

Advancements in China's Tourism Sector within the Framework of the "Double Carbon" Policy: Based on the Analysis of Harbin's Tourism Peak Seasons

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Abstract. With the rapid development of China's economy, the living conditions of Chinese residents have gradually improved. As material living conditions continue to improve, people's spiritual needs are accelerated, and the demand for tourism by Chinese residents is rapidly increasing. The environmental problems associated with tourism have also emerged. With China's "dual-carbon" goal, the "non-green" aspects of the tourism industry have been brought to the forefront of people's attention. To promote the high quality and sustainable development of China's tourism industry, responding to the "dual-carbon" goal is a necessary choice for China's tourism industry. At the same time, it is also necessary to pay attention to the current conditions of the tourism industry. This paper takes the tourists who have travelled to Harbin in the winter of 2023 as the target, and through the questionnaire survey, takes the recent Harbin "hot" out of the circle as an example, and comes up with the tourism influencing factors that are most concerned by the tourists at present. Subsequently, the reliability and validity of the questionnaire and the Pearson correlation coefficient model were used to analyze the reliability and validity of the questionnaire, as well as the influence of tourism factors, and to analyze the necessity of tourism development in response to the "double carbon" goal. Finally, the obtained tourism influencing factors are combined with the "dual carbon" goal to draw conclusions and give new development measures and directions.

Keywords: China's Tourism Sector, "Double Carbon" Policy, Questionnaire.

1. Introduction

With the rise of people's consumption level and happiness index nowadays, people's pursuit of a better life is also rising. Tourism is an important indicator reflecting the living standard and happiness level of residents [1]. At the same time, tourism development is closely related to the economic development of a country, and its relationship with the expansion of economic power has received more and more attention since this century [2]. According to the data released by the United Nations World Tourism Organization (UNWTO) in 2019, the number of tourist arrivals has increased exponentially every year in less than 20 years, and China has a major contribution in this [3]. Therefore, tourism has an important place in China's economic development blueprint. In the winter of 2023, ice and snow tourism in Harbin City, Heilongjiang Province, China, was so hot that in just a few months, the tourism revenue there reached RMB 550 billion, which greatly boosted the local economy [4]. This phenomenon is a good reflection of the importance of tourism in China's development. As the development becomes more and more rapid, the environmental problems also become more and more prominent. According to the data, the carbon emission of international tourism may occupy 8% of the global greenhouse gas emission, which has a very great impact on global warming [5]. By analyzing the green development of tourism in the context of low carbon economy, Guo et al. from the School of Management of Guangdong University of Technology and Normalism concluded that the scenic spots need to adjust their projects, appropriately use new energy core technology, reduce resource consumption and other specific measures [2]. Therefore, tourism development has an important impact on the environment.

During China's 14th Five-Year Plan, the Chinese government proposed the "dual carbon" goal of "carbon peak" and "carbon neutral" target [2]. This policy aims to reduce carbon dioxide emissions and promote green, low-carbon lifestyles in response to climate change. Jin and Zeng from the

Chinese Academy of Sciences (CAS) summarized the development of the "dual-carbon" policy through the LDA thematic model and based on the analysis of the three-dimensional framework, and put forward the policy recommendations in four aspects: the development process, the policy themes, and the policy mix [6]. It also shows that the "dual-carbon" policy is a very good proposal for China's long-term high-quality development. As China's tourism industry continues to develop in a comprehensive manner, the amount of carbon emissions will have great potential and play a pivotal role in helping to achieve China's "dual-carbon" goal. In the "Opinions on the Complete and Accurate Implementation of the New Development Philosophy and Doing a Good Job of Carbon Peak Achievement and Carbon Neutrality" issued by China in October 2021, it is proposed that To deeply adjust the industrial structure, form a green and low-carbon lifestyle, promote the green development of tourism, and enhance the goal of ecological carbon sequestration. Therefore, the implementation of the "dual carbon" policy is necessary. Yang et al. from the School of Tourism of Northwest Normal University provided some ideas for the development of tourism under the "dual-carbon" policy in China by analyzing it from three perspectives: supply-side perspective, consumption-side perspective, and policy-guarantee perspective [7].

