



Reopening after the pandemic: leveraging the destination image to offset the negative effects of perceived risk

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Received: 7 February 2022 / Accepted: 6 February 2023 / Published online: 10 February 2023
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Abstract

The Covid-19 pandemic outbreak is dramatically affecting travelers' behavioral intentions. The higher level of risk perceived has reduced people's intention to travel, especially among those lacking self-confidence. The present study investigates how travelers' personality traits (i.e., information acquisition and personal outcome decision-making) impact destination image and perceived risk to get infected by the Covid-19 virus may influence travelers' attitude and travel intention. An online survey was administered among social networks. A structural equation model was developed on a dataset of 344 questionnaires filled by Italian travelers. The findings of the study confirm that, on one hand, the high sense of travelers' perceived risk, enhanced by personal outcome decision-making, is dramatically reducing their travel intentions by reducing travelers' attitude toward travel during the Covid-19 pandemic. On the other hand, the destination image, enhanced by information acquisition, offsets the negative effect of risk. This study provides insights to tourism operators and policymakers who are trying to cope with an unstable and raveled sector, badly hit by the pandemic. In this stage of the pandemic, operators should improve the image of their service quality to reassure travelers of the possibility of contracting the virus at restaurants and accommodations. Policymakers should support policies to encourage domestic tourism.

Keywords Covid-19 · Travel intention · Perceived risk · Destination image · Travelers' personality traits

1 Introduction

The coronavirus pandemic (Covid-19) is considered the most impactful crisis hitting tourism in the 21st century (Hall et al., 2020). As the tourism industry is relevant to the worldwide economy, generating 10.4% of the global GDP (ENIT, 2019),

operators, policymakers, and scholars are trying to understand how tourism would be affected by the spread of the pandemic. To this aim, understanding the possible changes in travelers' perceptions and behaviors is key.

The Covid-19 pandemic can be considered a natural disaster but with socio-political and human implications (Zenker & Kock, 2020). From a social viewpoint, travelers are considered the main carriers of the virus. Thus, to curb the global spread of Covid-19 several government measures, such as the lockdown of economic activities, social distancing, the borders shutdown, and other inbound and outbound travel restrictions have been implemented (Im et al., 2021; Li et al., 2020b). Transport companies, especially airlines, have quit or drastically reduced their national and international services generating a widespread sense of trip uncertainty (Foo et al., 2020). In sum, "this crisis is not only different, but it can have profound and long-term structural and transformational changes to tourism as socio-economic activity and industry" (Sigala, 2020, p. 312).

Several aspects make Covid-19 particularly dangerous for tourism. Usually, crises and disasters impact restricted geographic areas and have short-term recovery patterns (Zeng et al., 2005) while, to date, Covid-19 has involved over 199 million people in 222 countries in a jeopardized way (Worldometer, 2021), and its negative effects will last long (Li et al., 2020a). To date, several studies have investigated the impact of the Covid-19 pandemic on tourist's travel intentions, evidencing how the potential perceived risk connected with the virus infection will highly influence tourist's post-pandemic travel decision-making (Rasoolimanesh et al., 2021).

Due to the numerous differences between pandemics and other crises and disasters, the present study contributes to the emerging literature investigating the impact of pandemics on tourists' travel intentions, deriving possible implications for the industry (Chen et al., 2020). This is increasingly relevant, considering that "the pandemic acted as a trigger for researchers to rethink or re-evaluate the essential role and functions of tourism in human society" (Huang & Wang, 2022, p. 15).

Thus, the paper aims at exploring how the diffusion of a global pandemic can influence travelers' choices to explore the role of destination image to offset the negative effects of perceived risk. The primary aim of this study is to gain a better understanding of tourists' travel intentions in a context of great uncertainty determined by the pandemic's spread.

However, in crises, travelers' personality traits may play a fundamental role in final intentions and behaviors. Valencia and Crouch (2008) evidence that some travelers may postpone or cancel planned travels due to their lacking self-confidence, making them more sensitive to adverse events. Conversely, the authors identify another segment, capable of processing even fragmentary information, who proceeds with the trip even in uncertain or risky conditions (Valencia & Crouch, 2008).

The study provides a theoretical and empirical examination of the influence determined by travelers' personality traits on the perceived risk to get infected by the Covid-19 virus during travel, together with the role played by destination image, on travelers' attitude toward travel during the Covid-19 pandemic and travel intention. In doing so, this work responds to the call for more theoretical and empirical studies analyzing the joint impact of destination image and perceived risk in influencing travelers' intentions (Perpiña et al., 2020) in light of travelers'

personality traits. By doing so, this study aims at contributing to the literature by providing a theoretical and empirical analysis of travelers' intention to travel during the global pandemic (i.e. Covid-19). To better catch the positive impact of destination image and the negative impact of perceived risk, the two constructs are settled apart. A covariance-based structural equation model builds on a dataset composed of 344 structured questionnaires collected among Italian people planning their summer holidays. The study was conducted in Italy as it is one of the first countries hard-hit worldwide. Thereafter, the study offers practical implications aimed at supporting recovery patterns to reopen after the pandemic. The discussion of findings opens new scenarios on changes in pandemic planned travel behaviors which could support tourism operators and policymakers to mitigate the negative risk perceptions of their destination areas and increase tourists' willingness to travel even in a context of great uncertainty.

