The impact of COVID-19 on China's tourism industry and the future development of China's tourism industry

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Abstract

The global tourism market was hit hard by the COVID-19 outbreak in early 2020. The Chinese tourism industry was severely affected during the outbreak as China was the initial site of transmission and strict anti-epidemic policies were enforced for a period of up to three years. Using data analysis, questionnaires and interviews, this study investigates how COVID-19 has affected the Chinese tourism industry from the perspective of three tourism industry components: tourists, the tourism service industry and travel agencies. The findings show that COVID-19 influences the tourism industry to a large extent, both in terms of policy and in terms of people's psychology. It was also found that although the behavior and motivations of most individuals were more negatively affected by the epidemic, a small number of individuals in each of the above-mentioned tourism constituents were resistant to the negative effects of the epidemic. Based on the results of this study, recommendations are also made for the sustainable development of China's tourism industry in the future.

Key words

China's tourism industry, COVID-19, Questionnaire methodology, Exploratory spatial data analysis.

Introduction

At the end of 2019, the new coronavirus called COVID-19 was first discovered in Wuhan, China, and then quickly affected the world. As the first country to be affected by it, China was the first to introduce policies to prevent and control the epidemic. These policies have greatly affected the global economic situation and the mobility of people. Affected by this, China's tourism industry, which had been growing at a high rate, was in a slump, and the hotel, railway, and aviation industries were all affected by this (UNDP, 2020). This is unprecedented in Chinese even worldwide history.

This means that the tourism industry is a real consumption economy, which requires physical objects to be consumed in a certain place in order to realize the actual contribution of tourism to the national economy (Zhang, 2023). Once consumers' mobility or ability to spend in real life is restricted, the tourism industry's economic resources are greatly diminished (Gössling et al., 2020). The COVID-19 outbreak has made people psychologically afraid to travel for fear of contracting the virus, while national governments have introduced policies to restrict the mobility of the masses (Zhao et al., 2020; Li et al., 2021). This has led to a reduction in the fundamental source of income for the tourism industry (Fletcher et al., 2020).

Moreover, the essence of the tourism industry is large hardware and large capital investment, such as aviation, cruise ships, hotels, scenic spots, etc. This means that the tourism industry does not have strong risk resistance in the face of unstable factors such as epidemics and natural disasters, but it can avoid some risks by rationally adjusting specific tourism businesses, thereby minimizing losses (Ming & Zhao, 2020; Hall, 2017; Calgaro et al., 2014).

The tourism industry is an industry that generates economic increment based on the movement of people (Ming & Zhao, 2020). The fear brought about by the epidemic and the government's anti-epidemic policies have directly caused spatial isolation, which has fundamentally brought the source of life for the tourism industry to a minimum (Gössling et al., 2020). The most direct manifestation is the dismal financial report data of listed tourism companies in the past three years (Wu et al., 2021). China's tourism industry has been expanding rapidly in the past few decades, which is attributed to the national economic take-off brought about by the reform and opening up, and the increase in people's disposable income makes them want to pursue a richer life (Wang & Liu, 2020). It can now be found that although people in the tourism industry are aware of the risks brought by such emergencies, China's tourism industry is not well prepared to deal with emergencies such as the epidemic (Zhong et al., 2022). The largest number of ordinary tourists in China's tourism industry are the main customers of travel agencies and are therefore the industry group that best represents Chinese tourists (Ruigi & Adrian, 2009). In other words, the response pattern and performance of travel agencies in the event of a crisis event can reflect the strength of the willingness of the majority of tourists to travel and whether the ecological functioning of the industry is normal under the current circumstances. In the aftermath of the epidemic, the travel agency industry in China had three main stages of reaction: initially travel agents thought that this was a single point regional health emergency

and would not have an impact on long-term business in other parts of the country. As the situation became more serious, travel agents were severely affected by the large number of refunds and city closures that affected their own capital chains, and gradually cut back on expenses and took the initiative to think about recognizing the incident and thus changing their own operational strategies. In the post-epidemic era, travel agents realized that epidemic prevention was becoming normalized and, for policy reasons, focused more on the domestic market and undertook a sustainable development transition (Chen et al., 2022). In the midst of this process, it is urgent for tourism practitioners to understand the current situation of the tourism industry, know the future development direction of the industry, and how to prepare for unexpected situations that may still occur in the future. In other words, it is important to understand what factors will affect the different downstream sectors of the tourism industry in such a protracted crisis, and how to use these factors to avoid negative impacts and maximize returns by changing business strategies and updating tourism products (Palacios-Florencio et al., 2021). No one can predict the future trends and challenges of a particular industry, but by learning from past successes and background information on events, you can summarize the relevant business strategies that can be applied to enable decision makers to stay ahead of the challenges. For example, Vikrant and Srivastava suggest in their study that hospitality managers can reduce operational costs in times of crisis by increasing the training of multi-skilled staff during normal times (Kaushal & Srivastava, 2021). Besides, Wen and others argue that Chinese tourists may choose to travel less frequently but stay longer in their chosen places due to the impact of the epidemic, and that travel agents can offer more long-haul products accordingly (Wen et al., 2021). At last, the objective of this paper is to summarize the successful experiences of the tourism industry in dealing with such crises by examining the patterns of response to COVID-19 and the impact of COVID-19 on the Chinese tourism industry. It also makes recommendations for the future development of China's tourism industry from the perspective of maintaining resistance in a crisis.

Due to the lack of data on a national scale, this study needs to select a typical case area to illustrate the overall situation of China's tourism industry during the three-year period of the epidemic. As a respiratory infectious disease, the COVID-19 epidemic often occurs in densely populated areas (Jung & Albarracin, 2020). The more densely populated areas, the more people are afraid of COVID-19, and the government's control policies will be stricter (Gearhart et al., 2022). The development of tourism often requires a vibrant economy as support, which means that a region with a thriving economy is more likely to attract the movement of people, whether for business or tourism purposes (Yang & Fik, 2014; Lin et al., 2019; Eadington & Redman, 1991). Guangdong Province is selected as the research area to show the general situation of China's tourism industry during the three-year period of the epidemic. These two characteristics of the research area can be used to ensure the generality of subsequent conclusions and logic. At the same time, the Pearl River Delta region had several large-scale outbreaks of the COVID-19 epidemic during the three-year period, and it was under normal epidemic prevention at other times, that is, people's daily life was not greatly affected, but their mobility was reduced to a certain extent. This is in line with the overall social situation of the COVID-19 epidemic in China, making Guangdong Province a more typical case, which can show the overview situation of China's tourism during the epidemic.

This study will first provide an overview of the Chinese tourism industry during the epidemic by case study of Guangdong Province to better understand the Chinese tourism market and the factors affecting the tourism service industry during the epidemic. This is followed by an online survey of Chinese tourists to explore their behavioral patterns and psychological motivations for travelling during the epidemic. Learning the behavioral patterns and psychological motivations of tourists can give an insight into the underlying reasons why tourists reduce their frequency of travel during the epidemic. It is also possible to explore whether there are different behavioral patterns and psychological motivations of tourists, and whether there are tourists whose behavioral patterns and psychological motivations are resistant to being affected by the epidemic. Last but not least, semi-structured interviews with managers of offline travel providers were used to identify changes in the operating practices and business concepts of travel agencies during the epidemic, and to identify the successful experiences of the companies concerned in dealing with prolonged crisis events such as the epidemic. The following research questions were answered by synthesizing the above information: Main research question: How did Covid-19 influence Chinese tourism industry? In order to answer the main research questions in a more comprehensive and detailed way, three sub-questions are proposed: Sub 1. What happened to Guangdong tourism industry during Covid-19? Sub 2. How did Chinese tourism industry face this crisis? Sub 3. In the future, how Chinese tourism industry manage to improve its ability to resist risks and achieve sustainable development? And based on the final results of the study, recommendations are made for the better development of China's tourism industry in the future.

