The Impact of Risk Perception on the Destination Image and Visit Intention: COVID-19 Pandemic and Wuhan Tourism

Lu Chen
Department of Global Hospitality and Tourism, Graduate School, Kyung Hee University, Seoul, Korea
Email: cl960531@gmail.com

Abstract: This study aims to explore the relationship between risk perceptions and destination image and visit intentions with Chinese domestic tourists. This article divides the destination image into cognitive and affective dimensions. The current study also examines how three risk perceptions, including physical, financial and performance risks, influence the intention to visit a destination. Evidence from 336 Chinese domestic tourists who visited Wuhan after COVID-19 pandemic suggest that perceived risk negatively and significantly influences cognitive and affective images. At the same time, cognitive and affective images positively influence the intention to visit.

Keywords: risk perception, destination image, visit intention, COVID-19, Wuhan

1. Introduction

After the breakout of COVID-19, the tourism industry, which is highly market-oriented and mainly relies on people to gather and consume, is one of the industries with the greatest impact, especially in China. As the domestic epidemic prevention and control continues to improve in China, the domestic tourism industry has entered an early stage of recovery. However, it is affected by the global spread of the epidemic, the pace of recovery of related tourism businesses related to China's outbound and inbound tourism will slow down. Previous study pointed out the pandemic had an impact on that demand. Thus, Wuhan is facing huge challenges, which need to evaluates the attitude and demand of tourists and improve the destination image after the COVID-19.

Recently the tourism industry is directly related to the production of images. Tourism destination image as a heated issue has been explored since Urry (1990) identify it as the basic part of the tourism experience. Research on tourism image mainly has two perspectives. The cognitive aspect reflects destination awareness and beliefs explained by observable attributes (Tasci, Gartner, & Cavusgil, 2007). At the same time, the destination's affective image reflects emotions and feelings about the destination (Yüksel & Akgül, 2007). After the crisis of COVID-19, it has had a fundamental impact on Wuhan tourism industry. Therefore, this context creates the need to redesign the management strategies of the destinations. However, it is highly-needed to explore the relationship of risk perception of tourists towards the tourism destination image in order to make effective measurements to reduce the losses caused by the outbreak of COVID-19.

Wuhan, as one of the China’s best Tourism cities evaluated by CNTA, is quickly finding its way into the limelight once overshadowed by its cosmopolitan neighbors. Wuhan is not only historically significant, but also a major player in China’s rapidly developing future. It is located in the center of China, at the intersection of China’s Yangtze River and Beijing-Guangzhou Railway. Wuhan is divided into three parts: Hankou, Hanyang and Wuchang. Such good natural ecological resources and superior geographical environment make Wuhan possess rich tourism resources. In addition to geography, waters, and biological landscapes, Wuhan, as a famous historical and cultural city in China, brings together various cultural elements such as Jingchu culture, wharf culture, Yellow River culture (Zhao, 2004). Wuhan's domestic tourism has been booming in recent years. At present, the image of Wuhan's tourist destinations is mostly from the perspective of planning, and there is relatively little research from the relationship between the perception risk, destination image and intension to visit focused on Chinese domestic tourists travelling in Wuhan.

This study aims are as follows: 1) to explore the relationship between physical risk, performance risk, financial risk and destination image and intension to visit; 2) To analyze the attitudes and perceptions of Chinese tourists about Wuhan urban destination image; 3) To explore the risk perception of Chinese domestic tourists after COVID-19 on Wuhan destination image; 4) To suggest for improving destination image after the COVID-19 crisis.
2. Theoretical background

2.1 Risk perception

Perceived risk refers to the subjective perception of a risk of experience (Sandra & Sónia, 2019). Travel risks are of primary importance in travel decisions due to their potential to alter the choice of destination or their plan to travel (Sönmez & Graefe, 1998). Prejudiced cognitive assessment of unfavorable activities in a tourist destination leads to potential negative effects of the actions of visitors (Jalilvand & Samei, 2012). The term risk perception as a tourist perception / attitude that depends on the viewpoint, thinking and experience of the tourists acquired during the purchase and consumption of travel services (Reisinger & Mavondo, 2005). Risk as a condition where something is at risk and the outcome is unknown. Risks may be true (actually exist) or subjective perception about risk evaluation by tourists (Ruan, 2017). Perceived risk is characterized as the perception of consumers about the uncertainty and adverse consequences of purchasing a product and a service (Dowling & Staelin, 1994). Previous studies argue that the physical risk, terrorism, natural disasters, injuries and epidemics individually or collectively raises the perception of threats and affects tourist arrivals to destinations (Carter, 1998; Rittichainuwat & Chakraborty, 2009; Chew & Jahari, 2014).

