current Situation of Curling Event Attendance Rate and Its Problems

Originating in Scotland in the 14th century, curling has a long history of development and evolution, and was approved by the International Olympic Committee as an official sport of the Olympic Winter Games in 1998. Curling is a team sport played on an ice rink, where both teams take turns pushing the curling ball into the center area of the base camp, with the goal of getting the ball as close to the center as possible to score points, while simultaneously attempting to knock the ball out of the other team's hands. At the international level, curling competitions, mainly the Winter Olympics, are held every four years and represent the highest level of curlers in the world. In addition to this, the events with the highest level of participants are the World Championships and the Grand Slam series respectively. These tournaments attract the best players and teams in the world.[2].

Although snow and ice sports have been active on the national scene in recent years with the Beijing Winter Olympics, attendance at curling events is still unsatisfactory. During the Winter Olympics, curling, the sport with the longest duration cycle, had an attendance of only about fifty percent per game. At lower-level events, such as National Cups, junior events, and local championships, almost all of the spectators were family members of the participating players or industry insiders.

Because curling is a sport that requires shouting to carry out tactical coordination, too few spectators will lead to a very cold game site, you can only hear the sound of the curls colliding with each other, which has a certain impact on the curlers' state of mind, such as the 2014 World Curling Men's Championship held in Beijing, the total attendance rate of less than 20%, resulting in a very cold site. At the 2022 Winter Olympics in Beijing, curling attendance has improved, reaching 60 percent for both the round robin and elimination rounds, but it's still a bit bleak compared to the packed houses for popular sports like ice hockey and short-track speed skating. Nationwide tournaments are even colder, with many cups and junior leagues not even opening up ticket channels,

offering free entry or online viewing platforms, but despite this, the cumulative number of viewers is basically made up of friends and family of team members and the media, which is not encouraging for the development of curling in China.

3. Generative Mechanisms of Low Attendance at Curling Events

3.1. Low Economic Scale for Curling

Currently, the popularity of curling in China is low, and there is still a gap between people's understanding of and participation in curling compared to traditional sports such as basketball and soccer. In order to demonstrate the difference in economic volume between curling and popular sports, the author lists the number of leagues, number of arenas, number of participants, and amount of commercial sponsorship for different sports in Table 1. As of 2022, the number of leagues, the number of venues, the number of participants, and the number of commercial sponsorships for curling are much lower than those for traditional sports. Through the comparison of the above information in all aspects, the author can conclude the gap in total economic volume between different sports in China. As a result, people who follow sporting events in China tend to be attracted to traditional and well-known sports and do not pay attention to curling.

Table 1: The economic volume between different sports in China.
 Source from: Annual Report 2022 of the General Administration of Sport of China [3]

	Basketball	Soccer	Table tennis	Badminton	Curling
The number of leagues	Chinese Basketball Association The Men's National Basketball League Women's Chinese Basketball Association	Chinese Football Association Super League Chinese Football Association China League Chinese Football Association Division Two League Chinese Football Association Women's Football League	China Table Tennis Club Super League	China Badminton Super League	China Curling League
The number of venues	There are 1,053,600 basketball courts nationwide, with a surface area of 622 million square meters	There are 126,500 soccer fields nationwide, with a surface area of 345 million square meters.	There are 884,800 table tennis venues nationwide, with a surface area of 54 million square meters.	There are 225,900 badminton courts in the country with an area of 0.44 billion square meters.	There are 30 curling courts in China
The number of participants	125 million people	26 million people	85 million people	250 million people	20 thousand people
The number of sponsors for national team.	64	19	48	5+	3

3.2. Sports Events are Obviously Influenced by Celebrity Effects

For any sport, when a team has a household name, the audience support for the team's games usually increases dramatically [1, 4]. The presence of a star player attracts more viewers and fans to pay attention to and support the team, and also increases the attention of the game. The impact of sports stars is astonishing, regardless of the field of play. Take Leo Messi for example, before Messi joined Miami International, the team's average attendance was only 14,927. However, Messi's arrival completely changed the situation, with average attendance quickly climbing to 20,104. This is a shocking statistic that demonstrates Messi's tremendous appeal and influence among fans. In addition to the surge in attendance, the team's average ticket price has also increased significantly. According

