A Study on the Development of Winter Sports Tourism in China

Hongbing Chen
Northeastern University, China
chenhb@pe.neu.edu.cn

Abstract. In the present study, two time periods were selected to obtain critical data, the first period is 2010-2019, and the second one is 2022. The literature related to winter sports tourism from 2010-2019 and 2022 was checked to review the history of winter sports tourism in China. Winter sports tourism development in China was obtained from 2010-2019 and 2022. The comparative analysis of a large amount of data found that the development of China's winter sports tourism industry is linear, and the overall development level is rising. Before 2015, China's ski resort infrastructure was poor, the number of people involved in winter sports tourism was low, and the demand for winter sports tourism in China had to be met abroad. After Beijing won the right to host the 2022 Winter Olympics and Winter Paralympics in 2015, China proposed to let 300 million people participate in winter sports, and the country officially vigorously developed the winter sports industry. 2016-2022, China's winter sports tourism heavy asset projects close to 1 trillion, and the total investment reached 2.47 trillion yuan. China's winter sports characteristics in the town gradually increased, improving the construction of ski resort infrastructure, deep excavation of cultural connotations, and active propaganda. Whether the number of people involved in skiing, the category of people involved in skiing, or the level of participants in skiing has a greater changed than before.

Keywords. Leisure sports, Winter sports tourism, Sports tourism

1. Introduction

The success of the 2008 Beijing Olympics had a positive impact on China, and Chinese people began to participate in sports. Since Beijing got the right to host the 2022 Winter Olympics and Winter Paralympics in 2015, China proposed to let 300 million people participate in winter sports and gave much support to winter sports and related industries in terms of the policy. In February 2021, the country proposed that the development of winter sports can contribute to the success of the Winter Olympics held "Winter sports Tourism Development Plan 2021-2023", based on the 2022 Beijing Winter Olympics, develop the winter sports competition and performance market, launch ice skating, ice hockey, curling and skiing events, develop professional ice hockey professional leagues, increase commercial performance projects, strengthen the construction of winter sports tourism destinations, enhance the attractiveness of winter sports tourism, and expand the number of participants (Wan, 2022).

Winter sports tourism is based on the winter sports ecological environment, including winter sports services, winter sports supplies, and related products manufacturing and winter
sports site facilities construction industry in three categories (Li, 2022). There are 157 winter sports construction projects of a larger investment scale built in 2018-2022 in the heavy asset category, and the heavy asset projects are close to 1 trillion. At present, China's north and south regions tend to balance; in 2018-2022 four years, the three north (northeast, north, northwest) regions absorbed the investment amount accounted for 47.9%, while the remaining four regions (southwest, south, central, east) accounted for 52.1% of the investment amount (Qing, 2022). In terms of excellent investment in transportation infrastructure, a total of 128 winter sports tourism transportation projects have been completed since 2016, including railroads, highways, transportation hubs, etc., with a total investment of 2.47 trillion yuan. Whether in the north with four distinct seasons, the warm south, or the far west, the supply of winter sports tourism products has been realized to varying degrees through a combination of science, art, sports, and tourism. Through the realization of the national development of winter sports goals in recent years, both the number of people involved in skiing, the categories of people involved, and the skiing level of participants have a more significant change than before. Experiential projects represented by sports and tourism are proliferating, and winter sports tourism opens a new journey for sports as well as leisure enthusiasts. In this paper, two time periods are chosen to obtain critical data, the first one is 2010-2019, and the second one is 2022. The literature related to winter sports tourism from 2010-2019 as well as 2022 is checked, the history of winter sports tourism in China is reviewed, and the development of all aspects of winter sports tourism in China from 2010-2019 as well as 2022 is obtained through comparative analysis of a large amount of data using statistical methods.

2. Methodology

This study needs to cover the winter sports tourism industry data for 2020 and 2021. The main reason is that since the outbreak of the COVID-19 epidemic in January 2020, China's winter sports tourism industry has been dramatically affected, so the industry data for these two years need to be more representative. In 2020 and 2021, overall ski trips dropped by about half, and the data fluctuation was affected by the epidemic. The critical demand in the wintertime is the epidemic covered. With the Winter Olympics held in Beijing in 2022, winter sports tourism is explosive growth.

In summary, this paper selects two time periods, the first period is 2010-2019, and the second is 2022, and selects vital data according to the above two time periods. The literature on winter sports tourism from 2010-2019 and 2022 was checked, including industry reports, published documents, government public announcements, and other materials from various provinces and cities. Materials related to this study were searched through CNKI. Using Excel to conduct statistical analysis of the data obtained from the research literature and the information collected online, create the corresponding charts and graphs, and summarize the development of winter sports tourism in China through the comparative analysis of a large amount of data.

