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Returning to Travel: Fear, Coping, and Resilience During the COVID-19 Pandemic

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Introduction

COVID-19, a contagious, pneumonic disease caused by the SARS-CoV-2 (Severe Acute Respiratory Syndrome Corona Virus 2), has been considered one of the most serious public health emergencies in the twenty-first century. It has transformed the world, constantly affecting travel, work, and daily life globally (Jia & Yang, 2020). Godinić & Obrenovic (2020) illustrated that health risks, unemployment, fear of lack of money for living, and fear of traveling are the most pressing issues on a global scale due to the COVID-19 pandemic.

The tourism industry has been greatly affected by the COVID-19 pandemic since travel has been identified as a high-risk activity for spreading the virus (Zheng et al., 2021). Unfortunately, tourism can greatly contribute to the transfer of contagious diseases between destinations (Hollingsworth et al., 2006) due to the large numbers of people traveling on a global scale (Zenker & Kock, 2020). During a pandemic, governments typically implement mandates, such as travel restrictions, to reduce the spread of the disease and protect the health and safety of the public (Eichelberger, 2007). Domestic and international border closures due to the pandemic have resulted in reduced opportunities for travel, and in some cases, halting travel altogether (Peco-Torres et al., 2021). Over 80 countries and territories implemented travel restrictions to reduce the spread of COVID-19 by February 2020 (Zheng et al., 2021). According to UNWTO World Tourism Barometer, international tourist arrivals were down by 87% in January 2021 (UNWTO, 2021). These COVID-19 pandemic-related travel restrictions made it difficult for people to travel and created a sense of fear in the citizens due to the unprecedented measures taken by governments.

While countries took steps to control the spread of the virus on a public scale, individuals faced personal issues related to COVID-19. To say the least, COVID-19 is a source of stress, and consequently, it can have long-lasting negative effects on mental and physical health. Early studies during the pandemic have shown increased rates of anxiety, depression, suicide risk, and post-traumatic stress (O'Connor et al., 2021). COVID-19 has highlighted and emphasized the importance of health and well-being during the pandemic. Combating and containing the COVID-19 pandemic will likely require a combination of vaccines and testing to return to a “new” normal. At the same time, it is important to understand that this “new” normal may be much different for many industries and will have long-lasting implications.

Additionally, revenge tourism, also known as catch-up travel, refers to the desire of tourists to want to catch up on missed-out travel to compensate for lost travel opportunities due to an event such as the pandemic, which could lead to a drastic increase in travel in the short-term post-pandemic (Panzer-Krause, 2022). While revenge tourism can be seen as a recovery for destinations impacted by the

pandemic, destinations need to be able to accommodate increased stress as travel begins to return post-pandemic.

Recent studies on pandemic travel have identified the importance of creating a bounding relationship between tourism and crisis management to reduce fear, and a couple of studies in the past have reported that people's travel motivations change after a major crisis (Bali et al., 2016; Lee et al., 2012), however, there are limited studies which investigate pandemic travel behavior. Particularly, there is a lack of studies that identify who travels during the pandemic and their decision-making process. Thus, to better understand pandemic travel behavior, this study expanded the research topic to explore how tourists recover from a global pandemic by incorporating constructs related to fear, coping, and resilience in individuals' decision-making mechanisms for pandemic travel. Particularly, this study aimed to identify relationships between pandemic travel fear, coping strategies, resilience against travel fear, and pandemic travel intentions. Further, this study investigated the moderating role of risk tolerance in those relationships.

Understanding pandemic travel fear and how people cope with it would provide valuable information on how to accommodate tourists during the COVID-19 pandemic. The findings of this study would help tourism providers and practitioners combat tourists' pandemic travel fear, encourage travel, and determine the best course of action to help the industry recover from the COVID-19 pandemic.

Literature Review & Hypotheses

Pandemic Travel Fear

Fear refers to an emotional response triggered by the threat of danger (de Hoog et al., 2008), and accordingly, pandemic travel fear can be defined as fear stemming from an individual's concerns about the risks associated with leaving their residence for travel purposes during a pandemic (Mashrur et al., 2022). Previous research has found perceived risks as the primary cause of travel fear (Dolnicar, 2005; Reisinger & Mavondo, 2005), and perceived threats and threat susceptibility towards traveling resulted in pandemic travel fear (Zheng et al., 2021).

People have become fearful of COVID-19 since the beginning of the pandemic (de Hoog et al., 2008) which has resulted in a drastic decline in travel and tourism demand (Zheng et al., 2021). There are several factors that can exacerbate pandemic travel fear in tourists. At the initial stages and outbreak of a pandemic, tourists may experience feelings of fear, anxiety, and helplessness towards traveling because less knowledge about the pandemic is available (Zheng

et al., 2021). During a pandemic, governments typically implement mandates, such as restrictions to travel or closure of non-essential facilities, to reduce the spread of the disease and prioritize public health, however, this can also result in increased fear of the pandemic (Eichelberger, 2007). The widespread transmissibility of pandemic diseases among individuals (Strong, 2008), observations of online reactions to the pandemic (Dalrymple et al., 2016; Fung et al., 2014), and misinformation on social media can also contribute to this pandemic travel fear (Zheng et al., 2021). The fear of pandemic diseases can persist over long periods of time which can result in fear-influenced decisions, such as travel-related decision-making, during and after a pandemic (Bali et al., 2016).

The Influence of Pandemic Travel Fear on Coping Strategies

Coping strategies are defined as the cognitive and behavioral efforts used to manage stressful situations (Lazarus & Folkman, 1984). Coping strategies are used to alleviate the negative effects of stressful situations (Folkman & Lazarus, 1985; Martínez et al., 2020), maintain physical and mental health, and manage emotions (Zheng et al., 2021). Previous literature has found three broad categories of coping strategies that are task-oriented coping, emotion-oriented coping, and avoidance-oriented coping (Endler & Parker, 1994).

Task-oriented coping involves tasks, planning, and problem-solving (Choi et al., 2017; Mariani et al., 2020). Task-oriented coping generally contributes positively to psychological well-being. Task-oriented coping in combination with other coping strategies can lead to positive outcomes such as reduced anxiety, depression, and stress (Gaudreau & Blondin, 2004; Smith et al., 2016). Emotion-oriented coping involves self-oriented emotional responses that aim to increase awareness of an individual's emotional distress, manage emotional distress (Shimazu & Schaufeli, 2007; Wu et al., 2018), and mitigate stressful situations (Choi et al., 2017; Mariani et al., 2020). Emotion-oriented coping allows people to regulate their emotions to improve their mood (Mariani et al., 2020). Avoidance-oriented coping involves actions that aim to avoid or postpone stressful situations (Choi et al., 2017; Long, 1990; Mariani et al., 2020). Avoidance-oriented coping can lead to reduced stress in short-term uncontrollable situations, however, it does not resolve long-term controllable situations (Avero et al., 2003).

When individuals are in stressful situations, they utilize coping strategies to overcome these adverse situations. Consumer psychology literature has found the significance of the relationship between consumer fear and coping strategies (Duhachek & Iacobucci, 2005). In response to pandemic travel fear, tourists might engage in protective travel behaviors through coping strategies. Individuals may

cope with fear through action-oriented styles such as task-oriented coping (Yeung & Fung, 2007) by gathering information about the COVID-19 pandemic to better understand the situation, thinking about steps to prevent the spread of COVID-19, and managing their emotions (Zheng et al., 2021) by taking care of their mental health during the COVID-19 pandemic, and reducing negative thoughts during the COVID-19 pandemic. Further, tourists might utilize avoidance-oriented coping, in the form of travel avoidance, for example, to reduce stress during a health crisis such as the COVID-19 pandemic. With this notion, this study proposes pandemic travel fear would have a positive influence on individuals' coping strategies.

Hypothesis 1: Pandemic travel fear positively influences task-oriented coping.

Hypothesis 2: Pandemic travel fear positively influences emotion-oriented coping.

Hypothesis 3: Pandemic travel fear positively influences avoidance-oriented coping.

The Influence of Coping Strategies on Resilience

Psychological resilience is defined as an “individual’s ability to thrive despite adversity” (Singh & Yu, 2010, p.23). Resilience has been conceptualized as a dynamic process that is influenced by coping styles (Stratta et al., 2015) or a personality trait that is influenced by various factors such as biological, familial, and social factors, but becomes stable over time (Silk et al., 2007).