To promote the development of tourism, it is essential to study the influencing factors of tourism development as well as the conditions of development. In an article published by Wang et al. from Hunan Normal University, they analyses the index of high-quality development of tourism, spatial characteristics, spatial variability, and the influencing factors of high-quality development of tourism through Dagum's Gini coefficient and panel regression estimation, and gave the methods of developing China's tourism industry that need to develop a characteristic strategy, improve the level of tourism development, and focus on coordination and integration [8]. At the same time, the development of tourism goes beyond spatial influences. Guo et al. analyzed the implementation of sustainable tourism policy, policy stakeholders, climate policy, indicators and planning, and the role of sustainable tourism policy through Louvain's algorithm. analyzed. It was concluded that the role of knot policy on the sustainable development of tourism is more obvious, and there is a theoretical disagreement between the concept of sustainable tourism development and sustainable development [9]. At the same time, Cao and Hou analyzed the impact of transport facilities on the development of urban tourism by analyzing the superposition, filtering and spillover effects, and came to the conclusion that the opening of high-speed rail for the tourism industry of the cities with poorer endowment of tourist resources has less impact than the tourism industry of the cities with higher endowment of tourist resources, and the opening of high-speed rail has an increasing effect of tourism promotion [2]. These three papers analyzed the effects of spatial variability, policy and transport on tourism respectively.

In the literature cited in this paper, most of the literature analyses the development conditions of China's tourism industry are single, not comprehensive enough, while the impact of policy and transport is also analyzed more dispersed. While there is an analysis of the new opportunities and development of tourism under China's "double carbon" policy, and there is also a study of the green development path of tourism in the context of the low-carbon economy, but the analysis is not comprehensive enough, and the object of the analysis is not accurate enough and is not implemented to the specific location. This paper analyses the development conditions of China's tourism industry through the questionnaire survey of Harbin tourists' feedback data and draws out the latest tourism influencing factors. At the same time, it also explains the importance of the dual-carbon policy, and finally combines the influencing factors of tourism development with the goal of "dual-carbon" to find out the conditions that can be improved in all aspects of the development of China's tourism industry in response to the "dual-carbon" policy, to promote the sustainable and high-quality development of China's tourism industry. The study will also identify the conditions under which the development of China's tourism industry can be enhanced in response to the "dual carbon" policy, thereby promoting the sustainable and high-quality development of China's tourism industry [10].

This paper obtained the feedback from the tourists who travelled to Harbin recently through questionnaires and used SPSS software to analyze the reliability and correlation of the questionnaires,

and then analyzed the data to determine the reasons why Harbin's tourism season is so "prosperous". Finally, based on this analysis, it is derived to analyze how China's tourism industry can have a better sustainable and high-quality development in the future under the important "double carbon" policy. The next section is a description of the research methodology of this paper.

2. Methodology

In this paper, the questionnaire was released on various internet platforms to collect feedback from tourists who have travelled to Harbin during the recent peak season. The questionnaire was then analyzed for reliability and validity by SPSS, and the data obtained from the questionnaire was then analyzed by SPSS software to draw conclusions.

