

Impact of COVID-19 on customer intention to stay in Airbnb accommodation after COVID-19 pandemic

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Abstract | While Airbnb was a disruptor of the international hotel industry for many years, COVID-19 has disrupted the disrupter during the last three years. Health risk perceptions and trust in the quality of the service and the influence on tourist attitudes and intention to stay in Airbnb accommodation are two main factors that this study aims to measure. Data was collected from 228 respondents in China and analysed through SPSS. The results show that tourists are concerned about their health, and there is a negative relationship between perception of health risks and attitude towards staying in Airbnb accommodation. They do, however, believe that the Airbnb host is honest and reliable in terms of the quality of their services and that they care about the customer, which influences their decision to stay in Airbnb accommodations after the pandemic. The results of this study can create a better picture of the tourist perception of Airbnb, which can be a piece of good information for the service providers to improve the service or do the necessary.

Keywords | Airbnb, COVID-19, post pandemic, intention to stay, health risk, psychological risk, trust

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1. Introduction

In the past 20 years, the tourism industry has been affected by various crises. These crises can be broadly divided into five categories, including natural disasters, terrorism attacks, socio-political crisis, economic crisis, and pandemic/disease threats (Miguel et al., 2022). The global tourism industry is suffering from the COVID-19 outbreak. In other words, tourism is experiencing a pandemic crisis. COVID-19's impact on the world has been wide-ranging, affecting various aspects such as production systems, healthcare, education, tourism, and more (Engel, 2021). Until February 2023, there were 6,859,093 deaths globally and 119,865 deaths in China due to the COVID-19 outbreak. The outbreak of the COVID-19 pandemic has led to a global recession. Inevitably, the accommodation sector, an important part of the tourism industry, has been hit hard, especially by the peer-to-peer (P2P) accommodation sector. In 2020, Airbnb had 1,354,662 listings; this number decreased to 1,148,885 listings in 2021, while in 2022, Airbnb announced the suspension of their housing reservation service, starting from July 30th. Some factors, such as China's zero-COVID policy, fierce competition, the lack of a liability framework in the country, and cultural differences, have impacted Airbnb's decision to exit China. The main competitors of Airbnb in China are Tujia, Xiaozhu, Mayi, and Meituan. Airbnb competitors in China provide high-quality apartments, allow tenants and landlords to independently book a room, have more listings with distinctive decorations, provide two-bedroom listings for families, and some of them cooperate with well-established guest houses, and provide tailored offline services to enhance the user experience, which creates competitive advantages for them compared to Airbnb.

Shocks are common in the P2P accommodation sector, but the impact of the COVID-19 pandemic on the tourism economy is unprecedented. Customers, platforms, and suppliers have all been

negatively impacted. First, since the outbreak of COVID-19, travel demand around the world has declined significantly. The statistics show that international tourist arrivals decreased globally by 72% in 2020, 69% in 2021, and 37% in 2022, while the highest percentages belonged to the Asia-Pacific region with 84% in 2020, 93% in 2021, and 77% in 2022 (UNWTO, 2023). The decrease in the number of tourists means that the operating conditions of all kinds of tourism industries will be greatly reduced. With the COVID-19 pandemic wreaking havoc, tourists' perceptions of sharing accommodation risks are also changing, especially in terms of social and security risks (Lee & Deale, 2021). Second, Airbnb's bookings fell sharply during the pandemic. Third, Airbnb hosts lost 70 percent of their revenue as a result of the pandemic, eight times more than the Airbnb platform itself, according to Chen's (2020) findings (Chen, Cheng, Edwards, & Xu, 2020).

Due to the novelty of COVID-19, there is limited data available on how it affects customer lifestyles and various industries. Further studies are required to understand its potential impacts (Dandotiya et al., 2022). The future of the P2P accommodation sector is uncertain in the face of a global pandemic crisis. In fact, between 2017 and 2020, Airbnb's market valuation fell from 31**billion** to 18 billion (Evans, 2020). In 2020, scholars were worried about whether hospitality and P2P accommodation would recover to pre-2019 levels (Dolnicar & Zare, 2020). However, with the number of nights stayed rapidly increasing, the number of nights stayed in 2021 is 22.5% higher than that in 2020 and 2.7% over 2019. Meanwhile, the revenue in 2021 is 37.5% more than in 2020 and 25.8% more than in 2019 (AirDNA, 2022). AirDNA predicts that occupancy rates will decline in 2022 as tourism normalises in many destinations. The responses of different countries to the pandemic have changed over time. Hence, the future direction of the P2P accommodation industry is unknown. The accommodation industry is facing numerous

challenges and uncertainties as the P2P accommodation industry is highly competitive, and consumer behaviour and preferences are changing rapidly because of the economic conditions, cultural trends, and technological advances.

