Original Research

SAGE Open
April-June 2024: 1–17

DOI: 10.1177/21582440241249528
journals.sagepub.com/home/sgo
Sage

Exploring the Spanish Tourists' Intentions to Travel to Zones That Have a Low-Impact of COVID-19 by Taking into Account Their Cognitive and Affective Risk Perceptions About the Pandemic

Begoña Álvarez-García[1], Ariadna Monje-Amor[1], and José Pablo Abeal Vázquez[1]

Abstract

In the current context in which tourism is beginning to recover, this study examines the worldwide trend of tourists traveling to destinations with a low impact of the COVID-19 pandemic in a country such as Spain, which is highly dependent on tourism activity. By employing the SEM methodology and an extended theory of planned behavior (TPB), which includes the cognitive and affective dimensions of perceived risk about the pandemic and past behavior, the results show the positive effect that past behavior and the core variables of the TPB have on the behavioral intentions of Spanish tourists, despite the negative impact that their cognitive risk perception has on these core variables. The study's findings have useful practical implications for tourism authorities and stakeholders in Spain and other countries that are also highly dependent on tourism.

Keywords

COVID-19 pandemic, tourist industry, behavioral intentions, TPB, SEM methodology

Introduction

The coronavirus disease-19 (COVID-19) pandemic has shaken the world in a totally devastating way (Duarte Alonso et al., 2020). One of the most affected sectors globally has been the tourism sector, since it essentially depends on human mobility (Hoque et al., 2020). The UNWTO has made estimations about the potential impact of the COVID-19 pandemic on international tourism, indicating a 72% decline during the year 2020 and 68% during the year 2021 (UNWTO, 2022). Nonetheless, tourism has timidly begun to recover across the world, and two trends are observed (Arbulú et al., 2021; UNWTO, 2020): (1) domestic tourism is recovering faster than foreign tourism, and (2) there is a change in the destinations selected by travelers who primarily choose destinations that have a low impact of COVID-19 (henceforth, LI-COVID-19), that is, destinations where the 14-day cumulative incidence of COVID-19 per 100,000 inhabitants is low (less than 100). If these trends continue in the future months, they will have significant positive economic implications for the areas selected by travelers, while they may jeopardize the tourism businesses of areas that, while being very attractive, have a higher incidence of the disease. This is why studying tourists' intentions to travel to LI-COVID-19 zones in the near future and the effect that the risk perception about the coronavirus may have is vital in the current context, especially in countries highly dependent on tourism because they are the ones where the direct and indirect impact on the sector has been the greatest.

[1]University of A Coruña, Spain

Corresponding Author:
José Pablo Abeal Vázquez, Department of Business, University of A Coruña, Campus de Elviña s/n, A Coruna 15071, Spain.
Email: j.abeal@udc.es

It is worth noting that in the last 3 years research has progressed in this field, although further work is still needed. Several researchers have investigated how the COVID-19 pandemic could affect the tourists' intentions to travel in the future (e.g., Bhati et al., 2021; Poulaki & Nikas, 2021; Xu et al., 2021). However, some of these studies refer to countries that receive a moderate number of tourists per year (less than 15 million), so the impact of the pandemic on their tourism industry has not been so severe (e.g., Perić et al., 2021; Terziyska & Dogramadjieva, 2021; Wachyuni & Kusumaningrum, 2020). Among the studies that focus on countries receiving more than 30 million arrivals per year, some do not take into account the perceived risk of COVID-19 (e.g., Boto-García & Leoni, 2021; Kourgiantakis et al., 2021; J. Li et al., 2020), and very few of them refer to zones or areas that may be differentially affected by the pandemic and therefore do not allow distinctions to be made between destinations (e.g., Bae & Chang, 2020; Luo & Lam, 2020). Therefore, the first gap detected in the literature is that research that (1) refers to types of tourist destinations that depend on the incidence of the pandemic and (2) focuses on tourist-intensive countries is very scarce, despite its practical relevance because the countries receiving the most tourists are the ones that need to make the strongest bid for recovery and need more support from researchers.

With regard to perceived risk, it may be conceptualized according to two main dimensions: cognitive risk perception and affective risk perception. The cognitive risk perception refers to what extent individuals believe they are susceptible to a specific risk, while the affective risk perception refers to the worry they feel about this risk (Loewenstein et al., 2001). The theory says that both dimensions are fundamental for an explanation of people's reactions to the possible hazards linked to their choices (Bae & Chang, 2020). Therefore, both dimensions should be treated as inseparable aspects of the same phenomenon, even if they are different (Slovic & Peters, 2006). In fact, Loewenstein et al. (2001) show that emotional reactions to risky situations often diverge from cognitive assessments. However, two more important gaps are observed in the literature. First, few studies take into account both dimensions of risk; in fact, cognitive risk perception is far more frequent in prior research than affective risk perception (e.g., Loewenstein et al., 2001; Sjöberg, 1998; Slovic & Peters, 2006). This scarcity is even more alarming in the field of tourism. Second, very few investigations pay attention to any possible relationship between these two dimensions (e.g., Altarawneh et al., 2018), and none in the tourism literature.

Despite the above, efforts have been made by the scholars to try to address some of these gaps. For example, Meng et al. (2021) analyze the Chinese tourists' intentions to travel during the pandemic by considering their risk perception and risk knowledge. Although these authors include the risk of COVID-19, they do not distinguish between cognitive and affective risk perceptions and analyze the tourists' intentions to travel without referring to specific zones or destinations. In the same vein, Sánchez-Cañizares et al. (2020) study the impact of the perceived risk of COVID-19 on Spanish tourists' intentions to travel during the pandemic. Like Meng et al. (2021), those authors do not take account of the cognitive and affective dimensions of perceived risk and do not distinguish between destinations affected differently by COVID-19. In contrast, Luo and Lam (2020) focus on specific destinations, namely on "travel bubble" destinations from Hong Kong. Travel bubbles (also known as coronavirus corridors) are partnerships between some destinations or countries that allow citizens from those destinations to travel freely through them. Those scholars study the relationship among the following variables: fear of COVID-19, travel anxiety, risk attitude, and tourists' intentions to travel through "travel bubbles." However, while these authors include risk in their research, they also fail to distinguish between cognitive and affective risk perception. The only authors who, to the best of our knowledge, refer to specific destinations and take into account the risk of COVID-19 by differentiating cognitive and affective risk perception are Bae and Chang (2020). They investigate the effect that the risk perception about COVID-19 has on the intentions of South Koreans to engage in "untact tourism" (this means tourism to destinations where direct contact with other people is minimized). Although these scholars are the only ones in the tourism literature to consider cognitive and affective risk perception, they did not investigate the possible relationships between these two dimensions of risk, and they focused on a country that does not have a high dependence on tourism.

In view of the above, this study will address all of the above gaps in the following manner. First, it focuses on Spain, which is a very touristic country and a paradigmatic case for four main reasons: (i) Spain is the second most visited country in the world by international tourists (UNWTO, 2019); (ii) Spain relies very heavily on tourism, since it is the country within the OECD with the highest contribution of tourism to its GDP (OECD, 2020); (iii) the incidence of coronavirus in Spain has been especially high (Department of Health of the Government of Spain, 2020); and (iv) Spain is the EU country whose GDP decreased the most in the second quarter of 2020, largely because of its dependence on the tourist sector. Second, this study examines the Spanish tourists' behavioral intention to travel to LI-COVID-19 zones, taking into account their perceived risk about the COVID-19 pandemic and their past behavior as tourists.

Research includes the two dimensions of risk perception (affective and cognitive), which deserves further analysis because the majority of investigators focus only on one dimension. Third, the paper considers the possible relationship between these two dimensions, which, to the best of the authors' knowledge, has never been studied in the field of tourism research.

To this end, the theory of planned behavior (TPB) is applied (Ajzen, 1985, 1991) The TPB focuses on the influences that three variables (namely attitude, subjective norm, and perceived behavioral control) have on individuals' behavioral intentions (Ajzen, 1985, 1991). In addition to those variables, this research integrates other variables (considered important at the current juncture): (1) cognitive risk perception about the COVID-19; (2) affective risk perception about the COVID-19; and (3) past behavior. The TPB is the theoretical framework chosen to conduct this research for several reasons. First, the TPB is one of the most widely employed theories to explain human behavior and, as such, a large number of papers and reviews have shown its ability to explain individuals' intentions and behaviors in many different contexts (e.g., Juan et al., 2022; L. Li & Li, 2021; Ukenna & Ayodele, 2019; Yadav & Pathak, 2017). Second, TPB has been extensively and successfully used to conduct investigations in the realm of tourism. Thus, in a systematic review conducted by Ulker-Demirel and Ciftci (2020) on its application in the tourism, leisure, and hospitality management research, these authors found that since 1991, 175 high-impact papers have been published using TPB as the sole theoretical framework and 46 articles using TPB in combination with other theories. TPB has attracted so much interest in the tourism field that in Yuzhanin and Fisher (2016) analyzed its efficacy for predicting intentions to choose a travel destination. These authors reviewed 15 research studies and concluded that not all predictors of the model necessarily contribute to explaining the behavioral intentions of travelers and that extensions of the model may help to suit different settings. Since that review, more than 30 high-impact articles have been published using the TPB for predicting travelers' intentions for choosing a travel destination. Almost half of them refer to the COVID-19 pandemic, although they explore the topic from a wide variety of approaches, many of which do not take into account perceived risk. For example, Girish et al. (2023) examine South Koreans' intentions to visit travel bubble destinations by integrating the protective motivation theory and the TPB. These authors analyze how some key dimensions affecting protective motivation (such as, perceived severity, perceived vulnerability, response efficacy, self-efficacy, and quarantine) influence, in turn, behavior. Among the studies that do include perceived risk, a variety of approaches are seen. For example, Liu et al. (2021) considers the risk tolerance variable and Han et al. (2020) and Wut et al. (2022) include the psychological risk variable. Only Bae and Chang (2020) take into account the affective and cognitive dimensions of risk (although without analyzing the possible relationships that may exist between them), thus reinforcing the importance of this study.