2 Conceptual framework

In recent years, the tourism literature focusing on tourists' travel intentions during crises has spread due to the growing appearance of critical events that make traveling increasingly uncertain, requiring the display of greater resilience capabilities to face adversity by tourism players (World Travel & Tourism Council, 2018). Thus, for example, scholars are unraveling the traveler's decision-making in the context of uncertainty and instability, such as political (Stepchenkova et al., 2018) and economic crises (McKercher & Hui, 2004), terrorist attacks, (Floyd et al., 2003), natural disasters (Chew & Jahari, 2014; Wu & Shimizu, 2020) and pandemic outbreaks (Novelli et al., 2018; Perpiña et al., 2020) evaluating how his/her personality may influence the travel intention (Dickman, 2003).

2.1 Travelers' personality traits

Travelers' personality plays a fundamental role during crises, to the point that those lacking in self-confidence may choose not to travel (Dickman, 2003). It comes to be increasingly relevant when the crisis is worldwide and there is no way to "feel safe" by opting for a destination far away from the terroristic attack or an earthquake, among other localized crises (Hajibaba et al., 2016). Each crisis impacts differently on travelers' perception of risk which may vary depending on travelers' self-confidence to address the crisis correctly and choose the right destination (Kapuściński & Richards, 2016). Similarly, Morakabati and Kapuściński (2016) contemplate that the perception of various levels of risk depends on tourists' self-confidence variability. Accordingly, depending on travelers' personalities and level of perceived risk - either risk-neutral, risk avoiders, or risk takers - they will confirm, postpone or cancel their travel in times of crisis (Moutinho, 1987). Nevertheless, when the process to acquire, understand and process information remains high, also thanks to the support of operators, consumers' self-confidence operates as an antecedent of their choices (Park et al., 1994).

While the re-planning costs and the cancellation charges may be a deterrent to travel cancellation (Park & Jank, 2014), good communication by the destination area to psychologically cope with the uncertainty determined by the crisis, may reassure the traveler and positively impact his/her travel intention (Coombs & Holladay, 2008). The latter is most effective when travelers are confident in their ability to acquire, process, and understand the information to make the right decision. Conversely, travelers lacking in their self-confidence will perceive the personal outcome of re-planning the travel as too costly (Valencia & Crouch, 2008).

H1a. Information acquisition impacts positively destination image.

H1b. Personal outcome decision making impacts positively perceived risk.

2.2 Perceived risk

Perceived risk has been extensively investigated in the tourism crisis literature as among the main factors shaping tourists' decision-making and behavior (Yu et al., 2021). The rise in the number of crises and disasters which have hit tourism over the last years made the perceived risk increasingly relevant in determining travelers' intentions (Coshall, 2003; Floyd et al., 2003; Gössling et al., 2020; Mazzocchi & Montini, 2001). From a broad perspective, tourists' perceived risk is associated with any negative perception the tourist can experience during his/her travel: physical, financial, political, performance, socio-psychological, time, natural, and health risks (Fuchs & Reichel, 2006). Recent studies investigating the impact of Covid-19 on the tourism industry have shown the primary role played by perceived risk in influencing travelers' intentions. Thus, for example, Qiu et al. (2020) found that the health risk, connected with the Covid-19 spread, is affecting not only outbound tourism but also inbound tourism. The authors found an increasing level of perceived risk for both travelers and residents of the destination areas (Qiu et al., 2020). When considering a destination, tourists evaluate existing and possible risks connected with the destination, before deciding on the travel. Although the destination can be attractive and present many leisure activities, tourists may decide to resign from it also after booking if they start to consider it risky (Khan et al., 2017). Furthermore, analyzing the impact of three risk categories (i.e., infectious diseases, terrorist attacks, and natural disasters) on international travel, Kozak et al. (2007) found that tourists tend to change their travel plans when the destination is considered highly risky. Indeed, perceived risk is key in negatively influencing tourists' perceptions both before and after booking in case of crisis. Furthermore, perceived risk has also a potential indirect effect on tourists' travel intentions by the means of their feelings and attitude (Amaro & Duarte, 2015). The mediating role of tourists' attitude was recently confirmed by the study of Bae and Chang (2020) which found an indirect impact of risk perception on tourists' behavioral intentions during the first wave of the Covid-19 pandemic. Similar results were found by Yu et al. (2021) finding a significant impact of Covid-19 perceived risk and tourists' feelings and travel intentions. Thus, during their summer holidays, tourists may show an increased level of risk perception of contracting Covid-19 in bars, restaurants, and hotels as well as during a possible visit to museums or cultural sites. Accordingly, the perceived risk is considered a negative driver for both travelers' attitudes and intentions, as follows:

H2a. Perceived risk is negatively related to attitude toward travel during the Covid-19 pandemic.

H2b. Perceived risk is negatively related to travel intentions.