With travel sharply reduced following the COVID-19 outbreak, the potential impact of COVID-19 on shared accommodation appears significant. The study found that during the COVID-19 period, consumers showed a higher perception of risk. This is especially true for customers who are highly concerned and fearful of the epidemic, who will have a higher risk perception. Of course, customers' past experiences will have a certain impact on their risk perception (Lee & Deale, 2021). Through the analysis of market data for Airbnb in 15 cities, the study found that the evolution of the epidemic had a great impact on the booking rate and occupancy rate of Airbnb. However, different housing sources show different results due to the epidemic situation, geographical location, urban economic situation, and epidemic control degree of the city (Boros, Dudás, & Kovalcsik, 2020). The COVID-19 pandemic has made people's demands for safety even more demanding. In this case, there will be more factors to consider, such as the country's epidemic control policy, the epidemic control system of Airbnb and the hotel, and the disinfection of the host or the hotel room.

In the face of a sudden pandemic, key stakeholders in P2P accommodation responded in different ways. Faced with a drop in the company's market valuation, the Airbnb platform took measures to attract customers by adjusting its cancellation policy and improving medical standards in an attempt to boost occupancy. However, these measures were perceived by other stakeholders as customer-friendly, especially the revised cancellation policy (Miguel et al., 2022). The original cancellation policy provided that the host would receive a certain amount of the reservation after the customer cancelled the booking. The new cancellation policy states that the customer can cancel the booking

for free without paying any money. This also led to great dissatisfaction among the hosts. Instantly, the platform provided some financial support, but some hosts did not receive financial support from the platform. In this case, the host and the platform, the two key stakeholders in P2P accommodation, become opposing sides because of the tendency of the measures taken. The hosts felt that the platform did not treat them as partners and did not reasonably consider their own interests, but fell back on the customers. Because of this, many hosts who were worried left the platform or even sold their homes, ending their P2P accommodation rental transactions.

While the future of the P2P accommodation industry remains uncertain due to the unpredictable changes of the pandemic. For both Airbnb platforms and hosts, customer occupancy is a key factor in the industry's recovery. However, with the pandemic, the biggest issue Airbnb is currently facing is how to attract customers to stay on Airbnb. Even though both Airbnb and hosts have taken action in response to the pandemic, the results so far have not been good.

Despite a large number of studies on the impact of the outbreak on the P2P accommodation industry, studies focusing on the impact of customer health risk perceptions on intention to stay on Airbnb are still limited. This paper aims to fill this gap by focusing on exploring customers' health risk perceptions and trust in Airbnb when staying with them under the COVID-19 epidemic. Therefore, the main questions of this study are (1) whether customers' trust in Airbnb under COVID-19 affects their attitude and intention to stay in Airbnb, and (2) whether customers' perceived health risks of staying in Airbnb under COVID-19 affect their attitude and intention to stay in Airbnb. We come up with and test a model to see if customers' trust and how they feel about health risks affect their decision to stay at Airbnb.

This study contributes to our understanding of the COVID-19 repercussions on Airbnb lodging

suppliers and tourist trust in their services in the aftermath of the pandemic, considering health risks. Although numerous studies have explored the impact of COVID-19 on the accommodation industry, only a few have delved into tourists' future plans to use Airbnb during post-pandemic. The findings of this study will enhance our understanding of tourists' intentions to use Airbnb accommodation during post-pandemic periods or in the event of another pandemic. This study will provide valuable insights for accommodation providers to improve their services, enabling them to compete in the market, as Airbnb's competitors did in China and were able to weather the COVID pandemic crisis.

2. Literature review and hypothesis development

The impact of COVID-19 on Airbnb

As a sustainable alternative to traditional accommodation, Airbnb is of great significance in the context of tourism (Zvolska, 2015). In the sharing economy, there are multiple modes of shared accommodation platforms, such as for-profit, Reciprocal and free. Among them, Airbnb is a profit-making sharing accommodation platform. Generally, Airbnb gains profits through leasing. The owners list their housing information online and provide short-term rental services to the guests for a certain fee. In this process, the platform acts as an intermediary company. Airbnb stands out in the sharing economy because it offers a low-cost accommodation service. At the same time, Airbnb offers a way for customers to socialize and integrate in a way that the hotel industry cannot. Airbnb is a leader in shared accommodation. It is the product of the prosperous development of the sharing economy and a reflection of sharing economy.