to Vivid Seats, Miami International's average ticket price before the start of the CONCACAF Cup was only \$44. However, with the arrival of Lionel Messi, that number skyrocketed to \$258 [4]. This shows that fans are willing to spend more money for watching Messi play. However, the number of curling teams in China is relatively small, and the national team has not achieved outstanding performance, which leads to the fact that curling has not yet appeared a household name like Liu Xiang in hurdles, and thus the audience's interest in purchasing tickets has not been increased by the celebrity effect. Although at the Beijing Winter Olympics, curling mixed doubles athletes Ling Zhi and Fan Suyuan, as the first Chinese team members to appear in the games, gained fame and support with media coverage and hot topics, the popularity of the athletes faded with the closing of the Winter Olympics and people's attention continued to decrease.

3.3. Income Theory on Consumer

When people get their income, they prioritize spending their money on meeting physiological needs, such as food and shelter, followed by safety and belonging needs, which already make up the bulk of their expenditures. Watching sports events is not a necessity in life and only groups in the well-off and affluent stages buy tickets for events. This group is categorized into two types of people; people with sports they participate in or love, and they tend to prefer watching the sports they know. The other group of people who do not have a sport that they participate in or love will tend to follow the mainstream group. According to the author's analysis of the economic volume of different sports, cold sports, such as curling, have a considerable gap with popular sports, therefore, people who are willing to spend their time cost and money on niche sports such as curling are very rare.

3.4. National Team Performance is Also a Major Influence on Viewers' Purchasing Desire

The victory of the national team will inspire national pride and directly affect viewers' satisfaction and purchase desire [1, 5]. Although China's women's team won the 2009 Curling World Championships and the bronze medal at the 2010 Vancouver Winter Olympics, and China's men's team finished 4th at the 2014 Sochi Winter Olympics, which has gradually made curling well-known in China, there are still real difficulties in improving the overall competitive level of curling in China. China's curling performance still has a considerable gap with the strongest countries in Europe and North America, as shown in the table below [6]. Due to the relative lack of competitive talent, China is the only curling team in the world that has participated in all World Championships with the same lineup for many years. Compared to the achievements of the Chinese men's and women's curling teams at the World Championships, the foundation for the development of the domestic curling teams appears weak [7]. As a result, the Chinese curling team began a downward spiral after the 2010 Vancouver Winter Olympics, leading to a decline in domestic enthusiasm for curling, and the attendance of curling at the Beijing Winter Olympics was relatively dismal compared to popular sports such as skiing, which is expected to win gold medals. In order to compare the awards of Chinese curling team with the world, Table 2 below shows the awards of several countries which have curling teams including China over the past ten years.

Table 2: The Awards of National curling team in world competition (2014—2022),
Source from: <https://olympics.com/en/sports/curling/> [8].

National Team for Different Countries	World Championship Results (2014—2023)
China men's curling team	Fourth place at the 2014 Winter Olympics in Sochi; Third place at the 2019 Asia Pacific curling championships.
China women's curling team	First place at the 2019 Asia Pacific curling championships.

Table 2: (continued).

Swedish men's curling team	Third place at the 2014 Winter Olympics in Sochi; Second place at the 2018 Winter Olympics in Pyeongchang; Champion at the 2018-, 2019-, and 2021-Men's World Curling Championships; Champion at the 2022 Winter Olympics in Beijing.
Swedish women's curling team	Champion at the 2018 Winter Olympics in Pyeongchang; Third place at the 2022 Winter Olympics in Beijing.
Canada men's curling team	Champion at the 2014 Winter Olympics in Sochi; Champion at the 2017 Men's World Curling Championship; Third place at the 2022 Beijing Winter Olympics.
Canada women's curling team	Champion at the 2014 Winter Olympics in Sochi; Champion at the 2017 Women's World Curling Championship.
England men's curling team	Second place at 2022 Winter Olympics in Beijing.
England women's curling team	Champion at 2022 winter Olympics in Beijing.

