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Introduction

The COVID-19 pandemic has led to unprecedented changes in the travel and tourism landscape, with all but the most essential travel grinding to a halt for a substantial period of time (Gallego & Font, 2020). While few global destinations escaped the realities of this altered environment, some were less affected than others. National governments took a wide variety of approaches to addressing COVID-19, and some were more effective than others at mitigating the spread of disease (Seyfi et al., 2020). Furthermore, there were often disconnects between strategies aimed at addressing the COVID-19 pandemic and those aimed at aiding the tourism industry (Kreiner & Ram, 2020). Despite the extraordinary downturn in international travel, hope remains that individuals will resume traveling when it is allowed by regulations and/or the containment of the pandemic. However, little is known about perceptions of risk and safety of international travel during or after the pandemic, nor about how various government responses to the pandemic are perceived by potential travelers. We seek to address this gap in knowledge by comparing the perceptions about COVID-related travel risk, United States (U.S.) government response to the COVID-19 pandemic, and the intention to travel to the U.S. To accomplish this task, we surveyed approximately 300 residents from each of the top five inbound tourism markets to the U.S. (Canada, Mexico, the United Kingdom (U.K.), Japan, and China) in early June 2020.

There is some evidence from past disease outbreaks like severe acute respiratory syndrome (SARS) suggesting that individuals' perceptions of risk are higher than they should be (McKercher & Chon, 2004). In modern history, disease outbreaks have generally been contained regionally (e.g., SARS in Asia, Ebola in Sub-Saharan Africa, or MERS in the Middle East), but evidence suggests that individuals' perceived disease-related travel risks may spill over to destinations where the disease does notexist (Novelli et al., 2018; Shi & Li, 2017). However, COVID-19 is a global pandemic, and perceived risks of travel are likely very different from previous regional disease outbreaks. In the relatively short period since COVID-19 has been declared a pandemic, research has begun to show that perceived health risks and uncertainty are greatly affecting future travel plans (Chua et al., 2020). As the pandemic has ebbed and flowed in various countries due to differences in government regulations and cultural norms, little is understood about whether those from different cultural backgrounds perceive the risks of COVID-19 and travel differently.

A voluminous body of research has shown that there are many reasons for cultural differences in perceptions. Perhaps the most popular conceptualization is Hofstede's 6 dimensions of national culture including power distance, uncertainty avoidance, individualism/collectivism, masculinity/femininity, long/short term orientation, and indulgence/restraint (Hofstede, 2011). While it is certainly not true that national cultures are homogeneous, Hofstede (2011) posits that there are certain underlying dimensions on which much of national culture is built. In this study, we posit that the continuum of individualism/collectivism plays an important role in the perceptions of travel related risks during the COVID-19 pandemic, perceptions of the U.S. government response to the pandemic, and intentions to travel to the U.S. Individualism/collectivism refers to the social structure of a national culture, ranging from one that values close social connections and support to one that values individuals taking care of themselves.

Methods

Data collection
        Data were collected through an online panel study in June 2020. The panel was provided by Qualtrics. A total of 1,653 survey responses were collected from each of the top 5 inbound travel markets to the United States (U.S.) - Canada (n=316), China (n=320), Japan (n=320), Mexico (n=349), and the United Kingdom (n=348). Respondents were required to have traveled internationally within the last two years and had an annual household income of greater than $50,000 USD to ensure the sample reflected an international market of travelers with the discretionary income necessary to make a trip to the U.S.

Data analysis
        Frequencies were used to analyze respondents' profile, including gender, nationality, age and highest level of education. A one-way ANOVA was then used to compare risk perceptions, perceptions of U.S. government response to the COVID-19 pandemic, and intention to travel to the U.S. from the top five international inbound markets to the U.S. The data met all assumptions of data normality for conducting ANOVA. Post-hoc Tukey's HSD test was conducted to better understand the difference between respondents from the five countries (Sobaih & Moustafa, 2016; Reichel & Haber, 2005). We chose Tukey's HSD test because it controls for different error rates between groups while allowing for groups of different size, and it is moderately conservative (Hair et al., 2010).