Resilience helps tourists adapt to the “new normal” during the COVID-19 pandemic (Peco-Torres et al., 2021). Individuals with high resilience show higher levels of optimism and are better equipped to problem-solve and cope with difficult situations (Elizabeth et al., 2010). They are more easily able to overcome the negative effects of difficult situations through psychological adjustment (Zheng et al., 2021) such as coping strategies. Results from previous studies show that resilience strengthens tourists’ decision-making process (Xie et al., 2022; Zheng et al., 2021). Additionally, resilience correlates negatively with perceived health risks, such as the threat of diseases, which was found to increase the intention to resume hotel usage during the COVID-19 pandemic (Peco-Torres et al., 2021).

Coping and resilience are related constructs, with coping strategies contributing to resilience, and resilience showing a negative relationship with poor coping (Campbell-Sills et al., 2006). Previous research has found that different coping strategies were found to predict variance in resilience and resilience was affected by adaptive or maladaptive coping strategies (Campbell-

Sills et al., 2006; Stratta et al., 2015). The broaden-and-build theory of positive emotions suggests that positive emotions build resources to allow an individual to expand their range of potential coping strategies and as a result, can increase an individual's resilience (Gloria & Steinhardt, 2014). Increased stress was found to be associated with decreased resilience (Yıldırım & Solmaz, 2022) and avoidance-oriented coping can reduce stress in short-term situations (Avero et al., 2003). Coping is a possible mechanism for promoting resilience in terms of stress and well-being (Leipold et al., 2019). Thus, this study proposes that coping strategies would have positive influences on an individual's resilience against travel fear.

Hypothesis 4: Task-oriented coping positively influences psychological resilience against travel fear.

Hypothesis 5: Emotion-oriented coping positively influences psychological resilience against travel fear.

Hypothesis 6: Avoidance-oriented coping positively influences psychological resilience against travel fear.

The Influence of Resilience on Travel Intention

Travel intention is defined as "one's desire or intention to travel" (Luo & Lam, 2020, p. 3) which is formed through personal and information sources (Luo & Lam, 2020). During a crisis, tourists' travel intentions can depend on their evaluation of risk, personal traits, and psychological characteristics such as resilience (Xie et al., 2022). Resilience can improve individuals' abilities to adapt to stressful or traumatic travel situations, for example, those with higher levels of resilience may be more likely to engage in cautious travel as opposed to avoiding travel completely after a pandemic (Zheng et al., 2021). In other words, higher levels of resilience translate into higher competency to adapt to the stressful situations produced by the COVID-19 pandemic (Peco-Torres et al., 2021). Increasing resilience is essential for decreasing stress and fear for those affected by a pandemic (Bonanno et al., 2008). Resilience is advantageous to the perception of safety at a destination and travel intention (Xie et al., 2022). Thus, this study proposes that resilience against travel fear would have a positive influence on pandemic travel intentions.

Hypothesis 7: Resilience against travel fear positively influences pandemic travel intentions.

The Moderating Role of Risk Tolerance

Risk tolerance refers to the “levels of risk-taking acceptable to achieve a specific objective or manage a category of risk” (Australian Government Department of Finance, 2016, p. 1). In general, risk involves potential danger, injury, or loss (Reisinger & Mavondo, 2005). In the context of tourism, perceived risk can increase as a result of the uncertainty of future conditions and a lack of knowledge about the destination (Chang, 2009). Travel and tourism have always had risks involved, with a growing awareness of risks related to crises such as terrorism (i.e. September 11th attacks) and disasters (i.e. pandemic) (Dolnicar, 2005). Therefore, risk tolerance plays an important role in the decision-making process of tourists (Tavor & Teitler-Regev, 2015).

Previous studies have found that the level of risk tolerance varied across socio-demographic factors influencing their decision-making process: men were more risk-tolerant than women as women participating in tourism were found to be more likely to be worried about physical risks than men (Boksberger et al., 2007; Byrnes et al., 1999); younger individuals were found to be more risk-tolerant than older individuals (van Dalen & Henkens, 2012); those with higher levels of education were found to have higher levels of risk tolerance (Halek & Eisenhauer, 2013); migrants were also found to have higher levels of risk tolerance than non-migrants potentially due to their experiences living abroad, which may contribute to their willingness to take risks in tourism (Baláž & Williams, 2011); and tourists that are not worried about unfamiliar destinations and seek new experiences are generally more risk-tolerant than those who look to interact locally in destinations (Teitler-Regev & Tavor, 2018).

Overall individuals with higher risk tolerance are more likely to be undeterred by tourism hazards, participate in risky forms of tourism, and possess a greater competency in risk management (Williams & Baláž, 2013). With this notion, this study proposes that the level of individuals’ risk tolerance (high versus low) would moderate hypothesized relationships between pandemic travel fear, coping strategies, resilience against travel fear, and pandemic travel intentions (H1-H7).

Hypothesis 8: Relationships between pandemic travel fear, coping strategies, resilience against travel fear, and pandemic travel intentions (H1-H7) are different for the high and low risk tolerance groups.

Based on the literature review about pandemic travel fear, coping strategies, resilience against travel fear, pandemic travel intentions, and risk tolerance, this study proposes the following conceptual model (Figure 1):

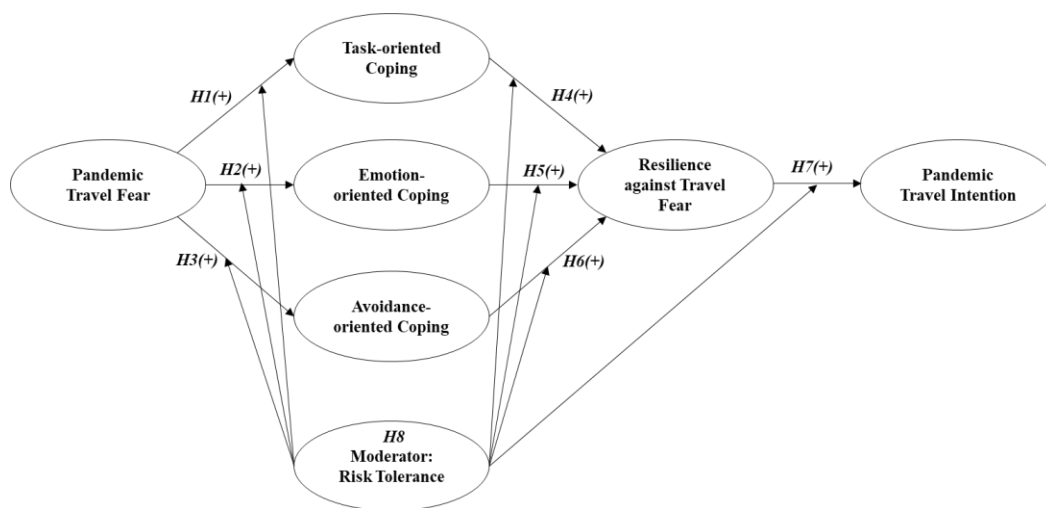


Figure 1. Conceptual Model

Methods

Research Instrument

The primary goal of this study is to investigate the relationships among pandemic travel fear, coping strategies, resilience against travel fear, and pandemic travel intentions. To fulfill this research objective, this study used a self-administered online survey questionnaire.

The survey questionnaire consisted of six parts: the first part measured pandemic travel fear; the second part measured three types of coping strategies including task-oriented coping, emotion-oriented coping, and avoidance-oriented coping; the third part measured resilience against travel fear; and pandemic travel intentions and risk tolerance were measured in the next two parts. At the end of the survey questionnaire, sociodemographic information such as gender, age, ethnicity, education, income, and domestic and international travel history was recorded to provide descriptive statistics of the respondents.

Measurements

Measurements for the constructs in the survey questionnaire were adapted and modified from previous studies (Endler & Parker, 1990; Liu et al., 2021; Zheng et al., 2021). All construct measurement items were on a 7-point Likert scale

ranging from 1 (Strongly Disagree) to 7 (Strongly Agree), with an option of N/A (Not Applicable). A pilot study for the survey questionnaire was conducted to check the reliability of the measurement items. Minor revisions were made to the survey based on confusion due to the wording of some measurement items. Measurements used for this study are listed in the Appendix.