2.3 Destination image

Similar to perceived risk, destination image represents an influential driver of tourist decision-making, playing a primary role in the context of pandemics (Rasoolimanesh et al., 2021; Tasci et al., 2022). Destination image “connotes the sum of a tourist’s subjective beliefs, ideas, expectations, and impressions connected to a destination” (Breitsohl & Garrod, 2016, p. 211). It represents the overall perception a tourist has of a destination place (Phelps, 1986). Over time, the concept of destination image has been extended adding to the functional aspect of the destination with emotional aspects. It “includes cognitive, affective, and conative dimensions of image, which reflects thoughts and opinions about a place [...] leading to behavioral intentions toward the place” (Tasci et al., 2022, p. 432).

Previous studies have applied this concept to explain tourists’ image of a destination and found it to strongly influence the tourist’s destination selection process. It represents a key driver of tourists’ visit intentions (Perpiña et al., 2020; Stylos et al., 2016). “Destinations with strong, positive images are much more likely to be taken into consideration and chosen in the travel-destination decision process” (Kim & Kwon, 2018, p. 1). Tourists choose the destination with the most positive image among possible destination alternatives (Noh & Vogt, 2013).

Previous studies have tested the destination image as an antecedent of both attitude toward travel and tourists’ travel intentions. Jalilvand et al., (2012) analyzing a sample of 264 Iranian tourists, found a significant and positive impact of destination image on tourists’ attitude and travel intentions. Analyzing the post-Covid-19 crisis recovery, Ahamad et al. (2021) found that destination image plays a mediating role in determining travelers’ visit intentions. Thus, replicating Jalilvand et al. (2012) relationships between destination image, attitude, and intention in the current pandemic scenario, we postulate that a positive image of the destination about the good overall quality of the touristic services offered and the availability of leisure activities may positively influence travelers’ attitude and intentions, as stated below:

H3a. Destination image is positively related to attitude toward travel during the Covid-19 pandemic.

H3b. Destination image is positively related to travel intentions.

2.4 Attitude toward travel during the covid-19 pandemic

Among other decision-making models, the marketing and tourism literature has extensively applied the attitude-intention relationship defined by the theory of planned behavior (TPB) (Ajzen, 1988). According to the TPB, when individuals have no full volitional control they base their behavioral intentions on attitude (Ajzen, 1991). Attitude represents a ‘useful input’ into consumer decision-making (Jalilvand et al., 2012). The tourism literature confirms that travelers’ feelings, beliefs, and thoughts (i.e. attitude) are the main predictors of their behavioral intentions, also in

traveling (e.g. Amaro & Duarte, 2015). Accordingly, in contexts of great uncertainty, such as crises and disasters, individuals' beliefs play a key role in determining their behavioral intentions. The recent study by Li et al. (2020a) confirmed the validity of TPB to understand intra-Covid-19 pandemic tourists' perceptions, thus we can postulate that:

H4. Attitude toward travel during the Covid-19 pandemic is positively related to travel intentions.

Figure 1 presents the overall theoretical model. The proposed model includes age, sex, and the presence of Covid-19 cases among relatives as control variables. Besides demographic variables, tourists' travel intentions may be influenced by experiencing the existence of the virus in their beloved ones.

3 Method

3.1 Research context and sampling

We used an online survey to empirically assess the theoretical model. Italy was selected as the research site for the study as it was one of the first European countries to present Covid-19 cases (Remuzzi & Remuzzi, 2020), hitting the hardest from the beginning (Global Web Index, 2020), and one of the worldwide countries with the highest case fatality rate (Rastegar et al., 2021). Since early March 2020, the Italian government has implemented measures aimed to reduce inbound and outbound mobility and curb the spread of the virus, imposing a lockdown on March 22. But thanks to these drastic measures, Italy was also one of the first countries in Europe