Theoretical Framework

After entering the 21st century, the global tourism industry has also faced crisis events in many periods, but they were all regional and short-term, and almost never had global, long-term crisis events (Coker, et al, 2011; Wu, T., et al, 2017). Obviously, the impact of the new COVID-19 epidemic is unprecedented and difficult to predict. Most of the impact of regional and short-term crisis events on the tourism industry can be dealt with by short-term emergency strategies such as PR handling and lending, which does not require some changes in the entire industry (Fuchs, 2021; Lai et al., 2020). However, a global and long-term crisis event means that practitioners in the tourism industry need to carefully consider future development plans, and if necessary, make some changes (such as launching new business models, changing business concepts, etc.) to ensure that their own enterprises adapt policy environment to achieve the goal of sustainable development (Fang & Zheng, 2011; Rogerson, 2021; Sharma et al., 2021).

Research on large-scale epidemics shows that travel behavior is a central part of epidemic transmission and surveillance (Hon, K. L., 2013), because individual travel behavior is disordered and diverse, during the incubation period of the epidemic, individual travel behavior can easily bring the pathogen to another place thousands of kilometers away from the virus outbreak site, facilitating the large-scale spread of the virus (Khan et al., 2009). At the beginning of COVID-19 epidemic, the world had not yet developed a vaccine or anti-venom that can completely immunize people. This means that countries around the world can only adopt non-pharmaceutical interventions as the main countermeasures in the early process of combating the spread of the virus (Le et al., 2020). These include but are not limited to: maintaining social distance, canceling large-scale gatherings, school closures, city-wide blockades, etc. Due to these policies of the governments of various countries, people's daily travel and long-distance travel have been greatly restricted. As a result, people's mobility has been greatly restricted. Although the tourism industry of countries around the world has also been directly affected, these measures have indeed slowed down the spread of the virus to a certain extent and bought some preparation time for governments (Gössling, 2020).

The global travel market went from hypergrowth to stagnation rapidly around the time of COVID-19 (Dodds, R., & Butler, R. 2019; Conde Nast Traveller, 2020). This is mainly caused by two reasons: on the one hand, the policies of various countries in the world. These policies constitute the external environment for tourists when they travel, making it necessary to carefully plan the timing of their trip before they travel in order to avoid epidemic policies affecting their schedule. On the other hand, tourists themselves will be afraid of being infected with the new crown during the trip, which will affect their future physical health. The second reason is not entirely the fears of the tourists themselves, but the publicity generated by the government, public institutions and social media (Dubey et al., 2020). To what extent is the new coronavirus harmful to the human body? There are various answers to this question in the media reports of different countries. In the United States, in Europe, in Southeast Asia, and in China, the answers to this question are different (Ioannidis, 2020). This also leads to cognitive biases among different groups of people.

Of course, national policies do not require cities to be closed at all times, and when the epidemic situation turns for the better, people's mobility will rise (Yu et al., 2023). But why is it that at such times there is still no major rebound in the overall tourism sector? It is important to look at the motivations of tourists to travel, to explore the circumstances under which they choose to travel and the circumstances under which they choose to cancel their plans to go out.

Generally, tourism motivation consists of 3 components: endogenous, exogenous and intermediate conditions (Baloglu, 2020). The endogenous drive is the human motivation to travel, one of the basic human needs; the intermediate conditions are income, leisure events and transport conditions; and the exogenous drive is the spatial relationship between the place of tourism and the place of origin (Heitmann, 2011). Accessibility is also an important characteristic of the exogenous drive. Although today's transport conditions have improved considerably compared to those of the past, the distance factor is still an important factor affecting tourism (Nicolau, 2006). The greater the distance between destination and departure, the greater the resistance to generating interactions between them (Clifton et al., 2016). Different destinations have different sensitivities to distance, which is mainly related to the tourism value of the destination itself. In general, accessibility is positively correlated with a destination's attractiveness to tourists. The more famous attractions the destination has, the higher the accessibility for tourists; conversely, the lower the accessibility for tourists (Nicolau, 2008). This effect is more pronounced when tourists' mobility is negatively affected. The three motivations mentioned above do not work in isolation; they interact with each other and together determine the final tourist behavior. A new set of intermediate conditions is created after an epidemic, for example, poor access to transport systems, epidemic policies that restrict the mobility of tourists, and a global economic downturn that reduces people's incomes. These intermediate conditions affect the endogenous drive of tourists in terms of their lived experiences, which enables tourists to make different travel choices from non-epidemic times. For example, under the fear of being locked down in the destination or getting infected in other cities, people will more like to choose closer cities as the travel destinations to ensure trips more feasible. This is because tourists tend to feel more psychologically secure in the knowledge that they know the city closer to them (Le & Bui, 2022).

In addition, due to China's extremely strict epidemic control policies, people are very vulnerable to psychological illness during an epidemic (Qiu et al., 2020; Chen et al., 2020). Without mental health, most people do not consider participating in leisurely activities like travel (Mackett, 2021). At the same time, in the context of an epidemic, people are more likely to be fearful or anxious about travelling across regions, because that could make them more vulnerable to contracting COVID-19 or being quarantined somewhere due to the epidemic policy. This further influenced people's travel choices during the epidemic.

The stagnation of the tourism industry in terms of the factor of tourists is the result of the reduced frequency of travel by tourists as consumers. The tourist, as a consumer of tourism, is the most fundamental aspect of the industry. When the number of consumers is drastically reduced and tourism

activities are restricted by the government and the wider social environment, how do the tourism services industry and travel agencies, which are the mainstay of a stagnant tourism industry, respond? A study by Chen et al. (2022) found three main stages of response in the travel agency industry in China following the outbreak. Firstly, travel agents relied on internal feelings and interpretations and adopted a passive strategy. In the second phase, with a national lockdown, they saw the pandemic as similar to the SARS outbreak, believed it would be contained in a short time and focused on various adaptive measures to cut costs. In the third phase, travel agents resorted to prudent perceptions and realized that COVID-19 would become the new normal, initiating strategic innovations and systemic changes, from establishing e-commerce platforms to developing non-travel businesses. Similarly, Lau's research (2020) shows that the Chinese hotel industry is beginning to embrace new technologies and business models, such as contactless booking and guided tours, after experiencing a major epidemic. As for the restaurant industry, studies have shown that during the epidemic, the psychological attitude of restaurant consumers was more positive and had great confidence in the recovery and development of the restaurant industry. The direction of the catering industry has also shifted from the previous reverence for online visibility to one where quality is paramount (Zhang et al., 2021). Despite the economic stagnation of the tourism industry, it is evident that all industries have shown remarkable resilience during the epidemic and have updated their business strategies through user feedback and operational experience during the epidemic. Only companies that are able to adapt to the market environment will be able to continue to survive in this sector, and if they want to do so, they will have to update their strategies (Lau, 2020).

