The impact of activity type and use of health and safety protocols for destination recovery following a health crisis

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ABSTRACT

This paper examines whether, following a prolonged health crisis, the offer of a tourist destination coupled with the use of health and safety protocols at the destination, influences brand equity and intention to visit. Specifically, it (a) examines whether the indoor/outdoor activity offers influence brand equity and intention to visit, (b) demonstrates whether health and safety protocols influence brand equity and intention to visit, and (c) tests whether there is a moderating effect by the use of health and safety protocols in destinations specializing in indoor, rather than outdoor, activities. The study is based on an experimental design in which the type of offer (out/indoor activities) and the use of anti-covid protocols versus their non-use were manipulated.

KEYWORDS Outdoor/Indoor activities; health crisis; brand equity; intention to visit; COVID-19, experimental design

Introduction

Supply and demand in tourism is sensitive to both natural and anthropogenic crises. This has been at no other time more obvious than during the COVID-19 pandemic when tourism was particularly hard hit on a global scale and for a long-time. The existing literature on tourism disaster recovery does not test how successful the post-crisis marketing measures are when utilized as a crisis subsides, but is not over. This lacuna in knowledge about crises marketing is particularly problematic in a situation like COVID-19 in which there have been several waves of infection (Volgger et al., 2021). This research addresses the gap in the knowledge by identifying and testing factors that reduce tourists' perceived risk and re-stimulate travel.

The psychometric or "revealed preference approach" (Fischhoff et al., 1978; Slovic, 1987) is used to identify and test factors that help to mitigate tourists' perceived risk and restimulate the desire to travel. For tourist activity to recover, it is key to consider the evaluations that tourists make of a destination that can be collected through the brand equity variable (Aaker, 1991; Keller, 1993). At the same time, dealing with the recovery of tourist activity implies considering the behavioural intentions of tourists to travel (Peco-Torres et al., 2021).

In the case of COVID-19, awareness of risk was heightened in relation to being in crowded, indoor spaces. As lockdowns eased this was translated into greater consideration, during the decision-making process, on whether a destination was predominately based on indoor or outdoor activities. The ability to offer outdoor activities is, as Zhang et al. (2021) argue not equal across all destinations. As such, chances of post-crisis recovery are not equal. It may seem obvious, but destinations that can provide outdoor activities (e.g. beach destinations) have a better and faster prognosis for recovery, compared to those where there is greater reliance on indoor activities (e.g. city destinations) (DNA, 2020).

In addition, according to Schneider et al. (2021), the use of health and safety protocols when consuming tourism experiences contributed, in the case of COVID-19, to providing, post lock- down, the reassurances that tourists were looking for. The adoption of health and safety measures was initially a response to the health crisis. From a market perspective, and looking to the future, understanding the role of health and safety mechanisms that can be maintained voluntarily by tourism providers, gives insight into the ways that adopting such protocols, leads to a more positive evaluation of the destination brand equity and is then converted into an intention to visit.

In addition, the health and safety protocols, are most effective when they manage to promote safe consumption for each type of offer or tourist activity available (Travel Safe, 2020). Research for this paper examines, in a novel way, the extent to which the use of health and safety protocols can improve the chances of recovery for different types of destinations based on their offer. In other words, is it possible to equate the possibilities of a destination recovering from a health crisis by the increased use and promotion of health and safety measures with tourists' evaluations and intentions to visit a destination?

As a whole, this research provides greater knowledge about the identification and effect that factors, e.g.: the characteristics of tourist destinations (based on indoor/outdoor activity offers) and the use of health and safety protocols can contribute, to restore the evaluation and intention to visit a destination in the immediate aftermath of the most acute stage of a health crisis. The specific research objectives were: (a) to assess whether the offer of the tourist destination (based on offering mainly outside or inside activities) influences brand equity and the intention to visit, (b) demonstrate whether health and safety protocols constitute a valid marketing tool, checking whether their use positively influences brand equity and the intention to visit, and (c) assess the moderating effect of the use of health and safety protocols on destinations with a specialized offer of activities consumed indoors versus destinations with a specialized offer of activities consumed outdoors. To satisfy the objectives, an experimental design was used in which the type of offer (outdoor vs. indoor activities) and the use or non-use of health and safety protocols were manipulated.

Literature review

Mitigating risk perceptions: identification of factors for the recovery of tourist activity

In crises contexts, perceived risk is a key variable affecting the changes in consumer behaviour. Perceived risk "refers to the combined measurement of 'perceived probability' and 'perceived con- sequences' of a certain event or

activity" (Bubeck et al., 2012, 1483). The psychometric or "revealed preference approach" is the most influential paradigm in modelling and forecasting risk perceptions and acceptance (Fischhoff et al., 1978; Slovic, 1987). Following on from Volgger et al. (2021) the key insights of this risk perception/acceptance framework have been used in this research to identify and test factors that help to mitigate tourists' perceived risk and encourages them to travel again.

The psychometric model asserts that informed awareness of a risk and how prepared someone is can increase acceptance of the risk. In general, preparedness and awareness are usually associated with an increased notion of control over the risk and increased trust in the managers of the risk (Fischhoff et al., 1978; Slovic, 1992). This, also applies in the tourism context (Volgger et al., 2021).