In view of the above, this paper is structured as follows. Section "Literature Review and Research Hypotheses" examines the links among the variables being studied and the proposed model. Material and methods are presented in Section "Material and Methods." The main results are presented in Section "Results." Section "Discussion and Findings" includes the discussion and findings. Finally, the theoretical contributions, practical implications, and limitations are presented in Section "Theoretical Contributions, Practical Implications, and Limitations."

Literature Review and Research Hypotheses

Various theories in social science have been used to explore the mechanisms of human behavior in decision-making processes. Among them, the TPB stands out (Ajzen, 1991; X. Huang et al., 2020). The TPB is an extension of the precedent theory of reasoned action (TRA) proposed in Fishbein and Ajzen (1975). The TRA suggests that an individual's intention can be predicted from two basic determinants: attitude and subjective norm (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). Attitude is a personal factor that indicates an individual's overall evaluation of their behavior. Subjective norm reflects the social influence, this is the perceived social pressure from others to perform the behavior (Ajzen, 1991; X. Huang et al., 2020). The TRA is an accurate and widely used model to predict individuals' decisions and behaviors, although it restricts itself to the prediction of volitional behaviors (Sánchez-Cañizares et al., 2020). In order to broaden the applicability of the TRA, Ajzen developed, several years later, the TPB (Ajzen, 1985, 1991). The TPB is an extension of the TRA that includes planned behavioral control as an additional predictor of behavioral intentions. Planned behavioral control refers to a person's perceived capacity to perform a behavior (Ajzen, 1991). Therefore, attitude, subjective norm, and perceived behavioral control are the determinants of behavioral intention in the TPB.

Based on the effectiveness that the TPB has shown in the investigations conducted in the tourism sector, it is going to be the conceptual basis on which this research will be developed, although two new variables will be added. On the one hand, the risk perception about COVID-19 is introduced as a variable that may have an

important impact on the predictors of the TPB (attitude, subjective norm, and perceived behavioral control). In this research, risk perception is conceptualized through two main dimensions (the cognitive and affective ones). Cognitive risk perception is related to an individual's perceived susceptibility and severity to risks (Bae & Chang, 2020). Affective risk perception is related to the anxiety and worry that an individual feels about their exposure to risks (e.g., Sjöberg, 1998; Slovic & Peters, 2006). The impacts of these two dimensions are analyzed separately. Additionally, the influence that cognitive risk perception has on affective risk perception is explored. On the other hand, past behavior is included to investigate its influence on Spanish behavioral intention and also on the predictors of the TPB. Past behavior of tourists (which in this case means whether they travelled frequently before the pandemic or not) is an important variable to see to what extent having past experience of a certain behavior can help to deal differently with an alarming international situation.

Perceived Risk: Cognitive and Affective Risk Perceptions

Tourism is inevitably associated with risk (Williams & Baláž, 2013). Thus, as tourism has spread across the globe, more attention has been paid to safety and risks in the travel experience (Cui et al., 2016). Therefore, the number of scientific papers related to risk and safety in tourism has greatly increased since the 1970s, though a remarkable qualitative leap has taken place over the past two decades due in part to some calamities that have shaken the tourism sector worldwide, such as the 2003 SARS outbreak, the Asian Tsunami, or the COVID-19 pandemic (e.g., Sönmez & Graefe, 1998; Uğur & Akbıyık, 2020). The risk conceptualization has been carried out in different ways in risk literature (and with different constructs), so there is no single approach or uniformity in understanding its impact on travelers' intentions.

Firstly, scholars distinguish between two main types of risk: real risk and perceived risk. The first one refers to the risk that objectively exists in reality at a given moment in time, and the second one refers to the subjective assessment of the real risk made by individuals (Cui et al., 2016). Specifically, perceived risk can be understood as a person's subjective belief of the potential of suffering a loss while seeking a desired outcome (Bauer, 1960). The vast majority of studies in tourism literature focus on perceived risk since tourists have limited information (they do not know the real risks nor do they have the means to calculate them), and they are only concerned with a few possible outcomes of risk that are related to themselves as individuals (Yang & Nair, 2014). Therefore, this is the type of risk taken into account in this research.

Secondly, perceived risks may derive from multiple sources that are related to the issues that concern travelers when they are planning or making a trip. Consequently, scholars have identified various sources of risk (and, depending on these, several types of perceived risks). For example, Roehl and Fesenmaier (1992) identified three main sources of perceived risks for travelers: physical-equipment, vacation, and destination risks. Sönmez and Graefe (1998) showed 10 sources of risk associated with international travel and the subsequent 10 types of risk: equipment, physical, financial, health, political, psychological, social, satisfaction, terrorism, and time risk. Reisinger and Mavondo (2006) presented the same risks as Sönmez and Graefe (1998) plus three additional ones: crime, cultural, and performance risk. Obviously, tourists may perceive one or more types of risk (and their combinations) when planning or making a trip. Among them, health risk has become a primary concern for travelers, having an influence on tourist decisions and behaviors (C.-K. Lee et al., 2012; L. Li et al., 2020).

Thirdly, every kind of perceived risk can be explored based on two dimensions: cognitive and affective (Yang & Nair, 2014). The cognitive risk perception refers to how susceptible individuals believe they are to a specific risk, while the affective risk perception refers to the worry they feel about this risk (Loewenstein et al., 2001). Cognitive and affective risk perceptions are two important dimensions of perceived risk. However, prior literature has focused more on the cognitive one (this is on the intellectual judgments on risk), making investigations that include the affective one (this is emotional feelings) more scarce (e.g., Bae & Chang, 2020; Loewenstein et al., 2001; Sjöberg, 1998). Notwithstanding this, consumer psychology researchers insist on the idea that cognition and emotion are inseparable because they are two sides of the same coin (Slovic & Peters, 2006; Yang & Nair, 2014). However, as Loewenstein et al. (2001) contend, intellectual judgments and emotional reactions are not the same and do not always converge. In fact, there may be positive influences between them as indicated by authors such as Altarawneh et al. (2018), Loewenstein et al. (2001), or Sundblad et al. (2007).

Based on these studies, the following hypothesis has been developed:

H1. Cognitive risk perception has a positive influence on affective risk perception.

Previous research has also shown that perceived risk can have an impact on attitude, subjective norm, and perceived behavioral control (e.g., Ajzen, 1985; Choi

et al., 2013; C. L. Huang, 1993; Quintal et al., 2010; Sánchez-Cañizares et al., 2020). Since perceived risk is considered as an expectation of something negative or a probable potential loss, it expected to have a negative influence on the predictors of the model or, in other words, on the predictors of the intention to perform an action. However, this influence should be positive when that action implies having a protective behavior because the perception of risk would lead to enhancing this protective behavior. Many authors have shown these effects in a variety of contexts. For example, M.-C. Lee (2009) showed evidence of the negative influence that various types of perceived risk (namely, performance, social, time, financial, and security risks) have on attitudes toward online banking use and on subjective norm. Likewise, Zhang and Luo (2021) verified that perceived risk has a negative effect on consumers' attitude toward buying remanufactured products. In contrast to these examples, literature has also provided evidence of the positive effect that perceived risk may have on the predictors of the model when exploring intentions or behaviors related to a protective action. For example, Rahmafitria et al. (2021) showed how the risk perception of COVID-19 increases both a person's attitude toward observing physical distancing and his or her behavioral control in observing that distance. In the same vein, Schmiege et al. (2009) expected a positive association between perceived risk and attitude towards flossing (although they did not find significant results).

These relationships have also been observed in research conducted in the tourism sector. Quintal et al. (2010) found that the perceived risk of visiting Australia on a holiday negatively influences attitudes towards that experience. Sánchez-Cañizares et al. (2020) demonstrated that the perceived risk of travel during the COVID-19 pandemic negatively affects travel attitude and perceived behavioral control. The only authors who separately study the effect of cognitive risk perception and affective risk perception on the variables attitude, subjective norm, and perceived behavioral control are Bae and Chang (2020). Since these scholars looked into a protective behavior (which involves sightseeing while minimizing direct contact with people), they have explored the positive effect of cognitive and affective risk perceptions on predictors of TPB.

