

Impact of Crisis and Resilience Communication on Destination Image and Tourists Behaviour

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Abstract

Resilience communication is a fundamental tool for destinations to improve their image and recover after a crisis. Social media are also important tools for tourism communication and for creating tourist experiences and destination image. Therefore, social media are key tools for crisis communication. Based on a series of hypotheses, this paper proposes a conceptual model of crisis communication management that responds to the need to establish a set of premises related to resilience communication in the tourism sector. The empirical analytical study consisted of the quantitative analysis of the results of a survey questionnaire applied to test the hypotheses based on the formulation of a structural equation model. The results demonstrate the importance of social media communication in Perceived Health Risk (PHR) and its effect on perceived impressions, destination image, and related behavioral responses (Destination Recommendation, DR, and Visit Intention, VI). The four hypotheses in the research model have been confirmed, as the effects are statistically significant in a sample of posts analyzed, and the selected items explain every one of the factors. Specifically, the analysis shows that PHR negatively affects Destination Image (DI) and, in a stronger way, Post Impression (PI). Secondly, PI and DI influence one another and covary to some extent. Moreover, the overall DI, which has been affected by PHR, in turn affects DR and VI, demonstrating that PHR in communication ultimately influences DR and VI negatively too. Finally, it is also verified both DR and VI are related and covary as intrinsic behavioral aspects related to DI. Resilience communication is a basic tool for destinations to improve their image and recover after a crisis and this research contributes to the literature on the subject by analyzing the impact of this communication on tourists, and specifically on destination image.

Keywords

Communication Strategies, Crisis Communication, Crisis Management, Destination Image, Destination Marketing Organization, Destination Recommendation, Facebook, Pandemics, Resilience Communication, Perceived Health Risk, Post Impression, Social Media, Social Networks, Tourism, Visit Intention.



1. Introduction

The tourism industry is particularly susceptible to perceived risks and uncertainty (Pappas *et al.*, 2023). The pandemic caused by the COVID-19 disease provoked a crisis in the tourism sector (González-Torres *et al.*, 2021) and generated travel risk perception (Nanni; Ulqinaku, 2021) and fear (Zheng *et al.*, 2021) among potential tourists. Perceived travel risk involves uncertainty and negative consequences (Ritchie; Jiang, 2019) and affects tourists' destination choices (Reichel *et al.*, 2007). The pandemic also brought changes in tourism demand and tourist behavior since the initial travel restrictions were lifted (Ivanova *et al.*, 2021). Tourists showed preventive behaviors (Zheng *et al.*, 2021) by looking for safe, close, less crowded, and more natural destinations that allowed social distancing (Neuburger; Egger, 2021; Galvani *et al.*, 2020). It is still unknown how tourists will recover emotionally from a global pandemic like COVID-19 (Zheng *et al.*, 2021), whose effects continue to affect traveling in 2023. In 2022, international tourism recovered in European destinations, getting closer to pre-pandemic levels (81% of 2019 levels). However, tourist destinations in Asia and the Pacific, such as China, are still completely submerged in the COVID-19 crisis and have only reached 17% of the pre-pandemic levels (UNWTO, 2023). Worldwide, international arrivals reached approximately 65% of pre-pandemic levels in 2022 (UNWTO, 2023). Furthermore, the pandemic crisis has not only affected the demand for tourist destinations but also their image, as it increased risk perception among potential tourists (Nanni; Ulqinaku, 2021) and tourism destinations need to be perceived as safe to project a positive destination image (Casali *et al.*, 2021). Moreover, the extensive media coverage of the pandemic generated great social awareness and increased risk perception (Chemli *et al.*, 2022), which in turn negatively affected the image of tourist destinations (Yang *et al.*, 2022; Wen *et al.*, 2020; Gössling *et al.*, 2020).

In this context, resilience and innovation become highly valuable managerial strategies for recovery (Pappas *et al.*, 2023). Consequently, destination marketing organizations (DMOs) must properly manage their crisis and resilience communication (Oliveira; Huertas, 2019; Karadimitriou; Panagopoulos, 2023) to improve their image (Zhang *et al.*, 2023). When the pandemic broke out, DMOs managed their crisis communication as best as they could and focused on providing responsible information about the situation (Chemli *et al.*, 2022) to restore their positive image and tourism demand. However, tourist destinations still face uncertainty and do not know whether the threat of COVID-19 will allow them to return to pre-pandemic demand levels (Costa-Sánchez; López-García, 2020). Therefore, DMOs need to develop more resilience communication strategies than crisis communication. Resilience is the ability to assess, innovate and adapt to disruptions caused by crises (Asmolov, 2022; Bethune *et al.*, 2022; Dallies; Pérez-Rabanales, 2022) and refers to the adaptive capacity of destinations to learn and manage change, recover after a crisis and return to normal balance (García González *et al.*, 2022; Amore *et al.*, 2018). However, there are still very few studies about DMOs' resilience management (Amore *et al.*, 2018; Bethune *et al.*, 2022; Prayag, 2020; García González *et al.*, 2022) and resilience communication (Usher *et al.*, 2020) and even less about the effects of such communication on potential tourists (Prayag, 2020; Zhang *et al.*, 2023).

Social media are important tools for destination marketing and communication (Zhou; Wang, 2014; Boes *et al.*, 2016; Molinillo *et al.*, 2018; Xiang; Gretzel, 2010) and for the creation of tourist experiences (Buhalis; Foerste, 2015; Buonincontri; Micera, 2016) and destination image (Neuhofer *et al.*, 2012; Binkhorst; Den Dekker, 2009). Moreover, social media are key tools for crisis communication (Veil *et al.*, 2011), including the communication of crises caused by pandemics (Chew; Eysenbach, 2010; Yu *et al.*, 2021; Freberg *et al.*, 2013), and for resilience communication (Nah *et al.*, 2022). Therefore, social media are the most suitable tools for analyzing these communications.

Many studies have analyzed DMOs' crisis communication plans (Oliveira; Huertas, 2019) and, specifically, crisis communication during the COVID-19 pandemic through social media platforms, like Twitter (Freberg *et al.*, 2013; Aguilar-Gallegos *et al.*, 2020; Chew; Eysenbach, 2010). However, very few studies have focused on the impact of crisis communication on tourists (Zhang *et al.*, 2023). Consequently, the objective of this study is to determine the impact of DMOs' crisis and resilience communication on potential tourists during the initial phase of a pandemic, to identify which types of tweets or messages communicate safer destinations, create a more positive destination image, and increase visit intention. Moreover, the study aims to distinguish between the effect of risk communication on a destination's overall image and partial impressions, which has not been done before and could have various managerial implications. All to provide useful knowledge to help DMOs improve their resilience communication plans in the current stage of the pandemic and in any other crisis to come.