4. Ways to Increase Attendance at Niche Sports Events

According to the above analysis, curling is still a relatively unknown sport in China and lacks public understanding and interest. The Ming Xin effect and national team performance have contributed little to the purchasing desire of curling events. In order to increase the attendance of curling events, it is possible to attract more spectators by strengthening the publicity of the sport, expanding the scope of the events, and creating a star effect, thus promoting the popularization and development of curling. Attendance of niche sports events is a key factor that affects the profitability, audience participation and popularity of the event. Enhancing the attendance of niche sports events can make the event organizers profitable, increase the popularity of the whole population and strengthen the degree of participation of the whole population in sports.

4.1. Enriching the Contents of Competitions

There is an old Chinese saying: "Insiders look at the doorway, outsiders look at the fun", for the audience who do not know curling, the real attraction is often a few exciting moments in the game, such as the collision of multiple pots and the players' shouts and high frequency of ice rubbing [9, 10]. In order to ensure the formality and professionalism of curling events, the organizers of the event are not allowed to change the rules, and the participating teams will not use hitting tactics throughout the game in order to get the highest possible score and win the game. So, the ornamental of curling is actually limited by the curling rules and tactical choices, in this regard, the tournament organizers can be in the event broadcast and event publicity, more use of exciting material to attract the audience, increase the number of rounds of the game, enhance the frequency of exciting ball.

4.2. Shape the Multimedia Publicity of the Event

Niche sports events usually face the problem of low audience understanding, so they need to increase publicity and promotion [11]. It can be publicized through social media platforms, online advertisements, TV, radio and other channels. Relevant variety shows can be recorded and curling national team athletes or retired athletes can be invited to enhance the exposure of the athletes, create star benefits, and attract fans as well as traffic. Let the people who don't know about curling love curling athletes and continue this heat into curling [12]. Take short-track speed skater Wang Meng as an example: as a retired national team athlete, Wang Meng has participated in programs such as "Winter Dreams About Season 2" and "Stand-up Comedy Conference" in recent years and attracted countless fans with her humorous language, and the audience will be interested in ice and snow sports

and further participate in them while watching her variety show. Curling can follow this model, establish the persona of curlers and drive the development of curling in variety art.

4.3. Developing Niche Sports Communities

Niche sports events can attract new audiences through targeted marketing strategies [13, 14]. It can cooperate with schools, community organizations, clubs and other institutions to carry out promotional activities to attract more young people to participate. Land curling is a new type of sport derived from curling, no longer subject to the limitations of the venue and temperature, the technical action of land curling is simple, there will be no dangerous action in the sport, high safety, young and old, it is a short distance from the track, the quality of the curling is light, the distance between the starting line and the front throw line is short, the curling needs less strength, and eliminates the curling movement of the icy rubbing action, the land curling in the casting out after Let itself rely on inertia to glide, greatly reducing the threshold of participation, easier for participants to master [15]. Under the national policy of ice and snow sports in schools, land curling is an excellent choice for introduction into primary and secondary schools. When participating in land curling, students can exercise their bodies and stimulate their interest in curling. Schools can organize some intra-school or inter-school competitions to make students aware of the development trend of curling in China, cultivate the student body as a potential market for curling, and promote the popularity and development of curling in China.

4.4. Stakeholder Theory

According to the stakeholder theory, stakeholders include the enterprise's trading partners such as shareholders, creditors, employees, consumers and suppliers, as well as pressure groups such as government departments, local residents, local communities, the media and environmentalism, and even objects such as the natural environment and future generations of mankind, which are directly or indirectly affected by the enterprise's business activities [16]. These stakeholders are closely related to the survival and development of the enterprise, some of them share the business risks of the enterprise, some of them pay for the business activities of the enterprise, some of them supervise and constrain the enterprise, and the business decisions of the enterprise must consider their interests or accept their constraints. In this sense, the enterprise is an institutional arrangement for the investment of intellectual and managerial specialization, and the survival and development of the enterprise depends on the quality of the enterprise's response to the demands of the interests of the various stakeholders, and not only on the shareholders. In curling sporting events, it is not only the event organizer that is affected by attendance revenue, but also the athlete teams, the media, the community and the surrounding area. Through the discussion of interest claims, benefit distribution and conflict of interest by each stakeholder, it can provide event organizers and stakeholders with a basis and support for decision making to maximize attendance and overall benefits.