In the context of tourism, the changing nature of the tourist product which is intangible means that it can not be experienced until after its purchase (Fakeye & Crompton, 1991), therefore, these particular features, especially the high cost of both in economic and time terms, make the experience of tourism a danger in itself (Gitelson & Crompton, 1983). Perceived risk in tourism can be defined as “a tourist’s perception of the overall negativity of a course of action based upon an assessment of the possible negative outcomes and the likelihood that those outcomes will occur” (Mowen & Minor, 1998). Risk dimensions are a crucial task in the design of the construction. Based on the marketing literature, up to seven theoretical dimensions of risk (Kaplan, Szybillo, & Jacoby, 1974; Roselius, 1971; Ross, 1975; Cheron & Ritchie, 1982; Schiffman & Kanuk, 1991; Stone & Gronhaug, 1993) are identified in tourism, defined as (1) financial risk, (2) functional risk, (3) physical risk, (4) psychological risk, (5) social risk, (6) satisfaction risk and (7) time risk. Roehl and Fesenmaier (1992) used these dimensions in the empirical study of tourist risk perceptions in travels, which advised that the measures should be appropriate to the context of interest and related to the research. Other studies also use multi-attributes scales, which each risk dimension includes several questions (Fuchs & Reichel, 2006). This article aims to investigate the impact of risk perception on destination image and intention to visit under the circumstance of COVID-19 in Wuhan. Therefore, physical risk, performance risk and financial risk abstracted to achieve the goal of this study.

Health, physical, financial, performance, and psychological risks were the most common travel risks captured by previous studies (Yang, Khoo-Lattimore, & Arcodia, 2017). At the same time, Roehl and Fesenmaier (1992) argued that risks related to disease, illness, crime and safety, and violence as physical risk. (Fuchs and Reichel, 2006). In travel behavior, perceived risk is a specific situation (Roehl & Fesenmaier, 1992), which imply it varies according to destinations. In the context of Wuhan, due to the pandemic, the personal safety and healthy, the services and the consumption level may be the major concerns among the domestic tourists after the COVID-19. Chew and Jahari (2014) found that the dimensions of perceived risks (socio-psychological) had a substantial negative effect on cognitive and emotional image. Some scholars found that, due to past hostility, Turks had a negative effect on the emotional picture of Israel (Alvarez & Campo, 2014). Besides, A natural catastrophe had a substantial effect on the emotional reactions of enjoyment, excitement, and superiority (Lehto, Douglas, & Park, 2008). Previous studies have integrated destination image and risk perception approaches to explore the effect of risk perception on the destination image. Lepp et al. (2011) studied the impact of exposure to Uganda’s national tourism marketing website on risk perceptions. Chew and Jahari (2014) examined the relationship between three dimensions of perceived travel risks, destination image and intention to visit in the context of tourism in Japan, following the Fukushima disaster. The perceived sociopsychological and financial risks of visiting Fukushima were significant in re-forming destination image.

Therefore, when tourists perceive that a certain destination may be risky due to terrorism problems, violence, natural disasters, disease, food safety, financial, health, physical, failure of facilities, weather, the perception can shape their cognitive, emotional assessment of the destination. Thus, risk perception may influence the tourist perception of destination image, the following hypotheses will be (see Figure 1):

- **H1:** Physical risk is negatively associated with affective image.
- **H2:** Physical risk is negatively associated with cognitive image.
- **H3:** Performance risk is negatively associated with affective image.
- **H4:** Performance risk is negatively associated with cognitive image.
- **H5:** Financial Risk is negatively associated with affective image.
**H6: Financial Risk is negatively associated with cognitive image.**