Despite the fact that the world has previously

suffered significant epidemics/epidemics (Buheji & Ahmed, 2020), the COVID-19 pandemic has had a valid impact on countries around the world. Tourism is one of the industries hit by the COVID-19. Hotels, restaurants, and tourist attractions have had to close due to the lockdown (Naumov, Varadzhakova, & Naydenov, 2021). It is also unclear whether the hospitality and Airbnb industries will recover to 2019 levels after the pandemic (Dolnicar & Zare, 2020). Since the outbreak of COVID-19, travel demand around the world has declined significantly. The decrease in the number of tourists means that the operating conditions of all kinds of tourism industries will be greatly reduced. The outbreak of the COVID-19 pandemic has led to a global recession. Inevitably, the sharing economy has also taken a big hit.

The Responses Adopted by Airbnb

The pandemic has forced Airbnb to respond, and these responses are categorized by Mont into three categories by three target groups of the socio-economic system (Mont, Curtis, & Palgan, 2021). The first type of response is organization oriented. Airbnb managed its daily operations by pausing in-person stays in most countries and asking investors for investment, adjusting its existing business model by adjusting its cancellation policy, and performing strategic work by updating the digital infrastructure. The second type of response is user oriented. User-oriented responses include raising hygiene standards, supporting physical distancing, and implementing awareness and education campaigns. Airbnb has responded by developing cleaning protocols and using smart locks. The last type of response is society oriented. Airbnb supports stakeholders like hosts by creating relief funds.

Airbnb hosts, as key stakeholders, have suffered greatly financially during the pandemic. According to Farmakis's (2020) qualitative study of hosts, they can be broadly classified into five ca-

categories based on their attitudes towards the pandemic: pessimistic, cautious, ambivalent, indolent, and optimistic (Farmaki et al., 2020). Hosts who are more negative will opt out of the short-term rental market, or even give up renting and selling their properties. Hosts with stable emotions will decide what to do depending on how the pandemic unfolds. The rest of the hosts are either unsure about giving up their short-term rentals for various reasons, or they are more optimistic and willing to continue to persevere.

Airbnb Exits Chinese Mainland Market

Although Airbnb has taken many responses, they have been less than effective. On May 24, 2022, Airbnb announced that it will only keep its outbound service in China and will completely cancel its mainland service in China in July. The reasons that led to Airbnb's exit from the local Chinese market involved various aspects such as policy, economy and culture. From a policy perspective, China is one of the last countries in the world to have a "Zero-COVID" policy. Dozens of Chinese cities have a lockdown policy in order to effectively prevent epidemics. This has severely affected the economy and major business of many major brands, and Airbnb's major business has been disrupted. Looking at Airbnb's localization process, since Airbnb officially entered the Chinese market in 2016, Airbnb has taken many measures to achieve localization. For example, following Chinese consumption habits and introducing WeChat and Alipay. However, there are still some problems, such as Airbnb collecting customer complaints via email, which is contrary to the online habits of Chinese users. Issues such as these have limited Airbnb's ability to localize in China. From the economic point of view, as the second largest economy in the world, China is rich in tourism resources and abundant in rooms, but Airbnb's revenue on its China business only accounts for 1% of the total revenue of the whole company. Since the

beginning of the pandemic, Airbnb's fiscal 2021 report has not separately mentioned decisions and information related to the China market. For this study, data was collected before the announcement of Airbnb's exit from its mainland market in China.

Trust

Airbnb is a popular choice for travel bookings (Moghavvemi et al., 2022). As a P2P online accommodation platform, Airbnb contains relatively high uncertainties and risks, so trust has a great impact on the success rate of Airbnb's transactions (Arvanitidis, Economou, Grigoriou, & Kollias, 2020). Customer trust in Airbnb refers to customers' confidence in the authenticity of information and transaction security on Airbnb. The source of customer trust is based on their own observation and perception of things, such as the perception of information authenticity, transaction security, and product uncertainty. When choosing Airbnb services, customers need to make a complete judgment about the platform, host, and information, which depends on the degree of trust they have in the platform, host, and information.