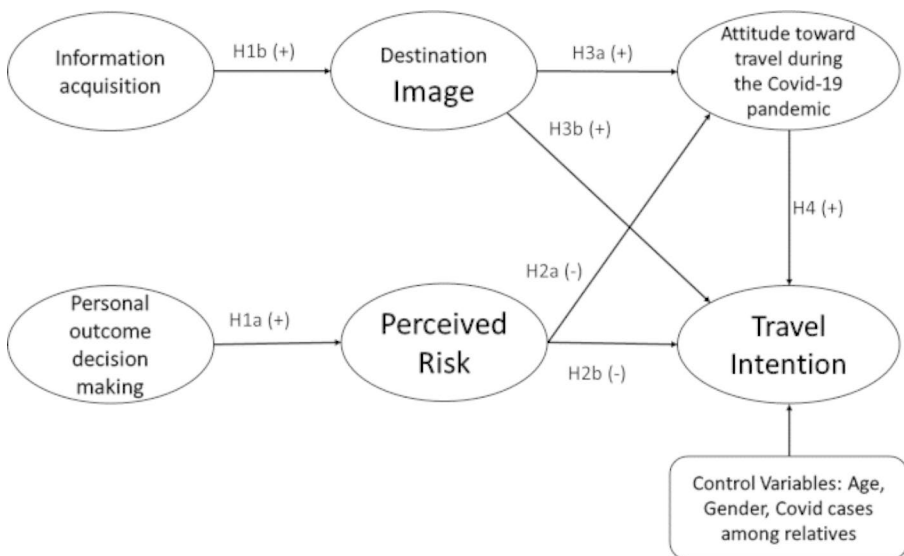


Fig. 1 Theoretical Model

Table 1 Respondents' Characteristics

Socio-demographic (N=344)	Type	n	%
Gender	Male	86	25.0
	Female	258	75.0
Age (years old)	18–30	143	41.6
	31–45	100	29.1
	46–60	73	21.2
	61 or above	28	8.1
Education	High school	150	43.6
	Graduate school and University	144	41.9
	Postgraduate and Ph.D.	50	14.5
Family income	Below €36,000	238	69.2
	€36,001 ~ 70,000	85	24.7
	€70,001 ~ 100,000	15	4.4
	Above €100,001	6	1.7
Travel Frequency (in the last five years)	none	3	0.9
	1–3 times	35	10.2
	4–5 times	54	15.7
	More than 5 times	252	73.7
Covid-19 cases among close people (family, friends)	No	203	59.0
	Yes	141	41.0
Travel Plans (before Covid-19 spread)	Italy	42	12.2
	Europe	57	16.6
	Over-Europe	46	13.4
	No plans	199	57.8
Travel Plans (mid-July)	Italy	204	59.3
	Europe	32	9.3
	Over-Europe	11	3.2
	No plans	97	28.2

to reopen its borders (mid-June 2020). Tourism is a key industry for the country: it develops 25.6 billion euros in turnover, 6% of the total added value generated, with 283 thousand employees in 52 thousand different companies (Istat, 2020). Italy ranks first in Europe by share of touristic accommodation out of the total EU and second per share of foreign tourists (Istat, 2020). The survey conducted by Isnart-Unioncamere (2020) revealed that one out of two Italians will not go on vacation this year (-40%), while, within the 24 million Italians who will move, 86% of them will remain in Italy and only 4.8% will go abroad (they were 26% in 2019).

A convenience sample of Facebook users was involved in the research. A structured questionnaire was distributed in more than 100 most popular Facebook groups focusing on travel both in Italy and abroad, to have access to the target group. The study was conducted in the summer season (July). A minimum of five respondents per item was surveyed to respect the sampling's endorsement (Hair Jr, et al., 2010).

A total of 344 completed and usable questionnaires were collected. Two questionnaires were deleted as not respecting the attention checks included in the questionnaire. Respondents' characteristics are reported in Table 1. The majority of respondents were female (75.0%). Respondents were aged between 18 and 75 years (mean: 37 years). The travel propensity, measured in terms of the number of travels undertaken in the last five years is very high: more than 73.7% of respondents traveled more than once a year. 141 respondents (41.0%) reported Covid-19 cases

Table 2 Results of the internal fit of measurement

Variable (Cronbach's alpha)	Completely standardized estimates	T-value	C.R.	AVE
Attitude toward travel during the Covid-19 pandemic (ATT) ($\alpha=0.882$)			0.885	0.630
I think traveling this summer is:				
Very silly - very wise	0.776	n.a.		
Very negative - Very positive	0.910	17.237		
Very useless - Very useful	0.854	15.129		
Information acquisition (IA) ($\alpha=0.880$)			0.881	0.712
I know where to look to find travel information	0.862	n.a.		
I am confident in my travel research abilities	0.811	13.416		
I know exactly what to ask when searching for travel information	0.857	17.074		
Personal outcomes decision making (PO) ($\alpha=0.756$)			0.755	0.508
I have doubts about the travel decisions I make when re-planning a travel	0.769	n.a.		
I often wonder if I made the right destination choice when re-planning	0.709	10.971		
I never seem to travel to the right place when re-planning	0.655	9.049		
Perceived Risk (RISK) ($\alpha=0.922$)			0.923	0.633
I am afraid of contamination through food	0.743	n.a.		
I am scared to eat in restaurants and bars	0.744	11.946		
I worry the structures are not sanitized	0.775	13.733		
I think I can contract Covid-19 on the trip	0.789	13.174		
The risk to catch Covid-19 in the accommodation is high	0.827	14.596		
To get infected in restaurants scares me	0.895	15.442		
Visit museums and places of art is risky because of Covid-19	0.786	13.015		
Destination Image (DIMA) ($\alpha=0.943$)			0.944	0.702
The destination that I will choose for the summer holidays:				
Has good overall quality	0.912	n.a.		
Offers fair quality standards	0.871	28.854		
Is well organized	0.844	31.704		
Offers moments of leisure and good services	0.847	30.513		
It will meet my expectations	0.873	35.500		
It is a safe destination	0.803	28.376		
Travel intentions (TINT) ($\alpha=0.879$)			0.880	0.561
I am going to travel this summer	0.740	n.a.		
I can imagine myself on holiday this summer	0.690	17.574		
I recommend friends and family to travel this summer	0.896	17.242		
I encourage friends and family to travel this summer	0.878	17.144		

Note: ATT— attitude toward travel during the Covid-19 pandemic, RISK—Perceived risk, DIMA— Destination image, TINT— Travel intention, n.a.: not available, α : Chronbach's α , C.R.: Composite reliability, AVE: Average variance extracted

among their family members and friends. To evaluate pre- and post-Covid travel choices, respondents were surveyed about their pre-Covid travel plans and how these changed after Covid-19. 145 respondents (42.2%) said they had already organized their holidays before the Covid-19 spread. The majority of them were planning to go abroad (42.2% - $n=145$). The post-Covid travel choices show a change in travel planning with a preference for travel within the national border (59.3%, $n=344$), in