Chinese COVID-19 Policies Context

Due to different national conditions and backgrounds, governments of different countries had also adopted different control systems in terms of follow-up control measures. For example, Singapore required citizens to maintain a one-meter social distance in public places, and the border was closed to most tourists. If you want to enter the country, you needed to observe at home and nucleic acid monitoring for 14 days after entering the country. Norway did not implement large-scale nucleic acid testing, and only provided nucleic acid testing for symptomatic groups, special types of workers, and susceptible groups; the borders were open to the Nordic countries, but people entering the country from outside the Nordic countries were required to produce nucleic acid testing reports within 10 days (Emeline Han, et al, 2020).

With the development and application of vaccines, most countries and administrative regions in the world would gradually reopen their borders in 2021, but China had always maintained a strict epidemic prevention policy: three-level control policy: three codes of red, vellow and green, low, medium and high risk areas. Regularly carry out large-scale nucleic acid testing for all employees in large cities and key places (schools, hospitals and other crowded places), and used the health code to uniformly control the health status and daily travel trajectory of the public. If you had close contact with someone infected with the new crown, you needed to be isolated at home, and ensured that the results of three nucleic acid tests within 7 days are all negative before the home quarantine can be canceled. If there was a history of traveling in high-risk areas within 14 days, you would get the red code, and a 14-day centralized guarantine is required, during which the nucleic acid results are all negative, and then they can resume green code. All administrative regions outside mainland China were high-risk areas, which means that anyone who comes to China must undergo a 14-day centralized quarantine. Unlike other countries, China implemented these policies from the beginning of 2020 without any relaxation until December 2022. For nearly three years, the mobility of citizens across the country has been restricted, and the possibility of traveling abroad was almost impossible, because the time cost of isolation after returning to China from abroad was too huge. Other countries also had stricter policies on tourists from China. Many countries had designated China as a high-risk area. After entering the country, Chinese tourists were also required to undergo home quarantine or centralized quarantine in foreign destinations, which further reduced the mobility of Chinese tourists.

From 8 January 2023, China implemented "Category B" control of novel coronavirus infection. In accordance with the Law of the People's Republic of China on the Prevention and Control of Infectious Diseases, isolation measures would no longer be implemented for people infected with the COVID-19 and close contacts would no longer be identified; high- and low-risk areas would no longer be designated; the classification and treatment of people infected with the new coronavirus would be graded and the medical protection policy would be adjusted in due course; the testing strategy would be adjusted to "testing whenever possible"; and the frequency and content of information dissemination on the epidemic would be adjusted (Xinhua News, 2022). The frequency and content of outbreak information would be adjusted. In accordance with the Law on Health and Quarantine of the

State Border, quarantine measures for the management of infectious diseases would no longer be taken for incoming persons and goods.

Based on the above research background, the research diagram for this study is shown below. The study starts from the long-term crisis event of COVID-19 and the impact of China's epidemic prevention policy on China's tourism industry, and takes the timeline of the epidemic and the three components of China's tourism industry as the research perspective. In the study of the three components of the tourism industry, the paper attempts to analyze the similarities and correlations between the three responses to the epidemic and use them to make recommendations for the future development of China's tourism industry.



Fig 1. Research diagram

Methodology

Case Study Area

The ultimate objective of this study is to investigate the impact of COVID-19 on China's tourism industry, but due to the lack of national-scale tourism-related data during the study period, Guangdong Province was chosen as a case study in the first part of the study to provide an overview of China's tourism industry during the outbreak. Guangdong Province is located in southern China, close to Hong Kong and Macau, and is the largest province in China in terms of economic output. The following is the rationale for selecting Guangdong Province as a case study.

Firstly, Guangdong Province has the largest and most important tourism industry in the whole of China; its total tourism revenue and foreign exchange earnings from international tourism have ranked first in the country for several years in a row. Secondly, tourism is one of the key sources of growth for the province's economy (Luo et al., 2016). At the same time, the epidemic had a significant impact on tourism in Guangdong Province, thus allowing a better analysis of the negative effects of the epidemic on tourism than other provinces. According to statistics from the Guangdong Provincial Department of Culture and Tourism, the number of inbound tourists arriving in Guangdong in 2020 decreased by 87.45% compared to 2019, indicating the significant impact of COVID-19 on international tourism in Guangdong Province. Thus, using Guangdong Province as a case study area, the extent to which China's tourism industry was affected during the epidemic can be effectively captured. It is also possible to use different tourism-related data from the province to give an insight into the specific extent of the impact on China's tourism sub-sectors, and to further analyze the development logic and coping strategies of China's tourism industry during the epidemic. This will help to answer the research questions of this paper.

Research design

In order to gain a comprehensive and systematic understanding of the impact of COVID-19 on China's tourism industry, this study utilizes a total of three different research methods to explore the impact of COVID-19 from three different perspectives: tourism services industry (hotel and catering industry), tourists, and travel agencies respectively. Firstly, in order to understand the profile of the tourism industry in China during the epidemic period, the Exploratory Spatial data Analysis was used to reveal the profile of the tourism industry in China during the epidemic period, using Guangdong Province as a case study. At the same time, the factors affecting the development of the tourism service industry during the epidemic are analyzed. In the second part, a questionnaire survey is used to explore the travel choices and motivations of tourists during the epidemic, as well as their psychological experiences during tourism activities. Finally, the research method of semi-structured interviews was used to interview the manager of a travel agency in China. In this section, the information provided by the professionals was analyzed through interviews and in conjunction with the first two sections to

explore how travel agents behaved as intermediaries during the epidemic, as well as to understand how the interviewee's company survived and what successes could be learned for future generations in similar crises.

These three research methods allow for the effective integration of different aspects of existing data, thus painting a complete picture of the Chinese tourism industry during the epidemic. Through such a research design, the final study presents results that can organically integrate the logic of the three main actors - consumers, tourism services and travel agencies - and their responses during the epidemic.

Data Collection

The data in the 'Overview of the tourism industry in Guangdong during COVID-19' section of this article are obtained from the Guangdong Province Data Yearbook published by the Guangdong Bureau of Statistics (2022). The period from 2018 to 2021 was chosen as the research period as the tourism data of Guangdong Province for 2022 has not yet been released. The data in the "Chinese tourists' response to COVID-19 and policies" section were obtained from the 174 valid samples of the online questionnaire (see Appendix) released in early June 2023 across China. The research population of this paper is Chinese tourists, and Guangdong province is just the case for Part 1 to show the overview of Chinese tourism industry during epidemic. The data for the 'Part 3' section were drawn from semi-structured interviews with a Beijing travel agency manager.

Exploratory Spatial data Analysis

In the first part of this research, with the method of exploratory spatial data analysis, this paper uses Guangdong Province as a case study to understand the profile of China's tourism industry during the epidemic and to explore the response of the tourism service industry. In this part, the four years from 2018 to 2021 are selected as the research period, 21 prefecture-level cities in Guangdong Province are used as the research area, and 3 research indicators are selected: Turnover of Accommodation and Catering industry in each city, Foreign earnings from International tourism, and Domestic arrivals in Guangdong. Foreign earnings here is used as an indicator describing the overview of Chinese international tourism, because this is the only available data for Chinese international tourism. Through these three indicators, we can get a more comprehensive understanding of the general situation of China's tourism industry represented by Guangdong Province during the epidemic from the perspectives of domestic tourism, international tourism, and tourism service providers. At the same time, this research period covers both the pre-epidemic and post-epidemic periods, allowing a more visual representation of the strong development of tourism in Guangdong Province before the outbreak and the significant impact of the epidemic on its development after the outbreak. This provides the most intuitive answer to the question "What did happen on here", which could answer the first research question.