### 2.2 Destination image

Destination image has always been a hot topic to understand its formation and impact. Some scholars believe that the destination image is composed of cognitive and affective (Beerli & Martin, 2004). A bi-dimensional model describing the cognitive and affective components of the destination image was developed by researchers (Baloglu & McCleary, 1999). The image of the destination refers to people's thoughts, views, and perceptions of the features and activities at a destination (Assaker, 2014). The cognitive aspect reflects destination awareness and beliefs explained by observable attributes (Tasci, Gartner, & Cavusgil, 2007). At the same time, the destination's affective image reflects emotions and feelings about the destination (Yüksel & Akgül, 2007). Usually, these beliefs are established by collecting and integrating information over time from different sources (Crompton, 1979). Affective components of the destination picture apply to the determination of a destination's optimistic, negative or neutral feelings (Baloglu & Brinberg, 1997; Ward & Russell, 1981). Each dimension makes a specific contribution to the picture of the destination and can be separately measured. Russell and Snodgrass (1987) are continuously evolving across a trip's time period. A number of scholars in environmental psychology have supported the idea that researchers should also analyze the affective aspect of the picture to better understand the way people evaluate their environment (Walmsley & Young, 1998; Ward & Russell, 1981).

In general, cognitive aspects of the destination picture are evaluated on a set of attributes corresponding to the services or attractions that can be provided by a tourist destination. 24 attributes were divided into nine dimensions by Beerli and Martin(2004): natural resources; tourism infrastructure, leisure and recreation tourism; culture, history and art; political and economic factors; natural environment, social environment; general infrastructure; and local atmosphere. Usually, the affective components of the destination image have been measured by a wide variety of adjectives reflecting feelings about a specific venue. Sometimes, affective image measurement is based on the four-dimensional response grid of Russell, Ward and Pratt (1980), namely "pleasant / unpleasant, " "relaxing / distressing, " "arousing / sleepy, " and "exciting / gloomy". Russell et al. (1981) proposed that two bipolar dimensions, namely 'pleasant-unpleasant' and 'arousing sleepy', would capture the affective content of locations.

Researchers have mostly linked the both the cognitive and affective image have a positive impact on loyalty in tourism literature (Bigne, Sanchez, & Andreu, 2009). In a meta-analysis of 66 studies on this subject, further review of the relationship between destination image and future behavioral intentions of tourists (conceptualized as loyalty). For example, Wang and Hsu (2010) stated that the cognitive and affective elements affect the behavioral intentions of tourists in relation to the destination. The creation of destination images is affected by personal factors that represent the perceiver’s features (Baloglu & McCleary, 1999). Researchers called for closer alignment with the risk literature in destination image research (Chew & Jahari, 2014). As found in the case of South Africa, taking a wider view of both image and risk may be relevant when a destination develops a reputation (George, 2003). The research offered empirical proof that both cognitive and affective representations of the destination serve as mediators between danger and intention to visit.

An integrated system of destination image and risk perceptions, and their effect on the intention to visit, is proposed, based on international literature (Figure 1). Following the empirical literatures above, these hypotheses will be tested:

- **H7: Cognitive image positively impact on tourist’s intention to visit.**
- **H8: Affective image positively impact on tourist’s intention to visit.**

**Figure 1. Proposed model**
3. Methodology

The data was collected by Chinese domestic tourists who have been to Wuhan, China after COVID-19 in an online survey. The aim of this study was to explore the impact of risk perceptions on the intention to visit and the destination image in the context of Wuhan after the COVID-19 pandemic. The time for collecting the questionnaire is from August 2020 to September 2020 when the tourism industry gradually recovered after the Wuhan epidemic. Respondents were invited to take part in the study survey on a voluntary basis and convenience sampling was used. The single factor test by Harman was conducted to make sure that in the questionnaire there was no traditional method bias. For Partial Least Square-Structural Equation Modeling, researchers established that a minimum sample size of 100 is adequate (Reinartz, Haenlein, & Henseler, 2009). The minimum sample of 166 was sufficient for PLS-SEM analysis and found, as a maximum of nine predictors pointed to one endogenous variable, and medium effect size and 0.95 model power were set for calculation (Hair et al., 2014). Therefore, the sample size of 336 that valid returned in this study is meet the condition. The questionnaire was drawn up on the basis of methods validated in previous research, ready to avoid ambiguity, the sentences and questions.