Table 3 The discriminant validity by the Fornell and Larcker's criterion

	TINT	ATT	DIMA	RISK	IA	PO
TINT	0.749					
ATT	0.630	0.794				
DIMA	0.550	0.320	0.838			
RISK	-0.216	-0.331	0.061	0.796		
IA	0.314	0.180	0.551	0.022	0.844	
PO	-0.041	-0.117	0.119	0.447	0.016	0.713

Note: TINT—Travel intentions, ATT—Attitude toward travel during the Covid-19 pandemic, DIMA—Destination image, RISK—Perceived risk, IA – Information acquisition, PO — Personal outcome decision making. Data in bold (diagonal) are square roots of AVEs.

agreement with recent surveys (Isnart-Unioncamere, 2020). Relevant also the number of those with no clear plans for Summer (28.3%) confirms the high uncertainty tourists are experiencing due to the Covid-19 pandemic. Data partially confirm the results of the survey conducted by the Global Web Index in the last week of May (19–26) on a sample of tourists from 20 different countries (2020). The Global Web Index (GWI) Coronavirus research showed that over 17,143 respondents, only 22% of them were planning an international journey for the following months.

3.2 Measures

A structured questionnaire composed of four main parts was developed and structured as follows: (1) pre-Covid travel plans; (2) post-Covid travel plans; (3) constructs about summer travel intentions; (4) demographics and general information about respondents. The third part of the questionnaire, in particular, was developed by reviewing previous related studies to ensure the content validity of measures. Items were evaluated on a 7-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (7). Tourists' travel intentions were measured using a four-item scale adapted from previous studies by Hung and Petrick (2012) and Girish and Lee (2020). A six-item scale adapted from the previous studies of Williams and Soutar (2009) and Tasci et al. (2022) was used to measure the destination image. Perceived risk to get infected while traveling in summer was adapted from the previous study of Fuchs and Reichel (2006) and measured on seven items. The scales of information acquisition and personal outcomes decision-making were derived from Valencia and Crouch (2008). Finally, a 7-point semantic differential scale, composed of three items, was used to measure attitude toward travel during the Covid-19 pandemic. The attitude scale was adapted from Jalilvand and Samiei (2012).

3.3 Data analysis procedure

A two-step approach was used to outline the theoretical model presented in Fig. 1 (Anderson & Gerbing, 1998). The Confirmatory Factor Analysis (CFA) was first performed to evaluate the measurement model. Then, a covariance-based structural equation model (CB-SEM) was developed using the maximum-likelihood method (ML). The structural model is aimed at estimating construct paths. The software Lisrel 8.80 was used for the two steps (Jöreskog & Sörbom, 2006).

3.4 Measurement model fit

The measurement model presents good values in assessing the convergent and discriminant validity of measures (Hu & Bentler, 1999). First, all factor loadings load into the expected construct showing good standardized values higher than 0.50. Besides, each item shows good significant levels being the smaller t-statistics higher than 13 (Hair et al., 2010). Second, Cronbach's alphas demonstrate good reliability, being above 0.8. Values for the composite reliability (CR), which should be above 0.60, and for the average of the variance extracted (AVE), which should be above 0.5, ensure the convergent validity of the measurement model (Fornell & Larcker, 1981).

Furthermore, the square root of AVEs for each construct is greater than the correlations for each construct in the relevant rows and columns confirming the discriminant validity based on the Fornell and Larcker's criterion (1981). Factor loadings, CR, AVE, and Cronbach's alphas of the measurement model are presented in Table 2.

4 Structural model results

4.1 Structural model fit and predictive ability

Following the procedure proposed by Huerta-Álvarez et al. (2020), the Harman's single-factor test was used to estimate common method bias. The variance explained by all measures is higher than the variance determined by a single factor composed of all observable variables, evidencing no particular problems with common method bias (Podsakoff et al., 2003). Further, correlations between latent constructs, presented in Table 3, are smaller than 0.9 (Bagozzi et al., 1991).

Good values were found for the goodness-of-fit indices revealing that the hypothesized model fits the data well. Although the robust Satorra and Bentler $\chi^2_{(360)}$ (697.402) $p < 0.00$ is significant, showing possible problems of multicollinearity (Satorra & Bentler, 1994), previous studies stated that this result may be due to the high sensitivity of the χ^2 to the sample size (Kline, 2011). This is confirmed by the good value expressed by the χ^2 ratio which is lower than 3 ($\chi^2/df = 1.937$). In addition, other model fit indexes show good values as follows: RMSEA = 0.0523^{n.s.} ($p = 0.254$), NFI = 0.948, CFI = 0.974. The GFI = 0.857 is slightly lower than 0.90. Further, the structural model does not present particular problems with residuals (SRMR = 0.067). Since the $R^2_{Tint} = 0.562$, $R^2_{Tatt} = 0.234$, $R^2_{Dima} = 0.303$, and $R^2_{Risk} = 0.199$ the amount of the total variance explained by the CB-SEM can be considered good.