2.1. Data Selection

The questionnaire in this paper collects feedback from tourists from various provincial capitals in China on their willingness to travel to Harbin. By the time of questionnaire collection, a total of 224 questionnaires were collected. The questionnaire collected the basic information of the respondents: age, city of origin. Among them, the group of 21-30 years old and 31-40 years old accounted for the largest proportion. To ensure the rigor of the questionnaire, it also enquired whether the respondents had visited Harbin during the recent peak season and whether they were aware of the unprecedented popularity of tourism in Harbin during that time. Among them, 64.29% of the respondents had travelled to Harbin. Then comes the core part of the questionnaire, the questionnaire investigates the ways through which the tourist respondents learnt about Harbin tourism, and in their opinion, what is the most attractive reason for them to go to Harbin, as well as in Harbin during the period of their most satisfied with the tourist attractions is what, and how much do tourists give a score to this tour. The largest proportion of these tourists learnt about Harbin through news reports, and the most attractive reasons for these tourists to visit Harbin were the attraction of Harbin's seasonal ice and snow culture and the support of the local government, both of which accounted for more than 43% of the total. The questionnaire then asked to what extent the convenience of transport, hospitality of residents, fun of attractions, interesting social media campaigns, reasonable local prices, good local infrastructure, and the availability of government incentives influenced their willingness to travel, on a scale of 1-5. The score for each item was basically maintained at 4. Finally, they were asked which aspects of their hometowns needed the most improvement compared to the unprecedented tourism development in Harbin. The areas with the highest percentage were transport (80.00%) and whether prices were reasonable (80.80%).

2.2. Modelling

In this paper, the reliability and validity of the questionnaire is analyzed using the reliability and validity of the questionnaire, followed by the correlation analysis model, which is used to analyze the correlation between two or more elements of a variable to measure the closeness of the correlation between the two variables. The correlation model is used to measure the closeness of the correlation between two or more elements of the variables. The correlation elements need to be related to each other by a certain degree of probability. The correlation analysis used in this paper is by using Pearson correlation coefficient. Pearson correlation coefficient, a measure of correlation, is used to measure the linear relationship between two continuous variables. The Pearson correlation coefficient model is as follows:

$$r = \text{cov}(X, Y) / (\sigma_X * \sigma_Y) \quad (1)$$

In the model, where $\text{cov}(X, Y)$ is used to represent the covariance of X and Y, while σ_X and σ_Y are used to represent the standard deviation of X and Y. The covariance of X and Y is the covariance of the two variables. When the Pearson coefficient is negative, there is a negative correlation between

the two variables; when it is positive, there is a positive correlation between the two variables; and when the value is zero, it means there is no correlation between them.

This paper uses SPSS software to correlate the impact of seven factors on tourists' willingness to travel: whether local residents are hospitable, whether attractions are fun to evaluate, whether social media propaganda is interesting, whether local prices are reasonable, whether the government has introduced relevant preferential policies, whether the local infrastructure is perfect, and whether the traffic is convenient, to explore whether there is a certain degree of correlation between each, and to analyze whether the variables have an impact on each other. The correlation between each of the seven factors on tourists' willingness to travel is investigated to see if there is a certain correlation between each of them, and to analyze whether there is any influence between the variables.

2.3. Reliability and Validity Analysis

The amount of reliability and validity is used to measure the quality of the questionnaire. Validity analysis is used to ensure the reliability and validity of the results of the study. The questionnaire can also be analyzed for reasonableness and structural validity for the degree of correlation between the measurements and the results of the measurements. The questionnaire was analyzed using SPSS software with KMO test and Bartlett's test of sphericity.

Table 1. Validity analysis

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Communality
Age	0.02	0.70	-0.03	0.22	-0.06	0.544
Whether know the hot situation	-0.02	-0.80	-0.02	0.16	0.01	0.671
Have you ever been	-0.10	-0.01	0.96	-0.06	0.02	0.927
Satisfaction	0.51	0.01	0.10	0.14	0.19	0.327
The most influential reason	0.04	0.05	-0.05	0.94	-0.01	0.894
Convenient transportation	0.78	0.02	0.04	0.00	-0.16	0.632
Resident enthusiasm	0.63	0.01	-0.09	-0.02	0.06	0.405
Interesting attractions	0.69	0.14	-0.19	-0.10	0.02	0.543
Social media campaign	0.69	0.08	-0.24	-0.08	0.01	0.544
Reasonable price	0.72	-0.00	0.13	0.17	0.04	0.573
Perfect infrastructure	0.72	-0.01	-0.16	0.18	-0.01	0.576
Relevant preferential policies	0.68	-0.08	0.04	-0.09	-0.08	0.486
Whether to come again	0.00	-0.07	0.02	-0.02	0.97	0.954
Feature root (before rotation)	3.80	1.26	1.06	1.01	0.96	-
Variance explanation rate % (before rotation)	29.22%	9.67%	8.12%	7.76%	7.35%	-
Cumulative variance explanation rate % (before rotation)	29.22%	38.89%	47.01%	54.77%	62.12%	-
Feature root value (after rotation)	3.73	1.17	1.07	1.07	1.03	-
Variance interpretation rate % (after rotation)	28.70%	9.03%	8.26%	8.23%	7.89%	-
Cumulative variance explanation rate % (after rotation)	28.70%	37.74%	46.00%	54.23%	62.12%	-
Feature root (before rotation)	3.80	1.26	1.06	1.01	0.96	-
Variance interpretation rate % (after rotation)	28.70%	9.03%	8.26%	8.23%	7.89%	-
Cumulative variance explanation rate % (after rotation)	28.70%	37.74%	46.00%	54.23%	62.12%	-
KMO Sampling suitability number	0.861					-
Bartlett Sphericity Test	558.776					-
df	78.000					-
P-value	-					-