Online Survey

This paper uses the research method of online questionnaires to learn Chinese tourists how respond to COVID-19, and analyze their behavior logic and travel choices. The sample size is expanded by snowballing (Groves et al., 2011; Johnson, 2014). At the beginning, the number people who be reached out to the survey is 20. These initial respondents were relatives and friends of the author, and the first dissemination of the questionnaire was mainly carried out by them. The 20 people were very evenly distributed in age: 5 were aged 16 to 30, 10 were aged 30 to 50 and 5 were aged 50 to 70. And the criteria for a valid sample for this survey is the average Chinese tourist. The average tourist here refers to the group of ordinary Chinese citizens who would be constrained by China's anti-epidemic policies and whose mobility would be significantly affected. This means that groups such as government officials who are not easily affected by China's anti-epidemic policies in terms of mobility do not serve as a valid sample. The questions in the questionnaire were set to address the travel of Chinese tourists during the epidemic, such as whether the tourists had traveled during the epidemic, their attitudes towards travel during the epidemic, their feelings while travelling, their motivations for travelling during the epidemic, etc. Some of these questions are open questions. As a consequence, descriptive analysis is used to analyze the data of survey, which is suitable for clarifying answers that involve ideas and motivations for travel choices for different groups of people.

In order to be able to understand the logical patterns of behavior of Chinese tourists during the epidemic and to explore whether different types of tourists may behave differently in the aforementioned ways, secondary survey is arranged for some of the specific sample. Respondents to the second survey consisted of people with different opinions on their motivation to travel. The main question in the secondary research was to ask the respondents how they formed their motivation to travel and what were the reasons behind it. This has proven to be very helpful in shaping the results of this study.

Semi-structured Interview

In the third part of this study, first-hand data on the response of Chinese travel agents during the epidemic can be effectively obtained through the use of semi-structured interviews with travel agent managers, and these data are logical and reflective in nature (Fylan, 2005). In other words, because of the first-hand experiences of the interviewee and the successful survival of the interviewee's travel agent after the epidemic, this data is of invaluable value to tourism industry practitioners and researchers. The interview structure mainly follows the timeline of the epidemic, from managers' feelings and corporate reactions in the early stages of the epidemic, to the shift in operational strategies in the middle and late stages of the epidemic, and finally ending with the gradual recovery of travel agency business at this stage. This interview structure allows the interviewees to recall and provide relevant data more fluently, thus maximizing the integrity of the interview data and the logical coherence of the corpus. Through the experiences and insights of professionals, this study allows for a more forward-looking and reflective approach to discovering the impact of COVID-19 on China's

tourism industry from the perspective of travel agents, ultimately achieving a comprehensive and systematic answer to the research question.

Overview of the tourism industry in Guangdong during COVID-19

The first of these three research indicators that this research chooses is about the tourism service industry, which means that this part focuses more on the epidemic situation of offline tourism supporting service providers, because it is a big and vital part of travel industry. Besides, although some tourists would choose to buy travel products by OTA, when they arrive at the destination, the travel service providers they will contact are still these offline hotels and restaurants (Ling et al., 2014). To a certain extent, these tourism service industries directly determine the specific tourism experience of tourists and the overall impression of tourists on the city (Gao et al., 2018). From an industry perspective, these tourism service providers are the most basic service providers and the most basic part of the entire industrial chain. If the performance of these suppliers is so poor that some hotels and restaurants close down or go out of business, then there will be no OTA online sales, and the entire tourism industry will be shut down.

It should be noted, however, that tourists are not the only ones who spend money in hotels and restaurants, but also in the daily lives of local residents in various locations (Britton, 1991). Therefore, when analyzing the data, it should be borne in mind that the data is a partial representation of the tourism industry as a whole, but not a complete representation of the overall tourism industry. In other words, hotels and catering service are a key part of the tourism industry, but they do not only serve tourists and their revenues are not fully representative of the tourism industry's rise and fall.

After obtaining data from the Guangdong Provincial Statistical Yearbook, the turnover indicators of the hotel and restaurant industry were visualized using ArcGIS software to obtain Figures 2 and 4. To facilitate comparison of the year-on-year changes in the data and to see more clearly the impact brought about by the epidemic, the data stratification criteria for both figures used the natural break of their own indicators in 2018. Fig.3 and Fig.5 are the overview line charts of the province total data.



Fig.2 The turnover of catering in Guangdong

Turnover of the catering







Fig.5 Line chart of the turnover of the hotel in Guangdong

It can be clearly observed that on a province-wide scale, both hotel turnover and restaurant turnover maintained an increase before the COVID-19 outbreak. After the outbreak, however, both indicators

remained high in Guangzhou (the capital of Guangdong Province), but the rest of the cities were affected to varying degrees and declined. Besides, in terms of spatial dimensional analysis, the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) consistently had the highest values in the province, followed by Zhanjiang and Maoming in the western part of Guangdong, in terms of both hotel turnover and restaurant turnover. Analyzed on a time-series dimension, the restaurant and hotel sectors in the two aforementioned regions were also the most risk-resistant to the epidemic, meaning that turnover was less negatively affected by the epidemic.

In this way, it is important to understand "Why did the hotel and restaurant sectors in these two regions withstand the strong impact of the epidemic?", as exploring this issue is likely to identify ways to increase resilience in the tourism services industry, and help tourism industry know how to behave better in future crisis. Firstly, the Guangdong-Hong Kong-Macao Greater Bay Area is an important geographical node for sea, land and air transportation in southern China, connecting various regions and countries in the process of building the "Belt and Road", with an area of 56,000 square meters and a total population of about 68 million (Guangdong Bureau of Statistics, 2022). Secondly, the Greater Bay Area contains a world-class city cluster and is driving the growth and prosperity of this mega-city region under the national development strategy (Hui et al., 2020). This means that the region has an extremely large economic and population size, which can lead to extraordinary spending power, and is supported by national policies. This is an extremely solid backing for the industries in this region. Although the Guangdong-Hong Kong-Macao Greater Bay Area had a brief period of closure during the outbreak, the lifting of the closure was followed by an unbridled economic dynamism. The combination of these factors has enabled the region's hotel and restaurant industry to withstand the impact of the epidemic relatively well. However, Zhanjiang and Maoming are not a part of GBA, and they are far from the heart of GBA, how could the hotel and catering make themselves solid?

Zhanjiang is adjacent to Hainan Province to the south and is an important port city, as well as an important distribution point for tourists going to Hainan, relying on a revitalized maritime economy. The Maoming region also does not have highly competitive tourism resources, while the city's main development strategy does not include tourism (Zhanjiang Municipal Government, 2022). However, Maoming has the most prolific oil shale deposits in the whole of Guangdong Province. The energy and heavy chemical industry, dominated by large national enterprises such as Sinopec, China National Offshore Oil Corporation (CNOOC), Baosteel and China Guangdong Nuclear Power Corporation (CGNPC), is the industrial backbone of Zhanjiang and Maoming. The region has an extremely developed industry and a large working population (Zhanjiang Municipal Government, 2022). It can be argued that the hotel and restaurant industry in the region generated less revenue from tourism and more from local workers and business demand. The stability of the large, heavy industrial state enterprises allowed a large number of employees in the region to continue to have sufficient spending power during the epidemic, allowing the hotel and restaurant industry to withstand the pressure of the epidemic (Lin et al., 2020).