According to a study of complaints made by Airbnb, it is found that Airbnb's customers regard it as different from other service platforms and value trust more (Phua, 2019). In the communication between Airbnb guests and hosts, such interaction will promote guests' trust in the host, thus deepening guests' trust in the Airbnb platform (Yang, Lee, Lee, & Koo, 2018). To a certain extent, familiarity with Airbnb affects the trust tendency of tourists (Mittendorf, 2016). Authentic experience has an impact on guest trust, but interestingly, economic benefits and perceived risk reduction do not have a significant impact (Lalicic & Weismayer, 2018). To sum up, many factors that affect guests' trust in Airbnb, including all the services and experiences in the process of booking, checking in, and checking out.

Airbnb is a popular choice for travel bookings

(Hasegawa et al., 2019). Customers' trust in the Airbnb platform, which is a key factor in the customer's decision between the hotel and Airbnb. If customers do not trust Airbnb, they are not going to risk the uncertainty and risk of choosing a trading partner they do not trust. Conversely, if a customer's trust in Airbnb is high, he is more likely to choose Airbnb as a trading partner. Customers' trust in the host will greatly improve the success rate of the transaction between them. However, customer trust in the host means confidence in the authenticity of the information conveyed by the host and the host's attributes (T. Ye, Alahmad, Pierce, & Robert, 2017). Before customers make a decision, they usually communicate with the owner to understand relevant information (Namahoot & Jantasri, 2022). At this time, the owner's attributes, such as enthusiasm and sincerity, will strengthen customers' trust in the owner, thus improving the success rate of the transaction. When customers have more trust in Airbnb, they have a more positive attitude towards choosing to stay with Airbnb.

Several studies have demonstrated that personal attitudes mediate the relationship between trust and behavioral intentions. Azizi (2019) stated that to satisfy their personal consumption needs, consumers will buy services or products that create positive attitudes and stressed that trust directly influences attitudes (Aziz, Husin, Hussin, & Afaq, 2019). Raman(2019) points out that in the context of women's online shopping, trust does not directly influence behavioural intentions but indirectly influences women's purchase intentions through attitudes (Raman, 2019). Customers' trust in Airbnb has a significant positive effect on purchase intention and is mediated by attitude (Chatterjee, Dandona, Mitra, & Giri, 2019). Therefore, the following hypothesis is proposed.

H1: There is a positive relationship between trust and attitude to stay at Airbnb accommodation.

Health Risk

In 1960, Bauer introduced risk into marketing, pointing out that marketing should put more thought to the risk of consumers' subjective feelings-perceived risk (Bauer, 1967). In the process of consumption, consumers do not fully perceive all risks, but only some of them and these risks may be exaggerated or reduced, so there is a big gap between perceived risks and actual risks. However, the existence of perceived risks does not affect consumers' consumption judgment. For example, one study demonstrated that the perceived risk of the purchase channel had no effect on the willingness to book on Airbnb (Amaro, Andreu, & Huang, 2019). The definition of risk is controversial (Fischhoff, Watson, & Hope, 1984). Travel risk is the possibility of exposure to risk while traveling. Scholars have found that perceived risk is a multi-dimensional structure. Risk is uncertain and consequential. The adverse consequences caused by these risks can be roughly divided into six types: performance loss, financial loss, physical loss, psychological loss, social loss, and time loss (Aqueveque, 2006).

As the COVID-19 pandemic spreads across the globe, industries are being hit hard. People also pay more attention to health, safety, and other topics when they stay in hotels (Atadil & Lu, 2021). Consumer concerns about privacy and security significantly increase the perception of risk (Muñoz-Leiva, Mayo-Muñoz, & De la Hoz-Correa, 2018). Safety and hygiene are the primary concerns of Airbnb guests in the context of the COVID-19 pandemic. The tourist's perception of the risks caused by hygiene, disease, and other health hazards during tourism is known as health risk perception (Garaus & Hudakova, 2022). So the perceived health risks are particularly salient in the context of the COVID-19 pandemic (Peco-Torres, Polo-Peña, & Frías-Jamilena, 2021). In this case, there will be more factors to consider, such as the country's epidemic control policy, the epidemic control system

of Airbnb, and the disinfection of the room.