The total number of literatures on "winter sports tourism" in China is 4049, as shown in Figure 1. 192 in 2010, 91 in 2012, 108 in 2014, 130 in 2016, 273 in 2018, 326 in 2020, and 755 in 2022. From 2010 to 2016, the overall trend of the literature journals about the study of winter sports tourism in China was relatively flat, and from 2018 to 2020, the trend of the development of literature journals about winter sports tourism in China increased significantly. 2022 has a significant increase in the number of works of literature compared to the previous. The top three ranked in the literature research content statistics are the winter sports tourism industry, the development status of winter sports tourism, and the resources of winter sports
tourism. The data in Figure 1 is from CNKI.

![Figure 1. The Number of Literatures from 2010 to 2022](image)

### 3. Results

#### 3.1 Winter Sports Town Construction

<table>
<thead>
<tr>
<th>Time(year)</th>
<th>Quantity(number)</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-2014</td>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td>2015-2016</td>
<td>12</td>
<td>Small size</td>
</tr>
<tr>
<td>2017-2019</td>
<td>40</td>
<td>Large size</td>
</tr>
<tr>
<td>2022</td>
<td>50</td>
<td>Large size</td>
</tr>
</tbody>
</table>

According to Table 1, no winter sports characteristic towns were built in 2010-2014, and 12 winter sports characteristic towns were built in 2015-2016, with a negligible overall scale. In 2017-2019, China's winter sports characteristic towns grew to 40, with a single type. The north has an excellent geographical environment, and the winter sports industry started early. At the same time, the south is limited by the natural environment, with little snow and the high cost of building ski resorts. China's best winter sports resources are concentrated in the north; the northern economy is backward, poor winter sports-related supporting facilities. Although the number of winter sports towns is growing, the single. In 2022 the number of winter sports characteristic towns will reach 50, more significantly, and strengthen the construction of winter sports-related supporting facilities. From the number and scale, China has ranked at the global forefront.
### 3.2 Ski Construction

#### Table 2 Ski Resort Characteristics and Infrastructure in China

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Number of Ski Resorts</th>
<th>Size</th>
<th>Equipment Configuration</th>
<th>Infrastructure</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-2014</td>
<td>460</td>
<td>Small scale, slow development.</td>
<td>Beginner trails; intermediate trails. Some snow parks have aerial lifts.</td>
<td>Poor facilities, usually not available for accommodation.</td>
<td>Scenic areas; suburban areas; mountainous areas.</td>
</tr>
<tr>
<td>2015-2019</td>
<td>742</td>
<td>Larger scale and increase in high-level snow parks.</td>
<td>Have two or more trails; some snow parks have three or more aerial lifts.</td>
<td>A few built catering, accommodation.</td>
<td>Landscape; Suburban; Mountain; Indoor.</td>
</tr>
<tr>
<td>2022</td>
<td>1000</td>
<td>Larger scale and increase in high-level snow parks.</td>
<td>The new 4 aerial ropeway snow park, the country has aerial ropeway snow park to 163.</td>
<td>Self-driving services; catering; accommodation.</td>
<td>Landscape; Suburban; Mountain; Indoor.</td>
</tr>
</tbody>
</table>

As seen in Table 2, from 2010-2014, the number of snow resorts in China reached 460, but the scale was small, and the infrastructure could have been better. From 2015-2019, the number of ski resorts in China increased to 742, with a significant increase in scale and infrastructure. According to the "2020 China Ski Industry White Paper (2020-2021 Snow Season Fiscal Year Report)", by the end of 2020, the number of indoor ski resorts in China was 36, far surpassing second-ranked India and occupying the first place in the world. The number of ski resorts in China continues to grow and become benign in 2022 compared to 2010-2019. The number of indoor ski trips in China is also climbing year by year with the growth in the number of ski resorts, but it still represents a low percentage of all skiing participation.

### 3.3 The Participation in Winter Sports Tourism

#### Table 3 Number and Type of Winter Sports Tourism in China

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Winter Sports Tourism Participation (million)</th>
<th>Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-2014</td>
<td>1070</td>
<td>Sightseeing, Festivals</td>
</tr>
<tr>
<td>2015-2019</td>
<td>1970</td>
<td>Sightseeing, amusement, sports and leisure, events</td>
</tr>
</tbody>
</table>
Table 3 shows that the total number of skiers in China from 2010 to 2014 was 107 million, and the types of winter sports tourism are mainly sightseeing and festivals. From 2015 to 2019, the growth rate of skiers in China was relatively fast, and the number of winter sports tourists reached 197 million, and more and more people are participating in skiing. According to the Statistical Survey Report of "Promoting 300 Million People to Participate in Winter Sports" by the State General Administration of Sports, since Beijing successfully bid for the Winter Olympics in 2015, the participation rate of winter sports has reached 24.56%, achieving the goal of "Promoting 300 million people to participate in winter sports" (Zhu, 2022). The goal of "Promoting 300 million people to participate in winter sports" has been achieved. Benefiting from this, the overall domestic skiing attendance has shown a steady growth trend, with the snow season picking up in 2020 and reaching a new high of 21.54 million in 2022, with a total of 12.02 million skiers.