From Table 1, it can be concluded that the validity analysis KMO value of this questionnaire reached 0.861, which means that the data has good validity. Meanwhile, the cumulative variance

kurtosis is 62.12% > 50% after rotation by Barthes Spherical Test, which means that the information content of the research items can be extracted effectively. This analysis extracted dimensions of 5, while the factor commonality of all the question items was generally greater than 0.4, and the cumulative variance explained value was 62.12% by the Butt Spherical Test. Thus, it can be shown that each dimension can extract most of the question item information. Thus, indicating that the research data has a good level of structural validity. Taken together, this indicates that the questionnaire has a high level of reliability and can be used for subsequent analyses and calculations.

Subsequently the same SPSS analysis was used to derive the reliability analysis, which was measured by the Cronbach alpha value, which is used to determine the stability as well as the reliability of the questionnaire. The formula for obtaining this value is as follows:

$$\alpha = \frac{K}{K-1} \left(1 - \frac{\sum S_1^2}{S^2} \right) \tag{2}$$

The results of confidence analysis are shown in Table 2. All the questionnaire options were analyzed for reliability, resulting in a first Cronbach. alpha coefficient value of 0.658, the number was desirable but did not reach a good value, so the four items that were no longer analyzed in the options were removed and analyses again. Subsequently the secondary analysis this time the Cronbach's coefficient was between 0.7 and 0.8, indicating a relatively good reliability.

Table 2. Reliability analysis

Sample size	Number of entries	Cronbach alpha coefficient
224	9	0.738

3. Empirical Results

3.1. Descriptive Statistics

From Figure 1, the age groups of 21-30 years old, 31-40 years old and 41-50 years old are more frequent among the people who travelled to Harbin in the winter peak season of 2023. Further, the young people and middle-aged people are the pillar force of tourism. This suggests that if want to promote the development of tourism, the young and middle-aged group is the focus of attention. Specific programmes for young adults can be developed in the context of specific tourism planning for the population.