Several studies have explored the negative impact of risk perception on attitudes towards consumption. Perceived risk does not necessarily affect the attractiveness of a destination, but can affect a visitor's willingness to visit (Alvarez, Campo, & Fuchs, 2020). Risk has a negative impact on satisfaction, continuance intention and business intention recommendations (Malazizi, Alipour, & Olya, 2018). Taking Korea as a case study, social risk and psychological risk of perceived risk have a negative impact on users' intention to stay, while performance risk has a positive impact (Jun, 2020). Therefore, the following hypothesis is proposed.

H2: Health risk perception has a negative impact on attitude to stay at Airbnb accommodation.

Attitude

From the theory of planned behavior (TPB) perspective, both positive and negative attitudes are an evaluation of an individual's willingness to behave (Ajzen, 1991; Tajeddini, Rasoolimanesh, Gamage, & Martin, 2021). According to the Value-attitude-behavior (VAB) model, attitudes are a prerequisite for behavior (Homer & Kahle, 1988). A positive attitude will stimulate the willingness to consume (Tajeddini et al., 2021). Customers often have a positive attitude because they can save money, learn about new cultures and make new friends when they stay in Airbnb (Simonovits, Zách, & Kondorosy, 2021). According to Zheng's (2021) research, when customers generate more negative attitudes about staying in Airbnb, they show lower willingness to repurchase and lower willingness to review online (Zheng, Zhang, Line, & Wei, 2021).

Based on the existing literature on the relationship between attitudes and behavioural intentions, there is a consensus that individual attitudes influence behavioural intentions (Hassani et al.,

2016; Moghavvemi et al., 2017). In the Chinese context, consumers' willingness to visit hotels is influenced by attitudes (J. Wang, Wang, Wang, Li, & Zhao, 2018). Similarly, in the UK P2P context, customer attitude is a determinant of the behavioural willingness to choose to stay in P2P accommodation (Agag, 2019). Untaru's (2021) research found that protective measures against COVID-19 stimulate positive attitudes among customers and, as a result, boost their willingness to consume (Untaru & Han, 2021). A study proved that customer attitudes and perceived risk significantly affect the willingness to book an Airbnb accommodation (Baldick & Jang, 2020). Therefore, the following hypothesis is proposed.

H3: Positive attitude about Airbnb accommodation has significant influence on intention to stay in Airbnb accommodation.

3. Method

Measurement

The measurement was adapted from previous research. The questions were conceptualized to the context of Airbnb and some keywords changed based on the context of the study. Health risks were assessed using the five-item scale proposed by Soo-Hyun Jun (2020) and Peco-Torres, Polo-Peña and Frías-Jamilena (2021). Attitudes were measured using the Nunkoo et al. (2013) scale. Trust was measured based on the five-item scale proposed by Stephanie et al. (2022) and Sung-Byung et al. (2019). The intention was quantified using Venkatesh et al.'s (2012) five-item scale.

Sampling and Data Collection

The main objective of this study is to investigate the individual perception of health risk

and trust on attitude and intention to stay at Airbnb accommodation. A quantitative methodology was selected since the scope was specific on determining the effects of COVID-19 on tourist decision-making therefore requiring participants to share their perception and plan for traveling after COVID-19. Data was collected online via Credamo (www.credamo.com) and Wenjuxing (www.wjx.cn). A link with the online questionnaire was sent to colleagues, friends and personal contacts in China. The questionnaire was initially designed in English but was carefully translated into Chinese. A pre-test and some adjustments were made before sending the questionnaire. As a bonus, those who completed the survey were offered a reward of 1-5 RMB. The online survey was conducted in April 2022. The convenience sampling method was used in this study, to ensure data validity, each questionnaire data was screened to remove invalid responses, and 228 questionnaires were finally recorded.

4. Data Analysis and Results

The relationships reflected in the hypotheses of this study are shown in Figure 1. We propose that customer trust has a significant positive effect on customer attitude, health risk has a negative effect on customer attitude, and attitude has a significant positive effect on customer intention.

The SPSS technique was used in this study to evaluate the three proposed hypotheses. Data shows that 62.3% of the respondents are female, and 37.7% are male. The majority of the respondents (48.7%) are between 31-39 years old and degree holders (60.1%). Around 80% of them travelled frequently, and 84.6% stayed in Airbnb accommodation before (Table 1).