Results

        Sample demographics can be found in Table 1. The ANOVA results (Table 2) reveal that all perception items were significantly different among respondents from the five countries. Tukey's HSD tests were performed to further examine differences among respondent groups. Chinese respondents were found to perceive their residents, themselves, as well as friends and family as having a lower risk of catching COVID-19 during the pandemic, compared with respondents from the other four countries. No significant differences were found between respondents from Canada, Japan, Mexico and the U.K. Chinese respondents considered the risks of COVID-19 seriously affecting their health to be high, while Canadian, Mexican and British respondents had similar perceptions that COVID-19 moderately affected their health. Furthermore, Chinese respondents considered the risks of contracting COVID-19 to be more within their control compared with the other four countries. Mexican respondents had a significantly higher mean score on "the current COVID-19 situation is serious." Japanese respondents had different perceptions than respondents from the other four countries, they strongly believed people were still going to be catching COVID-19 six months from then.

Table 1. Sample demographic characteristics

		Canada n=316	China n=320	Japan n=320	Mexico n=349	U.K. n=348
		Percent (%)				
Gender	Male	57.3	52.5	63.4	45.0	63.5
	Female	42.7	47.5	36.6	54.7	36.5
	Other	-	-	-	0.3	-
Age	<18	4.4	-	1.6	0.3	1.1
	18-27	7.6	11.6	4.7	25.8	13.2

	28-37	30.7	69.4	24.4	49.0	44.5
	38-47	23.1	16.6	30.3	16.6	20.7
	48-57	18.0	2.2	21.9	6.9	11.8
	>57	16.1	0.3	17.2	1.4	8.6
Highest level of education	Less than high school	0.3	-	1.6	0.6	0.6
	High school or GED	4.7	0.3	13.1	3.2	5.7
	Technical, vocational or trade school	4.7	-	5.3	1.7	4.3
	Some college	7.3	-	3.8	5.7	6.3
	Associate degree	5.4	2.8	0.9	0.3	9.5
	4-year college/university	45.6	73.1	69.1	67.3	32.8
	Master's degree	21.8	19.4	4.7	17.5	26.7
	Ph.D./professional degree	4.4	4.4	1.6	3.7	14.1

Japanese respondents were much more worried, tense, and stressed about international travel during the COVID-19 pandemic than the other four countries, which did not feel significantly differently. Japanese respondents also had a significantly higher mean score than the other four countries, that travelling internationally was risky in terms of contracting COVID-19 and the likelihood of catching COVID-19. Additionally, Japanese and Mexican respondents had similar and higher concerns about infecting friends or family when returning from an international trip. Respondents from the other three countries (Canada, China, and the U.K.) showed similar concern about infecting friends or family after travelling internationally.

Next, the U.S. government's response to the COVID-19 pandemic also negatively affected respondents' attitudes toward the U.S. as a travel destination. Japanese respondents had significantly different opinions, and the lowest mean score on perception of safety and choosing the U.S. as a travel destination, while Mexican and British respondents had similar and relatively neutral perceptions. Japanese respondents reported that the U.S. government's pandemic response negatively affected their intentions to travel to the U.S. to the greatest extent. Mexican and British respondents reported the governmental response to the pandemic influenced their intentions to travel to the U.S. the most positively in the short term. In general, all countries felt that the U.S. governments' response to the pandemic had a more negative influence on their intention to travel to the U.S. in the short term (one year) than the long term (3 years or 5 years).

Table 2. Differences of perceptions on travel risks, governments' response to the pandemic, and intentions to travel to the U.S.