2. Literature Review

2.1. Impact of the COVID-19 Pandemic Crisis and Risk Perception on Destination Image and Tourist Behavior

The high number of deaths caused by COVID-19 and the media treatment of the pandemic (Koo *et al.*, 2016) have generated fear of traveling and perceived risk among potential tourists (Nanni; Ulqinaku, 2021), an industry crisis (Higgins-Desbiolles, 2020), which in turn has affected destination image (Wen *et al.*, 2020) and travel behavior (Casali *et al.*, 2021). It has been previously shown that perceived risk harms destination image (Sönmez *et al.*, 1999) and that the latter affects tourists' attitudes and behaviors (Chew; Jahari, 2014; Nadeau *et al.*, 2008).

In tourism, risk is a possibility of danger, harm, or loss (Reisinger; Mavondo, 2005) that generates a negative outcome in the tourism experience (Le; Arcodia, 2018; Wolff *et al.*, 2019). There are different types of risk in pandemic situations: the functional risk, related to the product itself; the time risk, related to the time lost during quarantines; the financial risk, related to the money lost by the cancellation of paid trips; and the physical risk, related to tourists' health (Chemli *et al.*, 2022). However, physical and health risks are the most decisive in visit intention (Ahmad *et al.*, 2021). Perceived risk when traveling involves uncertainty (Ritchie; Jiang, 2019) and tourists' decisions are highly sensitive to risk. Moreover, perceptions of safety and risk also greatly influence destination image, which in turn has an impact on tourist behavior (Casali *et al.*, 2021). Several studies have recently demonstrated the impact of COVID-19 on tourists' perception of risk, destination image, and future visit intention (Neuburger; Egger, 2021; Sánchez-Cañizares *et al.*, 2021; Xie *et al.*, 2021; Jin *et al.*, 2022; Li *et al.*, 2022).

The pandemic has also generated worry and fear (Luo; Lam, 2020), travel fear (Zheng *et al.*, 2021), and travel anxiety among potential tourists (Luo; Lam, 2020). Fear, generated by risk, is a basic emotion that influences tourist decisions (Luo; Lam, 2020) and leads to protection motivation and protective travel behaviors (Zheng *et al.*, 2021). This is why tourists choose less risky destinations (Beerli; Martin, 2004). So, risk and safety are important factors that influence tourist perceptions and travel intentions to destinations (Casali *et al.*, 2021; Marine-Roig; Huertas, 2020; Luo; Lam, 2020). When a destination is perceived as unsafe, travel fear will be generated, and a negative image will be created (George, 2003). Therefore, destinations must provide up-to-date and real information to reduce people's anxiety and their perception of risk or insecurity and to generate a perception of safety and a positive image (Luo; Lam, 2020).

It has been shown that communication and the media play a significant role in the creation of destination image and visit intention (Chemli *et al.*, 2022; Govers *et al.*, 2007). Mass and social media disseminate the projected image of destinations (Rasoolimanesh *et al.*, 2021). The extensive media coverage of the pandemic increased the perceived health risk of destinations (Chemli *et al.*, 2022; Chew; Jahari, 2014) and negatively affected their image (Gössling *et al.*, 2020; Wen *et al.*, 2020; Yang *et al.*, 2022). So, the recovery of tourism and destinations will depend on public perception and communication (Fernández Cavia *et al.*, 2020; Zhang *et al.*, 2023). Since destination image is a key factor for attracting tourists and wealth to territories (Lee; Gretzel, 2012), tourist destinations must manage their communications strategically to generate a positive image (Govers *et al.*, 2007). In addition, effective crisis communication management has been shown to have a positive effect on destination image (Avraham, 2015; Rasoolimanesh *et al.*, 2021). Destinations need to manage strategic crisis communication effectively to minimize the fear of tourists and combat negative image (Khan, 2021).

Therefore, in the face of the pandemic crisis and the current stage of tourists' uncertainty and destinations' resilience, DMOs must coordinate their strategic and resilience communication with local governments and authorities (García González *et al.*, 2022; Yeh, 2021) to provide ethical, responsible and accurate information about the situation at present (Elmo *et al.*, 2020; Chemli *et al.*, 2022) to be able to resist and restore their image (Cambra-Fierro *et al.*, 2022; Rasoolimanesh *et al.*, 2021; Li *et al.*, 2022) quickly and with minimal impacts (Mair *et al.*, 2016). However, the creation of this strategic communication plan requires the analysis of the impact of the different messages of crisis and resilience communication on tourists and their relationship to the destination image.

In this respect, it is worth analyzing and differentiating between a destination's overall image and the partial impressions that may affect this overall image. As Echtner and Ritchie (1993) explain, destination images are formed by perceptions of specific aspects of the destination and certain impressions which are mental pictures or imagery of it. These impressions can consist of mental pictures or imagery of the physical characteristics of the destination, or the psychological aspects related to the atmosphere or mood of a destination (such as risk). Furthermore, the definition of impressions entails that they have the power to influence and achieve some kind of effect on people's perceptions, feelings, and thoughts (Cambridge University Press & Assessment, n.d.). As Tung *et al.* (2021) point out, destination images are holistic overall images, which include the destination as a whole and its different aspects and experiences, while impressions are partial perceptions of specific aspects or experiences, which may have an effect (positive or negative) on the overall destination image. These authors have found that negative impressions of certain specific aspects of the destination trigger more favorable impressions of other aspects. Moreover, through "impression estimators", Tung *et al.* (2021) assess that travelers who were exposed to negative information or situations tried harder to compensate for this negativity with positive reports on their destination's overall experience and image.

In this regard, the study aims to determine whether the publication of certain content that may be perceived as more or less negative by viewers can affect their overall image of the destination. Furthermore, Tung *et al.* (2021) imply that certain aspects of the destination may be "atemporal" and not affected by specific timely impressions related to COVID-19, for example.

2.2. Crisis and Resilience Communication of Destinations to Restore Destination Image

Previous studies have focused on crisis communication DMOs implement to restore their image (Khan, 2021). However, with the current situation of the pandemic, there is more talk of resilience than of crisis, and of renewal and regeneration

than of recovery. Resilience refers to management and communication strategies to get back to normal (**King et al.**, 2021; **Bethune et al.**, 2022). Some studies have analyzed destination reopening communications and are developing recommendations for effective resilience communication (**Gera; Kumar**, 2023; **Li et al.**, 2022). However, resilience communication is still a very underused and understudied concept (**Gera; Kumar**, 2023; **Varghese; Chennattuserry**, 2022).