Therefore, based on prior literature, the following hypotheses have been developed:

H2. Cognitive risk perception has a positive influence on attitude.
H3. Affective risk perception has a positive influence on attitude.
H4. Cognitive risk perception has a positive influence on subjective norm.
H5. Affective risk perception has a positive influence on subjective norm.
H6. Cognitive risk perception has a positive influence on perceived behavioral control.
H7. Affective risk perception has a positive influence on perceived behavioral control.

Core Variables of the TPB

Attitude, subjective norm, and perceived behavioral control are core variables in the TPB (Ajzen, 1985, 1991). Accordingly, extensive research in the tourism literature shows that the core variables of TPB (attitude, subjective norm, and perceived behavioral control) are powerful predictors of the intentions and behaviors of tourists. For instance, Sparks (2007) found that subjective norms and perceived behavioral control have a positive impact on the behavioral intention of tourists to take a wine-based vacation in Australia. Han and Kim (2010) also showed that attitude, subjective norm, and perceived behavioral control have a direct influence on the customers' intention to revisit a green hotel. More recently, Bae and Chang (2020) have studied the effect of COVID-19 risk perception on the "untact" travel intentions of South Koreans. They showed evidence that attitude, subjective norm, and perceived behavioral control have a significant positive influence on their behavioral intention. Likewise, many scholars have studied the existing relationships among those core variables (e.g., Han & Kim, 2010; Ukenna & Ayodele, 2019). Based on prior literature studies, the following hypotheses have been developed:

H8. Attitude has a positive influence on behavioral intention.
H9. Subjective norm has a positive influence on behavioral intention.
H10. Perceived behavioral control has a positive influence on behavioral intention.
H11. Subjective norm has a positive influence on attitude.
H12. Subjective norm has a positive influence on perceived behavioral control.

Past Behavior

According to Ajzen (1991), the TPB is open to being extended by including additional predictors if they can increase the predictive accuracy of the model once the original TPB constructs have been taken into account. One of the frequently proposed additions to the TPB is past behavior. Past behavior may play an important role in explaining intentions and behaviors because (1) people tend to maintain behavioral persistency (Cialdini, 1988) and (2) the repetition of a behavior can help to create a

habit and thus increase individuals' perceived control over a type of behavior (Ajzen, 1991). Many scholars have demonstrated that the relationships between past behavior and intentions or behaviors may be direct (e.g., L. Li et al., 2020; Shevlin & Goodwin, 2019) or indirect through the predictors of the model (e.g., D. J. Brown et al., 2020; Thamthanakoon et al., 2021; Vallejos et al., 2023). Ouellette and Wood (1998) conducted a meta-analytic synthesis of prior research related to past behavior, and they found that in the case of behaviors that are well practiced and performed in stable contexts, past behavior is a direct predictor of future acts. They also indicated that behaviors that occur in changing contexts are likely to require conscious decision-making and in that case the effects of past behavior are likely to be mediated by attitude, subjective norm, and perceived control.

Many authors have also included past behavior when applying the TPB in the field of tourism (e.g., Cheng et al., 2005; Lam & Hsu, 2006; Ouellette & Wood, 1998; Sönmez & Graefe, 1998; Sutton, 1994). Many of them show evidence that past behavior has a direct and significant influence on intentions and others, although fewer, show that past behavior influences the other predictors in the model. Concerning the direct effect on intentions, Sönmez and Graefe (1998) found that, in the case of international trips, previous international travel experience has a positive impact on future travel intentions, even when travelers are exposed to various types of risks. Likewise, Lam and Hsu (2006) contended that the inclusion of past behavior enhances the predictive ability of the original TPB when analyzing the behavioral intentions of Taiwanese travelers to revisit Hong Kong. Concerning the effect on the predictors of the model and the intentions, Shen et al. (2009) showed that past behavior has an impact on both the Chinese travelers' intention to visit world cultural heritage sites and on other predictors of the model. Additionally, when evaluating the intentions of individuals to visit green hotels in Taiwan, Kun-Shan and Yi-Man (2011) observed that past behavior significantly influenced behavioral intention, and that this influence was partially mediated by the other predictors of the TPB.

Based on prior literature, and taking into account the changing context drawn by the pandemic, the impact of past behavior on both intentions and the predictors of the model are explored through the following hypotheses:

H13. Past behavior has a positive influence on attitude.
H14. Past behavior has a positive influence on subjective norm.
H15. Past behavior has a positive influence on perceived behavioral control.
H16. Past behavior has a positive influence on behavioral intention.

In view of the above, an extended TPB is proposed (Figure 1).

Material and Methods

Sample and Data Collection

Our target population is Spanish residents who are engaged in tourism and use social media. The information was collected via two social networks: Facebook and Instagram.

We opted for voluntary response sampling, principally due to the ease of access for participants. However, this technique, which is part of the non-probability sampling methods, has a higher risk of sampling bias, specifically self-selection bias, which may affect the generalizability of the results obtained. To reduce this bias, before conducting the survey, we provided potential participants with information regarding the study's objectives.

A double segmentation criterion was used to select the sample based on territory and age. With respect to age, both social networks were used because of the difference in user age, thereby preventing sample bias. On average, Instagram users are under 40 years of age, in contrast to Facebook, where the typical user profile is over 40. Regarding the territory, the target country was Spain, albeit segmented by autonomous regions. In this sense, a campaign was designed by autonomous regions (19 in total) for both Facebook and Instagram. In addition, the Spanish population pyramid was used as a reference for age segmentation in each autonomous region.

Data collection was performed in two stages. First, a pre-test was carried out on both social networks between June 29 and July 3, 2020, to ensure the validity of the measures. A dissemination campaign was designed and included the study's purpose and a link to the survey. The survey was conducted using the Survey Monkey software. A total of 277 valid responses were obtained, and the validity of the questionnaire could be assessed on the basis of response time, content, translation, comprehension, and comments made by respondents. Second, this study's final sample was collected between September 23 and September 29, 2020, totaling 611 responses (Álvarez-García et al., 2022).

G*Power software (Faul et al., 2007, 2009) was used to define the minimum sample size required. The input parameters used were a minimum power of 0.80, $\alpha = .05$, and an effect size $f2$ smaller than 0.04.

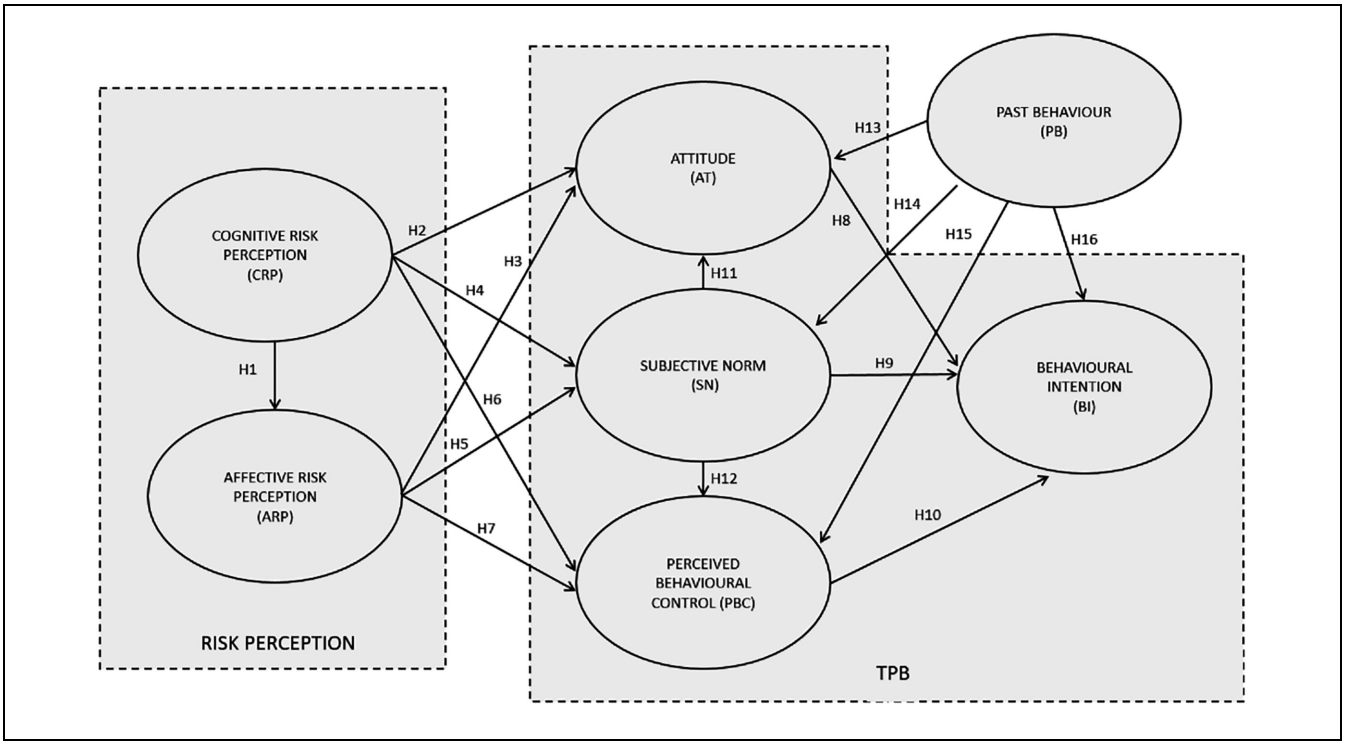

Figure 1. Proposed research model.

