



Print ISSN: 1738-3110 / Online ISSN 2093-7717
 JDS website: <http://www.jds.or.kr/>
<http://dx.doi.org/10.15722/jds.19.10.202110.17>

Distribution of Tourist Behavior in COVID-19 Pandemic

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Received: July 28, 2021. Revised: October 01, 2021. Accepted: October 05, 2021.

Abstract

Purpose: Covid-19 has caused an unprecedented situation for the tourism industry with slumping demand during the outbreak and many uncertainties about tourist behavior in the post-pandemic. This study is aimed to discover the distribution in the behavior of tourists in Vietnam, whose government has taken serious and early actions towards the health crisis and among the earliest to reopen the economy. **Research design, data, and methodology:** We adopted a mixed-method approach - combining qualitative interviews with quantitative research using a questionnaire survey. Through the form of the online survey through social networking channels: Facebook, Gmail. The study received 261 valid responses for analysis. Multivariate analysis techniques were used: descriptive statistics, exploratory factor analysis (EFA). **Results:** From the data and result of EFA, the result showed that the distribution of tourist behavior could be grouped into four main factors, including (1) the general impacts, (2) travel-related behaviors; (3) attitudes and preferences regarding modes of tours and destinations; (4) awareness of safety and hygiene. **Conclusions:** These results highlighted the importance of the theory of perceived risks in explaining the travelers' prudent decisions. In addition, this study provides practical implications for policymakers and various stakeholders of Vietnam's tourism industry in formulating the recovery strategy.

Keywords: Distribution of tourist behavior, COVID-19 pandemic, health crisis, perceived risks, consumer behavior, tourism, behavior distribution, Vietnam

JEL Classification Code: A1, I1

1. Introduction

The COVID-19 first outbreak in Wuhan, China in December 2019 and became a worldwide pandemic (Lu, Stratton, & Tang, 2020; Vo-Thanh, Vu, Nguyen, Nguyen, Zaman, & Chi, 2021). As of 5 April 2021, which was over five months after the first cases identified in Wuhan, 132,024,751 people were infected by Covid-19, and 2,867,946 deaths were reported throughout the world. In Vietnam, tourism has been positioned as a spearhead economic sector functioning as a driving force for other industries and has experienced stable and constant growth over the years. Particularly, in 2019, Vietnam set new

tourism records and was featured as the seventh fastest-growing tourism destination globally. In greater detail, the number of international tourist arrivals peaked at 18 million, which was higher than ever before increasing by 16.2% year over year. With that being said, the tourism industry generated a revenue of VND 726,000 billion up 17.1% year over year and occupied 7.02% of national GDP in 2019. However, amid the outbreak of the Covid-19 pandemic, tourism has been the worst hit of all service sectors due to the slumping demand. Together with bars, clubs, and restaurants in Vietnam, most tourist destinations were closed till 15 April for the earliest. As a result, the number of international visitors to Vietnam hit a free fall in March and registered only 3,686.6 thousand arrivals in the first quarter,

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reducing 18.1%. Consequently, a decline of 27.8% in tourism revenues was reported.

Perceived risk of Covid-19, in this research, refers to travelers' feelings of uncertainty and negativity about their traveling decisions that go beyond their reasonable tolerance (Dowling & Staelin, 1994; Nguyen, Pham, & Nguyen, 2020). These risk perceptions determine their destination selection and traveling behaviors (Mansfeld, 2006; Mitchell & Vassos, 1998; Reichel, Fuchs, & Uriely, 2007). First, Covid-19 has raised the fear of physical danger or injury among travelers (Roehl & Fesenmaier, 1992; Seabra, Dolnicar, Abrantes, & Kastenholz, 2013). To be specific, they may encounter health problems (Cossens & Gin, 1995; Lawton & Page, 1997; Cori, Bianchi, Cadum, & Anthonj, 2020) such as virus contamination (Rittichainuwat & Chakraborty, 2009), illness and hygiene-related hazards, dangerous animals and insects, and other infectious disease associated with a pandemic or natural disasters (Hunter- Jones, Jeffs, & Smith, 2008). Second, with global travel restrictions (Chinazzi, Davis, Ajelli, Gioannini, Litvinova, Merler, Piontti, Mu, Rossi, & Sun, 2020) that involves over 90% of the world population, travelers have to deal with a disrupted hospitality value chain including but not limited to border lockdown, flight cancellation, closed accommodations, or even being trapped in a cruise which homes Covid-19 patients but cannot get approved to dock (Gössling, Scott, & Hall, 2020). Third, international travelers may be treated with racism and discrimination in the form of micro-aggression, violation, or ostracism (Chung & Li, 2020; Devakumar, Shannon, Bhopal, & Abubakar, 2020). Fourth, fake news and misleading information via social media are serious concerns (Huynh, 2020).

