

Measuring the degree of people's risk perception in event tourism

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Abstract

This study is to verify whether there are any differences of risk perception in event tourism among Japanese, Chinese, Taiwanese, and South Korean people as an international comparison. International tourists drastically decreased due to the Covid-19 pandemic. The total consumption expenditure of the events industry in 2020 decreased by almost 50 %, compared to that in the same time duration in the preceding year. In the future, the possibility of risks such as a pandemic cannot be denied. A questionnaire survey was conducted to examine risk perception when people participate in event tourism. As a method, a link to an online survey written in Japanese, Chinese, and Korean languages was sent to respondents. The authors collected 504 questionnaires from August to September 2020. The results show that there are significant differences in risk perception between countries and region. Therefore, it is necessary to have a risk management plan which considers the characteristics of the people of a specific country or region.

Keywords

risk perception, events industry, event tourism, MICE, questionnaire survey

1. Introduction

This study is to verify whether there are any differences of risk perception in event tourism among Japanese, Chinese, Taiwanese, and South Korean people as an international comparison. Getz [2008] argued that “event tourism represents a discourse with both academics and practitioners contributing from two main poles (tourism/events)” (p. 433). The events industry is classified into four categories: the acronym is ‘MICE’ (Meetings, Incentives, Convention/Congress, and Exhibition/Event). The events industry has been acknowledged as helping destinations gain a better tourism image and produce a positive economic impact.

Before the Covid-19 pandemic, the tourism industry had be-

come one of the most important sectors in the world economy. According to the World Travel & Tourism Council (WTTC), travel and tourism directly contributed 8.9 trillion US dollars to the world's GDP in 2019. The tourism and travel sector contributed to 10.3 % of the world's GDP and created 330 million jobs. This is approximately 1 in 10 jobs around the world.

In Japan, the number of international tourists broke the record for the seventh consecutive year in 2019. 31.9 million international tourists visited Japan in that year. For inbound tourism in Japan, China, Taiwan, and South Korea had been the top three countries before the spread of Covid-19. Tourists from these three countries accounted for 60 % or higher of the total in 2019.

However, international tourists have drastically decreased due to the Covid-19 pandemic since 2020 as shown in Figure 1. The Covid-19 pandemic has also affected the events industry.

The total consumption expenditure made by the events in-

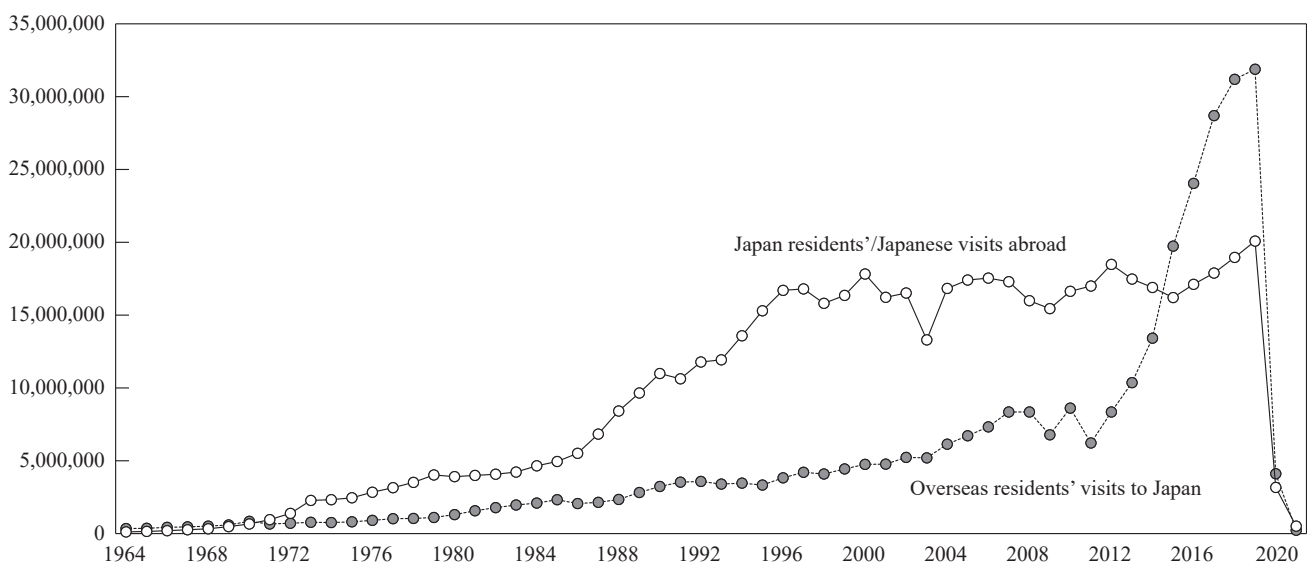


Figure 1: Tourism statistics (1964 to 2020) for Japan

Source: Japan National Tourism Organization (JNTO).

dustry in Japan hit a new record for the eighth consecutive year in 2019. Due to the Covid-19 pandemic, the total consumption expenditure of the events industry in 2020 decreased by almost 50 %, compared to that in the same time duration in 2021. In the future, the possibility of risks such as a pandemic cannot be denied. Therefore, it is important to anticipate any threats and discuss risk management for international tourists to achieve sustainable growth of the tourism industry.