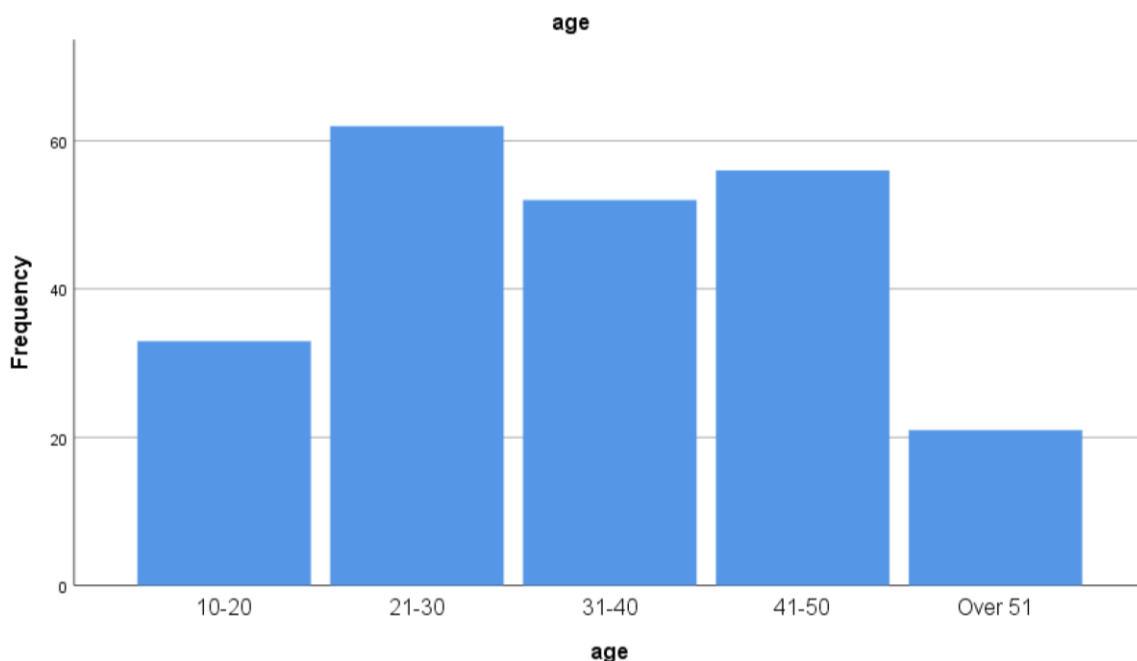


Figure 1. Age distribution

Table 3 shows the statistics of questionnaire respondents to the question: soon whether they have travelled to Harbin. More than 60 per cent of the more than 200 questionnaire respondents have been to Harbin City, Heilongjiang Province, soon, and 9.4 per cent have the intention to go there. Therefore, in the winter of 2023, Harbin tourism "peak season" of the peak. This shows that the questionnaire is very timely and the survey is very innovative and persuasive. Inside the number of surveyed people, more than 60% of the tourists gave a high score of 4-5 to this Harbin tour. It shows that most tourists are very satisfied with the tour of Harbin. This can show that this paper through the recent Harbin "peak season" tourism analysis has a certain degree of credibility, according to the sample analysis is feasible.

Table 3. Whether the respondents have been to Harbin recently

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	144	64.3	64.3	64.3
No	59	26.3	26.3	90.6
Have a mind to	21	9.4	9.4	100.0
Total	224	100.0	100.0	

As shown in Table 4, more than 60% of the tourists gave a high score of 4-5 to this Harbin tour, inside the number of surveyed people. It shows that most tourists are very satisfied with the tour of Harbin. This can show that this paper through the recent Harbin "peak season" tourism analysis has a certain degree of credibility, according to the sample analysis is feasible.

Table 4. Satisfaction with the tour

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
1	17	7.6	7.6	7.6
2	33	14.7	14.7	22.3
3	35	15.6	15.6	37.9
4	101	45.1	45.1	83.0
5	38	17.0	17.0	100.0
Total	224	100.0	100.0	

From Table 5, in the questionnaire, putting aside the travelling in Harbin, the most influential factor for people to travel to a place is whether the traffic is convenient or not. And in the rest of the influencing factors, each of them has about the same percentage of influence. Each of the factors, such as the attractions, the attitude of the residents, the interesting social publicity, the reasonable price, the perfect infrastructure, and whether the government has introduced relevant measures, has an importance that cannot be ignored, so to effectively promote the development of tourism in a high quality, it is necessary to improve each of these factors. One of the first influencing factors is the degree of accessibility of transport, whether it is a poor tourism resource endowment of urban tourism or tourism resource endowment of urban tourism, transport has an important impact on its development. In all provinces of China, to develop tourism, the first thing is to improve the transport hub, so that every tourist can easily come to travel, which is the basic premise of the development of other factors.