By adapting the items from previous studies that used well-established scales, the study instrument was created (Baloglu & Mangaloglu, 2001; Lam & Hsu, 2006; Nyaupane & Andereck, 2008; Beerli & Martin, 2004; Fuchs & Reichel, 2006;). All scale items was measured on a five-point Likert scale to eliminate common scale properties and reduce common method bias (Podsakoff, MacKenzie, & Podsakoff’, 2012), where 1 = strongly disagree and 5 = strongly agree. From the travel risk scale provided by Fuchs and Reichel (2006), which is applicable to the study background, five physical risk items, three financial risk items, four performance risk items were selected to test. The five physical risk perception items were adapted to reflect the pandemic of Wuhan and health problems (e.g. The possibility of being infected with COVID-19 on a trip makes me feel uneasy; After the epidemic, I am worried that eating bad food will have harmful effects on the body). Financial risk perceptions were measured by three items by comparing with other cities, it is related to the price and consumption level of Wuhan (e.g. After the COVID-19, I worry that traveling to this city will cost more than other cities). Furthermore, Performance risk perception were measured by asking the specific situation of local tourism after the COVID-19. Seven cognitive image items were chosen, and four affective image items were adapted by Baloglu and Mangaloglu (2001) from the destination image scale applicable to the context of the research. Besides, three elements for the intension of the visit was adapted by Lam and Hsu (2006).

SPSS and the Smart PLS 3.0. PLS (Partial Least Squares) is chosen to analyze the data because the prediction-oriented model proposed in this study has formative variables and a large number of manifest variables (Sarstedt, Hair, Ringle, Thiele, & Gudergan, 2014).

4. Findings and discussions

All the 336 respondents of the survey were domestic Chinese tourists. The gender of the respondents includes male (45.2%) and female (54.8%). Most of the respondents’ occupations were students (45.2%). The majority (61.6%) of respondents belonged to middle-income households. Table 1 shows the profile of respondents.

| Variable          | Frequency | Percentage |
|-------------------|-----------|------------|
| Gender            |           |            |
| Female            | 184       | 54.8%      |
| Male              | 152       | 45.2%      |
| Age               |           |            |
| Under 20 years    | 28        | 8.3%       |
| 21-25 years       | 201       | 59.8%      |
| 26-30 years       | 63        | 18.8%      |
| 31-40 years       | 19        | 5.7%       |
| 41-50 years       | 24        | 7.1%       |
| 51-60 years       | 1         | 0.3%       |
| Less than 1000 yuan| 48        | 14.3%      |
| Monthly income    |           |            |
| 1000-3000 ¥       | 92        | 27.4%      |
| 3000-6000 ¥       | 115       | 34.2%      |

Table 1. Demographic profile of respondents (n =336)
Variable | Frequency | Percentage
--- | --- | ---
Monthly income |  |  |
6000-9000 ¥ | 63 | 18.8%
More than 9000 ¥ | 18 | 5.4%
Civil servants/institutions | 49 | 14.6%
Company staff/technical staff | 89 | 26.5%
Occupation |  |  |
Freelance | 28 | 8.3%
Student | 152 | 45.2%
Others | 18 | 5.4%

SmartPLS3.0 software will be used to organize the data from the questionnaire and import it into the structure model of the study. This part uses PLS to verify the structural validity of the model and scale.

Reliability indicators are mostly expressed by correlation coefficients, and Cronbach α reliability coefficient is currently the most commonly used reliability coefficient. The scale has the best reliability coefficient above 0.8, if the reliability coefficient reaches above 0.9, the reliability of the scale is very good; it is good between 0.7-0.9; it is acceptable between 0.6-0.7. If the Cronbach's alpha coefficient is below 0.6, we must consider re-editing the questionnaire.

At the same time, the potential combination reliability similar to the α reliability coefficient can also be used as a measure of model stability. Generally speaking, the model built is satisfactory when the α reliability coefficient>0.7 and the combined reliability>0.6.

We usually think that the validity of the measurement model is better when the mean value of the variance of the sampling variance AVE is greater than 0.5. According to the actual survey data, the results are shown in the above table. The analysis results show that the questionnaire model is composed of 6 factors, and the standardized factor load value of each measurement item is absolutely greater than 0.6, which performs well. In addition, the alpha reliability of each latent variable is greater than 0.7, and the combination reliability CR is greater than 0.7, indicating that the model has a good combination reliability; the average variance extraction AVE value of each factor is greater than 0.5, and the model has good aggregation validity and structural variable validity, which means degree is better (See Table 2).