To attract international tourists from the top three countries, China, Taiwan, and South Korea, it is indispensable for a swift recovery of inbound tourism in Japan. Therefore, this study focuses on people living in China, Taiwan, and South Korea and tests hypothesis whether there is a difference of risk perception among these countries and region as an example of the events industry.

2. Literature review

The tourism industry is vulnerable to external shocks such as natural and human-caused disasters. The Covid-19 pandemic shows an example of vulnerability of and a threat against the tourism industry. There are five major risks related to tourism: terrorism, war and political instability, health, crime, and cultural and language difficulties [Richter, 2003; Dimanche and Lepetic, 1999; Basala and Klenosky, 2001].

The tourism industry as well as the events industry are inherently susceptible to the above-mentioned risks. Risk perception can be explained as the degree of the risk for a threatening situation [Moreira, 2008]. There is a possibility that the number of accidents on hospitality and the tourism industry will increase due to highly mobile people and interconnections of the global economy. In addition, Mayer [2021] emphasizes the special attention of health crisis by disease outbreak such as SARS, MERS, and Covid-19 and points out the necessity of the media's role in shaping public discourses regarding crisis.

Yeh [2021] describes that tourism industries need to develop countering and recovery strategies because inadequate risk management can easily undermine the destination's image. Neuburger and Egger [2020] conducted a questionnaire survey to examine the risk perception and travel behavior on Covid-19 among travelers in the three Central European countries of Germany, Austria, and Switzerland. The results showed that there was a significant increase in risk perception after Covid-19 was declared a pandemic.

Iwamoto et al. [2021] studied risk perception among Japanese, Chinese, and Taiwanese people by conducting a questionnaire survey. Items of risk perception are referred from previous studies. The results showed that there are significant differences among countries and region even though cultural backgrounds and geographical conditions of each country and region have some degrees of similarity.

Few prior research appears to have been done about international visitors' risk perception. Therefore, any risk of natural and human-caused disaster, not just infectious diseases such as Covid-19, will be expected in the future, so analyzing people's

risk perception is valuable when considering countermeasures.

3. Data and method

3.1 Overview

The target populations concerned in this study are Japanese, Chinese, Taiwanese, and South Korean. The questionnaire was designed to examine their risk perception when they participate in either domestic or overseas event tourism. The items are based on the literature review dealing with risk perception in tourism. The degree of risk perception in event tourism is measured on a 5-point Likert scale of the importance, ranging from 1 (least important) to 5 (most important).

3.2 Data collection

The authors asked Japanese students living in Japan and foreign students studying abroad in Japan to send a link of an online questionnaire survey to their acquaintance. The respondents are those who live in their home country. The results showed that the response rate to let nature take its course was about 40 %. A link to an online survey written in Japanese, Chinese, and Korean languages was sent to the respondents. The authors collected 504 valid responses, of which 108 were Japanese, 141 were Chinese, 130 were Taiwanese, and 123 were South Korean from August to September 2020.

3.3 Data analysis

The survey was composed of two parts. The first part elicited demographic background information on respondents and the second consisted of 16 questionnaire items.

In addition to descriptive analysis, logistic regression was conducted to examine the differences in risk perception between Japanese and foreign respondents.

4. Results

4.1 Characteristics of respondents

The demographic profiles of the respondents of each group ($n = 502$) are shown in Table 1. The gender ratio (female: male) of the respondents was sixty to forty for Japanese, seventy to thirty for Chinese, sixty to forty for Taiwanese, and eighty to twenty for South Korean respondents.

In terms of age group, the highest was 10s for Japanese, 20s for Chinese, 20s for Taiwanese, and 20s for South Korean respondents. Except for Taiwanese respondents, more than 70 % of the other respondents were under 20s in the age group. The second highest age group in the Taiwanese group was 40s. For occupation, the highest item was undergraduates for Japanese and South Korean respondents and full-time employee for Chinese and Taiwanese respondents. The second highest item was full-time employee for Japanese and South Korean respondents and undergraduate for Chinese and Taiwanese respondents.