3.4 Market size

As seen from Figure 2, 2016-2020 are less than 500 billion yuan, and 2021 exceed 600 billion yuan. Skiing boom, winter sports market size to achieve faster growth. In winter sports, skiing has become the most popular sport, with a 44.9% penetration rate in 2022 to become the most popular sport in domestic winter sports, higher than figure skating, speed skating, ice hockey, etc. Thus, it can be seen that the rapid growth of the winter sports market scale drives the rapid development of the winter sports tourism industry. Data show that in 2020 the epidemic background tourism trips fell significantly overall in market size. In 2022 the market rebounded and reached a new high, with a winter sports-related industries market size of 644.65 billion yuan, of which the core market size of about 59.49 billion yuan.
3.5 Current status of participation

As showed in Figure 3, China's leading population group of winter sports tourism is young people, with a slightly higher proportion of women than men, including 58.4% of winter sports enthusiasts aged 27-39. Winter sports enthusiasts are mainly middle-income groups, with more than 30% of winter sports enthusiasts earning 5000-10000 yuan (Li, 2022).

Figure 3. Population Groups of Winter Sports Tourism in China

Figure 4 shows the primary reasons for participating in winter sports tourism. Holiday-oriented skiers accounted for the lowest proportion due to the high cost. The proportion of learning skills and travel experience is about 40%, and there is a continuous rise.

Figure 4. Primary Reasons for Participating in Winter Sports Tourism

4. Conclusion

Winter sports belong to China's traditional sports, but winter sports resources are concentrated in the north. The northern economy is backward and has poor winter sports-related support facilities. The natural environment limits the south, the amount of snow is low, the cost of building ski resorts is high, and the development of the north and south regions is unbalanced.
The development of winter sports lags behind other countries, and there are problems such as insufficient industrial development, low level of competition, low number of participants, and poor foundation of the winter sports industry. With Beijing winning the right to host the 2022 Winter Olympics and Winter Paralympics, China has officially made great efforts to develop winter sports and put forward the goal of getting 300 million people to participate in winter sports. Currently, the number of winter sports towns will reach 50 from 0 in 2014 to 2022. by the end of 2020, the number of indoor ski resorts in China will be 36, far exceeding second-ranked India to reach the first in the world, and the total number of ski resorts will reach 1000 in 2022. There will be 21.54 million people participating in winter sports tourism in 2022, and the total number of skiers will be 12.02 million, which will be a new high. In 2022, the winter sports market size of the sports-related industry reached 644.65 billion yuan, of which the core market size is about 59.49 billion yuan. The data of 2022, in winter sports, skiing became the most popular sport, with a penetration rate of 44.9% to become the most popular sport in domestic winter sports, higher than figure skating, speed skating, ice hockey, etc. The Winter sports tourism industry is developing rapidly.

According to Laurent Vanat's "Global Ski Market Report 2019", China's skiing population penetration rate is 1%, while Switzerland/Japan/USA's penetration rates reach 35%/9%/8%, respectively. According to the Statistical Survey Report of the State General Administration of Sports, the participation rate in winter sports has reached 24.56% since Beijing successfully bid for the Winter Olympics in 2015, achieving the goal of "Promoting 300 million people to participate in winter sports". The goal of "Promoting 300 million people to participate in winter sports" has been achieved (Zhu, 2022). The leading population group of winter sports in China is young people, of which the proportion of winter sports enthusiasts aged 27-39 is 58.4%, the proportion of women is slightly higher than that of men, and the number of business trips for learning and travel experience is higher. Currently, China's skiing population is still dominated by skiing experience, especially since the user's past experience is extensive. They ski more than six times a year, and only 8.7% of skiing enthusiasts do. With the increase in skiers' stickiness to the sport, the consumption conversion rate of ski products is expected to continue to rise. The 1960 California Winter Olympics made the United States a significant skiing country with a surge in the number of skiers. The 1972 Hokkaido Winter Olympics also created a skiing frenzy in Japan. With the 2022 Winter Olympics in Beijing, the number of skiers in China began to surge, and snow tourism in China is developing.

References