The above conclusions can be verified simultaneously with the situation of the last two indicators.

After understanding the tourism services sector, the second indicator is analyzed: domestic tourist arrivals (as shown in Figure 6). In order to facilitate comparison of the year-on-year changes in the data and to see more clearly the impact of the epidemic, the data stratification criteria for this figure are again uniformly based on the natural break in 2018 for the domestic tourist arrivals indicator.

It is even more evident from this graph that domestic tourism numbers continued to climb at a high rate before the outbreak and fell off a cliff in the vast majority of regions after the outbreak, with only the core regions of Guangdong, Hong Kong and Macau's Greater Bay Area experiencing a slight increase in tourism numbers after the outbreak. Prior to the outbreak, the highest number of tourist arrivals was concentrated in the core GBA region and Zhanjiang, while after the outbreak only Guangzhou and the surrounding municipalities remained with a high number of domestic tourists. This corresponds to the above discussion that the tourism services industry in the western Guangdong region of Zhanjiang and Maoming relies mainly on local residents for revenue, while the tourism services industry in the core GBA region can still rely on tourist spending.



Fig.6 Arrivals number of domestic tourists



Fig.7 Line chart of Arrivals number of domestic tourists

Apart from the relative lack of quality tourism resources in other cities in the province, another important reason for the concentration of tourists in core GBA areas such as Guangzhou after the outbreak is the risk assessment and grading control of China's domestic outbreak control policy (Xu et al., 2020). Policy makers and experts have identified significant differences in the spread patterns and overall risk patterns of the epidemic, as evidenced by the higher risk of spread in medium-sized thirdand fourth-tier cities, and the low to medium risk of spread in developed cities and backward regions. This is because developed cities have a high level of medical care and a high level of public awareness of self-prevention and control, while medium-sized cities have a large population but a lower level of medical care and a generally lower quality of population than developed cities. As a result, control policies in medium-sized cities tend to be much more responsive and have much lower response thresholds than in developed cities (Xu et al., 2020). For example, if there are 10 cases in Maoming on a given day, the city needs to be closed for 2 weeks the next day, whereas if there are 10 cases in Guangzhou, only the street where the cases are located needs to be closed the next day, and the rest of the city can move around as usual (Jiang & Liu, 2023). Therefore, developed cities such as Guangzhou have much less restrictive travel and arrival policies than medium-sized cities and are objectively more likely to become destinations for tourists.

After understanding the travel of domestic tourists during the epidemic, it is still necessary to understand the impact of the epidemic on international tourism to China, with a view to providing a comprehensive overview of the impact of the epidemic on China's tourism industry. Foreign Exchange Earnings is the only available data describing Chinese international tourism, so this study chooses this to help learning Chinese international tourism during epidemic. The graph below shows a visualization of data on foreign exchange earnings from international tourism before and after the epidemic (shown in Figure 8), and Figure 9 shows the overall change in this data over four years at the Guangdong Province scale.



Foreign Exchange Earnings from International Tourism

Fig.8 Foreign exchange earnings from International Tourism





Foreign Exchange Earnings from International Tourism refer to the total expenditures of foreigners, overseas Chinese, Chinese compatriots from Hong Kong, Macao and Taiwan during their stay in the mainland of China, or earnings of foreign exchange from international tourism in terms of national economy (Guangdong Bureau of Statistics, 2022). As can be seen from the graph, foreign exchange earnings fell by almost 90% after the outbreak, which suggests China's international tourism industry takes a serious hit after the outbreak. Besides, as can be seen from Fig.8, the spatial structure of international tourism foreign exchange earnings is similar to the previous maps, with regions with

high levels of foreign exchange earnings showing a concentration in the core of the GBA, both before and after the outbreak. However, one difference from the previous graphs is that international tourism foreign exchange earnings did not show a significant increase before the outbreak. In the year following the outbreak, the indicator did not show a small increase, and even fell somewhat. International tourism is not like domestic tourism in that the factors affecting domestic tourism depend heavily on the economic dynamics within the country. A thriving domestic economy drives more people to have more disposable income, which can drive the internal circulation of the tourism economy. However, the growth of international tourism has been steadier and slower due to a larger global economy, more travel options for tourists and a higher barrier to entry to China (Gwenhure & Odhiambo, 2017; Durbarry, 2004). In the aftermath of the outbreak, the time and economic thresholds for international travelers to come to China were raised significantly as domestic outbreak control policies classified all areas outside China as high-risk areas, meaning that all people from areas outside China were subject to a 14-day quarantine of entry (Hoque et al., 2020). This has resulted in a situation where almost the entire province has seen zero foreign exchange earnings from tourism since the outbreak.

Chinese tourists' response to COVID-19 and policies

When talking about different travel choices or different travel psychologies due to the impact of the epidemic from a tourist's point of view, it is important to understand that different epidemic control policies can have a significant impact on the behavioral logic and psychology of tourists (Zambianchi, 2020). This is because in the context of COVID-19, epidemic control policies are the equivalent of force majeure for ordinary citizens, an objective condition that cannot be ignored and that can have a significant impact on the degree of difficulty in travelling. This section uses a questionnaire research method to learn the travel choices of Chinese tourists during the epidemic, the extent to which the epidemic policy affected tourists' travel, and the psychology of tourists when travelling during the epidemic.

The questionnaire was published online, using a snowball approach to finding interviewees to ensure a random sample (Johnson, 2014). The final number of completed questionnaires was 192, with a valid sample size of 175. Of these, 75.86% of interviewees were working and 16.67% were students. Only 41.95% of the total sample had travelled during the epidemic, the rest of the interviewees had not travelled once during the three years of the epidemic. Most of the interviewees' furthest travel experiences were concentrated in the summer of 2020, while the rest of the travel experiences did not show a clear trend of concentration in terms of time dimension. That time period was the end of the first outbreak period, and most people were optimistic about the future outbreak situation and did not expect the outbreak to recur so dramatically in the future. It is worth noting that China's epidemic prevention policy is not static. After the shock of the first outbreak (with Wuhan as the epicentre of the outbreak), by the summer of 2020 the Chinese government had developed a relatively well-developed and flexible outbreak prevention and control policy. The flexibility here means that provinces and cities have the power to define their own risk zones and choose to adopt strict or lax regional quarantine policies based on the number of cases in national regulatory documents. This often means that first-tier cities with large economies are able to ensure greater mobility for the majority of their citizens without compromise, while residents of smaller cities may face a more difficult situation. In Guangzhou, for example, there have been several outbreaks during the two-year period between the end of the first wave of the epidemic in the summer of 2020 and the summer of 2022, but there has never been a truly comprehensive closure of the city, and the public transport system has never been shut down. Behind this situation is a precise policy of designating and isolating high-risk areas, without a "one-size-fits-all" management model. Obviously, in such cases, the daily lives of ordinary citizens are largely unaffected by epidemic, but once citizens want to move across regions, the difficulty rises steeply. This is because policies on epidemic prevention are often not entirely consistent from region to region, and no one can guarantee which city will be free of new cases at a given time in the future.