The questionnaire guaranteed the respondent's anonymity. No personal data that could identify participants was collected. Before accessing the questionnaire, an explanatory text was included, detailing the purpose of the study, the type of information requested, and the academic use the information would be put to. The process for obtaining participants' consent required two clicks: the first to enter the questionnaire link and the second at the end of the questionnaire for submission and final consent. Therefore, the participants (always of legal age) were informed and gave their consent freely.

Table 1 summarizes the characteristics of the respondents based on six demographical variables: age, gender, education, employment situation, place of residence, and work stability. The number of valid responses amounted to 611.

Instrument Development

The research model includes seven variables: four of them (attitude, subjective norm, perceived behavioral control, and behavioral intention) from TPB, two (cognitive risk perception and affective risk perception) from the literature related to risk perception, and one (past behavior) from the investigations that highlight the importance of past behavior in tourism activities. The variables of the TPB were operationalized with four items each, as suggested by previous research (Ajzen, 1991), except for perceived behavioral control, which included only three items. The first item of the original questionnaire was deleted because it had a poor factor loading (lower than 0.40) on its factor, as suggested by Hair et al. (2010). Risk perception was defined as the level of risk perceived by an individual in relation to COVID-19, and it was operationalized with two variables to include cognitive and affective risk perception, with four items each (Bae & Chang, 2020; Brug et al., 2004). Past behavior was assessed with a single item, following several scholars (e.g., Ajzen, 1991; Kun-Shan & Yi-Man, 2011; Lam & Hsu, 2006). The item was "*Number of trips made in* 2019." The variables from TPB were rated on a 7-point Likert scale, ranging from *strongly disagree* (1) to *strongly agree* (7). The variables of cognitive and affective risk perception were rated on a 7-point Likert scale ranging from *not at all* (1) to *very much* (7). Originally, these scales were written in English. Using back translation, the questionnaire was written in English and then translated into Spanish.

Results

Data Analysis

Preliminary analyses were carried out with SPSS version 26. First, data screening was performed, and frequencies and a correlation matrix were computed. Next, validity

Table 1. Respondents' Characteristics.

Category	Frequency (%)
Age	
⩽30	14.6
31–43	21.8
44–55	26.2
56–68	28.4
>69	9.0
Gender	
Female	67.6
Male	32.4
Education	
Primary education	1.8
Secondary school	4.1
High school	10.0
Vocational training	17.5
University	66.6
Employment situation	
Employee	50.4
Self-employed	8.4
Unemployed	13.1
Retired	22.3
Student	5.9
Place of residence (autonomous region)	
Andalusia	14.3
Aragon	2.5
Asturias	4.4
Balearic Islands	3.0
Canary Islands	5.4
Cantabria	1.5
Castilla La Mancha	4.1
Castilla y Leon	5.9
Catalonia	14.1
Valencia	10.0
Extremadura	2.3
Galicia	5.7
La Rioja	0.8
Madrid	16.1
Murcia	3.4
Navarre	1.3
Basque Country	4.8
Ceuta	0.3
Melilla	0.2
Work stability	
Yes	71.2
No	28.8

Note. $N = 611$.

and reliability were tested by means of Cronbach's alpha, the composite reliability (CR), and the average variance extracted (AVE). These indicators assess the psychometric quality of the scales.

Cronbach's alpha values exceeding .70 meet the threshold (Nunnally & Bernstein, 1994). CR values greater than 0.60 show acceptable reliability (Bagozzi & Yi, 1988). AVE values greater than 0.50 are acceptable, indicating convergent validity (Fornell & Larcker, 1981). The content validity of a test determines how well it measures the domain intended to be measured (Hair et al., 2010). Three scholars in the field of management validated the measures. Then, the variance inflation factor and tolerance values were computed to rule out multicollinearity issues. VIF values between 1 and 10 and tolerance values greater than 0.10 diagnose a lack of multicollinearity problems (Hair et al., 2010).

Structural equation modeling (SEM) analyses were carried out with Amos version 26. First, the measurement model was examined via confirmatory factor analysis. Next, Harman's single factor was conducted to test the presence of common method bias. Then the seven-factor structural model and an alternative model (without the direct paths from cognitive risk perception to affective risk perception, cognitive risk perception to subjective norm, and affective risk perception to subjective norm) were studied. Finally, hypotheses were tested with SEM, performing bootstrapping with 200 samples and 95 bias-corrected confidence intervals to evaluate the indirect relationships (MacKinnon et al., 2012). When confidence intervals do not include zero, hypothesized relationships are significant. The maximum likelihood estimation method was used to analyze the covariance matrix (T. A. Brown, 2006). When examining both the measurement and the structural models, the sub-dimensions of the constructs were used as indicators of their factors. Past behavior was reported as an observed variable with a single indicator.

We used multiple fit indices to assess the model fit, following Bollen (1989) and Bentler's (1990) guidelines, namely the chi-square (χ^2) statistic, the Normed Fit Index (NFI), the Tucker-Lewis Index (TLI), the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA). Non-significant values of χ^2 indicate good fit, but this test is very sensitive to sample size (Bollen, 1989). Values of NFI, TLI, and CFI greater or equal to 0.90 are indicative of good fit, and RMSEA values around 0.06 are acceptable (L. T. Hu & Bentler, 1999).

Descriptive Statistics

Table 2 summarizes the means, standard deviations, and correlations among demographic variables and the constructs under study. Most of the correlations were in the expected direction and significant at the .05 level or lower. The highest values are found between attitude and subjective norm (.728), attitude and behavioral intention (.736), and between subjective norm and behavioral intention (.671). Additional analyses were conducted to explore multicollinearity and both VIF and tolerance values met the cut-off values. Therefore, multicollinearity may not be a potential risk in this study.

Table 2. Means, Standard Deviations and Correlation Matrix.

Variables	Mean	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13
1 Gender	1.3241	0.46841	—												
2 Place of residence	8.7508	4.90637	−.044	—											
3 Education	4.4304	0.95282	−.085**	.038	—										
4 Age	48.20	14.950	−.019	−.026	−.103**	—									
5 Employment situation	2.6809	1.88034	.060	−.064	−.117***	.281***	—								
6 Work stability	1.2881	0.45323	−.047	−.049	−.136***	−.189***	.314***	—							
7 CRP	3.1506	1.48311	.004	.001	.013	.026	.053	−.007	—						
8 ARP	5.4476	1.51045	−.103**	−.019	.035	−.076	.023	.012	.357***	—					
9 AT	4.5675	2.00523	.058	.124***	.190***	−.086**	−.145***	−.111***	−.230***	−.208***	—				
10 SN	3.6665	1.97914	.111***	.164***	.116***	−.015	−.058	−.082**	−.219***	−.265***	.728***	—			
11 PBC	4.4071	1.66886	.115***	.094**	.064	−.019	−.103	−.224***	−.229***	−.207***	.555***	.560***	—		
12 BI	3.7651	2.18360	.061	.125***	.140***	−.040	−.146***	−.079**	−.234***	−.240***	.736***	.671***	.588***	—	
13 PB	3.29	2.254	.046	.060	.024	.069	−.016	−.108***	−.123***	−.160***	.434***	.395***	.366***	.618***	—

Note. Gender: 1 = female, 2 = male; place of residence: from 1 to 19 according to Table 1; education: 1 = primary school, 2 = secondary school, 3 = high school, 4 = vocational training, 5 = university; age: 1 = under 30, 2 = 31–43, 3 = 44–55, 4 = 56–68, 5 = >69; employment situation: 1 = employee, 2 = self-employed, 3 = entrepreneur, 4 = unemployed, 5 = retired, 6 = student; work stability: 1 = yes, 2 = no.
***$p < .01$. **$p < .05$.

Measurement Model

All standardized factor loadings were statistically significant at $p < .001$ onto their latent variables. The seven-factor model showed an acceptable fit to the data (χ^2[215] = 725.798; $p < .001$; NFI = 0.926; TLI = 0.935; CFI = 0.942; RMSEA = 0.062). The one-factor model shows poor fit to the data (χ^2[230] = 5,749.637; $p < .001$; NFI = 0.575; TLI = 0.543; CFI = 0.585; RMSEA = 0.198), thus supporting the distinctiveness of these factors. All dimensions were loaded on a single factor to test for common method bias, and results demonstrate that the single factor explains less than 50% of the total variance (Podsakoff et al., 2003).