There is no denying that Covid-19 has caused an unprecedented situation for the global tourism industry and has changed the behaviors of tourists worldwide in a massive way. The existing literature on tourists' behaviors in response to Covid-19 is concentrated on China. The demand for independent travel, luxury packages, and wellness tourism for Chinese citizens is predicted to increase. Therefore, the Chinese tourism industry may see the emergence of new services such as smart tourism and slow tourism to adjust to customer preferences. Moreover, Chinese or Asian tourists often encounter race-based tensions when visiting a foreign country such as Australia, America, and the UK. Consequently, they feel unwelcome, uncomfortable, and reluctant to participate in new experiences (Zheng, Goh, & Wen, 2020). Nevertheless, the issue remains unexplored in Vietnam. Therefore, it is essential to discover how traveling patterns may have changed in a country that has taken severe and early actions towards the health crisis (La, Pham, Ho, Hoang, Linh, Trang, Ho, & Vuong, 2020) and if the findings align with previous studies.

2. Data

2.1. Research design

A mixed-method approach – combining qualitative with quantitative analysis– is employed in this research. In phase one, qualitative interviews with domestic tourists reveal their behaviors and attitudes towards tourism activities during and after the Covid-19 pandemic. Open-ended interview questions address three major dimensions: (1) General impacts on tourists' behaviors; (2) Impacts on tourism activities; (3) Transformations of tourism activities after the Covid-19 pandemic. In phase two, based on the qualitative findings, a questionnaire is designed and piloted with ten customers to examine its understandability and appropriateness. The questionnaire is then modified according to pilot respondents' comments before being massively delivered. Also, the empirical investigation is implemented to indicate particular patterns of tourist behavior based on the collected data (from the questionnaire).

2.2. Data collection

In the qualitative phase, data are obtained in two main ways: (1) direct phone interview; (2) email-based questionnaire. All respondents voluntarily participate in the interview with consent forms signed before the interviews proceed for research ethics. Ten tourists are interviewed via phone, and five others are asked to answer open-ended questions via email. Data for the quantitative phase are collected between July 17 and August 15, 2020 (COVID-19 pandemic phase broke out the second time in Vietnam) through an online questionnaire on Google Form, which finally results in 261 valid responses used for multivariate analysis.

2.3. Data analysis

First, qualitative results are codified and analyzed with Nvivo software. Then, any aspects revealed by the analysis are integrated into a quantitative closed-ended questionnaire and sent to respondents. After that, data obtained from the questionnaire are processed with SPSS. In detail, the analysis techniques involved are descriptive statistics to characterize the tourists in our sample and exploratory factor analysis to reveal particular patterns of behavior distribution that tourists experience during and after the pandemic.

3. Results

3.1. Research Model

From the results of the qualitative analysis, 21 items are constructed to capture the areas most affected during and after Covid-19, as shared by the interviewees. These 21 items are described in detail in Table 2, related to behavior distribution: daily routines, tourist activities, and self-protection against the virus infection. In addition, the profile of the tourists in our sample are described in Table 1.

Table 1: Sample description

		Number	Percent (%)
Gender	Male	112	42.9
	Female	149	57.1
Age	Below 19	2	0.80
	From 19 to 35	203	77.8
	From 36 to 54	56	21.5
Edu	University	162	62.1
	Graduate university	92	35.3
	Secondary school	2	.8
	High school	5	1.9
Total		261	100

The results of exploratory factor analysis (EFA) verify that the 21 items are saliently loaded onto four factors, or dimensions, representing the respondents' behaviors with all the factor loadings larger than 0.5, the value of Kaiser-Meyer-Olkin statistic (KMO) above 0.5, and that of total variance explained (TVE) larger than 50% (To, Than, Nguyen, & Nguyen, 2021) (see Table 2). Therefore, each factor can be interpreted as follows: the first including items GI1, GI2, GI3, and GI4 summarizes the general impacts of Covid-19; the second consisting of AP1, AP2, and AP3 demonstrate travel-related behaviors; the third including AP4, AP5, AP6, AP7, AP8, and AP9 represents tourist attitudes and preferences regarding modes of tours and destinations; the final consisting of HS1, HS2, HS3, SH4, SH5, SH6, SH7, and HS8 relates to the awareness of safety and hygiene (see Table 3).