One approach to increasing perceived control over risks is the use of outdoor space (in contrast to utilizing indoor space). This came to the fore at the start of the pandemic, in that indoor consumption was associated with greater risk to health than outdoor consumption. The characteristics and offer of a destination, therefore, can influence the possibilities of recovery for tourist activity (Zhang et al., 2021). For example, Poulaki and Nikas (2021) identified a preference for tourists to consume stays in places with a greater number of possibilities for engaging in outdoor activities and which afforded greater control for safety, such as beaches, compared to places with fewer opportunities to provide outdoor spaces.

Another important method of increasing perceived control over risks is the use of non-pharmaceutical interventions (NPIs), through the health and safety protocols (or so-called anti- COVID protocols) (e.g. AENOR, 2021). These health and safety protocols include a structured programme of social distancing, hygiene and disinfection measures to ensure safety among tourists (Anderson et al., 2020; Schneider et al., 2021). Examples of these health and safety protocols in the COVID-19 context are the Spain Travel Safety programmes orientated to different kinds of service providers (Travel Safe, 2020) or the World Travel and Tourism Council programmes (WTTC, 2020).

The use of health and safety protocols were shown to have led to changes in the preferences for the consumption of tourist experiences (Im et al., 2021). From a market perspective, understanding the positive role that the protocols did or did not have and whether such mechanisms can be maintained by tourism providers on a voluntary basis to promote safer tourism consumption, is valuable for understanding what is needed in post-health crisis recovery situations.

Brand equity: effect of the destination offer and the use of health and safety protocols

According to Keller (1993, p. 2), Customer-Based Brand Equity can be conceptualized as "the differential effect of brand knowledge on consumer response to the marketing of the brand." Previous research has identified the need to know the antecedents that contribute to the formation of brand equity (Frías-Jamilena et al., 2017). The present research contributes to knowledge about the antecedents of brand equity in contexts of a health crisis. This is relevant to analyse given that changes are generated in the preferences of tourists (Im et al., 2021).

In the case of COVID-19 data collected in 2020 showed that destinations with a majority offer of activities that can be consumed outdoors were preferred and more valued than destinations that offered activities to be consumed mainly

indoors (DNA, 2020). As Im et al. (2021) argued an offer of outdoor activities was associated with greater perceived safety.

At the same time, the use of health and safety protocols is oriented towards the communication of a certain kind of information. There is a broad scholarly consensus that having appropriate information is a crucial factor in times of crisis, because it influences tourists' perceptions of security (e.g. Zou & Meng, 2020). Further, the measures can be an effective strategy employed by individuals to reduce uncertainty in the decision-making process (Liu & Hu, 2021).

As the preceding discussion indicates, the type of activities offered and the use, or non-use, of health and safety protocols can influence the brand equity, because both factors form part of tourists' perceptions of security. Based on this, it is interesting to analyse the effect that the offer of activities (outdoor or indoor) and the use of health and safety measures will generate on the brand equity. For this reason, the following hypotheses are proposed:

- **H1.** The brand equity is significantly higher if a destination offers activities mostly outdoors compared to a destination that offers activities mostly indoors.
- **H2.** The brand equity is significantly higher if a destination uses a health and safety protocol compared to a destination that does not use a health and safety protocol.

Intention to travel to a tourist destination: effect of the destination offer and the use of health and safety protocols

Repeat purchase intention, or revisiting a tourism destination, can be considered a key variable in the success of tourism offers, as it is directly related to their performance and long-term survival (Alrawadieh et al., 2019). The perception of danger to health at a destination is dependent on numerous factors, amongst which are the characteristics of the offer. In the case of COVID-19, destinations with an offer of activities that take place mostly indoors will be perceived as riskier, while destinations with an offer of activities that take place mostly outdoors will be perceived as safer (Poulaki & Nikas, 2021). From the foregoing, it is logical to consider that destinations that have a range of activities mainly oriented to indoor consumption will achieve a lower intention to visit, compared to destinations that have a greater range of activities outside. As Wen et al. (2020) found in relation to the COVID-19 emergency, tourists' intentions to travel once again were influenced by how sufficiently they felt assured that the potential health risks and stress connected with travelling were minimized (Wen et al., 2020).

Health-secure measures are precisely aimed at reducing perceived risk, so destinations that use health and safety protocols will transmit greater perceived security to tourists. This will positively influence the intention to visit, compared to destinations that do not use such procedures as these will be perceived as less safe. With this in mind, and in response to the literature to advance understanding of destination-specific variables that can influence the recovery of post-crisis tourism activity (e.g. Peco-Torres et al., 2021), it is necessary to analyse the effect that the type of destination offer, combined with the use of health and safety protocols, has on the intention to visit. Hence, the following research hypotheses are proposed:

- **H3.** The intention to visit a destination is significantly higher if the destination offer of activities is mostly outdoors compared to a destination offer of activities mostly indoors.
- **H4.** The intention to visit a destination is significantly higher if the destination uses a health and safety protocol compared to a destination that does not use a health and safety protocol.