Table 3 presents reliability, validity, standardized estimates for all the measurement items, skewness, and kurtosis values. Results show that all estimates are greater than .50 on their respective factors (Kline, 2011). Cronbach's alpha, composite reliability, and average variance extracted values exceed the .70, .60, and .50 cut-off values, respectively, thus supporting the reliability and validity of the measures used (Bagozzi & Yi, 1988; Fornell & Larcker, 1981; Nunnally & Bernstein, 1994). Moreover, discriminant validity is granted because the AVE is greater than the variance between the latent variable and other constructs in the proposed model. Data do not deviate much from a normal distribution, hence meeting the assumptions of normality.

Structural Equation Modeling

The hypothesized relationships were analyzed using SEM. We controlled for five demographic variables that positively correlated with some of the constructs: gender, region of residence, education, employment situation, and work stability. Both the proposed model (χ^2[358] = 1,060.021; $p < .001$; NFI = 0.930; TLI = 0.943; CFI = 0.949; RMSEA = 0.057) and the alternative model (χ^2[241] = 952.522; $p < .001$; NFI = 0.910; TLI = 0.921; CFI = 0.927; RMSEA = 0.071) had a good fit. However, the hypothesized model had a better fit. Table 4 displays the proposed model's structural parameter estimates for the control variables and the constructs.

Hypotheses 1, 3, and 8–16 are supported because the standardized paths are statistically significant at the 0.05 level. Hypotheses 2, 4, 5, and 6 are partially supported; these relationships are statistically significant, but the direction is negative. This will be further developed in the discussion section. However, hypothesis 7 is not supported because this relationship is not statistically significant at the usual levels. This latter hypothesized relationship is not statistically significant in this study ($p > .05$).

The proposed model serves as a means to examine the concept of mediation within our study, as it assesses the intermediary processes through which certain variables

Table 3. Reliability and Confirmatory Factor Analysis Properties.

Constructs	Standardized estimate	Cronbach's alpha	CR	AVE	Skewness	Kurtosis
CRP						
CRP1	0.847***	.821	0.823	0.546	0.501	−0.159
CRP2	0.792***					
CRP3	0.647***					
CRP4	0.648 (fixed)					
ARP						
ARP1	0.766 (fixed)	.882	0.887	0.663	−0.625	0.661
ARP2	0.883***					
ARP3	0.802***					
ARP4	0.722***					
AT						
AT1	0.907***	.943	0.946	0.815	−0.457	−1.045
AT2	0.956***					
AT3	0.931***					
AT4	0.804 (fixed)					
SN						
SN1	0.934***	.957	0.957	0.847	0.137	−1.247
SN2	0.939***					
SN3	0.940***					
SN4	0.866 (fixed)					
PBC						
PBC1	0.911***	.750	0.795	0.577	−0.195	−0.921
PBC2	0.791***					
PBC3	0.525 (fixed)					
BI						
BI1	0.968 (fixed)	.964	0.965	0.873	0.095	−1.435
BI2	0.960***					
BI3	0.905***					
BI4	0.886***					

Note. CRP = cognitive risk perception; ARP = affective risk perception; AT = attitude; SN = subjective norm; PBC = perceived behavioral control; BI = behavioral intention; CR = composite reliability; AVE = average variance extracted.
***$p < .01$.

influence one another. Evidence of indirect effects was only found from cognitive risk perception to perceived behavioral control via affective risk perception (CI [−0.234, −0.094], $p < .05$), from subjective norm to behavioral intention (CI [0.351, 0.551], $p < .05$), from cognitive risk perception to behavioral intention (CI [−0.305, −0.163], $p < .01$), and from affective risk perception to behavioral intention (CI [−0.198, −0.035], $p < .05$). These indirect paths are significantly different from zero at the 0.05 level.

Discussion and Findings

The main findings of this study are as follows. The first one is related to the relationship between cognitive and affective risk perceptions. The results confirm that cognitive risk perception has a positive impact on affective risk perceptions. This means that people's perceived probability of becoming infected by COVID-19 (assessed on the basis of objective features such as daily data related to the pandemic evolution) has a direct influence on the worry and anxiety that potential travelers feel. These results are consistent with the findings of other scholars, such as Altarawneh et al. (2018) and Sundblad et al. (2007). Therefore, this paper reinforces the line of research that argues that it is necessary to include both perceptions of risk and also to take into account possible relationships between them, especially in the tourism field where this type of study is scarce. Since the beginning of the pandemic, several authors have studied how perceived risk about COVID-19 has influenced tourists' behavior and how news consumption has influenced risk perception (Chemli et al., 2022; Seyfi et al., 2021). In the particular case of Spain, Mora-Rodríguez and Melero-López (2021) also show that people most exposed to news content during the pandemic are those who have had higher risk perceptions about COVID-19. Although these authors do not distinguish between cognitive and affective risk perceptions, their findings also bolster the idea that cognitive perception influences emotional perceptions.

The second key finding is related to the impacts that the two dimensions of perceived risk have on the core

Table 4. Structural Parameter Estimates.

Standardized path	CI lower bound	CI upper bound	*p*-Value	Result
Gender → SN	0.029	0.187	.019	
Gender → ARP	−0.191	−0.006	.032	
Residence → SN	0.089	0.241	.005	
Education → AT	0.047	0.152	.012	
Education → SN	0.036	0.193	.021	
Employment situation → AT	−0.165	−0.025	.018	
Stability → PBC	−0.179	−0.056	.016	
H1. CRP → ARP	0.324	0.497	.009	Supported
H2. CRP → AT	−0.195	−0.047	.004	Partially supported
H3. ARP → AT	0.008	0.146	.023	Supported
H4. CRP → SN	−0.263	−0.054	.013	Partially supported
H5. ARP → SN	−0.302	−0.112	.012	Partially supported
H6. CRP → PBC	−0.212	−0.038	.008	Partially supported
H7. ARP → PBC	−0.111	0.066	.349	Not supported
H8. AT → BI	0.193	0.375	.015	Supported
H9. SN → BI	0.010	0.240	.032	Supported
H10. PBC → BI	0.277	0.501	.013	Supported
H11. SN → AT	0.631	0.748	.007	Supported
H12. SN → PBC	0.562	0.721	.015	Supported
H13. PB → AT	0.102	0.245	.008	Supported
H14. PB → SN	0.272	0.434	.003	Supported
H15. PB → PBC	0.122	0.276	.005	Supported
H16. PB → BI	0.254	0.411	.008	Supported

Note. CI = confidence interval; CRP = cognitive risk perception; ARP = affective risk perception; AT = attitude; SN = subjective norm; PBC = perceived behavioral control; PB = past behavior; BI = behavioral intention.

variables of the TBP. As expected, the results show that these two dimensions behave differently. However, the signs of the relationships between the two dimensions of perceived risk and the core TPB variables are not as expected. Since traveling to LI-COVID-19 areas implies a protective action with respect to the pandemic, the signs of the relationships between perceived risk and the model predictors were expected to be positive (as previously demonstrated by authors such as Rahmafitria et al. (2021) or Schmiege et al. (2009). However, in this research cognitive risk perception has a negative influence on attitude, subjective norm, and perceived behavioral control, while affective risk perception has a positive (although weak) influence on attitude, a negative influence on subjective norm, and no significant influence on perceived behavioral control. This means that people's cognitive assessments lead to: (1) having a less favorable attitude toward traveling even to LI-COVID-19 zones; (2) downplaying the importance of family and friends' opinions about traveling to LI-COVID-19 zones; and (3) feeling less control over the circumstances of the travel to those zones. It also means that people's affective reactions lead to: (1) having a more positive attitude toward traveling to zones less heavily hit by COVID-19; and (2) giving less importance to the influence that social pressure may exert when it comes to visiting those zones.

Concerning these relationships, it should be noted that the Spanish Sociological Research Center conducts a monthly survey to measure the state of public opinion in the country at any given time. The September 2020 survey asked about the COVID-19 pandemic, and 51% of the respondents said they were very concerned about it, and 42% said they were quite worried (CIS, 2020). In the September 2021 and September 2022 surveys, concern was still very present: in 2021, 39% of respondents felt very concerned and 47% were quite concerned, and in 2022, 19% of respondents felt very concerned and 34% quite concerned (CIS, 2021, 2022). These figures reflect that the COVID-19 pandemic is a matter of particular concern to Spanish people, which might explain why intellectual judgments about pandemic risks reduce their sense of control and encourage them to have a negative attitude towards travel to LI-COVID-19 zones (even if they are safer) and give little importance to social pressure. In the case of emotional feelings about the pandemic risks, there is also a tendency to give less importance to social pressure, although the attitude to travel to LI-COVID-19 zones is favorable and there is no influence on the feeling of control. In line with Loewenstein et al. (2001) and Oh et al. (2015), these results show that emotional reactions to risky situations are very often different from cognitive assessments, highlighting the

importance of considering both dimensions of perceived risk. The only authors who have so far considered these two dimensions separately when studying travelers' behavioral intentions are Bae and Chang (2020). These authors found a significantly positive impact of affective risk perception on attitude (which confirms our results), although (in contrast to this paper) they also found a significantly positive impact of cognitive risk perception on subjective norm. Therefore, this lack of homogeneity in the conclusions obtained underlines the need for additional research in this field.