| Variable       | Cronbach's Alpha | rho_A | Composite Reliability | Average Variance Extracted (AVE) |
|---------------|------------------|-------|-----------------------|----------------------------------|
| Affective Image | 0.910            | 0.910 | 0.910                 | 0.716                            |
| Cognitive Image | 0.927            | 0.932 | 0.925                 | 0.642                            |
| Financial Risk | 0.830            | 0.904 | 0.831                 | 0.636                            |
| Performance Risk | 0.860          | 0.889 | 0.853                 | 0.604                            |
| Physical Risk | 0.898            | 0.921 | 0.887                 | 0.624                            |
| Visit Intension | 0.865            | 0.868 | 0.865                 | 0.682                            |

The rationality of the causal relationship between each latent variable in the structural model is represented by the correlation coefficient of the latent variable. The correlation analysis of each latent variable is shown in the above table. The diagonal data in the table is the positive square root of the AVE of each latent variable, and the off-diagonal data is the correlation coefficient of the corresponding two latent variables.

The table of correlation coefficients and discriminative validity of latent variables shows that the diagonal data in the table are all greater than 0.7 and much larger than other data in this column. This shows that the discriminative validity of the model in this study is good, and the correlation between the latent variables is relatively low. The maximum correlation coefficient is 0.549. The positive square root of AVE that is less than the minimum average variance extraction is 0.777, indicating that each latent variable has good discriminating validity. In other words, these 6 latent variables are relatively independent, and the structure of this research model is more reasonable. In summary, the structure of the measured variables and latent variables of this research model is relatively good (See Table 3).
Table 3. Latent variable correlation coefficient and discriminative validity

| Latent Variable | Affective Image | Cognitive Image | Financial Risk | Performance Risk | Physical Risk | Visit Intension |
|-----------------|-----------------|-----------------|----------------|-----------------|---------------|----------------|
| Affective Image | 0.846           |                 |                |                 |               |                |
| Cognitive Image | 0.549           | 0.801           |                |                 |               |                |
| Financial Risk  | -0.386          | -0.351          | 0.798          |                 |               |                |
| Performance Risk| -0.305          | -0.357          | 0.329          | 0.777           |               |                |
| Physical Risk   | -0.246          | -0.220          | 0.102          | 0.116           | 0.790         |                |
| Visit Intension | 0.417           | 0.362           | -0.174         | -0.287          | -0.169        | 0.826          |

Note: The diagonal line is known as the positive square root of the average variance extraction AVE of the corresponding latent variable, and the correlation coefficient between the latent variables is below the diagonal line.

Structural equation model usually includes two basic models: measurement model and structural model. The study of this theoretical model of this research is relatively scientific. When performing a significance test, the sample size needs to be at least 500 so that the result is credible. In this study, it was used the bootstrap algorithm to test the significance of the data with a sample size of 1000. According to the comparison result of empirical and variable hypothesis, the path coefficient is combined with the T value. When the p value is less than 0.05 and the T value is greater than 1.96, the test result is significant. Using PLS3.0 software, the research hypothesis and model are calculated and analyzed, and the model calculation diagram is obtained as shown below, and the model data results are sorted to obtain the structural equation model response coefficient table.

![Figure 2. Output of structural equation model](image)

Table 4. Structural equation model response coefficient

| Relationship                  | Coefficient | Std Beta (STDEV) | t-Value (|O/STDEV|) | P-value | Decision |
|-------------------------------|-------------|-----------------|---------|---------|----------|
| Affective Image -> Visit Intension | 0.277       | 0.090           | 3.061   | 0.002   | supported |
| Cognitive Image -> Visit Intension | 0.186       | 0.082           | 2.254   | 0.024   | supported |
| Financial Risk -> Affective Image | -0.283      | 0.069           | 4.103   | 0.000   | supported |
| Financial Risk -> Cognitive Image | -0.238      | 0.059           | 4.052   | 0.000   | supported |
| Performance Risk -> Affective Image | -0.172      | 0.065           | 2.641   | 0.008   | supported |
| Performance Risk -> Cognitive Image | -0.238      | 0.062           | 3.870   | 0.000   | supported |
| Physical Risk -> Affective Image | -0.181      | 0.048           | 3.793   | 0.000   | supported |
| Physical Risk -> Cognitive Image | -0.157      | 0.045           | 3.480   | 0.001   | supported |