Sample and Data Collection

To collect the data, a web-based nationwide survey was conducted through Amazon MTurk, a crowdsourcing marketplace that allowed for data collection through tasks such as surveys. The self-administered survey was posted and was open to all Amazon MTurk participants for approximately two weeks. Participants were provided a small incentive to complete the 5-minute survey questionnaire. Participation in this survey was anonymous and responses were confidential. The sample population of this survey was respondents who were 18 years or older and resided in the United States. Overall, 439 usable responses were collected.

Data Analysis

To examine the hypothesized relationships, structural equation modeling (SEM) was conducted using Analysis of Moment Structure (AMOS). First, confirmatory factor analysis (CFA) with a maximum likelihood was conducted on the measurement model to estimate relationships between the hypothesized latent variables and their indicators (Anderson and Gerbing, 1988). Then, the structural model was assessed to estimate the hypothesized causal relationships (H1 to H7). To test the moderating effect of risk tolerance (H8), multiple group analysis was conducted.

Results

Descriptive Statistics

The study sample, a total of 439 respondents, consisted of 49.7% male, 49.2% female, and 1.1% transgender, non-binary, or other. The majority of respondents ranged from age 20 to 39 (66.3%). The majority ethnicity was Caucasian which consisted of 64.5% of the sample. Most respondents had a college degree or higher education (86.8%). A majority of the respondents had a reported income of over \$40,000 (65.9%). Detailed demographic information is provided in Table 1.

Table 1. Descriptive Statistics of Respondents

Variable	Descriptive	Frequency	%
Gender	Male	218	49.7
	Female	216	49.2
	Transgender	1	0.2
	Non-binary	3	0.7
	Other	1	0.2
Age	18-19	2	0.5
	20-29	135	30.8
	30-39	156	35.5
	40-49	73	16.6
	50-59	44	10.0
	60+	29	6.6
Ethnicity	Asian	55	12.5
	Black/African	29	6.6
	Caucasian	283	64.5
	Hispanic/Latinx	37	8.4
	American Indian or Alaskan Native	12	2.7
	Multiethnic	7	1.6
	Other	16	3.6
Education	Less than high school degree	1	0.2
	High school degree or equivalent (e.g., GED)	14	3.2
	Some college, but no degree	43	9.8
	College degree	251	57.2
	Graduate degree or higher	130	29.6
Income	\$0-19,999	52	11.8
	\$20,000-39,999	98	22.3
	\$40,000-59,999	110	25.1
	\$60,000-79,999	93	21.2
	\$80,000-99,999	43	9.8
	\$100,000 or more	43	9.8
Total		439	100.0

The travel history of respondents is provided in Table 2. Most respondents had traveled during the COVID-19 pandemic (69.7%) and of those that had traveled, 76.1% traveled domestically, 14.1% traveled internationally, 47.1% traveled for business, and 33.7% traveled for leisure.

Table 2. Travel History of Respondents

Variable	Descriptive	Frequency	%
Travel during the COVID-19 Pandemic	Yes	306	69.7
	No	133	30.3
Domestic or International Travel	Domestic	233	76.1
	International	43	14.1
	Both	30	9.8
Purpose of Travel	Leisure	103	33.7
	Business	144	47.1
	Both	52	17.0
	Other	7	2.3
Total		439	100.0

Measurement Model

To assess the overall fit of the measurement model, a CFA was conducted. The goodness-of-fit indicators suggested that the measurement model fit the data well [$\chi^2=578.564$, $p=0.000$, $\chi^2/df=2.081$, normed fit index (NFI)=0.935, Tucker-Lewis index (TLI)=0.956, comparative fit index (CFI)=0.965, and root mean square error of approximation (RMSEA)=0.050].

Convergent validity for this study was evaluated with the standardized factor loading values, composite reliability (CR), and average variance extracted (AVE). Standardized factor loadings for all measurement items ranged from 0.705 to 0.915, which is above the recommended 0.5 cutoff value (Anderson & Gerbing, 1988), which provides insight into the strength of the association between the measurement item and the construct (Shevlin et al., 2000). Higher standardized factor loading values indicate a stronger association.

The CR values ranged from 0.834 to 0.944, which is above the recommended 0.7 cutoff value, ensuring high internal consistency of the measurement items (Bagozzi & Yi, 1988). The AVE values ranged from 0.611 to 0.795, which is above the recommended 0.5 cutoff value, which means that the measurement items explain more variance than measurement errors for our constructs. Lastly, our Cronbach's alpha values ranged from 0.827 to 0.929, which is above the recommended 0.7 cutoff value, suggesting that our measurement items were able to reliably measure our constructs. The results of the confirmatory factor analysis are provided in Table 3.

Table 3. Confirmatory Factor Analysis

Construct	Item	Standardized Factor Loading	Cronbach's Alpha	Composite Reliabilities	Average Variance Extracted
Pandemic Travel Fear (PTF)	PTF-1	0.915	0.923	0.921	0.795
	PTF-2	0.884			
	PTF-3	0.875			
Task-oriented Coping (TOC)	TOC-1	0.705	0.827	0.834	0.627
	TOC-2	0.833			
	TOC-3	0.831			
Emotion-oriented Coping (EOC)	EOC-1	0.836	0.883	0.882	0.713
	EOC-2	0.849			
	EOC-3	0.849			
Avoidance- oriented Coping (AOC)	AOC-1	0.834	0.866	0.867	0.686
	AOC-2	0.829			
	AOC-3	0.821			
Resilience against Travel Fear (RATF)	RATF-1	0.751	0.887	0.887	0.611
	RATF-2	0.810			
	RATF-3	0.769			
	RATF-4	0.760			
	RATF-5	0.817			
Pandemic Travel Intentions (PTI)	PTI-1	0.852	0.944	0.944	0.773
	PTI-2	0.895			
	PTI-3	0.896			
	PTI-4	0.879			
	PTI-5	0.872			

Note: $\chi^2=578.564$, $p=0.000$, $\chi^2/df=2.081$, $NFI=0.935$, $TLI=0.956$, $CFI=0.965$, $RMSEA=0.050$

Discriminant validity was evaluated by comparing the AVE of constructs with the squared correlations of pairs of constructs (Table 4). The AVE values for all constructs were greater than the paired squared correlations, which indicates that each construct is empirically different from each other (Fornell & Larcker, 1981).

Table 4. Discriminant Validity - Construct Correlation Matrix

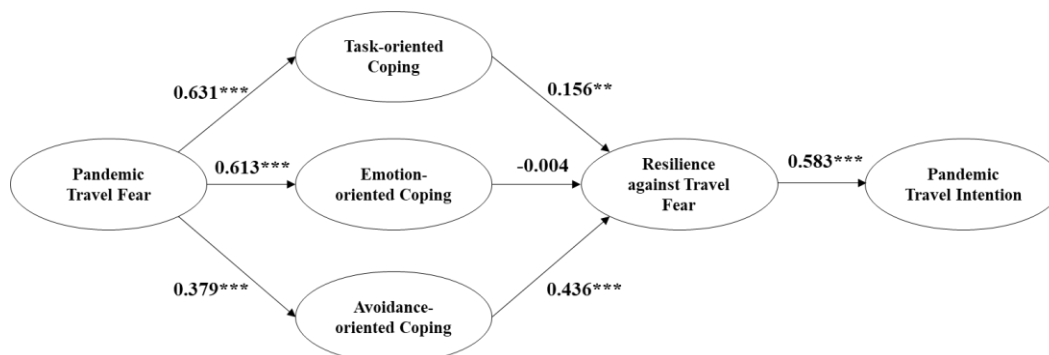
	PTF	TOC	EOC	AOC	RATF	PTI
PTF	(0.795)^a					
TOC	0.279 ^b	(0.627)				
EOC	0.270	0.350	(0.713)			
AOC	0.114	0.092	0.223	(0.686)		
RATF	0.012	0.085	0.080	0.178	(0.611)	
PTI	0.011	0.005	0.020	0.115	0.284	(0.773)

Note: a: AVE; b: squared correlations

Structural Model

To test the hypothesized causal relationships, a structural model was assessed. The goodness-of-fit statistics suggested that the model reasonably fit the data well ($\chi^2=589.639$, $p=0.000$, $\chi^2/df=2.919$, NFI=0.916, TLI=0.928, CFI=0.943, RMSEA=0.066). Figure 2 provides the results of the structural model.