5. Conclusion

In summary, according to the author's research results show that the attendance rate of curling in China is relatively poor, mainly because the volume of curling in China is low compared to mass sports, curling events are affected by the star effect, and Chinese curling has not appeared as a household name, the performance of China's national curling team lags behind compared to the performance of other countries in the World Championship, and, according to the theory of consumer income and the theory of demand, the According to consumer income theory and demand theory, consumers have less demand to watch curling events. On the basis of this study, the author suggests that enriching the content of curling events, improving spectator appreciation, establishing

multimedia channels to publicize the events, and developing curling communities are feasible paths to solve the problem of curling attendance. Based on the stakeholder theory, this paper proposes that balancing the interests of each beneficiary can increase the number of participants to enhance the economy and ultimately drive the spread of curling. This study provides an analytical framework and theoretical innovations to address the problem of low curling attendance through a process-tracking approach. The authors track and analyse the process of curling, dig deeper into the causes of low attendance, and propose specific solutions. This is of great significance to the promotion and development of curling, and also provides reference and inspiration for the marketing promotion of other niche sports in similar contexts, enriching the research content in the field of sports economy and marketing. Future research in this field can focus on the collection of quantitative data and empirical studies to deepen the understanding of the low attendance rate of curling and further propose effective solutions. At the same time, more socio-cultural factors, such as audience background and cultural differences, can also be incorporated into the study to explore the problem more comprehensively.

References

- [1] Wang Yue, Li Rongri, Du Mei. (2014) *Theoretical research on the influencing factors of spectator attendance of sports events:presentation and construction*. *Journal of Shenyang Sports Institute*,33(03):59-63.
- [2] Zhao Fangcong,Wang Chengmin. (2019) *Research on the development status and countermeasures of curling in China*. *Ice and Snow Sports*, 41(01):40-45.
- [3] *Annual Report*. (2022) *General Administration of Sport of China*. Retrieved from http://www.stats.gov.cn/english/PressRelease/202302/t20230227_1918979.html.
- [4] *The Messi Effect: New Miami star brings big business to MLS*. (2023) Retrieved from https://www.espn.com/soccer/story/_/id/38082893/the-messi-effect-new-miami-star-brings-big-business-mls.
- [5] Li Yuyang,Zeng Hui,Wang Xuefeng. (2019) *Research on the attendance rate of Chinese Super League and its influencing factors*. *Neijiang Science and Technology*,40(12):90-91.
- [6] Dalia Sedky, Wael Kortam, Ehab AbouAish. (2022) *The role of sports marketing in attracting audience*. *journal of Humanities and Applied Social Sciences*. 4(2), pp.
- [7] T. Greenwell, G. Greenhalgh, Nick Stover. (2013) *Understanding spectator expectations: an analysis of niche sports*. *Journal of Sport Management and Marketing*, 13(3/4), 144.
- [8] Li Ye,Zhang Shouxin. (2015) *Research on the development status and countermeasures of curling in China*. *Sports World(Academic Edition)*, 03:4-5.
- [9] *Olympic Channel*. (2023) Retrieved from <https://olympics.com/en/sports/curling/>.
- [10] Cixin. *How China's curling can really say goodbye to the cold [N]*. *China Youth Daily*, 2022-02-16(005).
- [11] Tong Jianjun,Wu Wei. (2013) *A study on the attendance rate of sparring matches*. *Sports Science and Technology Literature Bulletin*, 21(12):129-131.
- [12] Shan Xiaona. (2019) *An analysis of the factors influencing the audience attendance rate of professional table tennis tournaments in China--taking the pingpong super league as an example*. *Martial Arts Research*, 4(04):136-139.
- [13] Wang Xuguang. (2022) *Ice and snow sports: from "niche cold" to "fashionable choice"*. *International Business Daily*, 01-06(005).
- [14] QU Mingche, WANG Glimmer. (2015) *Research on the phenomenon of "low attendance rate" in the national volleyball league*. *Sports Science and Technology*, 36(04):80-81.
- [15] Zhou Y. (2023) *Research on the dilemma and breakthrough strategy of introducing curling in junior high school sports*. *Ice and snow sports innovation research*, 04:81-83.
- [16] Freeman,R. Edward. (1984) *Strategic Management: A Stakeholder Approach[M]*. Pitman Publishing Inc.