Table 1 | Participant characteristics

| <i>Characteristic</i> | <i>Group</i> | <i>n</i> | <i>%</i> |
|--|------------------------------------|----------|----------|
| Gender | Female | 142 | 62.3 |
| | Male | 86 | 37.7 |
| Age | Below 25 | 1 | 4 |
| | 20-30 | 83 | 36.4 |
| | 31-39 | 111 | 48.7 |
| | Over 39 | 33 | 14.5 |
| Education | Primary school | 3 | 1.3 |
| | Secondary school | 5 | 2.2 |
| | Diploma | 19 | 8.3 |
| | Undergraduate | 137 | 60.1 |
| | Masters | 51 | 22.4 |
| | PhD | 13 | 5.7 |
| Traveling frequently | Yes | 185 | 81.1 |
| | No | 43 | 18.9 |
| Have you ever stayed in Airbnb place/listing? | Yes | 193 | 84.6 |
| | No | 35 | 15.4 |
| Revenue for months | less than RMB2,000 | 29 | 12.7 |
| | RMB2,000-3,999 | 30 | 13.2 |
| | RMB4,000-5,900 | 25 | 11 |
| | RMB6,000-7,999 | 35 | 15.4 |
| | RMB 8,000-9,999 | 39 | 17.1 |
| | Above 10,000 | 70 | 30.7 |
| | Students | 66 | 28.9 |
| Employment condition | Corporate employees | 103 | 45.2 |
| | Government and institutional staff | 42 | 18.4 |
| | Freelance | 7 | 3.1 |
| | Others | 10 | 4.4 |

Note. n = 228.

Descriptive statistics are used to define the central tendency, dispersion, or reliability. It measures the Mean and Standard Deviation (or variance) and gives some information on the distribution of scores on continuous variables. The data shows the normal distribution, and the value of the skewness and kurtosis were in the acceptable range. Intention to visit and trust has the highest mean. The reliability test shows that the value for all the variables is higher than 0.7. The factor analysis (Varimax extract rotation) results revealed that the value of the KMO is 0.9934, sig 0.000 (Table 2), and all the items are loaded in their predetermined factor without cross loading, therefore, we did not drop any items.

Table 2 | Results of the Descriptive Statistics

| Independent and dependent variables | Mean | Standard Deviation | Cronbach α | KMO and Bartlett's Test |
|-------------------------------------|------|--------------------|-------------------|-------------------------|
| | | | | 0.934 Sig 0.000 |
| Health Risk | 2.58 | 0.91 | 0.89 | Factor Loading |
| | | | | 0.851 |
| | | | | 0.822 |
| | | | | 0.812 |
| | | | | 0.806 |
| | | | | 0.800 |
| | | | | 0.797 |
| Attitude | 3.71 | 0.78 | 0.915 | 0.858 |
| | | | | 0.856 |
| | | | | 0.857 |
| | | | | 0.843 |
| | | | | 0.823 |
| | | | | 0.793 |
| | | | | 0.839 |
| Trust | 3.89 | 0.63 | 0.859 | 0.838 |
| | | | | 0.804 |
| | | | | 0.780 |
| | | | | 0.752 |
| | | | | 0.876 |
| | | | | 0.829 |
| | | | | 0.827 |
| Intention to Visit | 3.92 | 0.68 | 0.796 | |

Correlations among the variables are examined and the results show that there is an average to strong correlation between the independent and dependent variables (Table 3).

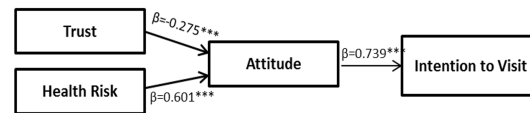
Table 3 | Results of the Correlation Analysis

| Independent and dependent variables | HR | AT | TR | ITV |
|-------------------------------------|----------|---------|---------|-----|
| Health Risk | 1 | | | |
| Attitude | -0.558** | 1 | | |
| Trust | -0.470** | 0.731** | 1 | |
| Intention to Visit | -0.482** | 0.739** | 0.720** | 1 |

** Correlation is significant at the 0.01 level (2-tailed)

Relationships among the independent and dependent variables are tested through regression analysis. The results show a significant and negative relationship between health risk and attitude ($\beta=-0.275$, Sig 0.000) and a significant and positive relationship between trust and attitude towards Airbnb accommodation ($\beta=0.601$, Sig 0.000), so hypothesis 1 and hypothesis 2 are confirmed. The values of the R Square show that trust and health risk predict 59% of the variance in attitude towards Airbnb accommodation. There

is a significant and positive relationship between attitude and intention to stay in Airbnb accommodation ($\beta=0.739$, Sig 0.000), while attitude explains 54% of the variance in intention to stay in Airbnb accommodation, so hypothesis 3 is supported.