Several studies have analyzed the crisis communication strategies of destinations after the pandemic (**Khan**, 2021; **Ketter; Avraham**, 2021; **Li et al.**, 2022). Some of them (**Varghese; Chennattuserry**, 2022; **Li et al.**, 2022) have focused on the contents or topics covered in the communication strategy and have shown that resilient and responsible destinations communicate primarily the measures taken to deal with the pandemic, such as the creation of medical centers in destinations, the promotion of sustainable development and the handing out of aid to mitigate the pandemic. Outdoor activities are preferably communicated by natural destinations, while the use of virtual reality tools, audio guides, and other technologies that allow social distancing are communicated mainly by cultural destinations (**Li et al.**, 2022). Resilient destinations that want to successfully fight the pandemic need to develop a responsible open communication strategy (**Yeh**, 2021). On the other hand, it has been shown that destinations perceived as more socially responsible in the face of the pandemic have also reduced travel unsafety and fear among tourists, have improved their image, and have increased visit intentions (**Su et al.**, 2020).

Other studies have focused on communication strategies (**Ketter; Avraham**, 2021; **Avraham**, 2020). For example, **Ketter and Avraham** (2021) analyzed the ads and videos posted on YouTube by the Nation Tourism Boards of the main tourist countries and the different marketing and communication strategies they used during the pandemic. Similarly, **Khan** (2021) analyzed the strategies of the main tourist countries to recover from the crisis and emphasized the importance of regularly communicating up-to-date information and taking care of the nature of messages. They found that the main communicative strategies were persuasive advertising, communication of community readiness, and the return to “business as usual”, as well as the use of testimonial or counter-negative publicity, among others. Along the same line, **Avraham** (2020) examined the successful crisis communication strategies used by American destinations, including cooperating with the media to get positive coverage, blaming the press for exaggerating the negative nature of the situation; using social media as an alternative source to reach audiences directly; showing customers that business continues; using celebrities; organizing all kinds of events at the destination; making new campaigns and even turning the crisis into an opportunity.

Nonetheless, all these studies have focused on establishing what the destinations communicated and not on identifying the impacts this communication has on tourists, their emotions, and their perception of the destination image. Thus, more studies are needed on the impact of DMOs’ crisis communication on tourists’ perceptions, attitudes, emotions, and behavior (**Zhang et al.**, 2023). In fact, emotions still receive very little attention in research on crisis communication and recovery in tourism (**Nadeau et al.**, 2022; **Zheng et al.**, 2021). In this line, **Zhang et al.** (2023) highlighted the importance of crisis communication based on shared emotions (**Papa; Ioannidis**, 2023). Crisis communication literature has already highlighted the importance of focusing on the emotions of stakeholders (**Yan; Bissell**, 2018). On the other hand, previous studies have also shown that emotions are what shape destination image (**Stylidis et al.**, 2017), attraction, and visit intention (**Rahmani et al.**, 2019; **Chung; Zeng**, 2020). In addition, the affective component of destination image involves behavioral intentions toward destinations (**Nadeau et al.**, 2008; **Chen; Tsai**, 2007). Previous studies on tourists’ emotions have shown that trust minimizes risk and uncertainty (**Han; Hyun**, 2015) and that tourists tend to visit those destinations they consider trustworthy and reliable (**Abubakar et al.**, 2017).

Along this line, although based on the field of accommodation, **Zhang et al.** (2023) showed that crisis communication focused on shared emotions can create brand humanization, a positive brand image, and emotional attachment with tourists; and this is crucial for destination image and tourist demand recovery, because tourists’ emotional attachment increases visit intention. Similarly, **Nadeau et al.** (2022) analyzed the projection of emotions in tourists’ comments on social media to find out the degree of resilience of destination image during the COVID-19 crisis and its recovery, compared to the previous year. They found that COVID-19 increased fear and sadness projection, and decreased joy in the comments of tourists of the two cities analyzed. Emotions have a great influence on the creation of destination image (**Stylidis et al.**, 2017) and future travel decisions (**Rahmani et al.**, 2019; **Chung; Zeng**, 2020). Moreover, social media are ideal platforms for expressing feelings and emotions towards destinations (**Nadeau et al.**, 2022; **Campillo-Alhama; Martínez-Sala**, 2019; **Miah et al.**, 2019). Therefore, it is necessary to know the impact of the emotions and images generated by the communication of DMOs on social media. However, the relationship between emotions and destination image in crisis communication is still poorly studied (**Nadeau et al.**, 2022).

Xie et al. (2021) have shown that correct communication about the risks caused by the pandemic is key to generating perceived safety, a positive destination image, and greater visit intention. Inadequate communication, on the other hand, increases perceived risk and harms destination image and travel intention (**Sano; Sano**, 2019; **Liu-Lastres et al.**, 2019). Along the same line, **Zhang et al.** (2023) analyzed the effect of DMOs’ crisis communication on tourists’ travel intentions according to different types of crisis communication and sources, showing that there is a matching effect between destination crisis communication sources and the type of crisis, and that perceived safety has an impact on

travel intentions. This study, however, focused more on cognitive than affective aspects. Messages that communicate safety have been shown to increase perceived security and visit intention (Wang; Lopez, 2020). Therefore, the risk messages communicated by destinations are key determining factors in the generated destination image (Xie *et al.*, 2021). Xie *et al.* (2021) have demonstrated that mitigating risk messages increase perceived safety and visit intention, while risk-amplifying messages have the opposite effect, while empathy and perceived waiting time were moderating factors that also influence impact.

Consequently, crisis communication protects destinations and helps them to restore their image (Xie *et al.*, 2021). The great challenge of crisis communication and destination resilience is how to deal with issues such as warnings, prevention measures, crisis response strategies, and crisis responsibility (Dallies; Pérez-Rabanales, 2022; Liu-Lastres *et al.*, 2019; Khan, 2021) to reduce risk perception among users (Reynolds; Matthew, 2005) after COVID-19 traveling restrictions were lifted. It remains to be known how tourists will process the crisis and resilience communication plans of DMOs during the pandemic and their impact on tourists' attitudes and behaviors (Zhang *et al.*, 2023). Hence, this study aims to analyze DMOs' communication messages and contents and their impact on tourist emotions, perceived destination image, and visit intention. The response of tourists to crisis communication will have a major impact on post-crisis recovery (Zhang *et al.*, 2023).

3. Hypothesis Development

Digital communication about tourist destinations shapes the behavior of tourists (Xu; Pratt, 2018; Pan *et al.*, 2021; Aydin, 2020) as it has an impact on the destination's image (Chew; Jahari, 2014; Nadeau *et al.*, 2022). Similarly, it has been concluded that perception of health risk affects tourist behavior, also through its impact on the destination's image (Casali *et al.*, 2021). Based on the previous hypotheses and the literature review, we propose a conceptual model (Figure 1) of crisis communication management that responds to the need to establish a set of premises related to resilience communication in the tourism sector.