The results of the SEM suggested positive relationships between pandemic travel fear and coping strategies. Pandemic travel fear positively influences task-oriented coping ($\beta=0.631$, $p<0.001$), which indicates that when pandemic travel fear goes up by 1 standard deviation, task-oriented coping increases by 0.631 standard deviations, as well as emotion-oriented coping ($\beta=0.613$, $p<0.001$) and avoidance-oriented coping ($\beta=0.379$, $p<0.001$) supporting hypothesis H1, H2, and H3. As proposed, task-oriented and avoidance-oriented coping positively influenced resilience against travel fear ($\beta=0.156$, $p<0.01$; $\beta=0.436$, $p<0.001$ respectively). However, the relationship between emotion-oriented coping and resilience against travel fear was not significant ($p=0.942$). The relationship between resilience against travel fear positively influenced pandemic travel intentions ($\beta=0.583$, $p<0.001$). In summary, all suggested relationships were significant except for the relationship between emotion-oriented coping and resilience against travel fear. Therefore, all hypotheses except H5 were supported.



Note: $\chi^2=589.639$, $p=0.000$, $\chi^2/df=2.919$, $NFI=0.916$, $TLI=0.928$, $CFI=0.943$, $RMSEA=0.066$; ** $p<0.01$, *** $p<0.001$

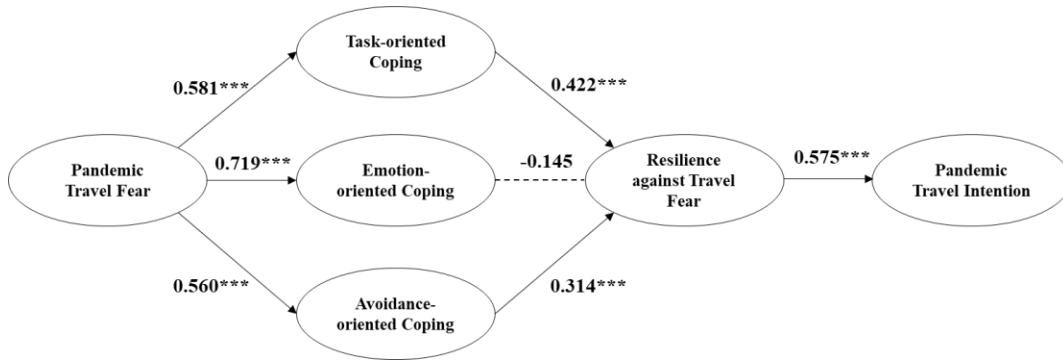
Figure 2. Results of the Structural Equation Modeling

Moderating Effect of Risk Tolerance

To test the group difference across high versus low risk tolerance groups, first, samples were grouped into high ($n=305$) and low ($n=134$) risk tolerance groups using a mid-point 4 of a 7-point Likert scale, and then multiple group analysis was conducted. The chi-square difference between the constrained ($\chi^2_{(427)}=980.580$) and unconstrained model ($\chi^2_{(404)}=934.072$) was compared, and the difference between the two groups was significant ($\Delta\chi^2_{(df=23)}=46.508$, $p<0.01$), which suggests that the high risk tolerance group was different than the low risk tolerance group.

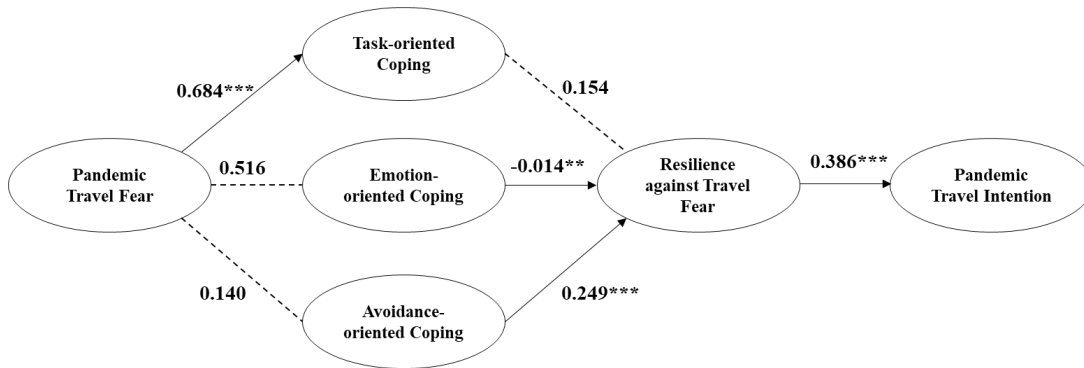
As illustrated in Figure 3, for the high-risk tolerance group, all relationships were significant except for the relationship between emotion-oriented coping and resilience. However, for the low-risk tolerance group, as illustrated in Figure 4, pandemic travel fear only had a significant positive influence on task-oriented coping, and emotion-oriented and avoidance-oriented coping significantly influenced resilience against travel fear. For both high and low risk tolerance groups, pandemic travel intention was positively influenced by resilience against travel.

In order to identify the differential effect of each relationship across two groups, the chi-square difference for each relationship was assessed separately. Table 5 provides the results of the comparisons of path coefficients. All relationships except a relationship between resilience against travel fear and pandemic travel intention were found to be significantly different across the two groups.



Note: *** $p < 0.001$

Figure 3. Results of the Moderating Effect – High Risk Tolerance



Note: ** $p < 0.01$, *** $p < 0.001$

Figure 4. Results of the Moderating Effect – Low Risk Tolerance

Table 5. Comparison of Parameter Estimates between High and Low Risk Tolerance Groups

Hypothesized Relationship	High RT	Low RT	$\Delta\chi^2$ ($df=1$)
Pandemic Travel Fear→Task-oriented Coping	0.581***	0.684***	6.851**
Pandemic Travel Fear→Emotion-oriented Coping	0.719***	0.516	8.281**
Pandemic Travel Fear→Avoidance-oriented Coping	0.560***	0.140	5.563*
Task-oriented Coping→Resilience Against Travel Fear	0.422***	0.154	7.579**
Emotion-oriented Coping→Resilience Against Travel Fear	-0.145	-0.014**	8.489**
Avoidance-oriented Coping→Resilience Against Travel Fear	0.314***	0.249***	8.767**
Resilience Against Travel Fear→Pandemic Travel Intentions	0.575***	0.386***	0.156

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Discussion & Conclusions

The COVID-19 pandemic has essentially brought decades of sustainable development progress to a halt, especially when it comes to travel-related fear because of health and well-being concerns. Travel has long been known as a potential derivative of the rapid increase in infectious disease spread. This known factor resulted in a considerable amount of travel fear among potential travelers. The research findings reaffirmed previous studies' results that tourists feared virus infection and made decisions based on their fear of traveling. As the restrictions were slowly lifted across the globe, travelers ventured out and had to cope with their personal fear of traveling and choose to travel in a time of uncertainty about the virus and its transmission.

This study was poised to understand the relationships between pandemic travel fear, coping strategies, resilience against travel fear, and pandemic travel intentions. The results indicated that the travelers responded favorably to pandemic travel by engaging in different coping strategies to manage and regulate stress. Coping with the fear of traveling also helped travelers to build resilience. This travel resilience behavior was different in different groups. For example, commuters became more resilient as compared to infrequent travelers (Wang et al., 2022). Resilience is positively influencing the travel intentions of the people who want to travel during the pandemic, and it is likely to continue until the pandemic completely subsides. Although there is no clear evidence of when the pandemic will end, it is clear that the intensity of the pandemic has decreased to an extent where the travel restrictions across the globe are minimal compared to the first two years of the pandemic from early 2020 to early 2022. The results also indicated that all relationships were significantly different between the high and low risk tolerance groups except for the relationship between resilience against travel fear and pandemic travel intentions. Importantly, the results suggested that coping strategies played a major role in travel intentions during the COVID-19 pandemic, which could be a major indicator for future research studies. The coping strategies of travelers play a vital role in their intentions to travel, but the ultimate goal of these strategies is to alter the behavior of the travelers. It is uncertain how long it will take to alter the behavior of all types of travelers and get back to the pre-pandemic levels, but what is clear is that there is gradual progress being made after travel restrictions were relaxed, and the travel industry can only hope for sustainable growth in tourism in the coming years. Future studies will have the scope of learning more about travelers altering behaviors and the speed at which this change takes place.