The third key finding is related to the predictors of the TPB model. Perceived behavioral control, attitude, and subjective norm have a positive impact on intentions to travel to LI-COVID-19 zones, showing that, as expected, they are good predictors of intentions. These results are in line with the findings of many scholars that in the realm of tourism have studied the impact of the TPB predictors to explain the behavioral intention of travelers (e.g., Girish et al., 2023; Han et al., 2020; Han & Kim, 2010; Lam & Hsu, 2006; Liu et al., 2021; Yadav & Pathak, 2017). This research also reveals that attitude and perceived behavioral control have a stronger impact on behavioral intention than subjective norm, demonstrating that the opinions of others do not weigh as heavily on future intention to travel to LI-COVID-19 zones as personal opinions or perceived control. Other scholars who have indicated that social pressure is not as important as the other variables in explaining travel intentions in the pandemic or post-pandemic context are Bae and Chang (2020), A. Hu et al. (2023), or Sánchez-Cañizares et al. (2020). However, there are also authors who have shown that social pressure is more important than the other predictors. (e.g., Calder et al., 2022; Girish et al., 2023; Han et al., 2020; Liu et al., 2021). Therefore, all these results confirm what was expressed by Yuzhanin and Fisher (2016) in their review on the use of TPB to explain travelers' behavioral intentions "*there is nothing in the TPB suggesting that all the constructs of the model must contribute equally, significantly and simultaneously to behavioral intentions.*"

The fourth key finding is the positive and strong association of subjective norms with attitude and perceived behavioral control. This means that the subjective norm reinforces attitude and the perceived sense of control when traveling to LI-COVID-19 zones. Many scholars have also shown positive influences among the predictors of the model in the literature. For example, Ukenna and Ayodele (2019) observed that both subjective norm and perceived behavioral control have a positive effect on customers' attitude toward patronizing sustainable street food vendors. Likewise, A. Hu et al. (2023) found that the subjective norm and the perceived behavioral control positively influence the attitude of Shanghai residents toward traveling abroad. Other scholars who have examined the influence of the subjective norm on attitude in research that focuses on analyzing potential travelers' intentions to choose a specific destination are Girish et al. (2023), Han and Kim (2010), and Han et al. (2020). All of them found that subjective norm has influence on the attitude towards traveling and that this influence is strong and positive.

The fifth key finding is related to the significant and positive influence of past behavior on the predictors of the TPB and on behavioral intention. Many scholars, such as Ouellette and Wood (1998) and Kun-Shan and Yi-Man (2011), found that past behavior had a significant impact not only on behavioral intention but also on attitude, subjective norm, and perceived behavioral control. Therefore, the experience of the past encourages tourists to visit LI-COVID-19 destinations despite the difficulties that the whole world has been experiencing since the onset of the COVID-19 pandemic. It should be noted that Spanish citizens travel frequently, and therefore, their past experience is an important variable in explaining their behavioral intentions. In 2018, Spain was the third most traveled country in the European Union, behind only Germany and France (Eurostat, 2018). In 2019, Spanish travelers made more than 190 million trips, with spending exceeding €45 billion (Epdata, 2021). These figures were drastically reduced in 2020, although in 2021 the number of trips exceeded 140 million (97.7% being domestic trips).

Theoretical Contributions, Practical Implications, and Limitations

The theoretical contribution of this paper lies in four key points. First, it investigates for the Spanish case the current worldwide trend of traveling to LI-COVID-19 destinations and demonstrates that this trend will be maintained in the coming months, even though the tourists' cognitive risk perception about the COVID-19 pandemic negatively influences their attitude towards choosing this type of destination, the social pressure they perceive, and their perceived behavioral control. Secondly, it shows a holistic view of the risk perception of COVID-19, which includes both its cognitive and affective dimensions and the relationship between them. This holistic view is novel in the literature on the tourism industry. Thirdly, it shows the importance of past experience on the behavioral intentions of tourists, despite living in an extraordinary and totally unpredictable situation. Fourth, it focuses on a country highly dependent on tourism, so the findings can be very useful for other countries that also rely heavily on tourism.

Based on the key points analyzed and the findings presented, several major practical recommendations arise from this research. On the one hand, the Spanish authorities and tourism stakeholders should encourage domestic tourism through information campaigns because it is the one that is performing the best (in fact, it accounts for more than 90% of the trips that are undertaken). These campaigns should reinforce the feeling of control and security among tourists because this is the strongest variable associated with the intentions of the Spanish to travel to LI-COVID-19 zones. On the other hand, it is important to advertise the safer zones (and to continue to provide daily information on the evolution of the pandemic) so that travelers can plan a trip with a sense of security and peace of mind that helps them reassert their perceived control.

Finally, it should be noted that this research is not free of limitations. The first limitation of this study is the cross-sectional nature of the data and the use of a single source (tourists) to obtain the data, which may impede causal inferences and increase the likelihood of bias. Future research should conduct longitudinal studies to expand the present model with reversed causation and use several sources (perceptions of other stakeholders or companies, for example) to enhance the robustness of the results. Secondly, this study focused on the Spanish tourism sector, which may limit the generalizability of results. Future studies should analyze the proposed relationships in other geographical areas to better understand tourists' intentions to travel. Thirdly, this study has been conducted in a specific time context. Therefore, the results should be interpreted with caution because the general context is changing every day and the constant adaptation to the specific circumstances of each moment becomes necessary.

Acknowledgments

None.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Ethical Approval

Evaluation by the University of A Coruña's Ethics Committee was not necessary because the questionnaire is anonymous and collects opinion data that do not require special protection under Spanish law. The data were collected respecting the rights of personal data protection in the European Union and Spain, pursuant to Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27, 2016, on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, repealing Directive 95/46 / EC (General Data Protection Regulation) and the Organic Law 3/2018, of December 5, on the Protection of Personal Data and guarantee of the digital rights.

ORCID iDs

Ariadna Monje-Amor https://orcid.org/0000-0002-6713-851X

José Pablo Abeal Vázquez https://orcid.org/0000-0001-9267-2450

Data Availability Statement

The data supporting the findings of this study are available on Zenodo at the following link: https://doi.org/10.5281/zenodo.6393223.

Supplemental Material

Supplemental material for this article is available online.

References

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), *Action control: From cognition to behavior* (pp. 11–39). Springer. https://doi.org/10.1007/978-3-642-69746-3_2

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Prentice-Hall. https://www.scienceopen.com/book?vid=c20c4174-d8dc-428d-b352-280b05eacdf7

Altarawneh, L., Mackee, J., & Gajendran, T. (2018). The influence of cognitive and affective risk perceptions on flood preparedness intentions: A dual-process approach. *Procedia Engineering*, *212*, 1203–1210. https://doi.org/10.1016/j.proeng.2018.01.155

Álvarez-García, B., Monje-Amor, A., & Abeal-Vázquez, J. P. (2022). *Planned behaviour in the COVID-19 context* [Dataset]. Zenodo. https://doi.org/10.5281/zenodo.6393223

Arbulú, I., Razumova, M., Rey-Maquieira, J., & Sastre, F. (2021). Can domestic tourism relieve the COVID-19 tourist industry crisis? The case of Spain. *Journal of Destination Marketing & Management*, *20*, 100568. https://doi.org/10.1016/j.jdmm.2021.100568

Bae, S. Y., & Chang, P.-J. (2020). The effect of coronavirus disease-19 (COVID-19) risk perception on behavioural intention towards "untact" tourism in South Korea during the first wave of the pandemic (March 2020). *Current Issues in Tourism*, *24*(7), 1017–1035. https://doi.org/10.1080/1368350 0.2020.1798895

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, *16*(1), 74–94. https://doi.org/10.1177/009207038801600107

Bauer, R. A. (1960). Consumer behaviour as risk taking. In R. S. Hancock (Ed.), *Dynamic marketing for a changing world* (pp. 389–398). American Marketing Association.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, *107*(2), 238−246. http://dx.doi.org/10.1037/0033-2909.107.2.238

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

Bollen, K. A. (1989). *Structural equations with latent variables*. Wiley.

Boto-García, D., & Leoni, V. (2021). Exposure to COVID-19 and travel intentions: Evidence from Spain. *Tourism Economics*, *28*(6), 1499–1519. https://doi.org/10.1177/1354816621996554

Brown, D. J., Hagger, M. S., & Hamilton, K. (2020). The mediating role of constructs representing reasoned-action and automatic processes on the past behavior-future behavior relationship. *Social Science & Medicine*, *258*, 113085. https://doi.org/10.1016/j.socscimed.2020.113085

Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. The Guilford Press.