This model is based on the proven impact of digital communication and Perceived Health Risk (PHR) on tourist behavior, through their effects on destination image (DI), as well as on the following main hypothesis: in the tourism industry, social media communication must highlight the tourism products and services adapted to the measures involved in a risk situation, as well as the measures themselves, because this has a positive effect on tourist behavior, in terms of destination recommendation and visit intention, through its impact on PHR and, therefore, on DI.

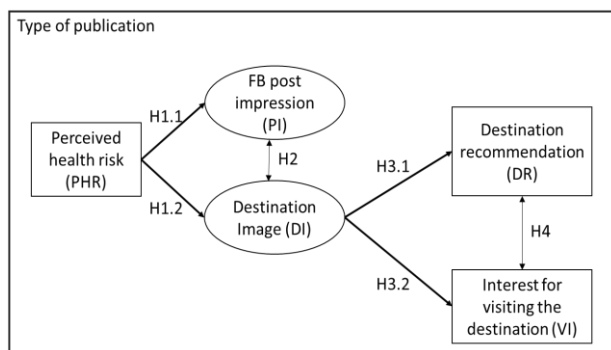


Figure 1: Proposed Conceptual Model.

Note: The abbreviation summary has been included in the Annex.

Based on the main hypothesis, the model is based on four hypotheses centered on the effects of different types of posts on PHR and, therefore, on Post Impression (PI) and DI. These effects have been verified in previous studies that show a relationship between some of the aforementioned variables (PHR and DI) in contexts before the health crisis caused by COVID-19 (Aydin, 2020; Pan *et al.*, 2021; Xu; Pratt, 2018). The PI variable is included because it is a defining factor of DI (Echtner; Ritchie, 1993) based on tourists' direct and indirect experiences with the destination (Tung *et al.*, 2021). The differences between the selected posts are based on their allusion, or lack thereof, to measures to prevent the spread of COVID-19, as detailed below (Table 2).

Regarding the hypotheses, H1 is divided into two sub-hypotheses that focus, specifically, on the effect of PHR on PI (H1.1) and DI (H1.2) (Godovykh *et al.*, 2021; Xu; Pratt, 2018) as potential conditioning variables of tourist behavior, in terms of interest in visiting the destination, as it has been observed, but not confirmed, in previous studies (Xu; Pratt, 2018; Hasan *et al.*, 2017). H2 addresses the relationship between the impression generated by the post in the tourist (PI), and the tourist's image of the destination (DI), as a result of the digital communication, among others, and vice versa. This study of covariance is implicit in any verification model based on structural equations, which is the technique chosen for this study as it is explained and justified below. The following hypotheses delve into DI, and specifically into its impact on Destination Recommendation (DR) (H3.1) and Visit Intention (VI) (H3.2). The analysis of the latter variable

is complemented by that of DR due to its importance in the field of study: digital tourism communication, in which tourists' recommendations enjoy greater credibility than DMOS' communication and exert a notable influence on other tourists' behaviors and decisions (Jiménez-Barreto *et al.*, 2020; Ki *et al.*, 2020; Martínez-Sala *et al.*, 2021; Önder *et al.*, 2020; Narangajavana *et al.*, 2017). Finally, H4, like H2, focuses on covariance, in this case between DR and VI.

4. Methods

The empirical analytical study consisted of the quantitative analysis (Batthyány; Cabrera, 2011) of the results of a survey questionnaire applied in Spain between January and March, 2022, to test the hypotheses based on the formulation of a structural equation model (Fornell; Larcker, 1981; Alonso-Dos-Santos *et al.*, 2020). The procedure and methods have been implemented and validated in other research studies in the field of digital tourism communication, which have verified their relevance to test the type of hypotheses raised here (Lunchaprasith; Pasupa, 2019; Mariani *et al.*, 2019; Wang *et al.*, 2023; Ying; Krishnapillai, 2018; Xu; Pratt, 2018; Alonso-Dos-Santos *et al.*, 2020).

4.1. Sample

The selection of Spain as the country of study is justified by its relevance in the global tourism industry, even during the pandemic, according to data provided by the UNWTO Tourism Recovery Tracker¹, and because it is one of the European countries where the health crisis had the greatest impact (Huertas Roig *et al.*, 2020; Williams, 2021). With regards to the sample, it was selected using convenience and snowball sampling methods that have also been implemented and validated in studies with similar scope and purpose (Ying; Krishnapillai, 2018; Otoo; Kim, 2020; Xu; Pratt, 2018; Proyrungroj, 2020) which supports and guarantees the results and conclusions of this study. Email and messaging services, such as WhatsApp and Telegram, were used to invite the contacts of the people linked to the research to answer the questionnaire and distribute it among their respective contacts. The criteria used to select survey participants focused on including members of generations Z, Y, X, and W (Ramos-Soler *et al.*, 2019) who had traveled. To meet the requirements of the chosen method and hypothesis, data collection stopped when enough questionnaires had been answered. Quantitative analysis was performed on a total of 348 questionnaires.

Table 1 describes the sample of respondents, the majority of whom are Spaniards (88.2%), women (67.8%), and between 18 and 24 years old (82.5%). As for the trips the people surveyed had made in 2019, more than half had made between 1 and 3 trips, while only 4.9% had not made any trips. In 2020, unsurprisingly, the percentage of respondents who did not make any trips increased considerably, to 35.9%, while more than half had made between 1 and 3 trips.

Table 1: Sociodemographic Characteristics of Respondents.

| Variable | Categories | % |
|---------------------|--------------|------|
| Nationality | Spanish | 88.2 |
| | European | 3.4 |
| | Other | 8.3 |
| Gender | Female | 67.8 |
| | Male | 32.2 |
| Age | 18-24 | 82.5 |
| | 25-31 | 10.1 |
| | 32-37 | 3.2 |
| | 38-40 | 0.6 |
| | More than 40 | 3.7 |
| Trips taken in 2019 | None | 4.9 |
| | 1-3 | 56.6 |
| | 4-6 | 25.3 |
| | 7-9 | 6.9 |
| | More than 9 | 6.3 |
| Trips taken in 2020 | None | 35.9 |
| | 1-3 | 53.7 |
| | 4-6 | 6.6 |
| | 7-9 | 2.3 |
| | More than 9 | 1.4 |

4.2. Measures and Procedure

Once the sample requirements were established, the questionnaire was structured into three sections, according to the research hypotheses. The first section focuses on participants' consent and acceptance of the conditions of the study, while the second collects basic data to define respondents' sociodemographic profile about the key themes of this study: travel and social networks. This section includes a series of questions about respondents' nationality, gender, age, travel frequency (in general and, specifically, in 2020, when the pandemic began), and personal use of social media platforms (leisure, entertainment, etc.). The results are shown in Table 1. According to the object of study, the third and final section asks respondents to answer some questions about five posts/images disseminated on the Facebook account of a real tourist destination, from May to June 2020, a period that coincides with the lifting of COVID-19-related restrictions in Spain.