Discussion

The COVID-19 pandemic grew to an exponential level which impacted the tourism industry in an unprecedented manner. Research on the effects of COVID-19 on tourism is relatively recent, with a knowledge gap in tourists' psychology during the pandemic travel (Zheng et al., 2021). This study contributes to the body of knowledge by exploring fear, coping strategies, resilience against travel fear, travel intentions, and risk tolerance. The results indicate that pandemic travel fear positively influences the use of task-oriented coping, emotion-oriented coping, and avoidance-oriented coping. The results are consistent with previous studies that the COVID-19 pandemic results in travel fear that leads to protective behaviors (Zheng et al., 2021). People perceive threats by considering threat susceptibility, which is an individual's vulnerability towards the threat, and threat severity, which is the perceived seriousness of the threat (Floyd et al., 2006). For example, in the case of the COVID-19 pandemic, an individual may have a higher perceived threat susceptibility and severity if immunocompromised. A greater perception of threat susceptibility and severity will motivate an individual to engage in protective behaviors (Bhati et al., 2021). Protection motivation can also occur when an individual's perceived efficacy, or ability to control and respond to a threat, is greater. Another important factor to consider apart from protection is coping with a global emergency like the COVID-19 pandemic.

Task-oriented coping is generally expected to be more beneficial when situations are perceived as changeable, and emotion-oriented coping is generally more beneficial when situations are perceived as unchangeable (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984; Lazarus, 1966). Task-oriented coping is also associated with higher levels of perceived control (Endler et al., 2000) and self-efficacy (Jones et al., 2001). This study found that pandemic travel fear had the greatest influence on task-oriented coping, followed by emotion-oriented coping, and lastly, avoidance-oriented coping. This could suggest that people are viewing the COVID-19 pandemic as changeable and as a situation that they have some level of control over. Previous research also found that individuals with higher self-efficacy were more likely to use task-oriented coping over emotion or avoidance-oriented coping (Jin et al., 2016). Personality traits such as openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism, are also determinants of individual differences in coping strategy performance (Prentice et al., 2020).

This study found that task-oriented coping positively influenced resilience against travel fear, which is consistent with studies that found a positive correlation between task-oriented coping strategies and resilience (Morales-Rodríguez, 2021; Smith et al., 2016). In addition, this study also found that the relationship between emotion-oriented coping and resilience against travel fear

was insignificant. One study found that in the absence of productive emotional regulation efforts, emotion-oriented coping can result in an increased fixation on negative emotions (Parker & Endler, 1996). Lastly, the findings of this study suggest that avoidance-oriented coping positively influenced resilience against travel fear, which is consistent with a thought in risk management where “resilience can be achieved by finding ways to avoid risk” (Mulligan, 2014, p. 95). This might suggest that tourists prefer a coping strategy that is tangible or more directly perceivable, such as task-oriented coping and avoidance-oriented coping.

Previous studies found that the use of adaptive coping strategies, such as task and emotion-oriented coping, was associated with greater resilience (Brooks et al., 2020), while maladaptive coping strategies, such as avoidance-oriented coping, were associated with lower resilience (Vannini et al., 2021). Other research found that avoidance-oriented coping can be more adaptive than emotion-oriented coping and that task-oriented coping is more adaptive than both (Parker & Endler, 1992). The findings of this study suggest that avoidance-oriented coping was more effective in building resilience than emotion-oriented coping. Still, it was not confirmed that task-oriented coping was more effective in building resilience than avoidance-oriented coping. One potential explanation for why avoidance-oriented coping might be more adaptive is that avoidance-oriented coping can act as an initial coping strategy during the initial phase of the COVID-19 pandemic, where there is limited knowledge (Maiorano et al., 2020). Continued research will improve our understanding of COVID-19, and the stress levels associated with COVID-19 are gradually going down (Park et al., 2021). This combined with the growing knowledge of COVID-19 can result in higher confidence in task-oriented coping skills. Lastly, previous research suggested that a combination of task-oriented coping and avoidance-oriented coping can produce more beneficial results (Gaudreau & Blondin, 2004). Despite all these relationships, coping strategies are complex. It can be difficult to say whether a coping strategy is unarguably effective at facilitating beneficial health results because most coping strategies are not undoubtedly positive or negative (Somerfield & McCrae, 2000).

This study found that resilience against travel fear had a positive influence on pandemic travel intentions which is consistent with one study that found that resilience had a positive effect on travel intentions post-pandemic (Zheng et al., 2021) but conflicting with another study that found that resilience has a negative effect on perceived risk, which in turn has a negative effect on the intention to utilize hotel services (Peco-Torres et al., 2021). Fear of the COVID-19 pandemic also affects attitudes toward risk and travel anxiety, which consequently affects travel intention. However, no direct relationship was found between the fear of the COVID-19 pandemic and travel intentions (Luo & Lam, 2020). Increasing

resilience against travel fear in tourists is important for adapting to the “new” normal post-pandemic (Otoo & Kim, 2018), and it can help the tourism industry improve travel intentions during the pandemic, which is also important in the economic recovery of the industry.

Results for risk tolerance indicated a difference between the high and low-risk tolerance groups. This study found that pandemic travel fear had a greater positive influence on task-oriented coping in the low-risk tolerance group than in the high-risk tolerance group. One possible explanation for this could be that less risk-tolerant individuals may want to gather information and create a plan to manage the stressful situation and reduce risks associated with the COVID-19 pandemic. This study also found that avoidance-oriented coping had a greater positive influence on resilience against travel fear in the high-risk tolerance group than in the low-risk tolerance group. People with higher risk tolerance may be able to endure more risky situations and perceive a lower degree of threat (Liang & Xue, 2009) from the COVID-19 pandemic and, therefore, may utilize avoidance-oriented coping strategies, such as not taking the COVID-19 pandemic seriously, to build resilience against travel fear. Lastly, the findings of this study suggest that resilience against travel fear had a greater positive influence on pandemic travel intentions in the high-risk tolerance group than in the low-risk tolerance group. These results might be expected because individuals with higher resilience and risk tolerance experience less state anxiety, a type of anxiety induced by a situation (McCleskey & Gruda, 2021) such as the COVID-19 pandemic. With less anxiety, they may be more inclined to travel during the pandemic. The findings of this study help us understand the types of coping strategies people use in response to pandemic travel fear, how coping strategies affect resilience against travel fear and travel intentions during the pandemic, and how risk tolerance moderates these relationships.

Implications

The tourism industry has been greatly affected by the COVID-19 pandemic; therefore, it is important to adopt policies and strategies that can help tourism recover. Understanding tourists’ fear and how they cope can provide insight into how to accommodate their return during and after the pandemic. Tourists are experiencing travel fear as a result of COVID-19, so in response, tourism managers can ensure that social distancing guidelines are being strictly adhered to, ensure that facilities are being disinfected to reduce the spread of COVID-19 and follow the CDC guidelines for COVID-19. To minimize the risk of spreading COVID-19, it is necessary to implement policies on travel and tourism. Previous research has found that government policies can be an effective method to improve tourist numbers post-pandemic (Wan, 2013). Tourists utilize coping

strategies to respond to pandemic travel fear, which helps them manage the stress associated with COVID-19. To improve these protective behaviors, policies can be employed to decrease tourists' perceived threat and severity. For example, a tourism destination might communicate and advertise its destination as clean and safe so that tourists exploring travel options consider that when determining travel intentions. The relationship between coping strategies and resilience suggests that certain coping strategies can build tourists' resilience against travel fear. For example, to help build resilience through task-oriented coping in public, a destination might make information publicly available and easily accessible on the destination's website. Change in public policies is a reliable way of asserting that the destinations care about the tourists, and responsible policy changes are implemented for generating faith in the system at the travel destinations. Health and wellness have always been at the core of the tourism industry but the pandemic has highlighted the need of generating safe and reliable travel guidance policies.