4.2 Structural paths

Figure 2 presents the results of the constructs paths outlined in the theoretical model and empirically tested with the structural model.

Results show that travelers' psychological traits positively influence travelers evaluation of the destination and their perceived risk in a context of crisis. Particularly,

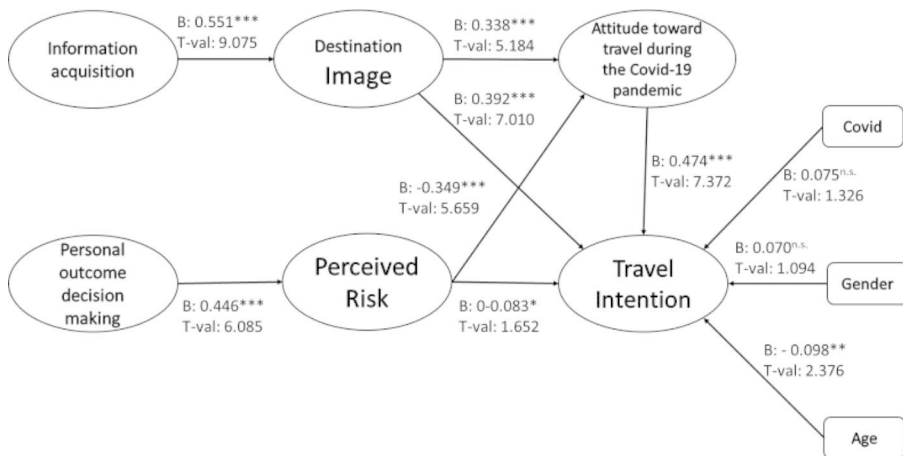


Fig. 2 Results of the estimated model. (Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$, n.s. not significant)

the information acquisition enhances the overall destination image, confirming H1a. Similarly, when the traveler feels to be unable to choose the right place for his/her travel, the perceived risk will be higher, in line with H1b. Further, the perceived risk to get infected by the Covid-19 virus while traveling has a significant and negative impact on attitude toward travel during the Covid-19 pandemic and on tourists’ travel intentions, which is consistent with the expected signs and the significance level postulated in H2a and H2b. Thus, the perception of infection risk connected with travel has a dual capacity to reduce both travelers’ attitude and intentions leading travelers to forgo departure.

Conversely, the destination image shows a positive and significant effect on both attitude toward travel during the Covid-19 pandemic and tourists’ travel intentions. Thus, hypotheses H3a and H3b are supported. Hence, by spreading a positive image of the destination area, it is possible to improve travelers’ feelings of safety and their intention to travel as well. Finally, attitude toward travel during the Covid-19 pandemic and tourists’ travel intentions are positively and directly related confirming H4.

No significant effect was found for the control variables included in the model, apart from respondents’ age. The significant and negative relationship between age and tourists’ travel intentions confirms that young tourists are more confident in traveling in conditions of high risk and uncertainty, such as the context of the pandemic. Conversely, the experience with Covid-19, although for some of the respondents only indirectly, as friends and relatives contracted the virus, does not represent a deterrent to the summer holidays. We also found no differences between men and women in their travel intentions in the context of a pandemic crisis.

4.3 Mediation analysis

The mediation test, presented in Table 4, shows that perceived risk indirectly influences tourists’ travel intentions by the means of attitude toward travel during the

Table 4 Indirect effects

Paths	Indirect Effect
Perceived risk \diamond Attitude toward travel during the Covid-19 pandemic \diamond Travel Intentions	- 0.189***
Destination Image \diamond Attitude toward travel during the Covid-19 pandemic \diamond Travel Intentions	0.152***

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

Covid-19 pandemic. Hence, we can assume that the great uncertainty provoked by the global spread of Covid-19 has strongly impacted not only tourists' feelings and attitudes but also their intention to travel, mainly in an indirect way, by impacting their feelings and beliefs. Further, the little direct effect exerted by RISK on INT shows almost a full mediation. Accordingly, the perception of risk of traveling during a pandemic may reduce travelers' intentions by reducing their attitude toward travel in crises.

Further, results of the mediation test confirm a partial mediation being the indirect effect significant. Results confirm that when a destination is perceived with good overall quality, offering fair services, as well as leisure opportunities, both tourists' attitudes and intentions are positively influenced. In this case, the partial mediation evidences that destination image has a dual role in both enhancing travelers' attitudes and feelings and boosting their travel intentions.

5 Discussion

This study builds on the current literature studying the effects of Covid-19 on consumer travel intentions. Within the literature on tourists' behavioral intentions in crisis contexts, this research contributes to the emerging literature focusing on the case of global pandemics (Chen et al., 2020). The SARS-COV, Ebola, and other pandemics have hit tourism since the beginning of the 21st century, making the health crisis different from other forms of economic, political, and human-made crises, as well as from natural disasters.