These images were selected according to their usefulness to test the main research hypothesis, i.e., depending on their treatment of PHR in a crisis, like the COVID-19 pandemic. In this sense, we chose tourist destinations that took place in closed and open spaces, where COVID-19 contagion risk and prevention measures differ (España, 2021). Cultural tourism not only met this requirement but also experienced remarkable growth during the lockdown period in which the demand for virtual access to museums, heritage sites, theaters, and shows, reached levels never seen (World Tourism Organization, 2022) revealing its growing importance in the tourism industry as well as the confirmation of the potential of virtual tourism. Once the type of tourism was chosen, the destination had to be on top in the Spanish rankings. Thus, Madrid was chosen because it is considered the preferred city to travel and is mainly a cultural destination (Ideas Llyc; Hosteltur, 2022).

As for the social network, Facebook was chosen because, despite the growth of other social networks, it still has the largest number of users (Interactive Advertising Bureau, 2021) and is the most used by DMOs (Barrientos-Báez et al., 2021; Önder et al., 2020; Aydin, 2020). Once the account and period were selected, a series of posts that represented different PHR situations were chosen, following the classification of social media communication on COVID-19 developed by Huertas Roig et al. (2020). The five images that were included in the survey were posted in the Facebook account of Madrid during the selected period and promoted cultural tourism and addressed PHR in different ways, as described in Table 2.

Table 2: Features of Selected Posts/Images.

| Post type | Tourism type | Participation mode | Space | Reference to COVID-19 measures |
|-----------|--------------|--------------------|----------|--------------------------------|
| 1 | Cultural | In-person | Outdoors | Yes |
| 2 | Cultural | In-person | Indoors | Yes |
| 3 | Cultural | In-person | Outdoors | No |
| 4 | Cultural | In-person | Indoors | No |
| 5 | Cultural | Virtual | - | - |

Source: based on Huertas Roig et al. (2020).

The last section of the survey asks respondents to answer five questions based on the analysis of the text and image of each of the selected posts. Each of the five questions derives from the research hypotheses and the variables included in the proposed conceptual model (Figure 1) and is measured by a single attribute (as in the case of PHR, DR and VI) or multiple attributes (as in the case of PI and DI). The combination of different types of variables, of a single and several items, has also been validated in previous studies carried out in the same field (Sohn et al., 2016; Tseng; Wang, 2016).

Apart from this difference, a 7-point rating scale is used for all variables, as advised in previous research (Sohn et al., 2016). The first variable, PHR, focuses on health risk (Jang et al., 2020; Pahlevan Sharif; Mura, 2019; Godovykh et al., 2021; Tseng; Wang, 2016). In addition, PHR is directly and explicitly associated with COVID-19, as in some of the reviewed studies, as a case for the study of risk perception and resilience communication (Godovykh et al., 2021). Based on the literature review, PHR is measured using a 7-point scale that helps respondents evaluate their concern about getting infected while “consuming” the tourist product or service on offer. On this scale, 1 is an absence of concern or the minimum perception of risk, while 7 is the highest concern and perception of risk.

PI is also measured using a 7-point scale, but concerning five items established based on the results and conclusions of previous studies of the tourism sector on the effects of Facebook posts (García-De los Salmones et al., 2021; Gutiérrez-Cillán et al., 2017). However, given the scarcity of studies in this area, due to its novel nature, the review was complemented with studies on the influence of tourist social media communication on tourists’ attitudes towards the posts and the destination (Xu; Pratt, 2018; Pahlevan Sharif; Mura, 2019; Choi; Rifon, 2012).

Regarding DI, the research examines the relationship between PI and DI (Tung et al., 2021) so the items associated with DI (DI1, DI2, etc.) should be comparable to those of PI (PI1, PI2, etc.). In this sense, the same 5 items related to PI are established for the evaluation of DI. Regarding the first three: *Negativity-Positivity* (PI1), *Boredom-Excitement* (PI2), and *Sadness-Happiness* (PI3), the use of affective items related to fun and joy is frequent in the study of DI in the tourism sector (Garay, 2019; del Pilar Leal Londoño et al., 2022). The other items derive from the physical or psychological risk to which tourists believe they will be exposed when visiting a destination, which determines the DI: *Irresponsibility-Responsibility* (PI4) and *Unsafety-Safety* (PI5)². This approach arises from studies on the effects of crisis communication on tourists’ behavior and attitude (Pahlevan Sharif; Mura, 2019) and DI (Ketter, 2016; Wut et al., 2021; Avraham, 2021), which have grown exponentially in relation to COVID-19 (Zhu; Deng, 2020; Taha et al., 2021; Lu; Atadil, 2021). Within this type of items, those that were finally chosen, depending on those used for the analysis of PI, are cognitive and have been validated in studies related to DI (Taha et al., 2021; del Pilar Leal Londoño et al., 2022).

To delve into the analysis of VI, participants were asked to indicate their intention to visit the destination recommended in the different posts, also using a 7-point scale, where 7 is the highest level of intention to visit the destination and 1 is the lack of intention. Previously, due to the focus of the study, on tourist social media communication, the need and convenience of including a question about the effect of posts in DR was raised. The analysis of DR is as relevant as that of VI due to the observed effect of tourists’ recommendations on the behaviors and decisions of other tourists

(Narangajavana *et al.*, 2017; Ki *et al.*, 2020; Jiménez-Barreto *et al.*, 2020; Martínez-Sala *et al.*, 2021; Önder *et al.*, 2020), which constitutes one of the contributions of this study. In addition, VI and DR (and thus eWOM) are relevant objects of study in the field of digital tourism communication and are usually examined together (Kumar; Kaushik, 2018; Jiménez-Barreto *et al.*, 2020; Pike; Bianchi, 2016). In this research, they are studied separately to confirm possible differences between the two because it is a crucial aspect for the selection and development of content according to the communication objectives of DMOs. As in the previous case, DR is assessed using a 7-point scale, where 7 represents the highest desire and intention to recommend the destination, while 1 represents no intention or desire to recommend it.

The initial version of the questionnaire was reviewed by an expert group of three academics and pilot-tested on a sample of 50 people who met the same selection criteria. Based on the feedback, minor adjustments were made to the final wording and order of the items, but no significant changes were necessary concerning the content of the questions. The initial survey was written in Spanish³. The full questionnaire and selected posts can be found in the Annex.

5. Results

The following table presents the results regarding the research hypotheses and sub-hypotheses. To this end, the items chosen to measure the research variables had to be validated depending on the designed method.