Table 5. Factors that most influenced people to go travelling

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Interesting attractions	25	11.2	11.2	11.2
Resident enthusiasm	39	17.4	17.4	28.6
Social media campaign	22	9.8	9.8	38.4
Convenient transportation	40	17.9	17.9	56.3
Reasonable price	26	11.6	11.6	67.9
Perfect infrastructure	40	17.9	17.9	85.7
Relevant preferential policies	32	14.3	14.3	100.0
Total	224	100.0	100.0	

Table 6. The willingness to travel influenced by various tourism factors.

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Convenient transportation				
1	5	2.2	2.2	2.2
2	22	9.8	9.8	12.1
3	18	8.0	8.0	20.1
4	137	61.2	61.2	81.3
5	42	18.8	18.8	100.0
Total	224	100.0	100.0	
Resident enthusiasm				
1	3	1.3	1.3	1.3
2	21	9.4	9.4	10.7
3	27	12.1	12.1	22.8
4	108	48.2	48.2	71.0
5	65	29.0	29.0	100.0
Total	224	100.0	100.0	
Interesting attractions				
1	1	.4	.4	.4
2	23	10.3	10.3	10.7
3	24	10.7	10.7	21.4
4	123	54.9	54.9	76.3
5	69	30.8	30.8	100.0
Total	224	100.0	100.0	
Social media campaign				
1	5	2.2	2.2	2.2
2	26	11.6	11.6	13.8
3	22	9.8	9.8	23.7
4	102	45.5	45.5	69.2
5	69	30.8	30.8	100.0
Total	224	100.0	100.0	
Reasonable price				
1	4	1.8	1.8	1.8
2	21	9.4	9.4	11.2
3	18	8.0	8.0	19.2
4	128	57.1	57.1	76.3
5	53	23.7	23.7	100.0
Total	224	100.0	100.0	
Perfect infrastructure				
1	10	4.5	4.5	4.5
2	14	6.3	6.3	10.7
3	45	20.1	20.1	30.8
4	99	44.2	44.2	75.0
5	56	25.0	25.0	100.0
Total	224	100.0	100.0	
Relevant preferential policies				
1	5	2.2	2.2	2.2
2	19	8.5	8.5	10.7
3	27	12.1	12.1	22.8
4	101	45.1	45.1	67.9
5	72	32.1	32.1	100.0
Total	224	100.0	100.0	

Table 6 shows the statistics of respondents' willingness to visit a place due to different tourism factors. The most popular factor chosen by the respondents for each factor is the degree of influence.

Although the statistics of the most popular degree of influence for each factor do not reach the highest degree. However, the influence of each factor on the willingness of tourists to visit a place is concentrated at more than 69 per cent, which shows that the influence of each factor cannot be ignored, and that to have a rapid and high-quality development, the attractions, the attitude of the residents, interesting social promotion, reasonable prices, perfect infrastructure, and the government should be considered. To achieve rapid and high-quality development, it is necessary to consider the development of each of these factors, such as the attractiveness of the attractions, the attitude of the inhabitants, interesting social campaigns, reasonable prices, good infrastructures, and whether the government has put in place the relevant measures, to arrive at the ideal situation.

Among these tourism influencing factors, although the fourth and the fifth degree together have the highest number of choices in each factor, there is a difference in the sum of the two degrees of each factor when compared with each other. Of all the factors, whether local prices are reasonable and whether transport is convenient are the most important to respondents. If a place has the so-called "rip-off" phenomenon, does not treat tourists with sincerity, and only thinks of scavenging money from foreign tourists, then gradually the reputation of the place will deteriorate, and tourists will naturally not go to the place to play, and then the place will not have the prospect of further development. Meanwhile, the fourth and fifth degree of accessibility accounted for 80 per cent of the total number of people who chose accessibility. It shows that accessibility is one of the most important aspects of tourism development. If it is not convenient, tourists in China tend to rule it out first when choosing where to go. Therefore, without the premise of accessibility, everything else will be hindered to some extent. Followed by the third option is whether the attraction of the place is fun tourists influence willingness, a place if people want to attract tourists from all directions, first, they should have attractive highlights. People come to a place to travel, play is what, of course, is the first. If the so-called "attractions" of a place is not fun enough, no attraction, then tourists will naturally not be willing to go. Of the remaining four factors, each is not very different from the other, with government incentives, a warm welcome from residents, and interesting social media campaigns all being very close to each other. The lowest level of influence is whether the local infrastructure is perfect or not, although its degree of influence is small, it is also a part that cannot be ignored. If the local tourist attraction has a good infrastructure, tourists will enjoy a better experience and will be attracted to visit it.