Category	Question	Mean (SD) Canada n=316	Mean (SD) China n=320	Mean (SD) Japan n=320	Mean (SD) Mexico n=349	Mean (SD) U.K. n=348	F	p-value
Risk of perception of catching COVID-19 (5-point Likert Scale, 1=Very low risk, 5= Very high risk)	What level of risk do you think the following groups of people have of catching COVID-19 during this pandemic? Average resident	3.08B* (1.103)	2.67C (1.098)	3.23B (1.030)	3.65A (0.934)	3.25B (1.130)	36.809	.000
	What level of risk do you think the following groups of people have of catching COVID-19 during this pandemic? You	2.87A (1.127)	2.19B (1.091)	2.95A (1.172)	2.89A (1.072)	2.85A (1.137)	24.335	.000
	Level of risk do you think the following groups of people have of catching COVID-19 during this pandemic? Your friends and family	2.97A (1.147)	2.29B (1.125)	2.99A (1.103)	3.08A (1.082)	2.99A (1.113)	27.209	.000
COVID-19 and health (5-point Likert Scale, 1=No affect all, 5= Very serious affect)	If you were infected with COVID-19, how seriously do you think it would affect your health?	3.46C (1.152)	4.10A (0.958)	3.82B (1.022)	3.34C (1.125)	3.41C (1.069)	30.095	.000
Perceptions of COVID-19 Pandemic (5-point Likert Scale, 1=Strongly disagree, 5= Strongly agree)	I think that whether I get COVID-19 or not is out of my control.	2.92B (1.265)	2.64C (1.139)	3.35A (1.095)	3.01B (1.212)	3.16AB (1.242)	15.961	.000
	I think the current COVID-19 situation is serious.	4.03BC (1.093)	3.83C (0.995)	3.95C (1.040)	4.43A (0.925)	4.19B (1.020)	17.666	.000
	In my opinion, people are still going to be catching COVID-19 six months from now.	4.11B (0.974)	3.99B (0.866)	4.32A (0.795)	4.11B (0.924)	4.00B (1.009)	6.904	.000
Feelings towards international travel (5-point Likert Scale, 1=Calm / Relaxed / Composed, 5= Worried / Tense / Stressed)	When you think about international travel right now, how do you feel? Calm-Worried	3.58B (1.411)	3.68B (1.348)	4.45A (0.825)	3.67B (1.254)	3.46B (1.324)	31.731	.000
	Relaxed-Tense	3.34C (1.276)	3.60B (1.253)	4.16A (0.933)	3.41BC (1.182)	3.33C (1.196)	28.775	.000

|								
	Composed-Stressed	3.43BC (1.314)	3.66B (1.205)	4.14A (0.900)	3.40C (1.172)	3.25C (1.244)	28.676	.000
Perception of international travel (5-point Likert Scale, 1=Not at all risky, 5= Very risky)	How risky is international travel now in terms of contracting COVID-19	3.99BC (1.082)	4.10BC (0.882)	4.43A (0.772)	4.13B (0.929)	3.91C (1.013)	14.125	.000
Perception of catching COVID when travel internationally (5-point Likert Scale, 1=Extremely unlikely, 5= Extremely likely)	If you travel internationally within the next 12 months, how likely is it that you would catch COVID-19?	3.39C (1.074)	3.60B (0.911)	3.95A (0.878)	3.42BC (0.975)	3.31C (1.017)	22.168	.000
Perception of infecting friends or family after travelling internationally (5-point Likert Scale, 1=Not at all concerned, 5= Extremely concerned)	How concerned are you about infecting a friend or family member with COVID-19 when returning from an international trip?	3.68B (1.293)	3.68B (1.064)	4.24A (0.955)	4.37A (0.896)	3.85B (1.102)	30.039	.000
Perceptions of the U.S. government's response to COVID-19 (5-point Likert Scale, 1=Very negatively, 5= Very positively)	Has the government's response to the current COVID-19 pandemic positively or negatively affected...Your perceptions of the U.S. as a travel destination.	2.56B (1.384)	2.52BC (1.286)	2.26C (1.142)	2.95A (1.241)	2.92A (1.306)	17.162	.000
	Your perceptions of the safety of the U.S. as a travel destination.	2.54B (1.369)	2.44B (1.285)	2.12C (1.123)	3.04A (1.302)	2.95A (1.278)	29.419	.000
U.S. Government Response to COVID-19 and intention to travel to the U.S. (5-point Likert Scale, 1=Very negatively, 5= Very positively)	Has the government's response to the current COVID-19 pandemic positively or negatively affected...The likelihood that you will travel to the U.S. within the next year.	2.74B (1.367)	2.65B (1.260)	2.03C (1.137)	3.32A (1.275)	3.05A (1.290)	47.916	.000
	The likelihood that you will travel to the U.S. within the next 3 years.	3.18B (1.253)	3.30B (1.147)	2.43C (1.063)	3.71A (1.134)	3.41B (1.079)	58.022	.000