Notes: * p<.05, ** p<.01.
Financial Risk has a significant negative impact on Cognitive Image ($T=4.052$, $P<0.05$), and the impact coefficient is -0.238. Therefore, hypothesis H1: Physical risk is negatively associated with affective image holds. Financial Risk has a significant negative impact on Affective Image ($T=4.103$, $P<0.05$), and the impact coefficient is -0.283. Therefore, hypothesis H2: Physical risk is negatively associated with Cognitive image was supported. Performance Risk has a significant negative impact on Cognitive Image ($T=2.641$, $P<0.05$), and the impact coefficient is -0.172. Therefore, hypothesis H3: Performance risk is negatively associated with affective image holds. Performance Risk has a significant negative impact on Affective Image ($T=3.87$, $P<0.05$), and the impact coefficient is -0.238. Therefore, hypothesis H4: Performance risk is negatively associated with cognitive image was supported. Physical Risk has a significant negative impact on Cognitive Image ($T=3.793$, $P<0.05$), and the impact coefficient is -0.181. Therefore, hypothesis H5: Financial Risk is negatively associated with affective image was supported. Physical Risk has a significant negative impact on Affective Image ($T=3.48$, $P<0.05$), and the impact coefficient is -0.283. Therefore, hypothesis H6: Financial Risk is negatively associated with cognitive image was supported. Cognitive Image has a significant positive impact on Visit Intension ($T=2.54$, $P<0.05$), and the impact coefficient is 0.186. Therefore, hypothesis H7: Cognitive image positively impact on tourist’s intention to visit was supported. Affective Image has a significant positive influence on Visit Intension ($T=3.61$, $P<0.05$), and the influence coefficient is 0.277. Therefore, hypothesis H8: Affective image positively impact on tourist’s intention to visit was supported.

The study aimed to analyze the relationship between risk perception, and cognitive and affective perceptions and feelings about the destination and intentions of domestic tourists to visit Wuhan after COVID-19. For the pandemic and risk perceptions, the study of destination image of domestic tourists was neglected by researchers. Therefore, the research attempt to explore deeply by establishing the factors about relationship between risk perception and destination image to investigate the impact of risk perception on the destination image in the domestic tourists’ perspective. The literature also revealed that the relationship between perceived threats, travel constraints and destination image has been explored by few studies (Chen, et al. 2007; Chen, Hua, et al. 2013; Lepp et al., 2011).

Literature review revealed that despite having all the characteristics that make Wuhan an attractive destination to investigate, Wuhan is still needing to receive the due importance from researchers in tourism sector. By combining factors significant in travel planning and their impact on destination image creation and visit intention, the research empirically tested a travel behavior model. The study empirically tested a comprehensive travel behavior model by integrating factors important in travel planning and their effects on destination image formation and visit intention. It played a certain role in the reconstruction or modification of the image of Wuhan after experiencing COVID-19. The findings of the study will assist Wuhan tourism authorities and managers to develop policies and marketing and promotion strategies that will improve the city image of Wuhan, and reduce the doubts of domestic tourists as much as possible through risk identification factors, thereby attracting more tourists to visit Wuhan.

The results of the study revealed that Chinese domestic tourists with low travel risk perceptions possess positive cognitive and emotional perceptions about Wuhan. These results are consistent with the findings of previous studies (San Martin & Del Bosque, 2008; Baloglu, 2000; Tang, 2014). The study also found that physical risk was negatively related to the cognitive image. The value of the physical risk shows that Chinese domestic tourists perceive high risks in Wuhan in terms of food safety, epidemic like COVID-19, personal safety such as traffic accident.

Unexpected events that affect travelers’ confidence in a destination and disrupt the normal operation of the tourism industry are the interpretation of the crisis by the World Tourism Organization. It can be seen that, as the industry with the widest scope, the most cross-regional and cross-industry collaboration, and the highest degree of interconnection on a global scale, the tourism industry is the most sensitive to changes in the external environment and the most vulnerable to public incidents, especially emergencies. Public events have the most profound impact on the sustainable development of tourism. Regardless of natural disasters such as the Indonesian tsunami, Wenchuan earthquake, Australian forest fires, public safety incidents such as the leakage of nuclear power plants in Japan, social security incidents such as regional terrorism, wars and political unrest, economic incidents such as financial crises and trade frictions, flu, Ebo Public health incidents such as the outbreak of coronavirus and the new crown virus will trigger a crisis in the tourism industry and cause great damage to the tourism industry. The new crown pneumonia epidemic is a sudden public health incident. How do we understand its impact on the tourism industry and adopt coping strategies in advance to reduce the pace of tourism development, consolidate the results of tourism reform, and continue to enjoy a healthy and happy life are major issues (Hou, 2004).