Table 2: The suitability of the EFA analysis

Indicators	Index
KMO	.86
TVE	62.23%

Table 3: Exploratory Factor Analysis with items

	Items	Components of behavior distribution			
		Safety and Hygiene	Mode of tours and destinations	General Impacts	Travel
HS6	Care more about the hygiene and safety of hotels after Covid-19.	.889			
HS4	Care more about the health of the members in tour groups after Covid-19.	.867			
HS2	Care more about the hygiene and safety of the public recreation sites after Covid-19.	.853			
HS3	Care more about the hygiene and safety of the means of transportation after Covid-19.	.852			
HS8	Care more about the hygiene and safety of the daily necessities while traveling after Covid-19.	.844			
HS1	Care more about the hygiene and safety of the tourist sites after Covid-19.	.752			
HS5	Prefer to stay in high-quality hotels after Covid-19.	.679			
HS7	Prefer separated dining while traveling with a tour group.	.545			
AP7	Prefer suburbs or areas within a short distance for leisure travel after Covid-19.		.765		
AP5	Reduce the length of travel and tourism after Covid-19.		.735		
AP8	Reduce the possibility of joining tour groups after Covid-19.		.645		
AP6	Avoid choosing Covid-19-affected areas as travel destinations.		.600		
AP9	Prefer to travel with family members and relatives after Covid-19.		.553		
AP4	Increased interest in participating in outdoor activities and eco-tourism.	.529			
GI3	All business travels have been canceled during the Covid-19 period.			.813	
GI4	All leisure travels have been canceled during the Covid-19 period.			.643	
GI1	Covid-19 has greatly affected working.			.640	
GI2	Covid-19 has greatly affected daily life.			.621	
AP1	Because of Covid-19, traveling in Vietnam will be unsafe.				.695
AP2	Reduce travel plans significantly in the next three months.				.694
AP3	Avoid traveling to crowded big cities after Covid-19.				.548

Note: Numerical values in the table are factor loadings corresponding to each item in the exploratory factor analysis.

Table 4: Description of the evaluation of aspects

	Mean		Mean
Safety and Hygiene		General Impacts	
HS6	4.07	GI3	4.06
HS4	4.21	GI4	4.30
HS2	4.22	GI1	4.10
HS3	4.20	GI2	3.95
HS8	4.00		
HS1	4.23		
HS5	3.62		
HS7	3.51		
Mode of tours and destinations		Travel	
AP7	3.46	AP1	3.34
AP5	3.12	AP2	4.07
AP8	3.72	AP3	3.69
AP6	3.72		
AP9	3.59		
AP4	2.96		

The first dimension indicates that the Covid-19 pandemic has generally affected various aspects of life. In Table 2, the average ratings for items GI1, GI2, GI3, GI4 are far above the mid-point of the Likert scale, and a large number of respondents agree or strongly agree that tours have all been canceled due to Covid-19 (mean = 4.3). The same goes for business trips (mean = 4.1), as the country has suspended all international routes as an early measure to prevent outside threats. Employment is, thus, severely affected (mean = 4.06), so are people's habits (mean = 3.95). Though the number of confirmed cases in Vietnam has been low compared to that of the world, as of August 21, recording 666 infected patients with 25 deaths, people have cautiously responded to Covid-19. Notably, after recording a second wave of patients since March 6, mainly caused by Vietnamese returning from the other countries at the outbreak's peak, people are even more risk-averse and concerned about community infection risks. This is partly due to the habit of browsing social media for information among young Vietnamese, which has significantly increased the risk perceptions of Covid-19 (Huynh, 2020). Furthermore, the government's proactive measures to contain the virus have chiefly contributed to those sudden changes in economic and social conditions.

The results also demonstrate that travel behavior is particularly affected. A significant proportion of respondents choose not to move around in the next three months with a mean of 4.07 (Item AP2), especially when there are so many unknowns regarding Covid-19. For instance, the possibility of the third or even fourth wave of infection is visible while vaccines and medical specifications have not been available yet. Moving to crowded big cities such as Hanoi, Da Nang, Ho Chi Minh City at the moment is also avoided by the

majority with a mean of 3.69 (Item AP3). To a lesser extent, the respondents consider traveling in Vietnam unsafe due to Covid-19 (mean = 3.34). The negative attitude toward traveling during the epidemic is because travel is associated with the acquisition and dissemination of viral diseases (Schlagenhauf, Weld, Goorhuis, Gautret, Weber, Sonnenburg, & Odolini, 2015). Originating from Wuhan, China, Covid-19 has affected more than 4 billion people worldwide, and travel activities are primarily blamed for the evolution of this pandemic. Moreover, populous cities would make it even harder to put things under surveillance and implement control measures to fight against the virus.