The likelihood that you will travel to the U.S. within the next 5 years.	3.31B (1.252)	3.64AB (1.128)	2.74C (1.031)	3.84A (1.095)	3.51BC (1.067)	46.145	.000

* Tukey's HSD test: means with the same letter are not significantly different at 5% level.

Discussion and Conclusions

This paper aimed to examine differences in perceptions of travel risks, government response to the COVID-19 pandemic, and intention to travel to the U.S. due to the COVID-19 pandemic among respondents from the top five international inbound markets to the U.S., including Canada, China, Japan, Mexico, and the U.K. ANOVA results indicate that the perceptions of travel risks, U.S. government response to the pandemic, and intention to travel to the U.S. among respondents from the five countries are significantly different. In the following paragraphs, we discuss cultural differences (especially individualism vs collectivism) and regional experiences with the COVID-19 pandemic as potential reasons for differing attitudes among individuals from each country. Prior to these discussions, we would like to reiterate that in Hofstede's 6-D model, The UK was seen as the most individualist with a ranking of 89 out of 100, then in decreasing order was Canada (80), Japan (46), Mexico (30) and China (20) (Figure 1).

Figure 1- Hofstede's 6D Model for the Five Study Countries
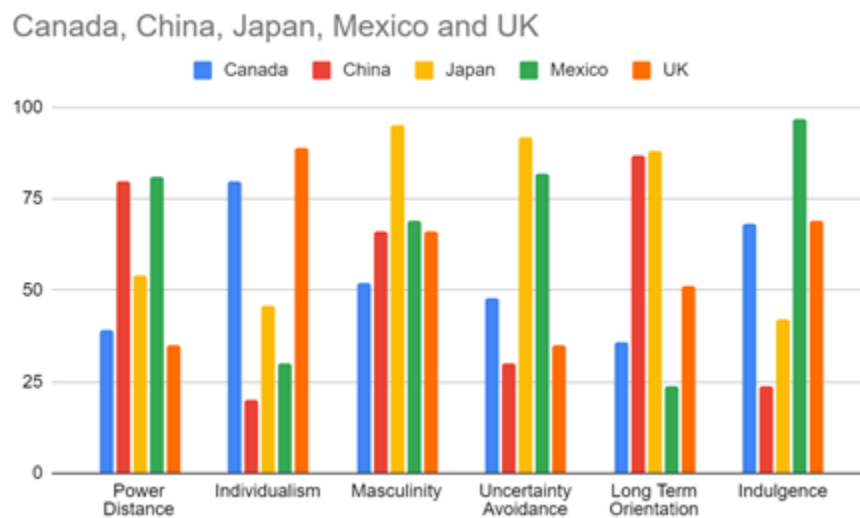
COVID-19 Risk Perceptions

Our findings indicated that Chinese respondents had the lowest risk perceptions of catching COVID-19 and did not consider the pandemic to be as serious as the other four countries when the survey was completed in June 2020. However, they did think that catching COVID-19 would seriously affect their health if it were to happen. This mentality may be linked to the initial outbreak, and the governmental public health response that followed in China. The fast and extensive lockdown measures implemented in China (and a population that likely went along with them due to their generally collectivist culture), mean the country managed to control the disease quickly, also reporting one of the lowest fatality rates during the pandemic (Fanelli & Piazza, 2020; Zhang et al., 2020).