However, these physical risks also have an impact on tourists' perception of the destination. This study pointed out that as people’s awareness of physical risks increases, they will have a negative impact on their cognitive and affective images of tourist destinations. When people have life safety, food safety issues, physical health issues, and the possibility of infection with a tourist destination, this greatly affects the travel intentions of Chinese domestic tourists and their perception of the
destination image.

The study also found that the financial risks of Chinese domestic tourists were related to cognitive and affective perceptions of Wuhan. This finding can be explained by the age, incomes and occupations (between 18 and 35 years, low-middle income and student) of the respondents. Studies reported that consumers were concerned about the financial losses related to their behavior (Jianakoplos & Bernasek, 2006). Financial risk in travel and tourism is related to secret costs that were left undisclosed at the time of the cost of the trip and poor value for money services (Fuchs & Reichel, 2006). First of all, after experiencing severe economic impact, after the spread of the COVID-19 virus, tourists’ basic living and work have been hit, their consumption patterns have gradually been conservative, and their consumption behaviors have been deliberately reduced. Therefore, they have become more aware of the economic crisis strengthen. And this kind of cognition will cause tourists to have a negative attitude and cognition about the high level of consumption and arbitrary charges that may exist in Wuhan when they experience the tourist destination Wuhan, thereby reducing their cognition and affective image of Wuhan. Secondly, respondents are mostly concentrated in 21-25 years old, most of them are students, so they are more price sensitive. Wuhan is a very large city in China, and its consumption level and prices are among the best in the country. Therefore, there are high financial risk in the image of Wuhan. Therefore, it is highly needed for Wuhan tourism authorities that due to the many information sources such as travel guides, electronic and print media, travel agents, and the number of online travel portals, financial risks should be reduced to a minimum so that prices of almost anything relevant to travel can be reviewed in advance.

The study also found there is a relationship between performance risks and cognitive and affective destination image. Chinese tourists have low awareness of the risk in the provision of tourist destinations in Wuhan, whether it is manual services or tourism resource settings. Correspondingly, the overall cognitive and effective image of Wuhan is high. Wuhan is located in the most central location in China, at the intersection of China's Yangtze River and Beijing-Guangzhou Railway. It has developed water, land and air transportation and is a transportation hub that runs through the country. Such good natural ecological resources and superior geographical environment make Wuhan rich in tourism resources. In addition to geography, waters, and biological landscapes, Wuhan, as a famous historical and cultural city in China, brings together various cultural elements such as Jingchu culture, dock culture, Yellow River culture, and friend culture. The historical relics and buildings are also unique, attracting domestic and foreign an endless stream of tourists (Zhao, 2004).

Lastly, the results of the study revealed the positive cognitive, and emotional perceptions about Wuhan among Chinese tourists will lead to developing the intention to visit. The findings were consistent with those of previous research (Gibson, Qi, & Zhang, 2008; Phillips & Jang, 2007). Strategies for tourism and hospitality marketing must use India's tangible qualities in such a way that a clear and optimistic cognitive picture emerges. With regard to tourist attractions, Wuhan is considered wealthy. To create an attractive picture of Wuhan that attracts potential travelers and meets their travel needs, an innovative blend of destination characteristics must be used. Promotion campaigns contain variables responsible for the creation of optimistic feelings and feelings about Wuhan. By improving Chinese tourists’ current awareness of the dangers of Wuhan’s tourist destinations, it will promote and improve the city’s destination image and attract more tourists to support Wuhan tourism after the epidemic.

5. Conclusion and Implications

The generalizability of the research results is limited to Chinese domestic tourists visiting Wuhan after COVID-19. The research also follows the previous literature and limits it to economic status and age and occupation, which helps to understand the risks of Chinese domestic tourists at this stage and the cognitive and emotional destination image of travelers and their future travel intentions. One suggestion for future research is to conduct the same research with different nationalities. With these boundaries, it is practical to understand the target image based on risk. Risk their own destination will affect their future visit intentions. The findings of this study have practical significance for understanding tourism marketing and tourism behavior. The image of the destination can be improved by reducing the perception of risk. Marketing managers must also learn to distinguish the risk perception of potential travelers. In short, strategy developers must be aware of the positioning of risk destinations.

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