However, despite this, according to the survey, 81.61% of interviewees found it more difficult to conduct tourism activities during the epidemic than during the non-epidemic period. This was mainly due to "psychological difficulties (e.g. fear that destinations will classified as a medium to high risk

area)" and "the closure of tourist facilities such as scenic spots and amusement parks or the stringent access conditions". A small number of interviewees also cited the "shortage of accommodation and catering facilities in the destination due to the epidemic" as a factor that made tourism activities more difficult. Besides, 63.79% of interviewees were anxious about whether they would be able to complete their trip as scheduled due to the outbreak control policy. The psychological difficulties experienced by tourists during this period can be explained in two ways: "destination anxiety" and "departure anxiety". "Destination anxiety refers to the fear that the area in which the tourist is staying will be classified as a medium to high risk area before, during and two weeks after the completion of the trip, which corresponds to three different negative outcomes: 1. not being able to complete the trip as scheduled; 2. being blocked by the quarantine policy in the hotel or B&B where they are staying; 3. Returning home with a 7-day, 3-check or quarantine requirement. The "departure anxiety" refers to the fact that the departure place is classified as a medium to high risk area before or during the trip, which corresponds to two situations: 1. not being able to complete the trip as scheduled, and 2. being forced to stay at the destination due to the blockade of the place of origin. Of course, there are also very rare and exceptional cases, such as being informed on transport during the journey to your destination that both the destination and the place of departure are classified as medium to high risk zones, which turns out to be a real case of nowhere to go. This makes it very easy for tourists to become anxious about their upcoming trip. This anxiety cannot be alleviated even during the journey, as they may have to keep an eye on the epidemiological situation in their original and current locations to avoid any of these negative situations. When it came to how to solve the related anxiety, 49.43% of the interviewees said there was no way to solve the anxiety; 19.54% of the interviewees chose to keep themselves in a good state of mind and just lie flat and resign themselves to their fate; 19.54% of interviewees said that they would do Plan B according to the situation at the time, thus giving themselves some psychological reassurance; the remaining 11.49% of the interviewees chose to adopt different external methods to dispel their anxiety, such as playing games, watching TV series, reading books and practicing calligraphy. As can be seen, there is no practical way in which visitors can change the external environment, as the whole journey itself is shrouded in a strong sense of uncertainty due to the unpredictability of the epidemic and the prevention and control policies. So why do people still choose to travel in such a tough external environment?



Fig.10 Ways respondents choosing to solve anxiety

When asked about their psychological motivation for travelling during the epidemic, 60% of interviewees who had travelled during the epidemic responded that they had been at home too long due to the pressure of the epidemic and wanted to go out for a break. Another 24% of interviewees felt that the psychological motivation for travelling during the epidemic was the same as that for travelling during the non-epidemic period. The remaining 16 per cent of interviewees felt that it was a good time to travel during the epidemic because the number of visitors to various attractions was low and the price of hotels and air tickets had dropped significantly. It can be seen that there is a wide divergence in the motivations of the tourists, with most wanting a period of relief from the depressing life of the epidemic through tourism activities, and a small number looking at the epidemic period through a very rational and pragmatic lens, which leads to the conclusion that the epidemic period is a good time to travel from an economic point of view. While each of these psychological states has its own justification, it is worth noting that, regardless of the above-mentioned motivation, the basic condition for permission to travel remains that the epidemic situation in the location is not so severe as to warrant the closure of the city as stipulated in the policy. At the same time, regardless of the psychological motivation of the traveler, the two thresholds of "no new cases in the place of residence for 14 days" and "negative nucleic acid test 48 hours prior to travel" are still required during the trip. These two thresholds are very easy to meet when the place of residence is free of the epidemic, but it is the uncertainty described above that makes the condition "free of the epidemic" so stressful. The constant nucleic acid testing in daily life is a constant source of fear that normal life will be disrupted by the epidemic and that a new infection will be acquired, which is why most of the interviewees found living with the epidemic very depressing.

In addition to this, one very noteworthy point is that interviewees with postgraduate or higher education (31 people, 17.82% of the total sample) were significantly more likely to have travelled during the epidemic than those with less than postgraduate education. 67.74% of interviewees with postgraduate and above degrees had travelled during the epidemic, compared to 36.36% of interviewees with less than postgraduate degrees. The percentage of interviewees with less than postgraduate qualifications who had travelled during the epidemic was 36.36%.



Fig.11 Educational Composition of Respondents

It is clear from this that there are significant differences in the perceptions of people with different levels of education regarding travel activities during the new crown, and it can even be argued that the overall perceptions of COVID-19, the epidemic and control policies differ between people with different levels of education. This has led to significant differences in behavioral patterns between them, with a small number of people having very rational motivations to travel, for example. A secondary survey of interviewees with different education levels revealed that interviewees with higher education levels often learnt through a variety of information sources that COVID-19 is not very harmful to young and middle-aged people, that it becomes less and less virulent over time, and that it is almost impossible to have a life-threatening effect as long as they are vaccinated. As a result, they were able to take a more rational attitude towards the epidemic and understand the control policy, rather than being afraid of it. However, most of the interviewees with low education levels are less educated on the effects of the virus, do not know more about the process of viral transmission, and do not have the ability to search and filter more objective and realistic information sources, which makes their information sources more homogeneous. What they see, hear and understand is only "if you get this disease you may die" (Respondent a), and "it is dangerous outside, you may get COVID-19 if you run around, you will be quarantined and you will not be able to earn money" (Respondent b). It can be argued that the information bias and cognitive model bias between different education types is the fundamental reason for their different attitudes towards travel as a behavior during the epidemic (De la Fuente et al., 2021). At the same time, this also makes a difference in their motivation to travel.

The Interview of Travel Agency

This section uses semi-structured interview with the head of a Beijing-based company in the travel industry (see Appendix for the text of the interviews). The company was founded in 2007, is around 500 people in size, and operates mainly in the field of overseas travel, as well as in the processing of education abroad. This company has survived the major blow of the epidemic and has seen a new period of growth in tourism. Through interviews, this section of the study will explain and analyse the following questions: How did travel agents react during the COVID-19 epidemic? What were the travel agents' strategies to assist tourists in travelling during the COVID-19 epidemic, and the post-epidemic dynamics of the travel industry.

When the COVID-19 epidemic first broke out in early 2020, with Wuhan as a precedent, cities were closed across the country. The interviewee said that the top managers of the company thought at the time that this was only a temporary situation, after all, they had experienced the SARS epidemic in 2003 before and most of them thought that this time was more similar to the SARS epidemic at that time and thought that all policies and social activities would return to normal after a month or two. Interviewee also admitted that they were not prepared for such a serious outbreak and did not expect it to be so severe that most cities across the country would be closed and the world would be affected. As the number of people travelling out of China in tour groups is much larger than that of individuals, China has strict qualifications and policies for tour operators operating outbound tours. In the immediate aftermath of the epidemic, the country introduced regulations to suspend all outbound travel operations by all travel agencies. This situation was undoubtedly devastating for the company as it rendered the outbound travel business, which is one of the company's two main businesses, completely unviable.