3.2. Correlation Analysis

The seven tourism influencing factors, namely whether the residents are hospitable, whether the attractions are fun to visit, whether the social media publicity is interesting, whether the local prices are reasonable, whether the government has introduced relevant preferential policies, whether the local infrastructure is perfect and whether the transport is convenient, are correlated and compared to see whether there is any mutual influence between the two. This paper analyzes how the factors interact with each other to promote the development of tourism in China. Pearson correlation coefficient analysis using SPSS yielded the following data, shown in Table 7.

Table 7. Correlation analysis of seven factors influencing travel intention

	mean	S.D.	RE	IA	SMC	RP	RPP	PI	CT
Resident enthusiasm (RE)	3.94	0.95	1						
Interesting attractions (IA)	3.91	0.89	0.39**	1					
Social media campaign (SMC)	3.91	1.03	0.37**	0.40**	1				
Reasonable price (RP)	3.92	0.92	0.38**	0.45**	0.41**	1			
Relevant preferential policies (RPP)	3.96	0.99	0.29**	0.44**	0.40**	0.43**	1		
Perfect infrastructure (PI)	3.79	1.03	0.38**	0.44**	0.47**	0.42**	0.41**	1	
Convenient transportation (CT)	3.84	0.92	0.44**	0.43**	0.49**	0.47**	0.42**	0.54**	1

From Table 7, it can be seen that whether the local residents are hospitable, whether the attractions are fun related evaluation, whether the social media publicity is interesting, whether the local prices

are reasonable, whether the government introduced relevant preferential policies, whether the local infrastructure is perfect and whether the transport is convenient these seven factors for tourists to go to the extent of the willingness to travel to the degree of influence, each between a certain correlation, and the correlation is significant. This shows that each factor has a certain influence on each other, so when improving a certain aspect, it should pay attention to another factor affected by the problem, not to favor one over the other, to improve the whole. At the same time, it also shows that all factors should be paid attention to promote the development of tourism.

3.3. Discussion

"Dual Carbon," which is carbon peaked short for "carbon peak" and "carbon neutral". In September 2020, China explicitly proposed the 2030 "carbon peak" and 2060 "carbon neutral" targets. The "dual carbon" strategy advocates a green, environmentally friendly, low-carbon Lifestyle The "dual-carbon" strategy advocates a green, environmentally friendly and low-carbon lifestyle. Accelerating the pace of reducing carbon emissions is conducive to guiding green technological innovation and improve the global competitiveness of industries and the economy. China continues to promote industrial structure and energy restructuring and vigorously develops renewable energy and accelerate the planning and construction of large-scale wind power in the desert, Gobi and desert areas. wind power photovoltaic base projects, and endeavor to balance economic development and green transformation synchronize economic development and green transformation. All sectors should respond to this policy, so that China's environmental quality can be improved, the industrial structure optimized, the energy structure adjusted, and green and low-carbon development promoted, providing important support for the realization of high-quality development. Therefore, the "dual-carbon" policy has an important role to play in all aspects of China's development. Among them, the combination of tourism and the "dual carbon" policy is of great significance. First, there are many "non-green" problems in the tourism industry, such as the use of predatory development mode and sloppy management mode of tourism development, and the quality of tourists is not the same, etc. [11]. The shortcomings of various crude tourism development and development modes have led to increased air pollution and environmental degradation. According to China Energy Statistics 2020, in 2019, the total energy consumption of the transport, storage and postal industry, wholesale and retail trade, accommodation and catering, which are related to the tourism industry, was 439.09 million tones and 136.24 million tons of standard coal, respectively. Secondly, tourism resources are non-renewable and there is greater resistance to the green development of tourism. Tourism resources are fragile, and some enterprises, to pursue their own interests, regardless of the carrying capacity of the natural environment, have developed a variety of projects, which not only depletes many resources, but also destroys the ecological balance. Although China's cultural tourism resources are relatively rich, the number is on a downward trend, which has a non-negligible impact on the development of tourism. The non-renewability of tourism resources and the declining trend in the number of tourism resources will seriously affect the sustainable development of tourism. Thirdly, within China, tourists' environmental protection awareness is insufficient and green consumption cognition needs to be strengthened. Green consumption refers to the consumer behavior of all kinds of consumer subjects in the process of consumption activities to implement the concept of green and low-carbon. In the tourism industry, the object of consumption is the tourists, and all things are built for the tourists. Some tourists have weak environmental awareness and green consumption is not in place. In China's tourist places, people often see "civilized tour" this kind of publicity slogans. From this, the problems can be seen in the green development of China's tourism industry. Therefore, the importance of the "dual carbon" policy is obvious.