Table 3: Descriptive Statistics of Items Per Post.

| | POST 1 | | POST 2 | | POST 3 | | POST 4 | | POST 5 | |
|-----------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
| | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| PHR | 3.07 | 1.662 | 4.37 | 1.666 | 4.19 | 1.751 | 4.09 | 1.850 | 2.70 | 1.795 |
| PI | | | | | | | | | | |
| PI1 | 5.36 | 1.462 | 4.80 | 1.530 | 4.83 | 1.541 | 5.31 | 1.467 | 5.21 | 1.486 |
| PI2 | 4.78 | 1.455 | 5.03 | 1.574 | 5.24 | 1.451 | 5.30 | 1.359 | 4.71 | 1.585 |
| PI3 | 5.30 | 1.428 | 5.09 | 1.447 | 5.21 | 1.447 | 5.33 | 1.340 | 4.87 | 1.488 |
| PI4 | 5.01 | 1.488 | 5.54 | 1.558 | 4.28 | 1.486 | 4.79 | 1.530 | 5.46 | 1.615 |
| PI5 | 5.01 | 1.547 | 4.37 | 1.622 | 4.25 | 1.525 | 4.72 | 1.602 | 5.47 | 1.679 |
| DI | | | | | | | | | | |
| DI1 | 5.37 | 1.409 | 4.65 | 1.612 | 4.83 | 1.604 | 5.19 | 1.535 | 5.20 | 1.471 |
| DI2 | 4.89 | 1.396 | 4.70 | 1.646 | 4.91 | 1.585 | 5.20 | 1.437 | 4.76 | 1.529 |
| DI3 | 5.29 | 1.360 | 4.80 | 1.532 | 5.13 | 1.453 | 5.26 | 1.414 | 4.93 | 1.454 |
| DI4 | 5.14 | 1.435 | 4.53 | 1.523 | 4.33 | 1.479 | 4.68 | 1.588 | 5.40 | 1.599 |
| DI5 | 5.15 | 1.463 | 4.39 | 1.560 | 4.26 | 1.522 | 4.59 | 1.620 | 5.39 | 1.617 |
| DR | 4.94 | 1.446 | 4.28 | 1.592 | 4.36 | 1.517 | 4.98 | 1.490 | 4.90 | 1.588 |
| VI | 4.76 | 1.617 | 4.24 | 1.755 | 4.45 | 1.614 | 5.06 | 1.558 | 4.68 | 1.712 |

Note. n=348. All minimum 1, and maximum 7.

Regarding the analysis of the PI and DI constructs, the results led us to discard some of the items highly correlated among PI and DI. Thus, to ensure discriminant validity between the two constructs, it was decided to work with those items showing the highest load factors in each construct. For PI, the items are *Irresponsibility-Responsibility* (PI4) and *Unsaftey-Saftey* (PI5), respectively, while in the case of DI, the items are *Negativity-Positivity* (DI1) and *Sadness-Happiness* (DI3).

Table 3 shows that the highest PHR mean is found in Post 2, which was an expected result given that this post is the “riskiest” (it promotes a physical visit to an enclosed space, and specifically talks about COVID-19 measures). This is coherent with the fact that this same post has the lowest score in DI (it is related to a worse DI), DR (this would be related to a lower recommendation of the destination), and the lowest VI.

Conversely, as expected, post 5 has the lowest PHR, as it is a virtual post. However, this low-PHR post did not generate the best PI or DI, nor the highest DR. Interestingly, post 4, which has a relatively high PHR, generated the highest intention of DR and VI, probably because this post does not mention COVID-19 and shows a new situation of safety and normality within enclosed spaces (which were the most affected by the pandemic restrictions).

Table 4: Analysis of Scale Dimensionality, Reliability, and Validity (Fully Standardized Solution).

| | POST 1 | | POST 2 | | POST 3 | | POST 4 | | POST 5 | |
|------|----------------------|-------|----------------------|-------|----------------------|-------|----------------------|-------|----------------------|-------|
| PI | AVE: 0.819 CR: 0.901 | S.E. | AVE: 0.874 CR: 0.933 | S.E. | AVE: 0.913 CR: 0.955 | S.E. | AVE: 0.927 CR: 0.962 | S.E. | AVE: 0.936 CR: 0.967 | S.E. |
| PI4: | 0.941** | 0.025 | 0.926** | 0.026 | 0.944** | 0.012 | 0.962** | 0.014 | 0.976** | 0.013 |
| PI5: | 0.868** | 0.025 | 0.944** | 0.015 | 0.967** | 0.016 | 0.964** | 0.011 | 0.959** | 0.010 |
| DI | AVE: 0.758 CR: 0.861 | S.E. | AVE: 0.795 CR: 0.886 | S.E. | AVE: 0.803 CR: 0.890 | S.E. | AVE: 0.796 CR: 0.887 | S.E. | AVE: 0.817 CR: 0.899 | S.E. |
| DI1 | 0.932** | 0.033 | 0.925** | 0.021 | 0.980** | 0.025 | 0.920** | 0.020 | 0.920** | 0.024 |
| DI3 | 0.804** | 0.041 | 0.857** | 0.024 | 0.804** | 0.038 | 0.864** | 0.032 | 0.887** | 0.023 |

Note. AVE: average variance extracted. CR: construct reliability

Table 4 shows the standardized load factors of the items included in each construct, their corresponding Standard Error, the scale validity of each construct, and the average variance extracted (AVE). According to these results, the measuring model is reliable, given the high load factors (higher than 0.75). According to Chin (1998), this means that at least 50%

of factor variance is reflected in the observed item. Thus, the AVE and CR of both constructs in the five posts analyzed are appropriate (Fornell; Larcker, 1981) and indicate that the selected items explain each construct.

Table 5 shows the discriminant validity measures for each post, the square root of AVE, and the correlations between factors. In addition, correlations between items of both factors were tested, resulting that they are lower than 0.5 in the five posts.

Table 5: Discriminant Validity.

| | POST 1 | | POST 2 | | POST 3 | | POST 4 | | POST 5 | |
|----|---------|-------|---------|-------|---------|-------|--------|-------|---------|-------|
| | PI | DI | PI | DI | PI | DI | PI | DI | PI | DI |
| PI | 0.905 | | 0.935 | | 0.956 | | 0.963 | | 0.967 | |
| DI | 0.574** | 0.871 | 0.701** | 0.892 | 0.620** | 0.896 | 0.691 | 0.892 | 0.596** | 0.903 |

Note. Diagonal: square root of AVE; above diagonal: estimated correlation between factors

Table 6: Model fit Measures Per Each Post.

| | POST 1 | POST 2 | POST 3 | POST 4 | POST 5 |
|------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| RMSEA | 0.087 (C.I. 0.056-0.120) | 0.082 (C.I. 0.051-0.116) | 0.046 (C.I. 0.000-0.083) | 0.083 (C.I. 0.052-0.116) | 0.077 (C.I. 0.045-0.111) |
| CFI | 0.975 | 0.980 | 0.994 | 0.979 | 0.982 |
| TLI | 0.942 | 0.953 | 0.985 | 0.951 | 0.958 |
| Chi-Square | 965.790 | 1077.822 | 1031.408 | 1046.896 | 1040.344 |
| DF | 21 | 21 | 21 | 21 | 21 |
| SRMR | 0.027 | 0.035 | 0.031 | 0.041 | 0.022 |

Note. ** Significant 1%. * Significant 5%

As shown in Table 6, the resulting model is statistically significant in all Facebook posts, showing a Chi-Square ranging from 965.790 to 1077.822 (21 degrees of freedom, $p < 0.000$). The other global model fit measures traditionally used are as expected (Hu; Bentler, 1999). In three out of the five posts, the RMSEA is a bit higher than 0.08, but the five models fit satisfactorily: high CFIs, TLI above 0.9, and small SRMR.