For tourist behaviors, we notice some interesting points. The third dimension can represent attitudes and preferences of tourists with regard to the mode of tours and destination choices in the post-pandemic period. Given a better public health scenario, the respondents are still negative about joining tour groups with a mean of 3.72 (Item AP8). Package tours in which tourists are arranged together with some others by travel agencies may get less attention because people are more aware of health risks from the community. Being more reassuring, traveling in small groups with family, relatives, or friends would be preferred with a mean of 3.59 (Item). In terms of destination choice, the respondents would avoid the areas which have been affected by covid-19 (mean=3.72) due to higher risks of infection. More would choose short-distance trips within the city or to the suburb with a mean of 3.49 (Item AP7) and holiday trips of shorter duration (mean=3.12, Item AP5). Despite the 22 strict social distancing days, not many respondents choose ecological tourism to go out for fresh air (mean = 2.96). As the summer is coming, beaches and islands are more desirable choices among Vietnamese, with islands and sea tourism accounting for a large share of tourism activities. Leveraging this huge demand in the domestic market is the key to recovering the tourism industry and the whole economy.

From the results, the salient impact of Covid-19 can be reflected in increasing public awareness and concern over safety and hygiene against infectious diseases. In Table 2, all of the items in "Safety and Hygiene" have relatively higher means, compared to those in the other factors, with the highest average rating on item HS1 "You care more about the hygiene and safety of the tourist sites after Covid-19." (mean = 4.23). This suggests more attention should be given to sanitary conditions of the premises since contact with contaminated surfaces is highly attributable to a viral transmission. Similarly, the hygienic quality of public entertainment places, transportation means, accommodation facilities, and daily necessities are high on the list of priorities with the means far above 3 (HS2, HS3, HS5, HS6, HS8). Additionally, the respondents are more concerned about the health status of other tour group participants, with a very high mean of 4.21 (HS4), and would prefer to have

separate meals if joining in this kind of tour (mean = 3.51, HS7). Those public health responses are driven by higher perceived risks, as discussed above, and enabled by clear, accessible, and regular risk communication from the central to local governments in Vietnam (Huynh, 2020). In fact, all inbound travelers are advised to make compulsory health declarations and take sensible precautions during their trips.

4. Conclusion and implications

4.1. Conclusion

The Covid-19 pandemic has caused an unprecedented situation for months, worsening social and economic conditions in various ways and mainly introducing many sudden changes to Vietnamese tourist behavior during and after the crisis. The tourism sector has been the hardest hit in the economy. Since the outbreak entered hibernation mode with most tourist activities suspended, country-wide destinations closed and plummeted revenues. Employing a mixed-method approach, our analysis indicated fluctuations in tourist consumer behavior, as driven by higher perceived health risks and strictly implemented containment measures by the Vietnamese government in the early pandemic. Notably, we find significant modifications in attitude and preferences of tourists regarding mode of tour and destination choices and increasing awareness of public health.

4.2. Theoretical implications

The theory of perceived risks is essential in explaining the travelers' prudent traveling decisions and a heightened sense of hygiene and safety in the context where understandings of covid-19 are still limited despite global joint efforts. Therefore, this study contributes to theories related to tourist behavior in the context of disease risk (COVID-19 pandemic being a prime example).

4.3. Practical implications

Practically speaking, our results have implications for policymakers and various stakeholders in the tourism industry because local travelers will be the first and foremost drivers in the post-pandemic recovery. Therefore, in addition to developing consumer stimulus packages including exemptions or reductions of service fees, or new tourist products to capture the fluctuations of the local demand, more emphasis should be laid on boosting the quality of tourist destinations complying with the international hygiene standards and safety for long-term growth.

5. Limited and future research

Nonetheless, it should be acknowledged that our results are subject to certain limitations. The study was conducted at one point in time, after the beginning of the Covid-19 outbreak in Vietnam. Despite our efforts in predicting the fluctuations in the tourist behavior in the post-pandemic by explicitly incorporating such questions in the survey, the nature of cross-sectional data does not allow accurate predictions due to some potential bias, such as psychological factors. Also, we are by no means certain whether those changes are short or long-term in nature. Thus, the scope of this study can be extended to cover the perceptions of tourist behavior when the virus has been successfully controlled in Vietnam for valid results.

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