The expansion of the epidemic in China was greatly reduced in the summer of 2020, and interviewees reported that although the number of infected people in the country was greatly reduced, the number of infected people outside China was still increasing dramatically due to the different policies of other countries around the world to prevent the epidemic at that time. As a result, China did not change its policy of banning outbound tours at the time to ensure the safety of people in the country. During this period, the interviewee realized that the national policy on tourism was not likely to change any time soon and discussed with other senior managers strategies for dealing with the situation. The only remaining business was study abroad, which was not doing well at the time of the epidemic, and the company was desperately short of revenue. In order to keep the company afloat, the interviewees adjusted the salaries of the employees to ensure a minimum level of living for them and encouraged them to find their own side businesses. Home working and voluntary attendance were also promoted. In these difficult times, the interviewees' companies have not chosen to actively reduce the number of employees, but rather to offer each employee half their normal salary as far as possible. It is worth noting that during this period, the travel agency did not expand into domestic travel or other areas of business. When asked why, interviewees replied, "As we had not done domestic travel before, we had to start from scratch and deal with suppliers from all over the country. The policy environment during

the epidemic made the domestic travel industry more uncertain, and we all felt it was too risky. And there was a shortage of capital and there was no more money left to expand into other areas of the business." It was in this way that the interviewee's company survived the three years of the epidemic, and from the beginning of 2023, the travel agency's international travel business gradually began to recover. When the industry recovered, the interviewee and other managers decided to increase the housing allowance for the staff who stayed on by RMB 1,500 per month as a token of their appreciation and reward for staying with the company.

The entire response process of the interviewee's travel agency was largely in line with the three-stage response of travel agencies during the epidemic as proposed by Chen and other scholars (Chen et al., 2022), i.e. the travel agency adopted a reactive strategy in the early stages, focused on various adaptive measures to cut costs in the middle stages, and initiated strategic innovation and systemic changes at the end, establishing an e-commerce platform or developing non-tourism businesses. However, in a slight departure from Chen's theory, the interviewee travel agency's main business was not only tourism but also study abroad education services prior to the outbreak. In other words, the travel agency's response did not strictly conform to its proposed end-stage response, which allowed this travel agency to be somewhat resilient at the time of the crisis and not be overwhelmed by the epidemic policy. At the same time, the survival of the interviewee's travel agency also side-steps the validity of Chen's theory. That is, the respondents' travel agents' original overseas education business was less affected by the epidemic as it was not a traditional tourism business, which allowed them to rely on their overseas education business to secure some revenue and thus not generate zero income. On the other hand, there are many counterexamples, as the interviewee said of his company's success in surviving the epidemic: "We don't really have any special secrets, we just have more non-tourism business than other travel agencies, and we have been operating since long before the epidemic. But many other travel agencies realized after the epidemic that they needed to combine multiple businesses together, and it was too late to start at that point. Beyond that, it was a case of tightening the belt and getting by."

Although the interviewee's travel agency was not able to launch domestic tourism during the epidemic, he has a wealth of contacts in the tourism industry that can complement this. Based on his knowledge of other friends and business partners in the industry, the vast majority of travel agents also provide appropriate assistance to tourists, mainly from the physical side, when offering travel products during the epidemic. Some of these services are paid for, for example, Ctrip's "epidemic insurance" product, which tourists can purchase when placing orders for airline tickets, customized tours and other travel products. The lower cost of "epidemic insurance" guarantees a full refund in the event that your trip is affected by the epidemic prevention and control policy, allowing you to minimize your financial losses. At the same time, some of these services are free of charge, for example, when taking on larger groups of tourists, Ctrip will act as a third-party travel platform and liaise with the government's epidemic interary. When larger groups of tourists are quarantined in hotels due to the epidemic policy, Ctrip will also send appropriate staff to assist the government in arranging food and accommodation for the

tourists.

Obviously, in the process of providing physical help, the staff of the company will be in direct contact with the tourists, so the task of providing psychological help to the tourists will fall on the shoulders of the company staff. As psychological support is difficult to quantify, and as different tourists have different mental capacities for anxiety, this part of the job is difficult to assess and there is no clear evaluation criterion. When it comes to evaluating the psychological help given to tourists during a crisis, the interviewee said: "A good tourism employee needs to be able to deal with people, not just plan and talk about solutions, but also know how to communicate effectively with tourists. Most companies end up evaluating such matters by interviewing tourists on the internet and measuring their satisfaction." Improving the overall quality and resilience of staff, or recruiting staff with these skills, is therefore an important part of enabling travel agents to better cope with crises in the future (KRISTIANA, 2021).

Conclusion and Recommendation

This study shows that the impact of COVID-19 on the Chinese tourism industry at the macro scale has been catastrophic, with a significant drop in tourism in China and an almost complete halt to international tourism activity due to the epidemic and epidemic control policies. For Chinese tourists, the impact of COVID-19 is mainly reflected in the travel choices and motivations of tourists. More than half of the questionnaire respondents did not travel during the epidemic, and the vast majority of tourists expressed anxiety and anxiety about travelling during the epidemic, although a small number of highly educated respondents were less likely to be affected by the epidemic in terms of travel choices and motivation. For China's tourism service industry, the epidemic has reduced hotel and restaurant turnover in most areas. However, hotels and restaurants in areas with large economies or large, stable state-owned enterprises were somewhat resistant to the epidemic. For travel agencies, the epidemic made it impossible for them to run their overseas travel business at all, and the number of domestic travel businesses was significantly reduced. Travel agencies that were able to persevere during the epidemic tended to expand into related businesses outside of tourism activities and were able to withstand the shortage of funds.

Putting these findings together, it is clear that the negative impact of the epidemic on China's tourism industry has been significant. It is important to acknowledge that both tourists and tourism professionals have, for the most part, chosen to adapt to the impact of the epidemic in the simplest way possible: by waiting, waiting for the epidemic to pass, waiting for policies to be liberalized. Rather than choosing to take the initiative to learn more about the economic model, policy framework and other background information during the epidemic and to change themselves based on this information. However, a small number of tourists, the tourism services industry and travel agencies have shown some resistance. For the tourism services industry, a well-stabilized regional economy is the source of their resistance. The location advantage allows hotels and restaurants in economically stable areas to retain a clientele with consumption power. Research has also shown that a small number of educated tourists are able to use their knowledge and information retrieval skills, as well as their strong mindset, to ensure that their travel activities and mindset are minimally affected by the epidemic. Travel agents can proactively adapt to the epidemic by changing their business models to weather the storm. In other words, the Chinese tourism industry's resistance to the epidemic was partly acquired proactively and partly passively through location advantages or policy support from state-owned enterprises.

In the future, there will still be countless potential crises, countless tourists and tourism businesses who choose to wait passively for them to pass, and countless individuals who take the initiative to change and adapt to them or even overcome them, and it will be important to know how to best respond. Firstly, ensuring a good regional economy is a prerequisite for being able to support tourism development and accelerate its prosperity. This study suggests that a good regional economy, while not completely resistant to the negative effects of the epidemic, will at least allow a region's tourism services to retain some vitality and still attract tourists in a challenging situation. Secondly, the high quality of tourism workforce is essential for a better tourist experience and better development of the travel industry. This study shows that tourists tend to have psychological problems during a crisis such as an epidemic, but that the tourism industry's assistance to tourists during a crisis is mostly physical, and that travel agencies and the tourism service industry have little quality psychological support for tourists because there are not enough highly qualified and professional staff. China's tourism industry could begin by recruiting highly qualified personnel and then targeting them according to the psychological needs of tourists to ensure that they are able to deal with a similar crisis in the future. Lastly, learn the ability to proactively seek to change or transform. This study shows that no matter what part of the travel industry, even in an industry environment and policy environment as tough as the epidemic, there is no complete death knell. This means that if one is willing to reinvent oneself, take the initiative to find a way out and have the will power to do so, the industry can still eventually spring into life.