4.2 Measurement of destination selection

Table 2 presents the degree of risk perception when the respondents participate in event tourism. The highest mean

Table 1: Demographic information of respondents

	Japanese (<i>n</i> = 108)		Chinese (<i>n</i> = 141)		Taiwanese (<i>n</i> = 130)		South Korean (<i>n</i> = 123)	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Gender								
Female	66	61	104	74	77	59	97	79
Male	42	39	37	26	53	41	26	21
Age								
10s	49	45	7	5	4	3	18	15
20s	38	35	92	65	57	44	84	68
30s	10	9	20	14	6	5	13	11
40s	8	7	15	11	19	15	5	4
50s	1	1	4	3	40	31	3	2
60s	2	2	2	1	2	2	0	0
70s	0	0	1	1	2	2	0	0
Occupation								
Full-time employee	26	24	48	34	82	63	29	24
Undergraduate	72	67	34	24	24	18	77	63
Graduate	3	3	7	5	3	2	4	3
Part-time job	2	2	1	1	10	8	7	6
Housewife/ Househusband	3	3	29	21	8	6	4	3
Others	2	2	22	16	3	2	2	2

Table 2: Measurement of risk perception among Japanese, Chinese, Taiwanese, and South Korean

	Japanese (<i>n</i> = 108)		Chinese (<i>n</i> = 141)		Taiwanese (<i>n</i> = 130)		South Korean (<i>n</i> = 123)	
	Mean (<i>M</i>)	Standard Deviation (<i>SD</i>)	Mean (<i>M</i>)	Standard Deviation (<i>SD</i>)	Mean (<i>M</i>)	Standard Deviation (<i>SD</i>)	Mean (<i>M</i>)	Standard Deviation (<i>SD</i>)
Traffic accident	3.55	1.19	3.74	1.05	3.81	1.04	3.07	1.20
Theft and fraud	3.86	1.17	3.82	0.99	3.91	1.03	3.87	1.18
Injury and assault	3.44	1.22	3.96	1.06	3.89	1.15	3.62	1.25
Sexual assault	3.17	1.20	4.05	1.08	3.90	1.17	3.37	1.37
Leisure and sports accidents	3.38	1.15	3.72	1.19	3.87	1.10	3.05	1.25
Earthquake	3.22	1.19	3.90	1.19	3.73	1.12	2.78	1.30
Typhoon	3.14	1.14	3.72	1.19	3.67	1.11	2.87	1.31
Local heavy rain	3.08	1.19	3.50	1.16	3.59	1.15	3.03	1.21
Tsunami	3.12	1.21	4.02	1.16	3.88	1.19	2.63	1.39
Volcanic eruption	2.97	1.21	4.04	1.19	3.80	1.27	2.57	1.36
Radiation leakage	2.79	1.13	4.09	1.18	3.82	1.27	2.75	1.46
War	2.85	1.32	4.08	1.24	3.85	1.29	2.60	1.48
Terrorism	3.24	1.35	4.21	1.12	3.98	1.26	3.09	1.47
Riot	3.22	1.29	4.17	1.09	3.90	1.20	3.09	1.42
Demonstration	3.17	1.31	3.76	1.18	3.54	1.20	2.83	1.34
Infection	4.08	1.02	4.18	1.09	4.32	1.00	3.77	1.25

score was ‘infection’ ($M = 4.08$ & $M = 4.32$) for Japanese and Taiwanese respondents, ‘terrorism’ ($M = 4.21$) for Chinese, and ‘theft and fraud’ ($M = 3.87$) for South Korean respondents. The second highest mean score was ‘theft and fraud’ ($M = 3.86$) for Japanese, ‘infection’ ($M = 4.18$) for Chinese, ‘terrorism’

($M = 3.98$) for Taiwanese and ‘infection’ ($M = 3.77$) for South Korean respondents. The third highest mean score was ‘traffic accident’ ($M = 3.55$) for Japanese, ‘riot’ ($M = 4.17$) for Chinese, ‘theft and fraud’ ($M = 3.91$) for Taiwanese, and ‘injury and assault’ ($M = 3.62$) for South Korean respondents. ‘Infection’ was

the only questionnaire item which enters the top three for the four groups.

On the other hand, the lowest mean score was 'radiation leakage' ($M = 2.79$) for Japanese, 'local heavy rain' ($M = 3.50$) for Chinese, 'demonstration' ($M = 3.54$) for Taiwanese, and 'volcanic eruption' ($M = 2.57$) for South Korean respondents. The second lowest mean score was 'war' ($M = 2.85$ & $M = 2.60$) for Japanese and South Korean, 'leisure and sports accidents' ($M = 3.72$) for Chinese, and 'local heavy rain' ($M = 3.59$) for Taiwanese respondents. The third lowest mean score was 'volcanic eruption' ($M = 2.97$) for Japanese, 'traffic accident' ($M = 3.74$) for Chinese, 'typhoon' ($M = 3.67$) for Taiwanese, and 'tsunami' ($M = 2.63$) for South Korean respondents. The results show some differences among each group. For example, 'war' shows a comparatively high mean score for Chinese and Taiwanese respondents, so they regarded it as high risk, while the mean score of 'war' is the second lowest for Japanese and South Korean respondents.