Moderating effect of the use of health and safety protocols on the effect of the destination offer on tourist behaviour

Returning to the psychometric model, we reiterate that preparedness and awareness are usually linked to an increased perceived sense of control over the risk and an increased trust in those managing that risk (Fischhoff et al., 1978; Slovic, 1992). A tourist offer that is perceived as safe is assumed to receive a better evaluation by potential tourists (Alnawas & Hemsley-Brown, 2019). If a health and safety measure is to be effective, it must generate adequate perceived security for different types of activities, such as visiting a museum or sunbathing. So, if the use of health and safety protocols reaches an adequate level of perceived safety for both outdoor and indoor activities, the chances of recovery for both types of pursuit can be similar. As tourists make more positive evaluations of some destinations over others, the assumption is that the brand equity and intention to visit would also be more favourable. Taking this into consideration, the research for this paper compared the effectiveness of the use of health and safety protocols between those destinations that had a pessimistic prognosis for recovery with those which had a more favourable forecast, and, in turn, how this relates to the evaluation of the brand equity and intention to visit for both types of destination.

Assessing whether the use of health and safety protocols are capable of equating consumers' assessments of destinations with different types of offers (specialized in either inside/outside activities), is useful information for the visitor economy, since the results provide an indication of the best actions and recovery forecasts for different tourist destinations. In addition, this allows identification of whether there are mechanisms that can be enacted to equalize the chance of recovery for different types of destination. That is, can those destinations with a worse prognosis for recovery (because of their mainly indoor activity offer) improve their chances of recovery to be equivalent to those with a more favourable forecast (due to their predominately outdoor activity offer)? Based on the above, the following hypotheses were proposed:

- **H5.** The use of health and safety protocols moderates the effect that the offer of the destination has on the brand equity.
- **H6.** The use of health and safety protocols moderates the effect that the offer of the destination has on the intention to visit the destination.

Methodology

Population and sample

Following Sánchez-Cañizares et al.'s example, the population under study consists

of residents in Spain who may potentially be travellers in the short/medium term within the environment created by the pandemic (Sánchez-Cañizares et al., 2021). This, then, is as an example of a country particularly affected by the COVID-19 pandemic, but at a time when there was tourist activity and it was possible to travel through Spanish territory (Gobierno de España, 2021). A convenience sample was obtained, with data collected for the empirical analysis by means of a self-administered questionnaire. The link to the survey was shared on social networks and travel forums for Spaniards.

The questionnaire had four parts. Part one, participation information about the study and guarantees that data would be treated anonymously and confidentially. In part two, respondents were exposed to one of the stimuli in the form of one of the four infographics that included information on a specific modality — beach or city tourism — and the inclusion or not of a health and safety protocol. The exposure time to the stimuli was always controlled, and a minimum exposure time of one minute was established after having verified, in a pre-test, that one minute was enough time to read, review and recall the stimulus. Thirdly, the respondents were asked to answer questions relating to the manipulation check and dependent variables. Finally, part four consisted of questions to ascertain the sociodemographic and psychographic profile of the participants.

A total of 265 responses were received. However, when considering the participants who met the control question (intention to take a tourist trip in Spain in the next year) the number of valid answers was 237. As the experimental design included exposing the participants to a stimulus with four levels, the 237 respondents were divided into four groups of between 57–60 members. Each group was randomly assigned for exposure to a different stimulus.

The distribution of the sample is similar to the structure of the population of domestic tourists in Spain (e.g. Sánchez-Cañizares et al., 2021), i.e.: in terms of gender (52.74% men and 47.26% women) and most had higher education qualifications (53.59%). In relation to age, the sample includes a greater number of participants in the younger age group (48.52% aged 18 to 24 years and 51.48% from 25 years) in comparison with the domestic tourist population. To understand the fewer responses from older age group, s it is necessary to consider that this group may have more health concerns and therefore have been more risk adverse to travelling at the time. In contrast, younger people, known to be less vulnerable to serious illness/death from COVID-19, may have had fewer concerns about travelling. In addition, older people may have less access to, or feel less comfortable with, social media compared to younger people. This may also be a factor in relation to the age distribution in survey participation.

Experimental design

An experimental design consists of manipulating one or several independent variables to obtain the variations produced in the dependent variables (Zikmund, 1998).

Independent variables

Type of destination offer: The stimuli designed included one design that offers mostly outdoor activities: the beach; and another for a destination offering mostly indoor activities: the city. For each of the versions created, information and examples of the information provided in official travel portals (e.g. https://travelsafe.spain.info/es/) were used.

Use of a health and safety protocol. For the preparation of the stimuli, a review of some specialized tourism web sites was undertaken to identify the most appropriate health and safety measures for each type of tourist destination, and the best way to present the information. Based on this review and specially on Travel Safe (2020), a health and safety protocol was designed according to the characteristics and activities of a beach destination and a city destination (the content of the health and safety protocols is shown in Appendices 1 and 2).

A total of four different stimuli were designed with the following combinations: beach destination with health and safety protocol (Appendix 1), city destination with health and safety protocol (Appendix 2), beach destination without health and safety protocol (Appendix 3) and a city destination without health and safety protocol (Appendix 4).

Dependent variables and other variables

Dependent variables. This study was based on measurement scales validated in previous studies. The destination brand equity variable is measured from a global perspective, following the scale proposed by Im et al. (2012) (Appendix 5). The intention to visit the destination variable is adapted from Gallarza and Gil-Saura (2006) based on Zeithaml et al. (1996) (Appendix 6). The items of the measurement scales included Likert-type items from 1 to 7 points, with 1 being "totally disagree" and 7 "totally agree".

Experimental manipulation check. To ensure that the factor manipulation had been correctly performed, and to test that the exposure to the beach destination versus the city destination and the exposure to stimulus with health and safety protocol versus no health and safety protocol, Likert- type scales were included where the value 1 was "totally disagree" and 7 "totally agree". This measured if the respondents recognized the type of tourist destination and the use or not of the health and safety protocol (Appendix 5).