**Figure 1 | Research Model**

5. Conclusion and Discussion

The purpose of this study was to develop and test a research framework to identify and measure the impact of customer trust and health risk perceptions on attitudes and intentions to stay in Airbnb. This study was tested prior to Airbnb's final exit from its domestic market in China.

First, the findings demonstrate that customer trust positively and significantly affects customers' attitudes towards staying in Airbnb. This result is consistent with the findings of Mosunmola (2018) and Wang (2018). Mosunmola's (2018) study verified that trust has a significant effect on purchase attitudes and purchase intentions despite the influence of many uncertainties (Mosunmola, Omotayo, & Mayowa, 2018). The higher consumers' trust in the Airbnb website, the higher their favorability towards the website, and consumers' trust in Airbnb positively and significantly influenced their attitudes (C. R. Wang & Jeong, 2018). Our findings suggest that the higher the customers' trust in Airbnb the better their attitudes toward staying in Airbnb in an environment of high uncertainty and high risk due to the epidemic. Ye et al.(2019) argue that customers' trust in P2P accommodation platforms largely influences their purchase intentions (S. Ye, Ying, Zhou, & Wang, 2019). The

refore, when customers believe that hosts are honest and reliable, and that they care about their customers and can provide them with high quality services, the more likely they are to use Airbnb in the future. This is good news for Airbnb hosts.

Second, the findings indicate that customers' perceived health risks negatively and significantly affect customers' attitudes towards staying in Airbnb. Kim et al. (2022) have similar support for their findings that show a negative effect of customers' perceived risks on attitudes in sharing economy services (S. Kim & Lee, 2022). In addition, there are studies that validate in the hotel context that even if people are still in the context of the COVID-19 epidemic, as long as customers' perceived risk to health is lower, they are more willing to resume their consumption of hotels. A study by Mao et al. (2017) concluded that despite the popularity of the concept of shared accommodation, perceived risk is still a significant barrier to customers' attitudes towards staying at Airbnb (Mao & Lyu, 2017). Godovykh et al. did a study in 2022 that looked at Airbnb's cleaning rules, hosts' hygiene labels, and guests' comments about cleanliness, all of which affect how likely they are to book (Godovykh, Back, Bufquin, Baker, and Park, 2022). In other words, Airbnb will recover faster in the post-epidemic era as long as it provides services that allow customers to perceive lower health risks. Both Airbnb's platform and hosts should improve the overall quality of their services from a cleanliness and hygiene perspective to achieve the goal of reducing health risks in order to attract customers to use Airbnb in the post-epidemic era.

Finally, this study proves that customers' attitudes positively and significantly influence customers' intention to stay in Airbnb, which is consistent with previous findings. As expected, attitude is a significant predictor of repurchase intentions (Mao & Lyu, 2017). However, this result is contrary to a study by Tajeddini (2021), which demonstrated that customers' attitudes towards Airbnb have no significant effect on willingness to

stay in Airbnb in the context of social attraction and economic attraction (Tajeddini et al., 2021). Therefore, Airbnb hosts should pay less attention to infrastructure and more attention to the cleanliness of their facilities, after all, hygiene and cleanliness are the main concerns of Airbnb customers (Guttentag, Smith, Potwarka, & Havitz, 2018), especially after COVID-19.

In conclusion, the results of this study confirm that trust and health risks have a significant impact on both customers' attitudes and willingness to stay in Airbnb. Consistent with previous research, this study reveals that customers' trust in Airbnb hosts enhances their intention to stay in Airbnb. Hosts who are honest and trustworthy are more trusted by customers. Moreover, customers' perceived health risks under COVID-19 reduce their intention to stay in Airbnb. Since the outbreak of COVID-19, customers' main concern has become their health. When making decisions, customers tend to choose low-risk products and services, while choosing brands they trust (Tajeddini et al., 2021). Therefore, improving customer trust and reducing customer risk perception can effectively attract customers to stay in Airbnb and prompt Airbnb to recover quickly after the outbreak. The honesty and dependability of hosts and the quality of service they provide are key factors in increasing customer trust. The platform's cleaning protocols, the health status of hosts, and the measures taken to prevent the epidemic were all key factors in reducing customers' perception of health risks. Given the important role of trust and risk perception on intention to stay, the Airbnb platform can properly manage the hygiene and cleanliness of hosts and accommodations, and hosts should maintain the hygiene and cleanliness of their properties and build a reputation for reliability to ensure that customers' health risks are minimized when staying in Airbnb during the pandemic, increasing customers' willingness to stay in Airbnb.