Discussion

Due to time and data source constraints, there are several design weaknesses in this study that need to be noted: 1. Due to the lack of national-scale tourism data during the epidemic, the tourism profile of China during the epidemic may be skewed from the actual situation. 2. The questionnaire does not mention the distance between the departure and destination of travel during the epidemic and the exact location of the two places, which may contain a lot of information about the choice of destination during the epidemic and may reveal different levels of tourist-friendliness of the epidemic control policies in different regions. 3. There is no analysis of factors other than education level for tourists with different travel motivations, while factors such as age and disposable income may have an impact on their travel motivation. 4. The small number of interviewees may not have the ability to reveal the overall industry situation.

In addition, during the course of this study, it was found that the news that could be accessed was somewhat different from the actual situation due to some government restrictions on speech. Therefore, there may be some inconsistencies between the interviewees' experiences and the literature in terms of their experiences of the epidemic, and the researcher should be aware of this in the design of the study and make good trade-offs between the two.

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Appendix

Questionnaire

Q1. Gender

A. Male

B. Female

Q2. Age

Q3. Education level
A. High school and below
B. Three -year college Education
C. Bachelor
D. Master and above
Q4. Study or Work Status
A. Currently studying
B. Working
C. Gap year
D. Unemployed

Q5. Disposable income A.1000¥ and below B.1000¥~3000¥ C.3000¥~5000¥ D.5000¥~8000¥ E.8000¥~12000¥ F.12000¥ above

Q6. Have you travelled during the three years of the epidemic (early 2020 to December 2022)?A. YesB. No

Q7. Did you find it more difficult to undertake travel activities during the epidemic compared to your travel experiences during the non-epidemic period?

A. Yes

B. No

Q8. If so, what do you think are the main difficulties? (Multiple Choice Questions)

A. Psychological difficulties (e.g. fear of the destination being classified as a medium to high risk area)

B. Financial difficulties

C. Scenic areas, amusement parks and other tourism facilities shut down or have strict access conditions

D. Shortage of accommodation and catering facilities at destinations due to the outbreak

Q9. Did you spend more or less on your travels during the epidemic compared to your travel experiences during the non-epidemic period?

A. More

B. Less

C. Almost the same

Q10. Please describe in general terms your psychological motivation, or external factors motivating you when travelling during the epidemic.

Q11. Do you regularly use online travel agents in preparing for and conducting your travels?

A. Yes

B. No

Q12. If yes, what do you use the software for? (Multiple Choice Questions)

A. Book tickets for trains, airline tickets and other transport

B. Book a hotel or a hostel

C. Use the tour itinerary they provide as a reference

D. Purchase a package of the tours they offer

E. Others

Q13. When you travelled during the epidemic, did you use the software to assist your travel more often than before the epidemic?

A. More

B. Less

Q14. Are you anxious that your tour will not be completed as scheduled due to force majeure?

A. Yes

B. No

Q15. If you do, how do you address the anxiety?



Fig.12 Poster of QR Code of questionnaire (in Mandarin)

Transcript of Interview of the Travel Agency

1. Please give a brief description of your position and responsibilities in the travel agency and the business you are responsible for.

A: Our business focuses on outbound travel, travelling as a tour group. The client base is the general public, government personnel and business people. The company also runs a study abroad consultancy service and sometimes organizes study tours. My position in the company is that of General Manager and I started the company with a few partners and am responsible for the overall planning of the business.

2. Can you talk about how you see the impact of this outbreak on tourism at the beginning of the new crown outbreak (early 2020)?

A: At first, the event was considered short-term, so it was not taken too seriously and there was no plan to deal with it. Later, when the city began to be closed, a work from home approach was implemented and this was the initial operating strategy.

3. In what ways has your travel agency made operational changes since the outbreak? How has this been reflected at the executive level in each department?

A: The business of outbound travel came to a direct halt after the epidemic as national policy strictly controlled outbound travel on a large scale. All staff were focused on the education business. Inbound travel was also considered, but the various licences and upstream and downstream aspects of the business needed to be re-run, so it did not take place.

4. Is there a period in the middle of the epidemic (May 2020 to February 2021) when the situation is more optimistic and has the travel agency made any further changes to its business strategy during this period? If yes, please elaborate. Did the psychology of tourists travelling during this period change significantly compared to the beginning of the epidemic? This can be elaborated on the basis of specific cases.

A: The domestic travel market was a little better during this period, but the overseas travel policy was still not liberalized, so there were no adjustments to the business strategy.

5. You mentioned that numerous offline travel agencies closed down during this period, but your company survived the winter and ushered in another spring in the tourism industry. Can you tell me how your business strategy differs from those of other companies that have closed down?

A: The state directs outbound travel and no private bookings of transfers are allowed, so it's useless to think any more about this aspect. Take a half pay cut and tighten your belt to get by. Guaranteed minimum wage for employees and a minimum of normal life. Work from home and come to the company voluntarily. Travel board employees come to do work on the education board side. Over and over again, home based and come to the company. After the epidemic, take the monthly housing allowance, each month 1500 RMB.

6. Does the late phase of the epidemic (February to November 2022), when policies and local control dynamics are getting tighter everywhere, appear to make it difficult to open during this period?

A: YES. The entire travel industry had too much of a hard time during the three years of the epidemic.

7. In the questionnaire survey, I found that many tourists have psychological barriers to travelling during the epidemic and are anxious about their planned itinerary. Do you have any measures in place to help ease the anxiety of your customers?

A: Despite the post-epidemic era, there is still a psychological barrier to COVID-19 for tourists travelling out of the country. Tourists do not speak the language abroad and have no way to see a doctor in case they test positive. Although we will have appropriate language services for medical treatment with our ground handlers, tourists will still be afraid.

8. As there are various policy conditions for travelling during an epidemic and tourists are vulnerable to the epidemic prevention policies of their home and travel destinations, what measures can your company take to assist tourists in their travels (e.g. assisting tourists to find the nearest nucleic acid testing site, helping tourists to negotiate with governmental epidemic prevention authorities)?

A: We have plans in place for these situations. Relevant medication is taken before departure and if a tourist is infected with COVID-19 after departure, a professional from our overseas partner drives a minibus to take the tourist to the doctor. If a tourist has no underlying illness and no life-threatening conditions are involved, they will take the medicine themselves; if life-threatening conditions are involved, the tourist will be taken to hospital. At the same time, I learned that Ctrip will launch an "epidemic insurance" product during the epidemic, which users can purchase when placing orders for travel products such as airline tickets and customized tours. The cost is low and tourists are guaranteed a full refund if their trip is affected by the epidemic prevention and control policy, allowing them to minimize their financial losses. In addition, when taking on larger groups of tourists, Ctrip will act as a third-party travel platform and liaise with the government's epidemic prevention department to help groups of tourist complete procedures such as declaring their itineraries for the epidemic. When large groups of tourists are quarantined in hotels due to the epidemic policy, Ctrip will also send appropriate staff to assist the government in arranging food and accommodation for the tourists. The tourism industry in China still needs professionals, and if you have highly qualified people on your staff who are good at communicating with tourists, the whole thing will go twice as far. But there is a shortage of such people.

9. The tourism service industry is an important part of the local tourism economy. From your point of view, how did the hotel and catering industry respond to the epidemic crisis? What changes have been made to the business strategy of the hotel and catering industry in working with you?

A: The only thing I know about the foreign travel market is that 80% of European restaurants that take group meals are gone, and the remaining 20% are there because they have a large volume and do foreign business as well. The cost of group meals is much more expensive than before. Hotel prices

have also gone up.