Limitations & Future Study Suggestions

Although this study provides theoretical and practical implications regarding pandemic travel, it is not free of limitations. Due to the social distancing guidelines of the COVID-19 pandemic, this study used quantitative data obtained from an online survey. Future studies may employ a method that enables the use of qualitative data, such as in-person interviews, to further investigate who travels during and post-pandemic. In addition, the sample for this study was people who reside in the U.S., where the generalizability of the results may be restricted. Future comparative studies in pandemic travel across countries would deepen our understanding of international tourism during and after the pandemic.

References

- Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach. *Psychological Bulletin*, 103(3), 411–423.
- Australian Government Department of Finance. (2016). *Defining Risk Appetite and Tolerance*. [https://www.finance.gov.au/sites/default/files/2020-03/Comcover Information Sheet - Defining Risk Appetite and Tolerance.pdf](https://www.finance.gov.au/sites/default/files/2020-03/Comcover%20Information%20Sheet%20-%20Defining%20Risk%20Appetite%20and%20Tolerance.pdf)
- Avero, P., Corace, K. M., Endler, N. S., & Calvo, M. G. (2003). Coping styles and threat processing. *Personality and Individual Differences*, 35(4), 843–861. [https://doi.org/10.1016/S0191-8869\(02\)00287-8](https://doi.org/10.1016/S0191-8869(02)00287-8)
- Bagozzi, R. P., & Yi, Y. (1988). On the Evaluation of Structural Equation Models. *Journal of the Academy of Marketing Science*, 16, 74–94. <https://doi.org/http://dx.doi.org/10.1007/BF02723327>
- Baláž, V., & Williams, A. M. (2011). Risk attitudes and migration experience. *Journal of Risk Research*, 14(5), 583–596. <https://doi.org/10.1080/13669877.2010.547256>
- Bali, S., Stewart, K. A., & Pate, M. A. (2016). Long shadow of fear in an epidemic: Fearonomic effects of Ebola on the private sector in Nigeria. *BMJ Global Health*, 1(3), 1–14. <https://doi.org/10.1136/bmjgh-2016-000111>
- Bhati, A. S., Mohammadi, Z., Agarwal, M., Kamble, Z., & Donough-Tan, G. (2021). Motivating or manipulating: the influence of health-protective behaviour and media engagement on post-COVID-19 travel. *Current Issues in Tourism*, 24(15), 2088–2092. <https://doi.org/10.1080/13683500.2020.1819970>
- Boksberger, P. E., Bieger, T., & Laesser, C. (2007). Multidimensional analysis of perceived risk in commercial air travel. *Journal of Air Transport Management*, 13(2), 90–96. <https://doi.org/10.1016/j.jairtraman.2006.10.003>
- Bonanno, G. A., Ho, S. M. Y., Chan, J. C. K., Kwong, R. S. Y., Cheung, C. K. Y., Wong, C. P. Y., & Wong, V. C. W. (2008). Psychological Resilience and Dysfunction Among Hospitalized Survivors of the SARS Epidemic in Hong Kong: A Latent Class Approach. *Health Psychology*, 27(5), 659–667. <https://doi.org/10.1037/0278-6133.27.5.659>
- Brooks, S., Amlôt, R., Rubin, G. J., & Greenberg, N. (2020). Psychological resilience and post-traumatic growth in disaster-exposed organisations: overview of the literature. *BMJ Mil Health*, 166(1), 52–56. <https://doi.org/10.1136/jramc-2017-000876>
- Byrnes, J. P., Miller, D. C., & Schafer, W. D. (1999). Gender differences in risk taking: A meta-analysis. *Psychological Bulletin*, 125(3), 367–383. <https://doi.org/10.1037/0033-2909.125.3.367>
- Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience

- to personality, coping, and psychiatric symptoms in young adults. *Behaviour Research and Therapy*, 44(4), 585–599.
<https://doi.org/10.1016/j.brat.2005.05.001>
- Chang, S. Y. (2009). Australians' Holiday decisions in china: A study combining novelty-Seeking and Risk-perception behaviors. *Journal of China Tourism Research*, 5(4), 364–387. <https://doi.org/10.1080/19388160903382533>
- Choi, Y., Moon, E., Park, J. M., Lee, B. D., Lee, Y. M., Jeong, H. J., & Chung, Y. I. (2017). Psychometric properties of the coping inventory for stressful situations in Korean adults. *Psychiatry Investigation*, 14(4), 427–433.
<https://doi.org/10.4306/pi.2017.14.4.427>
- Dalrymple, K. E., Young, R., & Tully, M. (2016). “Facts, Not Fear”: Negotiating Uncertainty on Social Media During the 2014 Ebola Crisis. *Science Communication*, 38(4), 442–467. <https://doi.org/10.1177/1075547016655546>
- de Hoog, N., Stroebe, W., & de Wit, J. B. F. (2008). The processing of fear-arousing communications: How biased processing leads to persuasion. *Social Influence*, 3(2), 84–113. <https://doi.org/10.1080/15534510802185836>
- Dolnicar, S. (2005). Understanding barriers to leisure travel: Tourist fears as a marketing basis. *Journal of Vacation Marketing*, 11(3), 197–208.
<https://doi.org/10.1177/1356766705055706>
- Duhachek, A., & Iacobucci, D. (2005). Consumer personality and coping: Testing rival theories of process. *Journal of Consumer Psychology*, 15(1), 52–63.
https://doi.org/10.1207/s15327663jcp1501_8
- Eichelberger, L. (2007). SARS and New York's Chinatown: The politics of risk and blame during an epidemic of fear. *Social Science and Medicine*, 65(6), 1284–1295. <https://doi.org/10.1016/j.socscimed.2007.04.022>
- Elizabeth, B., Ross, H., King, C. A., Baker, P. G., Hegney, D., McLachlan, K., & Rogers-Clark, C. (2010). The Components of Resilience-Perceptions of an Australian Rural Community. *Journal of Community Psychology*, 38(5), 975–991. <https://doi.org/10.1002/jcop>
- Endler, N. S., Macrodimitris, S. D., & Kocovski, N. L. (2000). Controllability in cognitive and interpersonal tasks: Is control good for you? *Personality and Individual Differences*, 29(5), 951–962. [https://doi.org/10.1016/s0191-8869\(99\)00246-9](https://doi.org/10.1016/s0191-8869(99)00246-9)
- Endler, N. S., & Parker, J. D. A. (1990). CISS Coping Inventory for Stressful Situations. *Multi-Health Systems Incorporated*.
- Endler, N. S., & Parker, J. D. A. (1994). Assessment of Multidimensional Coping: Task, Emotion, and Avoidance Strategies. *Psychological Assessment*, 6(1), 50–60. <https://doi.org/10.1037/1040-3590.6.1.50>
- Floyd, D. L., Prentice-Dunn, S., & Rogers, R. W. (2006). A meta-analysis of research on protection motivation theory. *Journal of Applied Social Psychology*, 30(2), 407–429. <https://doi.org/10.1111/j.1559->