The main objective of this study is to understand how tourists' travel intentions have changed since the pandemic spreads globally, from late February 2020 to the 2021 summer. On one hand, the oncoming summer holidays have pushed many people to reschedule their holidays. On the other hand, the uncertainty relative to the developing government restrictions on inbound and outbound mobility has strongly influenced travel choices. As such, tourists have changed their destinations preferring the domestic market to international areas. Further, the present study confirms that the great uncertainty due to the Covid-19 global pandemic is reducing tourists' travel intentions. More than 28% of respondents, when the data collection took place, hadn't planned their summer holidays yet waiting for the evolution of the pandemic situation. Similar results were found in the recent study conducted by Li et al. (2020a) showing that in China, the country where the virus spread first since the end of 2019, consumers were planning to postpone their holidays by six months or longer. This opens up serious planning problems for the tourism industry, particularly for travel and hospitality companies. Moreover, this trend can cause potential problems

of customer dissatisfaction, lower service quality, and the impossibility to manage unpredictable demand.

The results show that both the uncertainty on the destination and the possible hiccup of having to re-plan the trip enhance the perceived risk of travel. This, in turn, reduces the overall travel intention. For those more confident in searching, selecting and understanding information about the destination's pandemic wave, the concern is lower. These trends were confirmed by the Data Appeal Company report on the 2021 summer travel trends, evidencing that 68% of Italians opted for domestic destinations due to the food offer and to a wider number of digital contents – double compared to 2020 – that improved the accessibility to information about the destination and local service providers (The Data Appeal Company). In the post-Covid era, the greater availability of information - also through social media - has allowed operators to meet the psychological needs of tourists (Cheung et al., 2021).

6 Implications

6.1 Theoretical implications

Our study contributes to the literature by evidencing that in a global pandemic crisis, the personality traits of travelers play an important role in driving their travel intentions. Results show that the perception of properly collecting, processing and understanding information has a positive impact on the overall destination image. Conversely, when the traveler feels the risk to re-plan the travel, the overall perceived risk increases. Thus, during crises, operators and policy-makers should improve travelers' self-confidence (Valencia & Crouch, 2008), and allow flexible booking conditions (Piga et al., 2022).

Furthermore, the paper contributes to bridging the literature gap on the joint role of destination image and perceived risk in shaping tourists' travel intentions (Perpiña et al., 2020). Nevertheless, the present study contributes to the literature by considering the destination image and the perceived risk as different constructs. This approach is in line with other previous studies (e.g., Noh & Vogt, 2013). Results show that, although a positive image may exist in tourists' minds if the destination is considered risky, tourists may opt for other destinations, changing their initial plans. To contribute to the extant literature, the present study theoretically and empirically considers these two drivers in a context of great uncertainty, where tourists' choices are strongly conditioned by uncertainty. Our findings show that although the perceived risk to get infected in traveling is high, negatively influencing both tourists' attitude and travel behavioral intentions, destination image may compensate for the perception of health risk. The opposite impact exerted by the two dimensions - i.e. positive for the destination image and negative for the perceived risk - confirm the need to consider the two aspects as distinct. Furthermore, differently from our expectations, destination image exerts the strongest impact on tourists' travel intentions, besides the context of great uncertainty experienced by tourists because of Covid-19. The present study contributes to the literature evidencing the primary role of destination image even in tourism crises. In line with previous studies (e.g., Breitsohl & Garrod,

2016), our results evidence that when a negative event, such as a pandemic outbreak, occurs, consumers perceive a higher risk and show a lower propensity to travel; in this scenario, a positive destination image can mitigate tourists' hostile behavioral intentions. This result may depend on the fact that almost 60% of the sample opted for staying in the resident country for holidays. In case of local crises (e.g. terroristic attacks or natural disasters), travelers use to move toward safe areas (Hajibaba et al., 2016), conversely, when crises are global, such as in the case of Covid-19 pandemic, local and national tourism is considered a safer option (Visentin et al., 2021).

Another contribution of the paper concerns findings emerging from the control variables. Results of the present study confirm that in the context of high uncertainty and infection risk, younger tourists display a lower level of risk than older people, which is in line with the findings of previous studies (e.g., Hajibaba et al., 2015; Karl, 2018). Our findings confirm that young travelers are less risk-averse and more willing to travel under risky conditions (Karl et al., 2020). Nevertheless, the study conducted by Li et al. (2020a) on the impact of Covid-19 on Chinese travel intentions showed opposite findings. The contrary findings emerging in the literature on the influence of travelers' socio-demographics on their willingness to travel in risky conditions, require further studies. Finally, the paper contributes to the understanding of the Covid-19 impact on tourists' travel intentions evidencing that the presence or absence of Covid-19 cases among family members or friends has no significant effect on Italians' travel intentions. This result may be probably due to individuals' need for freedom after months of lockdown.

In light of our results and of the recent trends, it is evident how the tourism sector has radically evolved. International travel has increased last-minute offers (Aldao et al., 2022). Operators have begun to offer additional flexibility in their bookings (Piga et al., 2022). From the tourist side, our data reveal the request for an easy access to information and attention to possible re-planning options. The pandemic led people to choose travel destinations to “disconnect from daily problems and restrictions” (Aldao et al., 2022, p. 7), with an increasing request for natural and healthy activities (Viglia et al., 2021), as well as food experiences (Aldao et al., 2022; The Data Appeal Company).