Control variables. These were to assess the attitude towards beach and city tourism modalities and to link the factors manipulated in the experiment to the dependent variable (Malhotra, 2010). Both variables were measured before the users were exposed to the stimulus — as recommended by, for example, Kirk (1995). The variable attitude towards the tourist speciality was measured with a 4-item scale of semantic differential type with 7 values, where value 1 was "totally disagree" and 7 "totally agree", adapted from Keppel (1991) and

Drolet et al. (2007) (Appendix 5).

Socio-demographic variables. The socio-demographic variables included in the questionnaire were gender, age, educational level, and information about experience with COVID-19 (if, for example, they had suffered from the virus, knew someone who had suffered from it, and if they lived with, or were caregivers of, vulnerable people).

Analysis

To test the hypotheses, we conducted a multivariate variance analysis (MANCOVA) using SPSS V.25 software. Before this, however, we checked the validity and reliability of the scales and verified that there was no selection bias in the sample.

Validation of measurement scales

Given that the scales used in the research presented an acceptable degree of reliability and validity (Appendix 6), it was decided that the value of each of these variables could be calculated based on the sum value of its items (Hair et al., 2018, p.126–7).

Sample selection bias

To check this, an analysis of the association using a set of covariates that are important in the results was carried out. For example, gender, monthly family income and whether the person surveyed lives with, or has a dependent vulnerable to COVID-19. Having performed association tests for the different groups and the covariates (gender: $\chi 2 = 0.5.97$; df = 3; p-value = 0.12; family income: $\chi 2 = 9.61$; df = 15; p-value = 0.18; lives with or is a caregiver for a vulnerable person: $\chi 2 = 4.67$; df = 3; p-value = 0.20) no evidence was found of a significant level being reached. Thus, the absence of subject selection bias was confirmed. As such, further measures to verify the results, with other more complex techniques was deemed unnecessary.

Confounding bias

The impact of the factors on the dependent variable was controlled via the covariates "attitude towards beach tourism", and "attitude towards city tourism". The use of covariates is justified if (a) they are related to the dependent variable and (b) they are not related to the independent variables (Kirk, 1995). To verify the first criterion, the Pearson correlation was calculated between each of the two covariates and the dependent variables (brand equity and intention to visit the destination). There was a significant correlation in some cases between brand equity (beach tourism attitude p-value \leq 0.01; and city tourism attitude p-value = 0.08), and intention to visit the destination (beach tourism attitude p-value \leq 0.01; and attitude city tourism p-value = 0.60). Part of the covariates met, therefore, the first criterion (attitude towards beach tourism), and part did not (attitude towards city tourism).

To check the second criterion, an MANCOVA was performed for each covariate, using the covariate as the dependent variable and the four different groups of the experiment as the independent variables. For the two covariates, the results

showed a significant relationship between the groups and the covariate (beach tourism attitude: F = 2.91, p-value = 0.03; city tourism attitude: F = 2.93, p-value = 0.03). They, did not, therefore, fulfil the second requirement for being included as covariates.

Manipulation check

To check that the manipulated factors produced the desired effects, we performed ANOVA to compare the means for those factors. The mean differences for the speciality of the tourist destination were significant ($M_{beach\ destination} = 6.80$; $M_{city\ destination} = 6.57$; p-value ≤ 0.01) and it was also the case for the incorporation, or not, of health and safety protocols (Mno health and safety protocol = 6.74; p-value ≤ 0.01)

Table 1. MANCOVA result	for	Hypotheses	1, 2	, 3	and 4.
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Н	Dependent variable	F	p-value	Hypothesis: empirical support?
Destinat	ion type			
H1	Brand equity	5.69	0.01	Yes
H3	Intention to visit the destination	12.30	0.00	Yes
Health a	nd safety protocol			
H2	Brand equity	4.63	0.03	Yes
H4	Intention to visit the destination	6.87	0.00	Yes

Results

In light of these results, we tested our hypotheses using ANOVA, in which brand equity and intention to visit the destination were the dependent variables and "destination speciality" and "health and safety protocol" were independent variables.

The main effect of destination type on brand equity and intention to visit the destination (H1 and H3) were significant. The mean for the beach destination being greater than for the city destination in all cases (Table 1, Figures 1 and 2). For brand equity, the beach destination mean was higher ($M_{beach\ destination} = 5.51$ vs. $M_{city\ destination} = 5.03$) and the difference between the two was significant (F = 5.69, p-value \leq 0.01). For intention to visit the destination, the beach destination mean was also higher ($M_{beach\ destination} = 5.60$ vs. $M_{city\ destination} = 5.25$) and, again, the difference was significant (F = 12.30, p-value \leq 0.01). Therefore, there is empirical support for H1 and H3.

The main effect of the use of a health and safety protocols on the dependent variables (H2 and H4) was also significant, with the mean of the use of the health and safety protocol being greater than that when the health and safety protocol is not used (Table 1, Figures 3 and 4). Individuals for whom the stimulus includes the health and safety protocol presented higher values for brand equity (Mhealth and safety protocol = 5.45; Mno health and safety protocol = 5.09), and intention to visit the destination (M health and safety protocol = 5.58; Mno health and safety protocol = 5.26), the difference between the two means being significant for brand equity (F = 4.63, p-value ≤ 0.05) and intention to visit the destination (F = 6.87, p-value ≤ 0.01). Therefore, H2 and H4 have empirical support.