1816.2000.tb02323.x

- Folkman, S., & Lazarus, R. S. (1980). An Analysis of Coping in a Middle-Aged Community Sample. *Journal of Health and Social Behavior*, 21(3), 219–239. <https://doi.org/10.2307/2136617>
- Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, 48(1), 150–170. <https://doi.org/10.1037/0022-3514.48.1.150>
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39. <https://doi.org/10.2307/3151312>
- Fung, I. C. H., Tse, Z. T. H., Cheung, C. N., Miu, A. S., & Fu, K. W. (2014). Ebola and the social media. *The Lancet*, 384(9961), 2207. [https://doi.org/10.1016/S0140-6736\(14\)62418-1](https://doi.org/10.1016/S0140-6736(14)62418-1)
- Gaudreau, P., & Blondin, J.-P. (2004). Differential Associations of Dispositional Optimism and Pessimism With Coping, Goal Attainment, and Emotional Adjustment During Sport Competition. *International Journal of Stress Management*, 11(3), 245–269. <https://doi.org/10.1037/1072-5245.11.3.245>
- Gloria, C. T., & Steinhardt, M. A. (2014). Relationships Among Positive Emotions, Coping, Resilience and Mental Health. *Stress and Health*, 32(2), 145–156. <https://doi.org/10.1002/smi.2589>
- Godinić, D. & Obrenovic, B. (2020). Effects of Economic Uncertainty on Mental Health in the COVID-19 Pandemic Context: Social Identity Disturbance, Job Uncertainty and Psychological Well-Being Model. *International Journal of Innovation and Economic Development*. 6(1):61-74. <http://dx.doi.org/10.18775/ijied.1849-7551-7020.2015.61.2005>
- Halek, M., & Eisenhauer, J. G. (2013). Demography of Risk Aversion. *The Journal of Risk and Insurance*, 68(1), 1–24. <https://doi.org/10.2307/2678130>
- Hollingsworth, T. D., Ferguson, N. M., & Anderson, R. M. (2006). Will travel restrictions control the international spread of pandemic influenza? *Nature Medicine*, 12(5), 497–499. <https://doi.org/10.1038/nm0506-497>
- Jia, P., & Yang, S. (2020). Are we ready for a new era of high-impact and high-frequency epidemics? *Nature*, 580(7803), 321–321. <https://doi.org/10.1038/d41586-020-01079-0>
- Jin, X., Wu, L., Becken, S., & Ding, P. Y. (2016). How do Worry, Self-efficacy, and Coping Interact? Examining Chinese tourists to Australia. *Journal of China Tourism Research*, 12(3–4), 374–393. <https://doi.org/10.1080/19388160.2016.1251868>
- Jones, P. S., Lee, J. W., Phillips, L. R., Zhang, X. E., & Jaceldo, K. B. (2001). An adaptation of Brislin’s translation model for cross-cultural research. *Nursing Research*, 50(5), 300–304. <https://doi.org/10.1097/00006199-200109000->

00008

- Lazarus, R., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. Springer.
- Lazarus, R. S. (1966). *Psychological Stress And The Coping Process*. McGraw-Hill.
- Lee, C. K., Song, H. J., Bendle, L. J., Kim, M. J., & Han, H. (2012). The impact of non-pharmaceutical interventions for 2009 H1N1 influenza on travel intentions: A model of goal-directed behavior. *Tourism Management*, 33(1), 89–99. <https://doi.org/10.1016/j.tourman.2011.02.006>
- Leipold, B., Munz, M., & Michéle-Malkowsky, A. (2019). Coping and Resilience in the Transition to Adulthood. *Emerging Adulthood*, 7(1), 12–20. <https://doi.org/10.1177/2167696817752950>
- Liang, H., & Xue, Y. (2009). Avoidance of Information Technology Threats: A Theoretical Perspective. *MIS Quarterly*, 33(1), 71–90. <https://doi.org/10.2307/20650279>
- Liu, Y., Shi, H., Li, Y., & Amin, A. (2021). Factors influencing Chinese residents' post-pandemic outbound travel intentions: an extended theory of planned behavior model based on the perception of COVID-19. *Tourism Review*, 76(4), 871–891. <https://doi.org/10.1108/TR-09-2020-0458>
- Long, B. C. (1990). Relation Between Coping Strategies, Sex-Typed Traits, and Environmental Characteristics: A Comparison of Male and Female Managers. *Journal of Counseling Psychology*, 37(2), 185–194. <https://doi.org/10.1037/0022-0167.37.2.185>
- Luo, J. M., & Lam, C. F. (2020). Travel Anxiety, Risk Attitude and Travel Intentions towards “Travel Bubble” Destinations in Hong Kong: Effect of the Fear of COVID-19. *International Journal of Environmental Research and Public Health*, 17(21), 1–11. <https://doi.org/10.3390/ijerph17217859>
- Maiorano, T., Vagni, M., Giostra, V., & Pajardi, D. (2020). COVID-19: Risk factors and protective role of resilience and coping strategies for emergency stress and secondary trauma in medical staff and emergency workers—an online-based inquiry. *Sustainability (Switzerland)*, 12(21), 1–18. <https://doi.org/10.3390/su12219004>
- Mariani, R., Renzi, A., Di Trani, M., Trabucchi, G., Danskin, K., & Tambelli, R. (2020). The Impact of Coping Strategies and Perceived Family Support on Depressive and Anxious Symptomatology During the Coronavirus Pandemic (COVID-19) Lockdown. *Frontiers in Psychiatry*, 11, 1–9. <https://doi.org/10.3389/fpsy.2020.587724>
- Martínez, J. P., Méndez, I., Ruiz-Esteban, C., Fernández-Sogorb, A., & García-Fernández, J. M. (2020). Profiles of Burnout, Coping Strategies and Depressive Symptomatology. *Frontiers in Psychology*, 11, 1–7. <https://doi.org/10.3389/fpsyg.2020.00591>
- Mashrur, S. M., Wang, K., Loa, P., Hossain, S., & Nurul Habib, K. (2022).

- Application of Protection Motivation Theory to Quantify the Impact of Pandemic Fear on Anticipated Postpandemic Transit Usage. *Transportation Research Record: Journal of the Transportation Research Board*, 036119812110654. <https://doi.org/10.1177/03611981211065439>
- McCleskey, J., & Gruda, D. (2021). Risk-taking, resilience, and state anxiety during the COVID-19 pandemic: A coming of (old) age story. *Personality and Individual Differences*, 170, 110485. <https://doi.org/10.1016/j.paid.2020.110485>
- Morales-Rodríguez, F. M. (2021). Fear, stress, resilience and coping strategies during covid-19 in Spanish university students. *Sustainability (Switzerland)*, 13(11). <https://doi.org/10.3390/su13115824>
- Mulligan, M. (2014). Risk and Resilience. In *An Introduction to Sustainability Environmental, Social and Personal Perspectives*. Routledge.
- O'Connor, R. C., Wetherall, K., Cleare, S., McClelland, H., Melson, A. J., Niedzwiedz, C. L., O'Carroll, R. E., O'Connor, D. B., Platt, S., Scowcroft, E., Watson, B., Zortea, T., Ferguson, E., & Robb, K. A. (2021). Mental health and well-being during the COVID-19 pandemic: Longitudinal analyses of adults in the UK COVID-19 Mental Health & Wellbeing study. *British Journal of Psychiatry*, 218(6), 326–333. <https://doi.org/10.1192/bjp.2020.212>
- Otoo, F. E., & Kim, S. (Sam). (2018). Is there stability underneath health risk resilience in Hong Kong inbound tourism? *Asia Pacific Journal of Tourism Research*, 23(4), 344–358. <https://doi.org/10.1080/10941665.2018.1433700>
- Panzer-Krause, S. (2022). Rural Tourism in and after the COVID-19 Era: “Revenge Travel” or Chance for a Degrowth-Oriented Restart? Cases from Ireland and Germany. *Tourism and Hospitality*, 3(2), 399–415. <https://doi.org/10.3390/tourhosp3020026>
- Park, C. L., Finkelstein-Fox, L., Russell, B. S., Fendrich, M., Hutchison, M., & Becker, J. (2021). Psychological Resilience Early in the COVID-19 Pandemic: Stressors, Resources, and Coping Strategies in a National Sample of Americans. *American Psychologist*, 76(5), 715–728. <https://doi.org/10.1037/amp0000813>
- Parker, J. D. A., & Endler, N. S. (1992). Coping with coping assessment: A critical review. *European Journal of Personality*, 6(5), 321–344. <https://doi.org/10.1002/per.2410060502>
- Parker, J. D. A., & Endler, N. S. (1996). Coping and defense: A historical overview. In *Handbook of coping: Theory, research, applications* (pp. 3–23). John Wiley & Sons.
- Peco-Torres, F., Polo-Peña, A. I., & Frías-Jamilena, D. M. (2021). The effect of COVID-19 on tourists' intention to resume hotel consumption: The role of resilience. *International Journal of Hospitality Management*, 99.