Table 3 presents the results of the binary logistic regression where the p-value are below .05 in the sixteen items and shows differences of risk perception among foreign and Japanese respondents when they participate in event tourism. Foreign respondents considered 'sexual assault', 'local heavy rain', and 'radiation leakage' to be a higher risk perception. On the other hand, Japanese respondents considered 'traffic accident', 'theft and fraud', 'tsunami', 'demonstration', and 'infection' to be a higher risk perception.

5. Discussion

Today, due to Covid-19, the respondents of each country have a high risk awareness. 'Terrorism' is regarded as the most dangerous risk for Chinese respondents. Taiwanese respondents also regarded it as the second place. Event tourism has a characteristic that people gather in one place, so 'terrorism' is typically considered as high risk because of a serious impact. On the other hand, Japanese and South Korean respondents do not consider terrorism as high risk. Previous studies point out that human-made disasters such as war or terrorism are regarded as high risk, but the results of this study show that there are differences among the respondents of each country.

For Chinese respondents, the third highest mean score was 'riot', so most of the Chinese respondents think that an act of destruction such as 'terrorism' and 'riot' has a high degree of risk perception. On the other hand, Japanese, Taiwanese, and South Korean respondents regarded 'theft and fraud' as high risk in the first to third places. There is a possibility that they are afraid of crime which occurs around them.

The results of logistic regression show that Japanese respondents consider 'car accident', 'theft and fraud', 'tsunami', 'demonstration', and 'infection' to have a higher risk perception than foreign respondents do, while foreign respondents consider 'sexual assault', 'heavy rain', 'radiation' to have a higher risk perception than Japanese respondents. Japanese respondents tend to have a higher risk perception of crime, which occurs around them.

Japanese respondents tend to consider 'tsunami' as a higher risk than foreign respondents, and also tend to consider 'infection' as a higher risk than foreign respondents do. On the other hand, foreign respondents consider widespread damage such as 'heavy rain', 'radiation' as a higher risk than Japanese respondents do. The reasons for these results are due to past experience such as the Great East Japan Earthquake and the outbreak of the Covid-19 pandemic, when the questionnaire survey was conducted with Japanese respondents in August 2020. Foreign respondents tend to consider 'sexual assault' as a higher risk. In fact, the possibility of a sex crime in a foreign country is higher than that of Japan.

On the other hand, there are no significant differences in traffic accident, demonstration, and infectious disease. The reason why the mean score of infectious disease among the groups is relatively higher than the other questionnaire items is due to the Covid-19 pandemic.

In conclusion, even though the four groups of the study share a similar cultural background and geographic conditions in an East Asian context/framework, the results show that there are significant differences among the countries and region. It is important to discuss risk management which considers the characteristics of the people of each country or region.

Table 3: Comparison between foreigners and Japanese on risk perception

	B	S.E	Wald	Sig.	Exp (B)
Traffic accident	0.58	0.17	12.2	0.00	1.79
Theft and fraud	0.46	0.18	6.50	0.01	1.59
Sexual assault	-0.63	0.19	11.40	0.00	0.54
Local heavy rain	-0.42	0.20	4.23	0.04	0.66
Tsunami	0.76	0.31	5.90	0.02	2.14
Radiation leakage	-1.27	0.29	19.50	0.00	0.28
Demonstration	0.64	0.25	6.44	0.01	1.89
Infection	0.45	0.15	8.52	0.00	1.56

Notes: $R^2 = .252$ (Cox-Snell), $.390$ (Nagelkerke). Foreign respondents = 0 and Japanese respondents = 1.

6. Limitations and future research

The limitation of this study is that most of the respondents were 10s and 20s, except for Taiwanese respondents, so there is some possibility that the results of this study mainly explain about the risk perception of a young generation. Also, items of risk perception are mainly referred from previous studies in the tourism field. It is necessary to focus on risks limited to only event tourism. In future research, it is important to examine other age groups such as elderly people in order to compare with the young generation. A research framework of an international comparison of perceptions on various risks in event tourism can be applied to other regions in the world where there is a substantial dominance of neighbouring nationals among the inbound visitors' market share. In this paper, the authors have revealed the existence of significant differences of risk perceptions even among neighbouring citizens within the same world region.

Acknowledgment

This study was supported by JSPS KAKENHI Grant Number 20K12433.

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(Received April 1, 2022; accepted May 19, 2022)