Lastly, when interpreting the main effects, it is essential to acknowledge that the interaction between the destination type and health and safety measures is not significant (Table 1). As proposed in H5 and H6, the use of the health and safety protocol moderates the effect of the

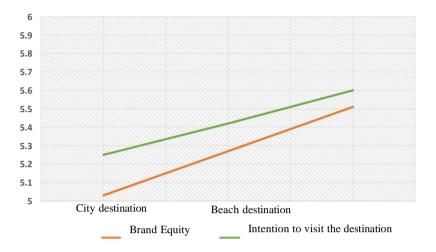


Figure 1. Main effects of destination type on brand equity.

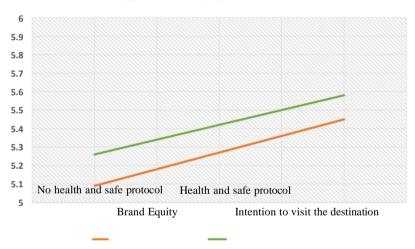


Figure 2. Main effects of destination type on intention to visit the destination.

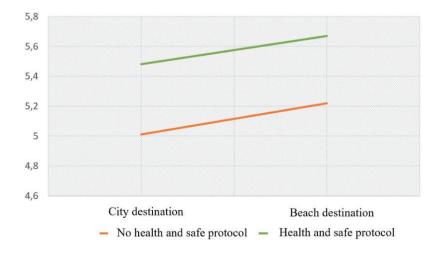


Figure 3. Interaction effect of health and safety protocol and the type of destination on brand equity.

destination type on brand equity (p-value = 0.27) and intention to visit the destination (p-value = 0.42). Hence H5 and H6 received no empirical support (Figures 3 and 4).

Discussion, conclusions and implications

The COVID-19 global pandemic had major consequences for the travel and tourism industries. It is important to understand how tourists' destination preferences changed following COVID-19 because future pandemics and lockdowns cannot be ruled out (Ivanova et al., 2021; Magno & Cassia, 2022).

Research for this study responds to the need to develop greater knowledge of the factors that contribute to the recovery of tourism activity after a health crisis (e.g. Volgger et al., 2021). From the perspective of the "revealed preference approach" (Fischhoff et al., 1978; Slovic, 1987), this paper provides empirical evidence about the effect of factors that affect risk perception and the perceived control tourists exert on brand equity and the intention to restart visiting tourist destinations. It provides empirical evidence indicating that (a) the speciality of the destinations will influence the

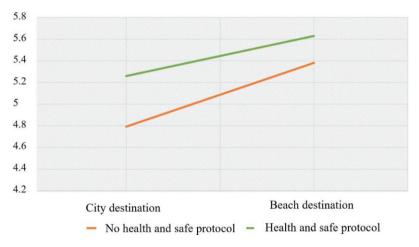


Figure 4. Interaction effect of health and safety protocol and type of destination on intention to visit the destination.

evaluation of the tourist, so that destinations with an offer oriented towards outdoor consumption (such as beach destinations) will achieve a higher evaluation of the brand equity and intention to visit the destination, compared to others more associated with the consumption of indoor activities (such as city destinations), (b) the use of health and safety protocols positively influences the brand equity and the intention to visit the tourist destination versus non-use; and (c) the use of health and safety protocols does not moderate the effect that the speciality of the destination exerts on the brand equity and the intention to visit the destination. The use of health and safety protocols is not, therefore, able to compensate for the differences in the assessment that the tourist makes of the different destination offers.

The findings make various contributions to knowledge. Firstly, the results from this research are consistent with the work of Volgger et al. (2021) and Zenker and Kock (2020). Their respective research indicated that spaces in which social distance is more easily controlled may gain in attractiveness during a pandemic. The results of this current research also concur with that of Poulaki and Nikas (2021) in which they indicated that during the pandemic, greater risk to health was associated with being indoors compared to being outdoors. Building on these existing con-tributions in the literature, this work advances knowledge by testing whether a destination with a majority offer of outdoor activities will achieve a higher brand equity and intention to visit than another with a majority offer of activities that are consumed indoors.

Secondly, the literature raised doubts about the effects that the use of health and safety protocols exerts on tourist behaviour in the context of a tourism crisis (e.g. Liu & Hu, 2021). The use of health and safety protocols is aimed at reducing perceived health risks, which, in turn, can help encourage tourists to travel again. At the same time, however, they can convey a feeling of discomfort during the trip (e.g. Volgger et al., 2021), which can discourage travel. According to Volgger et al. (2021), the use of health and safety processes is related to a greater recovery of tourism activity. The findings of the current research demonstrate the positive effect of the use of health and safety protocols on brand equity and intention to visit the destination. This is verified in an original way. Thirdly, starting from the premise that a tourist offer that is perceived as safe is assumed to receive a better evaluation by potential tourists (Alnawas & Hemsley-Brown, 2019), the moderating effect between the use of health and safety protocols and the speciality of the tourist destination on brand equity and the intention to travel has been raised. Testing this interaction effect provides novel insights about whether the use of health and safety protocols would be able to counteract the lower valuation of brand equity and the intention to visit the destination that is reached for destinations with a majority offer of indoor activities compared to destinations with a majority outside activity offer. The results have shown that this moderating effect is not found. A possible explanation for this result is based on the psychometric model of risk perceptions, which suggests that objective risk (or expert judgements of risk) and subjectively perceived risks may differ (Slovic, 1987). However, on average, people provide an acceptable assessment of real risks (Sjöberg, 2000). Consequently, recognizing the effectiveness of the use of health and safety protocols after a health crisis, the perceived risk associated with the consumption of activities in each tourist speciality continues to be important for tourists.