Table 7: Estimates (Fully Standardized Solution).

| | POST 1 | S.E. | POST 2 | S.E. | POST 3 | S.E. | POST 4 | S.E. | POST 5 | S.E. |
|----------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|
| PHR-> PI | -0.389** | 0.064 | -0.384** | 0.052 | -0.380** | 0.054 | -0.431** | 0.051 | -0.533** | 0.056 |
| PHR-> DI | -0.342** | 0.058 | -0.345** | 0.057 | -0.221** | 0.058 | -0.356** | 0.058 | -0.334** | 0.061 |
| DI-> DR | 0.523** | 0.058 | 0.670** | 0.037 | 0.629** | 0.041 | 0.625** | 0.045 | 0.652** | 0.044 |
| DI-> VI | 0.491** | 0.052 | 0.688** | 0.036 | 0.572** | 0.048 | 0.600** | 0.046 | 0.669** | 0.039 |
| DI<->PI | 0.574** | 0.052 | 0.702** | 0.036 | 0.626** | 0.042 | 0.691** | 0.041 | 0.596** | 0.056 |
| VI<->DR | 0.676** | 0.035 | 0.677** | 0.043 | 0.673** | 0.043 | 0.708** | 0.054 | 0.655** | 0.050 |

** Significant 1%. * Significant 5%

As Table 7 shows, in the five Facebook posts under analysis, the effect of PHR on the PI and DI factors is negative and statistically significant, which means that PHR negatively affects PI and DI. This makes sense, as it shows that a higher PHR causes a worse impression (PI) on the viewer, and this higher PHR and worse impression affect DI, resulting in a worse overall image. The results indicate that the negative effect of the posts' PHR is stronger on the PI than on DI, which is coherent with the literature and can be explained because PI refers to partial and more immediate impressions while DI is an overall construct where many other factors play a role. The higher the post's PHR, the more negative the post's first impression, which has a milder negative effect (but notable and significant) on the overall DI. In this respect, PI and DI covary in the same sense in relation to PHR, but with a stronger effect on PI. On the other hand, both DI and PI affect positively and significantly DR and VI.

It makes sense that this relationship is positive as a better DI positively affects tourists' decision-making and behavior. Thus, a better DI leads to higher recommendation of the destination (DR) and higher interest to visit it (VI). In this respect, both DR and VI covary and are related: a stronger recommendation entails more interest in visiting the destination and vice versa. This also shows that, ultimately, PHR affects DR and VI through DI, thus becoming a fundamental aspect to consider in destination image communication.

Resilience communication is a basic tool for destinations to improve their image and recover after a crisis.

Finally, concerning the five models created for the five posts, it can be observed that the size of the effects is similar and that the sign is the same in all five posts. Results reveal that respondents behave similarly when observing each Facebook post regardless of the type of information posted (images of outdoors, indoors, or cultural tourism).

6. Discussion and Conclusion

Resilience communication is a basic tool for destinations to improve their image and recover after a crisis and this research contributes to the literature on the subject by analyzing the impact of this communication on tourists, specifically on destination image (Varghese; Chennattuserry, 2022; Karadimitriou; Panagopoulos, 2023). This study demonstrates the

importance of social media communication in PHR and its effect on perceived impressions, destination image, and related behavioral responses (DR and VI). The four hypotheses in the research model have been confirmed, as the effects are statistically significant in all five posts, and the selected items explain every one of the factors.

Concerning H1, the analysis shows that PHR negatively affects DI and, more strongly, PI. A higher PHR in communication messages leads to a stronger negative impression of that communication and this impression negatively influences the overall destination image, which is in line with previous studies that show that PHR affects destination image (**Wen et al.**, 2020) and visit intention (**Casali et al.**, 2021). The negative effect is stronger in the post impression and milder in the destination image (where many other factors are in place), but the effect is there and significant. In this respect, we do not see the effect mentioned by **Tung et al.** (2021) as both impression and destination image vary in the same positive or negative direction. However, it was observed that the overall image has certain “atemporal” aspects that are not influenced by partial impressions.

“A higher Perception Health Risk in tourism communication messages leads to a stronger negative impression of that communication and this impression influences negatively the overall destination image.”

Posts that are about indoor spaces and mention COVID-19 measures are perceived as the riskiest. Knowing that when more PHR is generated, DI, DR and VI also decrease, DMOs should ensure their social media communication about indoor tourist spaces transmits safety and confidence to tourists, by using more positive messages that avoid talking about the dangers and risks of the pandemic. However, this research has also demonstrated that the lowest possible PHR (a virtual tour) in communication does not improve DI, VI or DR more relatively. This result is also interesting and is an aspect that requires further analysis because it contradicts previous studies that showed that virtual reality positively influences DI and decreases PHR in destinations (**Yung et al.**, 2021). However, **Sarkady et al.** (2021) showed that virtual reality was a travel substitute during and after the pandemic but also found that PHR does not influence people’s decision to use virtual reality.

“The overall Destination Image, which has been affected by Perception Health Risk, in turn affects Destination Recommendation and Visit Intention.”

Concerning H2, PI and DI influence one another and covary to some extent. Partial post impressions affect the overall destination image, but this destination image also affects the post impression of very well-known urban destinations.

“Destination Image, Destination Recommendation and Visit Intention are positively related.”

In H3, the overall DI, which has been affected by PHR, in turn affects DR and VI, demonstrating that PHR in communication ultimately influences DR and VI negatively too. As suggested by the literature, DI, DR and VI are positively related. With regards to H4, both DR and VI are related and covary as intrinsic behavioral aspects related to DI.