In contrast, Japanese respondents had the highest risk perceptions in contemplating travelling internationally during the COVID-19 pandemic. They felt worried, tense, and stressed about international travel and thought that international travel was risky. This high perception of risk and hesitancy aligns with Japan's impression as a collectivist country (Hofstede 2010), but little experience with the COVID-19 pandemic in general. Whereas China had an initially large outbreak that it struggled to control, Japan has seen very little in the way of extensive transmission of COVID-19 among its population. Japan's collectivist mindset also helps explain their survey responses, as hesitancy to travel has been linked to preventing COVID-19. This is apparent from global travel bans and general social distancing

implemented in Japan at the time (Linka et al., 2020). Japan's few existing COVID-19 cases were also the result of international travel with citizens returning from China (Furuse et al., 2020). Thus, by emphasizing international travel as risky and being inclined to avoid it, respondents are focusing on what's best for the group, increasing their hesitancy towards international travel.

Mexican, British, and Canadian respondents had similar perceptions pertaining to travel risks, COVID-19 and health, thus feeling less worried, tense and stressed than respondents from other countries. In explaining Mexican respondents' attitudes, Mexico is seen as a collectivist culture, but a form of collectivism commonly understood to be different from our notion of Asian collectivism. One which is highlighted by aggression and competitiveness during business and relationships, whereas Asian cultures typically seek out harmony (Gabrielidis et al., 1997). The lack of concern demonstrated by Mexican respondents is also explained by the lack of action by the Mexican government in response to COVID-19. At the time of our survey, there was an added emphasis on reopening the economy, minimal testing, and an overwhelming COVID-19 caseload country-wide (Ibarra-Nava et al., 2020). Likewise, British and Canadian respondents had the lowest perception of the risk of international travel. This aligned with their individualist nature, as both residents of Canada and the U.K., two of the more individualistic countries in the world, have opposed any restrictions when it comes to individual freedoms during the COVID-19 pandemic, even when for one's safety.

Perceptions of the U.S. Government Response to the Pandemic

With respect to the U.S. government's response to the COVID-19 pandemic, our findings indicated that Japanese respondents had the most negative perception of the safety of the U.S. as a travel destination. This ties back into the general fear experienced by Japanese respondents in response to traveling internationally given travel bans implemented by the country (Linka et al., 2020). This runs parallel to the perception of harm and COVID-19 cases that came with Japanese residents coming back from China at the beginning of the pandemic (Furuse et al., 2020). Furthermore, Japan's collectivist nature during the pandemic conflicted with the individualistic tendencies of the U.S. Globally, it has been publicly apparent that the U.S. has struggled to contain the COVID-19 pandemic with a death toll exceeding all other countries, and a consistent national rise in COVID-19 cases. Canadian and Chinese respondents felt somewhat less negatively about the U.S. governmental response to the pandemic, while Mexican and British respondents' perceptions of the U.S. as a travel destination were least affected by the government's response to the COVID-19 pandemic. Unlike Japan, this aligns with their personal negative responses to the COVID-19 pandemic. Mexico struggled to contain or focus on the virus, while British individuals tended to disregard it.

Impact on Intentions to Travel to the U.S.

Lastly, our findings indicated that Japanese respondents' intentions to travel to the U.S. were most impacted by the U.S. governmental response to the pandemic aligning with their high-risk perceptions of travelling internationally and negative perception of the safety of the U.S. as a travel destination. On the contrary, Mexican and British respondents reported being more likely to travel to the U.S. based on the governments' response to the pandemic, aligning with their low perception of risk and unchanged notion of the U.S. as a travel destination. Chinese and Canadian respondents had similar perceptions in respect to traveling to the U.S. based on governmental response to the pandemic - less likely in the next year but more likely in the next three or five years. This builds on China's lack of risk perception towards traveling. As for Canada, the country has a high individualist score in addition to being geographically close to the U.S. When considering Canadian respondent's willingness to travel to the U.S. within the next three years, both these factors appear to play a role in their openness to the concept. Unlike the U.S. and U.K., undeterred by individualism correlating with a high death toll, Canadians appeared to not be as negatively impacted by COVID-19, reflecting a low infection and mortality rate in comparison to the U.S. Similar to China's handle on the COVID-19 pandemic, Canadians may also feel the same sense of safety when traveling to the U.S. due to its geographical proximity (Chimmula & Zhang, 2020).

In the full paper and presentation, a full discussion of the implications of study findings for theory and practice will be provided.

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