Lastly, it should be noted that this work responds to issues identified in the existing literature by advancing the study of new antecedents of brand equity (e.g. Frías-Jamilena et al., 2017), in this case, in the context of a health crisis.

Implications for practitioners

It is, by now, well-known that the tourism industry was particularly hard hit on a global scale by the COVID-19 pandemic with huge losses in jobs and revenues (Dube et al., 2021). As restrictions on freedom of movement were lifted and people began to travel again changes in tourist destination choice were noticeable. Indeed, as an article in the UK daily newspaper *The Guardian*, by Bernard Donoghue of the Association of Leading Visitor Attractions, demonstrates there

was following the lifting on restrictions, in the UK, a preference for visits to places that offer a predominately outside- based experience compared to those that were more focused on indoor activities. Donoghue also notes that recovery to a pre-pandemic situation is not likely for half a decade (Bernard Donoghue, Association of Leading Visitor Attractions, The Guardian, March 2022). This preference for out- doors, rather than indoors, was echoed elsewhere in the world. For example, data collected by US- based data analyst company STR showed a preference for visits to outdoor attractions and a fall in visits to indoor attractions by 53% (STR, 2022).

The findings of this study are useful for managers of tourist destinations and business personnel in the sector, because they provide information about where to adopt strategies to encourage the recovery of tourist activity after a health crisis. In relation to the destination speciality, it should be noted that characteristics, such as the ease of doing outdoor activities, does influence recovery. This means that tourism practitioners must evaluate the possibilities of recovery based on the type of destination offer and take this into account when designing marketing strategies and making forecasts. Given the results, it is suggested that in the case of a health crisis like COVID-19 to promote a faster recovery of tourist activity, a destination's offer should be oriented towards outdoor activities. For example, destinations offering indoor activities, could adjust their traditional offer, where possible, to take place outside. For example, outdoor exhibitions, theatre performances, music events, street markets etc.

Having identified the difference attributed to indoor/outdoor activities on ease of recovery the next question to answer is: how can the recovery of the sector be encouraged, assuming the differences that there may be between destination offers? For this, the effectiveness of the provision of health information through health and safety protocols was analysed. The use of health and safety protocols shows that, regardless of the type of tourist offer, communicating the associated health and safety protocol is associated with a higher brand equity offer while generating greater intention to visit. Therefore, establishing and communicating the use of health and safety protocols based on the cleaning and disinfection of the facilities, the management of social distance and reduction of group size and/or the use of masks, helps potential tourists to better value the offer and shows increased intention to travel to the destination. Examples to consider are the protocols provided by the World Travel & Tourism Council (WTTC, 2020) or those by the International Council of Museums (ICOM, 2022). Both could be implemented and communicated dynamically, according to the risk level of each destination at any given time (Gobierno de Canarias, 2021).

Finally, the results suggest that maintaining the use of health and safety protocols favours the recovery of the sector (for both offer types), but that the offer that is most associated with risk (in this case indoors) has a slower rate of recovery compared to the offer associated with less risk (in this case outdoors). This implication is in line with Do et al. (2022) previously cited observation and suggestion that this situation must be considered by those responsible for the sector when designing and implementing recovery strategies for the different types of destinations, suggesting a reorientation of supply towards activities that are understood to be of less risk to health.

Like all empirical research, this work has limitations that must be considered cautiously and that can, in turn, contribute to recommendations for future research. The first limitation relates to the study context and the sample used. The study was carried out in the immediate aftermath of the COVID-19 pandemic in the Spanish domestic market, using a convenience sample. Then, one limitation is that the sample includes a different profile in comparison to the Spanish travelling population. The first recommendation for further research is to replicate this study in other geographical contexts. The second recommendation is to use a representative sample, and thirdly to extend the sample to the international market.

Another limitation is the choice of variables. Although variables relevant to tourist behaviour were selected, only two were worked on (brand equity and the intention to visit a destination). Future research should consider other relevant variables for tourist behaviour, such as, for example, risk or perceived safety.

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References

Aaker, D. A. (1991). Managing brand equity. Free Press.

AENOR. (2021). Certificación de Protocolos frente al COVID-19. https://www.aenor.com/certificacion/riesgos- y-seguridad/certificacion-de-protocolos-frente-al-covid-19.