Brug, J., Aro, A. R., Oenema, A., de Zwart, O., Richardus, J. H., & Bishop, G. D. (2004). SARS risk perception, knowledge, precautions, and information sources, The Netherlands. *Emerging Infectious Diseases*, *10*(8), 1486–1489. https://doi.org/10.3201/eid1008.040283

Calder, G., Radic, A., Ryu, H. B., Ariza-Montes, A., & Han, H. (2022). COVID-19 and pro-environmental behaviour at destinations amongst international travellers. *Frontiers in Psychology*, *13*, 879300. https://www.frontiersin.org/articles/10.3389/fpsyg.2022.879300

Chemli, S., Toanoglou, M., & Valeri, M. (2022). The impact of Covid-19 media coverage on tourist's awareness for future travelling. *Current Issues in Tourism*, *25*(2), 179–186. https://doi.org/10.1080/13683500.2020.1846502

Cheng, S., Lam, T., & Hsu, C. H. C. (2005). Testing the sufficiency of the theory of planned behavior: A case of customer dissatisfaction responses in restaurants. *International Journal of Hospitality Management*, *24*(4), 475–492. https://doi.org/10.1016/j.ijhm.2004.10.006

Choi, J., Lee, A., & Ok, C. (2013). The effects of consumers' perceived risk and benefit on Attitude and behavioral intention: A study of street food. *Journal of Travel & Tourism Marketing*, *30*(3), 222–237. https://doi.org/10.1080/10548408.2013.774916

Cialdini, R. B. (1988). *Influence*. HarperCollins.

CIS. (2020). *Barómetro de septiembre 2020. Avance de resultados* (Estudio No. 3292). http://www.cis.es/cis/opencms/ES/NoticiasNovedades/InfoCIS/2020/Documentacion_3292.html

CIS. (2021). *Barómetro de septiembre 2021* (Estudio No. 3334). https://www.cis.es/cis/export/sites/default/-Archivos/Marginales/3320_3339/3334/es3334mar.pdf

CIS. (2022). *Barómetro de septiembre 2022* (Estudio No. 3375). https://www.cis.es/cis/export/sites/default/-Archivos/Marginales/3360_3379/3375/es3375mar.pdf

Cui, F., Liu, Y., Chang, Y., Duan, J., & Li, J. (2016). An overview of tourism risk perception. *Natural Hazards*, *82*(1), 643–658. https://doi.org/10.1007/s11069-016-2208-1

Department of Health of the Government of Spain. (2020). *Current situation*. https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/situacionActual.htm?q=service/

Duarte Alonso, A., Kok, S. K., Bressan, A., O'Shea, M., Sakellarios, N., Koresis, A., Buitrago Solis, M. A., & Santoni, L. J. (2020). COVID-19, aftermath, impacts, and hospitality firms: An international perspective. *International Journal of Hospitality Management*, *91*, 102654. https://doi.org/10.1016/j.ijhm.2020.102654

Epdata. (2021). *¿Adónde viajan los turistas españoles?* Epdata. https://www.epdata.es/datos/turismo-residente-datos-graficos/249

Eurostat. (2018). *Tourism trips of residents (aged 15 years or more), 2018*. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Tourism_trips_of_residents_(aged_15_years_or_more),_2018.png

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*(4), 1149–1160. https://doi.org/10.3758/BRM.41.4.1149

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–191. https://doi.org/10.3758/bf03193146

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behaviour: An introduction to theory and research* (Vol. 27). Addison-Wesley.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39–50. https://doi.org/10.2307/3151312

Girish, V. G., Ko, M.-H., Lee, C.-K., Suess, C., & Park, Y.-N. (2023). Examining behavioural intentions to visit travel bubble destinations during the COVID-19 pandemic. *Current Issues in Tourism*, *26*(21), 3483–3498. https://doi.org/10.1080/13683500.2022.2127349

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Pearson.

Han, H., Al-Ansi, A., Chua, B.-L., Tariq, B., Radic, A., & Park, S. (2020). The post-coronavirus world in the international tourism industry: Application of the theory of planned behavior to safer destination choices in the case of US outbound tourism. *International Journal of Environmental Research and Public Health*, *17*(18), 6485. https://doi.org/10.3390/ijerph17186485

Han, H., & Kim, Y. (2010). An investigation of green hotel customers' decision formation: Developing an extended model of the theory of planned behavior. *International Journal of Hospitality Management*, *29*(4), 659–668. https://doi.org/10.1016/j.ijhm.2010.01.001

Hoque, A., Shikha, F. A., Hasanat, M. W., Arif, I., & Hamid, A. B. A. (2020). The effect of coronavirus (COVID-19) in the tourism industry in China. *Asian Journal of*

Multidisciplinary Studies, *3*(1), 52–58. https://asianjournal.org/online/index.php/ajms/article/view/213

Hu, A., Li, H., Pang, J., & Zhang, H. (2023). A study on the intention of Shanghai residents to travel abroad in the post-pandemic era based on the theory of planned behavior. *Sustainability*, *15*(15), 12050. https://doi.org/10.3390/su151512050

Hu, L. T., & Bentler, P. M. (1999). Cut-off criteria for fit indexes in covariance structure analysis. Conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*, 1–55. https://doi.org/10.1080/10705519909540118

Huang, C. L. (1993). Simultaneous-equation model for estimating consumer risk perceptions, attitudes, and willingness-to-pay for residue-free produce. *Journal of Consumer Affairs*, *27*(2), 377–396. https://doi.org/10.1111/j.1745-6606.1993.tb00754.x

Huang, X., Dai, S., & Xu, H. (2020). Predicting tourists' health risk preventative behaviour and travelling satisfaction in Tibet: Combining the theory of planned behaviour and health belief model. *Tourism Management Perspectives*, *33*, 100589. https://doi.org/10.1016/j.tmp.2019.100589

Juan, L. X., Tao, W. Y., Veloo, P. K., & Supramaniam, M. (2022). Using extended TPB models to predict dishonest academic behaviors of undergraduates in a Chinese Public University. *SAGE Open*, *12*(4), 21582440221140391. https://doi.org/10.1177/21582440221140391

Kline, R. B. (2011). *Principles and practice of structural equation modeling*. Guilford Publications.

Kourgiantakis, M., Apostolakis, A., & Dimou, I. (2021). COVID-19 and holiday intentions: The case of Crete, Greece. *Anatolia*, *32*(1), 148–151. https://doi.org/10.1080/13032917.2020.1781221

Kun-Shan, W., & Yi-Man, T. (2011). Applying the extended theory of planned behavior to predict the intention of visiting a green hotel. *African Journal of Business Management*, *5*(17), 7579–7587. https://doi.org/10.5897/AJBM11.684

Lam, T., & Hsu, C. H. C. (2006). Predicting behavioral intention of choosing a travel destination. *Tourism Management*, *27*(4), 589–599. https://doi.org/10.1016/j.tourman.2005.02.003

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

Lee, M.-C. (2009). Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit. *Electronic Commerce Research and Applications*, *8*(3), 130–141. https://doi.org/10.1016/j.elerap.2008.11.006

Li, J., Nguyen, T. H. H., & Coca-Stefaniak, J. A. (2020). Coronavirus impacts on post-pandemic planned travel behaviours. *Annals of Tourism Research*, *86*, 102964. https://doi.org/10.1016/j.annals.2020.102964

Li, L., & Li, J. (2021). An investigation of factors influencing Chinese young women's intention for mammography screening. *SAGE Open*, *11*(3), 21582440211032164. https://doi.org/10.1177/21582440211032164

Li, L., Zhu, B., Jiang, M., Cai, X., Lau, A. K. W., & Shin, G.-C. (2020). The role of service quality and perceived behavioral control in shared electric bicycle in China: Does residual effects of past behavior matters? *Environmental Science and Pollution Research*, *27*(19), 24518–24530. https://doi.org/10.1007/s11356-020-08690-8

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

Loewenstein, G. F., Weber, E. U., Hsee, C. K., & Welch, N. (2001). Risk as feelings. *Psychological Bulletin*, *127*(2), 267–286. https://doi.org/10.1037/0033-2909.127.2.267

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), E7859. https://doi.org/10.3390/ijerph17217859

MacKinnon, D. P., Coxe, S., & Baraldi, A. N. (2012). Guidelines for the investigation of mediating variables in business research. *Journal of Business and Psychology*, *27*(1), 1–14. https://doi.org/10.1007/s10869-011-9248-z

Meng, Y., Khan, A., Bibi, S., Wu, H., Lee, Y., & Chen, W. (2021). The effects of COVID-19 risk perception on travel intention: Evidence from Chinese travelers. *Frontiers in Psychology*, *12*, 655860. https://www.frontiersin.org/article/10.3389/fpsyg.2021.655860

Mora-Rodríguez, A., & Melero-López, I. (2021). Seguimiento informativo y percepción del riesgo ante la Covid-19 en España. *Comunicar: Revista Científica de Comunicación y Educación*, *29*(66), 71–81. https://doi.org/10.3916/C66-2021-06

Nunnally, J. C., & Bernstein, I. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.