- <https://doi.org/10.1016/j.ijhm.2021.103075>
- Prentice, C., Zeidan, S., & Wang, X. (2020). Personality, trait EI and coping with COVID 19 measures. *International Journal of Disaster Risk Reduction*, 51, 101789. <https://doi.org/10.1016/j.ijdrr.2020.101789>
- Reisinger, Y., & Mavondo, F. (2005). Travel anxiety and intentions to travel internationally: Implications of travel risk perception. *Journal of Travel Research*, 43(3), 212–225. <https://doi.org/10.1177/0047287504272017>
- Shevlin, M., Miles, J. N. V., Davies, M. N. O., & Walker, S. (2000). Coefficient alpha: A useful indicator of reliability? *Personality and Individual Differences*, 28(2), 229–237. [https://doi.org/10.1016/S0191-8869\(99\)00093-8](https://doi.org/10.1016/S0191-8869(99)00093-8)
- Shimazu, A., & Schaufeli, W. B. (2007). Does distraction facilitate problem-focused coping with job stress? A 1 year longitudinal study. *Journal of Behavioral Medicine*, 30(5), 423–434. <https://doi.org/10.1007/s10865-007-9109-4>
- Silk, J. S., Vanderbilt-Adriance, E., Shaw, D. S., Forbes, E. E., Whalen, D. J., Ryan, N. D., & Dahl, R. E. (2007). Resilience among children and adolescents at risk for depression: Mediation and moderation across social and neurobiological contexts. *Development and Psychopathology*, 19(3), 841–865. <https://doi.org/10.1017/S0954579407000417>
- Singh, K., & Yu, X. (2010). Psychometric Evaluation of the Connor-Davidson Resilience Scale (CD-RISC) in a Sample of Indian Students. *Journal of Psychology*, 1(1), 23–30. <https://doi.org/10.1080/09764224.2010.11885442>
- Smith, M. M., Saklofske, D. H., Keefer, K. V., & Tremblay, P. F. (2016). Coping strategies and psychological outcomes: The moderating effects of personal resiliency. *Journal of Psychology: Interdisciplinary and Applied*, 150(3), 318–332. <https://doi.org/10.1080/00223980.2015.1036828>
- Somerfield, M. R., & McCrae, R. R. (2000). Stress and coping research: Methodological challenges, theoretical advances, and clinical applications. *American Psychologist*, 55(6), 620–625. <https://doi.org/10.1037/0003-066X.55.6.620>
- Stratta, P., Capanna, C., Dell’Osso, L., Carmassi, C., Patriarca, S., Di Emidio, G., Riccardi, I., Collazzoni, A., & Rossi, A. (2015). Resilience and coping in trauma spectrum symptoms prediction: A structural equation modeling approach. *Personality and Individual Differences*, 77, 55–61. <https://doi.org/10.1016/j.paid.2014.12.035>
- Strong, P. (2008). Epidemic psychology : a model. *Society of Health and Illness*, 12(3), 249–259. <https://doi.org/10.1111/1467-9566.ep11347150>
- Tavor, T., & Teitler-Regev, S. (2015). Risk Tolerance in the Case of Tourism. *International Journal of Research in Tourism and Hospitality (IJRTH)*, 1(2), 16–25. www.arcjournals.org

- Teitler-Regev, S., & Tavor, T. (2018). Decision-making in daily life and in tourism. *Israel Affairs*, 24(3), 467–481.
<https://doi.org/10.1080/13537121.2018.1454003>
- UNWTO. (2021). *UNWTO Tourist Arrivals down 87% in January 2021 as UNWTO Calls for Stronger Coordination to Restart Tourism*.
<https://www.unwto.org/news/tourist-arrivals-down-87-in-january-2021-as-unwto-calls-for-stronger-coordination-to-restart-tourism>
- van Dalen, H. P., & Henkens, K. (2012). Explaining low international labour mobility: the role of networks, personality, and perceived labour market opportunities. *Population, Space and Place*, 18(1), 31–44.
<https://doi.org/10.1002/psp.642>
- Vannini, P., Gagliardi, G. P., Kuppe, M., Dossett, M. L., Donovan, N. J., Gatchel, J. R., Quiroz, Y. T., Premnath, P. Y., Amariglio, R., Sperling, R. A., & Marshall, G. A. (2021). Stress, resilience, and coping strategies in a sample of community-dwelling older adults during COVID-19. *Journal of Psychiatric Research*, 138, 176–185.
<https://doi.org/10.1016/j.jpsychires.2021.03.050>
- Wan, Y. K. P. (2013). A comparison of the governance of tourism planning in the two Special Administrative Regions (SARs) of China - Hong Kong and Macao. *Tourism Management*, 36, 164–177.
<https://doi.org/10.1016/j.tourman.2012.12.005>
- Wang, J., Huang, J., Yang, H., & Levinson, D. (2022). Resilience and recovery of public transport use during COVID-19. *npj Urban Sustainability*, 2(1), 1-9.
- Williams, A. M., & Baláž, V. (2013). Tourism, risk tolerance and competences: Travel organization and tourism hazards. *Tourism Management*, 35, 209–221. <https://doi.org/10.1016/j.tourman.2012.07.006>
- Wu, Q., Slesnick, N., & Zhang, J. (2018). Understanding the role of emotion-oriented coping in women’s motivation for change. *Journal of Substance Abuse Treatment*, 86, 1–8. <https://doi.org/10.1016/j.jsat.2017.12.006>
- Xie, C., Zhang, J., & (Sam) Huang, S. (2022). Effect of Risk Message Framing on Tourists’ Travel Intention: Roles of Resilience and Impulsivity. *Journal of Travel Research*, 004728752210952.
<https://doi.org/10.1177/00472875221095212>
- Yeung, D. Y. L., & Fung, H. H. (2007). Age differences in coping and emotional responses toward SARS: A longitudinal study of Hong Kong Chinese. *Aging and Mental Health*, 11(5), 579–587.
<https://doi.org/10.1080/13607860601086355>
- Yıldırım, M., & Solmaz, F. (2022). COVID-19 burnout, COVID-19 stress and resilience: Initial psychometric properties of COVID-19 Burnout Scale. *Death Studies*, 46(3), 524–532.
<https://doi.org/10.1080/07481187.2020.1818885>

- Zenker, S., & Kock, F. (2020). The coronavirus pandemic – A critical discussion of a tourism research agenda. *Tourism Management*, *81*, 104164.
<https://doi.org/10.1016/j.tourman.2020.104164>
- Zheng, D., Luo, Q., & Ritchie, B. W. (2021). Afraid to travel after COVID-19? Self-protection, coping and resilience against pandemic ‘travel fear.’ *Tourism Management*, *83*, 104261.
<https://doi.org/10.1016/j.tourman.2020.104261>

Appendix. Measurement Items

Pandemic Travel Fear (Zheng et al. 2021)

- I feel nervous to travel during the COVID-19 pandemic.
- I feel anxious to travel during the COVID-19 pandemic.
- I feel afraid to travel during the COVID-19 pandemic.

Task-oriented Coping (Zheng et al. 2021, Endler & Parker 1990)

- I gather information about the COVID-19 pandemic to better understand the situation.
- I think about steps that I can take to prevent the spread of COVID-19.
- I take an action to prevent the spread of COVID-19.

Emotion-oriented Coping (Zheng et al. 2021, Endler & Parker 1990)

- I am trying to take care of my mental health during the COVID-19 pandemic.
- I am trying to improve my mood during the COVID-19 pandemic.
- I am trying to reduce negative thoughts during the COVID-19 pandemic.

Avoidance-oriented Coping (Zheng et al. 2021, Endler & Parker 1990)

- I try to avoid facing problems associated with the COVID-19 pandemic.
- I try not to think about anticipated problems associated with the COVID-19 pandemic.
- I try to put problems associated with the COVID-19 pandemic behind.

Resilience against Travel Fear (Zheng et al. 2021)

- I am confident that I can easily adapt to changes in travel.
- I am able to overcome whatever occurs during travel.
- I am able to handle unpleasant feelings associated with travel.
- I can easily overcome stressful travel situations.
- I am confident in dealing with difficult travel situations.

Pandemic Travel Intentions (Liu et al. 2021)

- I would like to travel during the COVID-19 pandemic.
- I intend to travel during the COVID-19 pandemic.
- I plan to travel during the COVID-19 pandemic.
- I will invest time and resources to travel during the COVID-19 pandemic.
- Given the opportunity, I would travel during the COVID-19 pandemic.

Risk Tolerance (Liu et al. 2021)

- I enjoy taking risks.
- Taking risks doesn't bother me if the gains involved are high.
- People have told me that I seem to enjoy taking chances.
- In general, I am willing to take risks.