Alnawas, I., & Hemsley-Brown, J. (2019). Examining the key dimensions of customer experience quality in the hotel industry. *Journal of Hospitality Marketing & Management*, 28(7), 833–861. https://doi.org/10.1080/19368623. 2019.1568339

Alrawadieh, Z., Alrawadieh, Z., & Kozak, M. (2019). Exploring the impact of tourist harassment on destination image, tourist expenditure, and destination loyalty. *Tourism Management*, 73, 13–20. https://doi.org/10.1016/j. tourman.2019.01.015

Anderson, R. M., Heesterbeek, H., Klinkenberg, D., & Hollingsworth, T. D. (2020). How will country based mitigation measures influence the course of the COVID-19 epidemic? *The Lancet*, *395*(10228), 931–934. https://doi.org/10.1016/S0140-6736(20)30567-5

Bubeck, P., Botzen, W. J. W., & Aerts, J. C. (2012). A review of risk perceptions and other factors that influence flood mitigation behavior. *Risk Analysis: International Journal*, *32*(9), 1481–1495. https://doi.org/10.1111/j.1539-6924. 2011.01783.x

DNA, Developing Natural Activities. (2020). En Busca de Escenarios y Recetas para las Nuevas Fases que Definirán una Nueva Era del Turismo. https://dna.es/wp-content/uploads/2020/04/ESTUDIO-DNA-SECTOR-TURISTICO-COVID19.pdf

Do, B., Nguyen, N., D'souza, C., Bui, H. D., & Nguyen, T. N. H. (2022). Strategic responses to COVID-19: The case of tour operators in Vietnam. *Tourism and Hospitality Research*, *22*(1), 5–17. https://doi.org/10.1177/ 1467358421993902 Drolet, A., Williams, P., & Lau-Gesk, L. (2007). Age-related differences in responses to affective vs. Rational ads for hedonic vs. Utilitarian products. *Marketing Letters*, *18*(4), 211–221. https://doi.org/10.1007/s11002-007-9016-z Dube, K., Nhamo, G., & Chikodzi, D. (2021). COVID-19 cripples global restaurant and hospitality industry. *Current*

Issues in Tourism, 24(11), 1487–1490. https://doi.org/10.1080/13683500.2020.1773416

Fischhoff, B., Slovic, P., Lichtenstein, S., Read, S., & Combs, B. (1978). How safe is safe enough? A psychometric study of attitudes towards technological risks and benefits. *Policy Sciences*, *9*(2), 127–152. https://doi.org/10.1007/ BF00143739 Frías-Jamilena, D. M., Polo-Peña, A. I., & Rodríguez-Molina, M. A. (2017). The effect of value-creation on consumer-based destination brand equity. *Journal of Travel Research*, *56*(8), 1011–1031. https://doi.org/10.1177/ 0047287516663650 Gallarza, M., & Gil-Saura, I. (2006). Value dimensions, perceived value, satisfaction and loyalty: An investigation of university students' travel behaviour. *Tourism Management*, *27*(3), 437–452. https://doi.org/10.1016/j.tourman. 2004.12.002

Gobierno de Canarias. (2021). Protocolo de buenas prácticas. https://turismodeislascanarias.com/sites/default/files/protocolo_de_seguridad_sanitaria_covid-19_turismo_activo_1.pdf Gobierno de España. (2021). Coronavirus (COVID-19) - 31 de agosto 2021. https://www.dsn.gob.es/es/actualidad/sala-prensa/coronavirus-covid-19-31-agosto-2021

Hair, J. F., Black, W. C., Babin, B. F., & Anderson, R. E. (2018). *Multivariate data analysis*. Prentice Hall.

ICOM, Internacional Council of Museums. (2022). Museums, museum professionals and Covid-19: Third survey. https://icom.museum/wpcontent/uploads/2021/07/Museums-and-Covid-19 third-ICOM-report.pdf Im. J., Kim. J., & Choeh, J. Y. (2021), COVID-19, social distancing, and risk-averse actions of hospitality and tourism consumers: A case of South Korea. Journal of Destination Marketing & Management, 20, 100566. https://doi.org/ 10.1016/j.jdmm.2021.100566

Im, H. H., Kim, S. S., Elliot, S., & Han, S. (2012). Conceptualizing destination brand equity dimensions from a consumer-based brand equity perspective. Journal of *Travel & Tourism Marketing*, 29(4), 385–403.

Ivanova, M., Ivanov, I. K., & Ivanov, S. (2021). Travel behaviour after the pandemic: The case of Bulgaria. Anatolia, 32 (1), 1-11.

https://doi.org/10.1080/13032917.2020.1818267

Keller, K. L. (1993). Conceptualizing, measuring and managing customer-based brand equity. Journal of Marketing, 57(1), 1–22.

https://doi.org/10.1177/002224299305700 Keppel, G. (1991). *Design and analysis. A researcher's handbook*. Prentice Hall. Kirk, R. E. (1995). *Experimental design: Procedures for the Behavioral Sciences* (3rd ed.). Brooks/Cole.

Liu, Y., & Hu, H. F. (2021). Online review helpfulness: The moderating effects of review comprehensiveness. International Journal of Contemporary Hospitality Management, 33(2), 534-556. https://doi.org/10.1108/ IJCHM-08-2020-0856 Magno, F., & Cassia, F. (2022). Firms' responses to the COVID-19 crisis in the tourism industry: Effects on customer loyalty and economic performance. Anatolia, 33(2), 263-265, https://doi.org/10.1080/13032917,2021,1916551 Malhotra, N. K. (2010). Marketing Research. An applied orientation. Prentice Hall. Peco-Torres, F., Polo-Peña, A. I., & Frías-Jamilena, D. M. (2021). The effect of COVID-19 on tourists' intention to resume hotel consumption: The role of resilience. International Journal of Hospitality Management, 99, 103075. https://doi.org/10.1016/i.iihm.2021.103075

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 International market. Journal Tourism Cities, 7(3), 845-860. of https://doi.org/10.1108/IJTC-09-2020-0218