Theoretical and Managerial Implications

Although there is a growing number of studies on Airbnb post the pandemic, there is limited research exploring trust and health risks on attitudes and intention to stay. After examining the literature on the sharing economy over the past decade, Vila-Lopez (2022) suggests that future research on sharing accommodation, and Airbnb in particular, should focus on trust (Vila-Lopez & Küster-Boluda, 2022). Information on the number of people infected with COVID-19 motivates consumers to choose to avoid unnecessary risks for the sake of health and safety (J. Kim et al., 2022). Based on the opinions of 19 industry and academic experts, it was agreed that after COVID-19, tourism research should focus on risk perceptions, understand changes in customer preferences for cleanliness, safety, and reliability, and test changes in customer attitudes toward Airbnb (Assaf, Kock, & Tsionas, 2022). This study focuses on two major themes of trust and health risks, filling a research gap and providing direction for future research.

In addition, in response to the COVID-19 crisis, Airbnb's platform and hosts adopted different strategies that did not solve the crisis well, but instead led to many hosts being forced out of the short-term rental market. China's Airbnb even chose to exit the local Chinese market in July this year. Managers should protect guest interests through a deeper approach to guest retention than just the financial aspect (free cancellations). This paper examines Airbnb customer trust and health risk perceptions, and the results suggest that Airbnb can attract customers by better management of hygiene and cleanliness, and that Airbnb hosts can attract customers by improving their reputation and providing higher quality services.

Limitation and Future Research

Although this paper fills the gap in Airbnb-

related research under COVID-19, there are still some limitations. First, this paper collected data before Airbnb exited the mainland China market, and currently Airbnb only provides outbound travel services in mainland China, so the findings of this study have a narrow application. One of the limitations of this study is the small sample size. Due to the restrictions on travel in China and the difficulty of data collection, we had to rely on convenient sampling to collect data. China has a large population but based on the number of items (20 items) in this research, we need to collect data from 200 respondents ($20 \times 10 = 200$). The limitation of a small sample size is a common concern in research, and it can impact the generalizability and reliability of research findings. In this case, the sample size of 200 respondents for a large population like China may not be sufficient to draw conclusions that can be generalized to the entire population. Moreover, the study sample is online participants, which may be generalized. Future expansion of the sample size could be considered to validate the results. Second, the situation of COVID-19 has been changing, the control policy of China on has changed with it, and the state of closure in major cities is dynamic, so the attitude of Chinese tourists towards outbound travel is uncertain. Future adjustments or validation of this model in countries with different policies can be considered. Finally, this paper uses a quantitative approach to measure customer trust and health risks. In the future, qualitative methods or mixed methods can be considered to explore the factors that influence customer trust and health risk.

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Appendix A

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| Health Risk |
| I am concerned that staying at an Airbnb place/listing would lead to some health issues. |
| I worry that the Airbnb host's health condition may affect me. |
| I am concerned that staying at an Airbnb place/listing may not be safe. |
| The thought of staying at an Airbnb place/listing makes me feel psychologically uncomfortable. |
| The thought of staying at an Airbnb place/listing gives me a feeling of unwanted anxiety. |
| The thought of staying at an Airbnb place/listing causes me to experience unnecessary tension. |
| Attitude |
| Staying in Airbnb during the post-pandemic is a good idea. |
| Staying in Airbnb during the post-pandemic is a wise idea. |
| I like the idea of staying in Airbnb during the post-pandemic. |
| Staying in Airbnb during the post-pandemic is pleasant. |
| Staying in Airbnb during the post-pandemic is interesting. |
| Staying in Airbnb during the post-pandemic is fun. |
| Trust |
| I think the Airbnb hosts are honest. |
| I think the Airbnb hosts care about their customers. |
| I believe the Airbnb hosts are consistent in quality and service. |
| I believe the Airbnb hosts are trustworthy. |
| I believe the Airbnb hosts are reliable. |
| Intention |
| I intend to continue using Airbnb in the future. |
| I will always try to stay in Airbnb accommodation when I travel. |
| I plan to continue to stay in Airbnb accommodation frequently. |