6.2 Managerial implications

This study provides practical suggestions for the actors of the tourism industry trying to recover from the negative impact of the Covid-19 pandemic as well as for policymakers who should support resilience and recovery.

Today, we are witnessing a constant evolution of the occupation rate, inversely proportional to the contagion rate. When the health condition becomes riskier, travelers are prone to cancel their booking. When the perceived risk is high, tourism operators should improve their communication programs to enhance tourists' travel intentions and correct negative perceptions and images of their destinations. The image and perceived risk of a destination are related to the information source that tourists consult (Noh & Vogt, 2013). It is easier for tourists to opt for a holiday in their own country as they have easier and wider access to information. Accordingly, by implementing a strong communication campaign (Im et al., 2021) and by stressing

spatial distance to reduce the psychological risk perception (Rather, 2021), operators may involve customers to travel. Consumers' overall perception of the pandemic strongly changes if considering their own country and the global situation. Thus, tourism operators should implement a short-term recovery pattern focusing on inbound tourism. In line with our findings, previous studies confirmed the pandemic outbreak impacts international tourism, with a drop in international demand (e.g. Henderson & Ng, 2004; Page et al., 2006). Travel and tourism operators should focus their efforts on the domestic market. Arbulú et al. (2021), analyzing the Spanish market, demonstrated that domestic tourism alleviates the crisis of the COVID-19 tourism industry by bringing 33% of the pre-crisis overnight stays. Thus, during a pandemic crisis, it is preferable to direct resources toward the internal market, which, especially in the short term, shows the best recovery and profitability trends (Viglia et al., 2021). Hence, the offer should be devoted to the Italian tourist who has a high knowledge of habits, tastes, and folklore of the Italian territory. It could be interesting to evaluate a possible economic support to domestic tourism; in Italy, for example, the government has allocated economic measures (i.e. National Recovery and Resilience Plan) mainly aimed at boosting domestic tourism and wellbeing.

In the post-pandemic, operators should bounce back to their long-term recovery patterns focusing on international tourism. International tourism represents 27% of the total global tourism spend (\$3,971 billion in 2017) and is key to support exports and rises the national country's image (WTTC, 2018). Hence, by the means of traditional and new media, operators should reassure international tourists on the overcoming the infection risk. Indeed, although it is "beyond tourism destination control, [...] safety is of utmost importance to global tourism" (Zuo & Meng, 2020, pp. 1886–1887). To improve safety perception and support outbound tourism, governments and policymakers should establish travel "corridors" between countries. This is what European governments are trying to implement since May 2020 (Global Web Index, 2020). Nevertheless, as national governments can quickly change restrictions and measures for international tourists, international tourism has dropped. Therefore, tourists may find themselves traveling freely across nations, as well as spending a quarantine period when entering a foreign country or returning to their home country. In the worst case, they may be denied permission to travel overnight, making international traveling badly uncertain.

7 Limitations and future research agenda

Although providing an interesting perspective on the uncertainty determined by the spread of Covid-19 globally and on its negative effects on tourists' travel intentions, there are limitations associated with this research. Firstly, this study focuses on Italian tourists only. Although Italians are an interesting sample to be investigated due to the pandemic course on the country and the importance of its tourism industry, findings are limited to a unique context, and caution is needed in generalizing the findings of this study. Further studies should test the theoretical and empirical model on countries with low/high destination images or in which the pandemic is at a different contagious stage. Secondly, data were collected through an online survey. Individuals

with high travel propensity were included in the empirical analysis providing a possible bias on the overall understanding of the phenomenon. Future works should replicate the study considering individuals with low travel propensity. Comparing results between high-propensity travelers and low-propensity travelers may give a broader view of the phenomenon under investigation. The non-probability sampling approach adopted in this study may also not be representative of all Italian travelers as females represent 75% of the sample. Thirdly, the Covid-19 pandemic is showing unpredictable contagious waves. Data were collected in summer – a period of partial calm in the Italian contagions’ scenario. The recent waves of infections both in Italy and in other nearby countries (e.g., Spain, Belgium, France) or highly attractive for Italian tourists (e.g., Brazil, USA, and Japan) could somehow affect the travel choices of those planning to travel in Italy, Europe or in a non-EU country. Interestingly, recent evidence (Li et al., 2021) showed that a closer (vs. farther) distance to pandemic epicenters is associate with lower (vs. higher) perceived risk of the pandemic, leading to less (vs. more) irrational consumption behaviors. Finally, the role of feelings and emotions were not included in this work, even if we acknowledged that they can play a role in shaping tourists’ travel intentions in times of pandemic.

Author contributions FDC is the coordinator of the project and wrote the first draft of the manuscript. All authors revised, edited and wrote updated versions of the manuscript and worked on the conceptualization of the study. In particular FDC cared conceptual framework and hypotheses, research design, methodology, and formal analysis; EM wrote the introduction, and limitations and future research agenda ; GV developed general discussion and implications.

Funding Not applicable.

Data availability Data are available upon direct request.

Declarations

Conflicts of interest We declare that the attached manuscript is original, unpublished and is not being submitted elsewhere. The authors of the manuscript declare that there are no conflicts of interest.

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