4. Conclusion

Through the survey of Harbin tourists in the peak season, this paper finds that the travelling group is mainly concentrated in the age group of 20-50 years old nowadays. It also analyses the factors that

most influence Chinese residents to travel to Harbin: whether residents are hospitable, whether attractions are fun to visit, whether social media campaigns are interesting, whether local prices are reasonable, whether the government has introduced relevant preferential policies, whether local infrastructure is perfect, and whether the local transport is convenient. There is a certain correlation between each of these factors, and the most influential factors on tourists' willingness to travel are whether the local price is reasonable and whether the local transport is convenient. Meanwhile, with the boom in tourism, the industry's carbon emissions are affecting the environment, and China's tourism industry is facing challenges and opportunities under the "dual-carbon" goal. This policy provides good external support for the development of China's tourism industry and provides a favorable opportunity to turn China's ecological resources into ecological assets, while also driving the optimization and upgrading of China's tourism industry. The tourism industry needs to develop in all aspects while taking new measures in line with the "dual-carbon" goal.

To enhance and establish low-carbon and zero-carbon tourism destinations, several key strategies can be implemented. Firstly, focus on improving local transport infrastructure while promoting decarbonization efforts, including the construction of low-carbon communities and energy supply facilities, alongside waste recycling systems. Secondly, ensure fair pricing in tourism-related industries to maintain a favorable consumption environment. Thirdly, prioritize the development of local characteristics while emphasizing low-carbon construction in tourist destinations. Fourthly, incentivize industry participation through preferential policies and subsidies. Additionally, utilize social media for engaging promotions and collaborate with residents to ensure a welcoming atmosphere. Improving infrastructure is crucial for enhancing visitor experiences. Innovations in green development mechanisms and regulations are vital, necessitating public participation mechanisms and targeted laws. Encouraging green consumption and environmental awareness among tourists is essential, alongside promoting low-carbon tourism. Digital transformation can aid in managing tourist flows and monitoring ecological environments, while also fostering the creation of green tourism products. Utilizing digital technology to process resources and heritage, implementing online booking services, and promoting walking over vehicular transport are important steps. Lastly, travel agencies can offer "dual-carbon" tourism programs and contracts to limit resource destruction by tourists, thus contributing to sustainable tourism practices.

The findings presented in this paper contribute to the understanding of strategies to advance low-carbon and zero-carbon tourism destinations. However, it is important to acknowledge the limitations of this research, as it is based on a subset of data obtained through questionnaire surveys, which inherently possess constraints in terms of the breadth and depth of information gathered. Consequently, certain influential factors may not have been fully accounted for, warranting further comprehensive investigation. Looking ahead, it is anticipated that China's tourism industry will proactively undertake practical initiatives to align with the "dual-carbon" goal, thereby sustaining its trajectory towards high-quality green development. It is envisaged that the Chinese tourism sector will continue to progress, guided by a commitment to environmental sustainability and innovation.

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