Sánchez-Cañizares, S. M., Cabeza-Ramírez, L. J., Muñoz-Fernández, G., & Fuentes-García, F. J. (2021). 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

Schneider, I. E., Budruk, M., Shinew, K., Wynveen, C. J., Stein, T., VanderWoude, D., Hendricks, W. W., & Gibson, H. (2021). COVID-19 compliance among urban trail users: Behavioral insights and environmental implications. Journal of Outdoor Recreation and Tourism, 100396. https://doi.org/10.1016/j.jort.2021.100396 Sjöberg, L. (2000). Factors in risk perception. Risk Analysis, 20(1), 1–12. https://doi.org/10.1111/0272-4332.00001 Slovic, P. (1987). Perception of risk. Science, 236(4799), 280–285. https://doi.org/10.1126/science.3563507

Slovic, P. (1992). Perception of risk: Reflections on the psychometric paradigm. In S. Krimsky & D. Golding (Eds.), Social theories of risk (pp. 117–178). Praeger.

STR. (2022). Tourism After Lockdown: How COVID is reshaping attraction

experiences. https://str.com/data- insights-blog/tourism-after-lockdown-howcovid-is-reshaping-attraction-experiences.

Travel Safe. (2020). Travel Safe. Portal Oficial de Turismo de España. Retrieved from: https://travelsafe.spain.info/es/. Volgger, M., Taplin, R., & Aebli, A. (2021). Recovery of domestic tourism during the COVID-19 pandemic: An experimental comparison of interventions. Journal of Hospitality and Tourism Management, 48, 428-440. https://

doi.org/10.1016/j.jhtm.2021.07.015 Wen, J., Kozak, M., Yang, S., & Liu, F. (2020). COVID-19: Potential effects on Chinese citizens' lifestyle and travel.

Tourism Review, 76(1), 74–87. https://doi.org/10.1108/TR-03-2020-0110 WTTC, World Travel & Tourism Council. (2020). 'Safe travels': Global protocols & stamp for the new normal, https://wttc.org/initiatives/safetravels-globalprotocols-stamp

Zeithaml, V. A., Berry, L., & Parasuraman, A. (1996). The behavioural consequences of service quality. Journal of Marketing, 60(2), 31–47.

https://doi.org/10.1177/002224299606000203

Zenker, S., & Kock, F. (2020). The coronavirus pandemic—a critical discussion of a tourism research agenda. Tourism Management, 81, 104164.

https://doi.org/10.1016/j.tourman.2020.104164

Zhang, H., Song, H., Wen, L., & Liu, C. (2021). Forecasting tourism recovery amid COVID-19. Annals of Tourism Research, 87, 103149.

https://doi.org/10.1016/j.annals.2021.103149

Zikmund, W. G. (1998). Essentials of marketing research. Harcourt Brace College Publishers.

Zou, Y., & Meng, F. (2020). Chinese tourists' sense of safety: Perceptions of expected and experienced destination safety. Current Issues in Tourism, 23(15), 1886–1899. https://doi.org/10.1080/13683500.2019.1681382

Stimulus 1: Beach destination with health and safety protocol.



Stimulus 2: City destination with health and safety protocol.



Stimulus 3: Beach destination without health and safety protocol.



Stimulus 4: City destination without health and safety protocol.



Measurement scales

Variable	Ítems	Escalas
Brand equity	CAP1. The information provided by the tourist destination has contributed to to choose this destination rather than another one even if they are similar.	lm et al. (2012)
	CAP2. The information provided by the tourist destination has contributed to preferring this destination even if there is another with the same characteristics.	
	CAP3. The information provided by the tourist destination has contributed to the fact that If there is another destination, no different from this one, it seems more intelligent to choose this one.	
Intention to visit the destination	INT1. Regarding my next trip, even with COVID-19 present I would like to travel to a destination like this	Gallarza and Gil-Saura (2006), Zeithaml et al. (1996)
	INT2. Regarding my next trip, even with COVID-19 present I plan to travel to a destination like this INT3. Regarding my next trip, even with COVID-19 present it is	
	likely that I will travel to a destination like this	
Attitude towards beach tourism	ACB1.Your opinion about beach tourism is (Bad – Good) ACB2. Your opinion about beach tourism is (Unfavourable – Favourable)	Drolet et al. (2007 and Keppel (1991)
tourism	ACB3. Your opinion about beach tourism is (Negative – Positive) ACB4. Opinion about beach tourism is (I don't like it -I like it)	
Attitude towards city tourism	ACC5. Your opinion about city tourism is (Bad – Good) ACC6. Your opinion about city tourism is (Unfavourable – Favourable)	
	ACC7. Your opinion about city tourism is (Negative – Positive) ACC8. Your opinion about city tourism is (I don't like it – I like it)	
Manipulation Check: type of destination	DT. The information shown is referred to a beach/city destination	The authors
Manipulation check: anti-covid protocol	PRO1. The information displayed includes security measures related to COVID-19.	The authors
	PRO2. The tourist destination to which the information shown refers has adopted anti-COVID-19 protocols.	

Appendix 6

Composite Reliability and Average Variance Extracted of the measurement scales

Variable	Composite	Average Variance Extracted	
	Reliability		
Overall destination brand Equity	0.89	0.74	
Intention to visit the destination	0.94	0.85	
Attitude towards beach tourism	0.95	0.83	
Attitude towards city tourism	0.95	0.84	

= 0.96, TLI = 0.97.