OECD. (2020). *Tourism policy responses to the coronavirus (COVID-19)*. https://read.oecd-ilibrary.org/view/?ref=124_124984-7uf8nm95se&title=Covid-19_Tourism_Policy_Responses

Oh, S.-H., Paek, H.-J., & Hove, T. (2015). Cognitive and emotional dimensions of perceived risk characteristics, genre-specific media effects, and risk perceptions: The case of H1N1 influenza in South Korea. *Asian Journal of Communication*, *25*(1), 14–32. https://doi.org/10.1080/01292986.2014.989240

Ouellette, J., & Wood, W. (1998). Habit and intention in everyday life: The multiple processes by which past behavior predicts future behavior. *Psychological Bulletin*, *124*(1), 54–74. https://doi.org/10.1037/0033-2909.124.1.54

Perić, G., Dramićanin, S., & Conić, M. (2021). The impact of Serbian tourists' risk perception on their travel intentions during the COVID-19 pandemic. *European Journal of Tourism Research*, *27*, 2705–2705. https://ejtr.vumk.eu/index.php/about/article/view/2125

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*, 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Poulaki, I., & Nikas, I. A. (2021). Measuring tourist behavioral intentions after the first outbreak of COVID-19 pandemic crisis. Prima facie evidence from the Greek market. *International Journal of Tourism Cities*, *7*(3), 845–860. https://doi.org/10.1108/IJTC-09-2020-0218

Quintal, V. A., Lee, J. A., & Soutar, G. N. (2010). Risk, uncertainty and the theory of planned behavior: A tourism example. *Tourism Management*, *31*(6), 797–805. https://doi.org/10.1016/j.tourman.2009.08.006

Rahmafitria, F., Suryadi, K., Oktadiana, H., Putro, H. P. H., & Rosyidie, A. (2021). Applying knowledge, social concern and perceived risk in planned behavior theory for tourism in the Covid-19 pandemic. *Tourism Review*, *76*(4), 809–828. https://doi.org/10.1108/TR-11-2020-0542

Reisinger, Y., & Mavondo, F. (2006). Cultural differences in travel risk perception. *Journal of Travel & Tourism Marketing*, *20*(1), 13–31. https://doi.org/10.1300/J073v20n01_02

Roehl, W. S., & Fesenmaier, D. R. (1992). Risk perceptions and pleasure travel: An exploratory analysis. *Journal of Travel Research*, *30*(4), 17–26. https://doi.org/10.1177/004728759203000403

Sánchez-Cañizares, S. M., Cabeza-Ramírez, L. J., Muñoz-Fernández, G., & Fuentes-García, F. J. (2020). Impact of the perceived risk from Covid-19 on intention to travel. *Current Issues in Tourism*, *24*(7), 970–984. https://doi.org/10.1080/13683500.2020.1829571

Schmiege, S. J., Bryan, A., & Klein, W. M. P. (2009). Distinctions between worry and perceived risk in the context of the theory of planned behavior. *Journal of Applied Social Psychology*, *39*(1), 95–119. https://doi.org/10.1111/j.1559-1816.2008.00431.x

Seyfi, S., Rastegar, R., Rasoolimanesh, S. M., & Hall, C. M. (2021). A framework for understanding media exposure and post-COVID-19 travel intentions. *Tourism Recreation Research*, *48*(2), 305–310. https://doi.org/10.1080/02508281.2021.1949545

Shen, S., Schüttemeyer, A., & Braun, B. (2009). Visitors' intention to visit world cultural heritage sites: An empirical study of Suzhou, China. *Journal of Travel & Tourism Marketing*, *26*(7), 722–734. https://doi.org/10.1080/10548400903284610

Shevlin, B. R. K., & Goodwin, K. A. (2019). Past behavior and the decision to text while driving among young adults. *Transportation Research Part F: Traffic Psychology and Behaviour*, *60*, 58–67. https://doi.org/10.1016/j.trf.2018.09.027

Sjöberg, L. (1998). Worry and risk perception. *Risk Analysis*, *18*(1), 85–93. https://doi.org/10.1111/j.1539-6924.1998.tb00918.x

Slovic, P., & Peters, E. (2006). Risk perception and affect. *Current Directions in Psychological Science*, *15*(6), 322–325. https://journals.sagepub.com/doi/10.1111/j.1467-8721.2006.00461.x

Sönmez, S. F., & Graefe, A. R. (1998). Determining future travel behavior from past travel experience and perceptions of risk and safety. *Journal of Travel Research*, *37*(2), 171–177. https://doi.org/10.1177/004728759803700209

Sparks, B. (2007). Planning a wine tourism vacation? Factors that help to predict tourist behavioural intentions. *Tourism Management*, *28*(5), 1180–1192. https://doi.org/10.1016/j.tourman.2006.11.003

Sundblad, E.-L., Biel, A., & Gärling, T. (2007). Cognitive and affective risk judgements related to climate change. *Journal of Environmental Psychology*, *27*(2), 97–106. https://doi.org/10.1016/j.jenvp.2007.01.003

Sutton, S. (1994). The past predicts the future: Interpreting behaviour–behaviour relationships in social psychological models of health behaviour. In D. R. Rutter & L. Quine (Eds.), *Social psychology and health: European perspectives* (pp. 71–88). Avebury/Ashgate Publishing.

Terziyska, I., & Dogramadjieva, E. (2021). *Should I stay or should I go? Global COVID-19 pandemic influence on travel intentions of Bulgarian residents* [Conference session]. SHS Web of Conferences (Vol. 92). EDP Sciences. https://doi.org/10.1051/shsconf/20219201048

Thamthanakoon, N., Huang, I. Y., Eastham, J., Ward, S., & Manning, L. (2021). Factors driving Thailand rice farmer decision-making in the choice of marketing channel. *British Food Journal*, *124*(1), 331–349. https://doi.org/10.1108/BFJ-11-2020-1040

Uğur, N. G., & Akbıyık, A. (2020). Impacts of COVID-19 on global tourism industry: A cross-regional comparison. *Tourism Management Perspectives*, *36*, 100744. https://doi.org/10.1016/j.tmp.2020.100744

Ukenna, S. I., & Ayodele, A. A. (2019). Applying the extended theory of planned behavior to predict sustainable street food patronage in a developing economy. *Journal of Food Products Marketing*, *25*(4), 404–434. https://doi.org/10.1080/10454446.2019.1572561

Ulker-Demirel, E., & Ciftci, G. (2020). A systematic literature review of the theory of planned behavior in tourism, leisure and hospitality management research. *Journal of Hospitality and Tourism Management*, *43*, 209–219. https://doi.org/10.1016/j.jhtm.2020.04.003

UNWTO. (2019). *International tourism highlights, 2019 edition*. World Tourism Organization (UNWTO). https://doi.org/10.18111/9789284421152

UNWTO. (2020). *UNWTO tourism recovery tracker*. https://www.unwto.org/unwto-tourism-recovery-tracker

UNWTO. (2022). UNWTO world tourism barometer and statistical annex. *UNWTO World Tourism Barometer (English Version)*, *20*(1), 1–40. https://doi.org/10.18111/wtobarometereng.2022.20.1.1

Vallejos, B. T., Engler, P. A., Nahuelhual, L., & Gelcich, S. (2023). From past behavior to intentions: Using the theory of planned behavior to explore noncompliance in small-scale fisheries. *Ocean & Coastal Management*, *239*, 106615. https://doi.org/10.1016/j.ocecoaman.2023.106615

Wachyuni, S. S., & Kusumaningrum, D. A. (2020). The effect of COVID-19 pandemic: How are the future tourist behavior? *Journal of Education, Society and Behavioural Science*, *33*(4), 67–76. https://doi.org/10.9734/jesbs/2020/v33i430219

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

Wut, T.-M., Ng, P., Lee, S., & Xu, J. (2022). Tourists' travel behaviour after COVID-19. *GeoJournal of Tourism and Geosites*, *41*, 387–392. https://doi.org/10.30892/gtg.41207-841

Xu, L., Cong, L., Wall, G., & Yu, H. (2021). Risk perceptions and behavioral intentions of wildlife tourists during the COVID-19 pandemic in China. *Journal of Ecotourism*, *21*(4), 334–353. https://doi.org/10.1080/14724049.2021.1955894

Yadav, R., & Pathak, G. S. (2017). Determinants of consumers' green purchase behavior in a developing nation: Applying and extending the theory of planned behavior. *Ecological Economics*, *134*, 114–122. https://doi.org/10.1016/j.ecolecon.2016.12.019

Yang, C. L., & Nair, V. (2014). Risk perception study in tourism: Are we really measuring perceived risk? *Procedia—Social and Behavioral Sciences*, *144*, 322–327. https://doi.org/10.1016/j.sbspro.2014.07.302

Yuzhanin, S., & Fisher, D. (2016). The efficacy of the theory of planned behavior for predicting intentions to choose a travel destination: A review. *Tourism Review*, *71*(2), 135–147. https://doi.org/10.1108/TR-11-2015-0055

Zhang, W., & Luo, B. (2021). Do environmental concern and perceived risk contribute to consumers' intention toward buying remanufactured products? An empirical study from China. *Clean Technologies and Environmental Policy*, *23*(2), 463–474. https://doi.org/10.1007/s10098-021-02061-8