In terms of the implications for resilience communication, according to the results for H1, it seems that messages that generate a better impression and positively affect DI are communicating experiences without mentioning the pandemic, especially in indoor spaces (where sanitary restrictions remained for much longer). Messages that promote real physical tourist experiences in a normalized way seem to generate the best post impression and destination image, as opposed to messages that feature zero-risk experiences (such as virtual tours). According to the results, posts that mention COVID-19 measures and related safety issues generate a worse destination impression and image, even if destinations communicate these aspects to reassure tourists’ safety. This differs from previous studies (**Xie et al.**, 2021) that showed that communication about risk issues generates a higher safety perception, and a positive destination image and visit intention. Even though experts in crisis communication have shown the importance of communicating about crises and solution measures (**Coombs**, 2015; **Coombs; Holladay**, 2015; **Karadimitriou; Panagopoulos**, 2023), this study has also shown that crisis communication in a post-pandemic situation inevitably generates a negative impression, which in turn increases risk perception and affects destination image. Therefore, in post-pandemic situations, DMOs should be cautious about mentioning these issues in tourist social media posts, as tourists may be looking for other types of content that do not remind them about the problem.

“Perceived health risk does not influence people’s decision to use virtual reality.”

This study’s methodological design contributes to the communication studies research by using Structural Equation Modelling (SEM), which is a relatively new and underused quantitative tool in the field of communication, in comparison to other areas such as psychology, marketing, and business (**Riffe et al.**, 2019). Moreover, it is worth mentioning that in this study, SEM is used to analyze how social media communication affects users’ perceptions. In other words, the fact that constructs themselves are built upon social media contents, also contributes theoretically to the communication literature.

In addition, from the perspective of destination marketing and communication, this study provides empirical evidence about the requirements that tourism communication content strategies must meet in crises to meet the expectations of actual and potential tourists. This constitutes a notable contribution not only to the tourism sector but also to crisis management,

in situations like the COVID-19 pandemic, which may affect the proper functioning of an industry that is essential for the economic and social development of many countries and territories. From an academic point of view, the crisis caused by COVID-19 may mean a paradigm shift in tourism communication in terms of crisis management. In this sense, this study is one of the first focused on the relationship between PHR, DI and VI. This improves our theoretical understanding of the creation and development of DI and its influence on VI and the travel behavior and expectations of tourists in crisis situations. Specifically, the consideration of DR and VI is one of the main contributions of this research as it confirms the effect of user recommendations on the final decisions of other users. In the same way, from a professional point of view, the study formulates a series of premises regarding the characteristics that posts must meet within a tourism communication strategy in crisis situations. Finally, a questionnaire and a model of great importance have been designed to evaluate the relationship between DI and VI in this type of situation.

Despite numerous contributions, the study is not without limitations, mainly regarding the sample, in terms of the selected social network (Facebook), the type of tourism under study, and the users surveyed.

DMOs should use a more positive communication at indoor tourist spaces to transmit safety and confidence

Regarding the social network, despite being the one with the largest number of users (**Interactive Advertising Bureau**, 2021) and the most used by DMOs (**Aydin**, 2020; **Barrientos-Báez et al.**, 2021; **Önder et al.**, 2020), it would be convenient to compare its results with other social networks such as Twitter, the most used platform in crisis situations (**Huertas Roig et al.**, 2020) or Instagram, the social network with the highest growth rates in recent years (**Interactive Advertising Bureau**, 2022) and growing prominence in the tourism sector, also concerning crisis management (**Avraham**, 2021; **Lu; Atadil**, 2021).

Similarly, it is pertinent to evaluate the effect of PHR on DI, in non-cultural tourism, like nature-based destinations, to determine to what extent the expectations of their respective audiences coincide. Similarly, the development of this same study in statistically representative samples of different generations will allow us to contrast these first results and overcome the shortcomings, in this regard, of the current sample. Survey respondents have a relatively homogeneous profile (mainly young, female university students) due to the non-probabilistic nature of the sample. Likewise, future studies should implement this type of analysis in different destinations that use similar types of posts, differentiating them according to the degree of severity of restriction measures and the effects of the crisis.

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8. Notes

- ¹ The tourism recovery tracker platform compiles all relevant data to track the recovery of tourism at the global and regional levels, alongside information on the main destinations for international tourism: <https://www.unwto.org/es/unwto-tourism-recovery-tracker>
- ² The equivalences for the analysis of DI are the following: *Negativity-Positivity (DI1)*, *Boredom-Excitement (DI2)*, *Sadness-Happiness (DI3)*, *Irresponsibility-Responsibility (DI4)*, *Unsafety-Safety (DI5)*.
- ³ Based on the scope of study, the language of the questionnaire was Spanish. To replicate the research in other areas, the translation of the questionnaire into other languages must enjoy the flexibility and freedom necessary to select those adjectives that most faithfully describe the feelings and sensations under study.

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9. Annex

A. Summary of Abbreviations

| Term | Abbreviation |
|----------------------------|--------------|
| Destination Image | DI |
| Destination Recommendation | DR |
| Post Impression | PI |
| Perceived Health Risk | PHR |
| Visit Intention | VI |

B. Questionnaire “Crisis Communication in the Tourism Sector”: Questions

1. Please answer the following question: After viewing post 1, how worried are you about getting infected with COVID-19?

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|---|---|---|---|---|---|---|---|--|
| I am not worried about getting infected with COVID-19 | | | | | | | | I am very worried about getting infected with COVID-19 |

2. Please indicate to what extent post 1 GENERATES on you the following feelings.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|----------------------|---|---|---|---|---|---|---|----------------|
| PI1 Negativity | | | | | | | | Positivity |
| PI2 Boredom | | | | | | | | Excitement |
| PI3 Sadness | | | | | | | | Happiness |
| PI4 Irresponsibility | | | | | | | | Responsibility |
| PI5 Unsafety | | | | | | | | Safety |

3. Please indicate to what extent post 1 GENERATES on you the following feelings regarding the DESTINATION shown.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|----------------------|---|---|---|---|---|---|---|----------------|
| DI1 Negativity | | | | | | | | Positivity |
| DI2 Boredom | | | | | | | | Excitement |
| DI3 Sadness | | | | | | | | Happiness |
| DI4 Irresponsibility | | | | | | | | Responsibility |
| DI5 Unsafety | | | | | | | | Safety |

4. Please answer the following question: After viewing post 1, would you RECOMMEND the destination it promotes to FRIENDS, FAMILY or OTHER USERS?

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|---------------------------------|---|---|---|---|---|---|---|-----------------------------|
| I would not recommend it at all | | | | | | | | I would surely recommend it |

5. Please answer the following question: After viewing post 1, do you FEEL INTERESTED in visiting the destination it promotes?

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|---|---|---|---|---|---|---|---|---------------------------------------|
| I do not feel any interest in visiting it | | | | | | | | I feel very interested in visiting it |

C. Questionnaire Crisis Communication in the Tourism Sector: Posts



Image 1: Type 1 Post (Table 2).
Source: Visita Madrid (2020a)



Image 2: Type 2 post (Table 2).
Source: Visita Madrid (2020d, June 17)



Image 3: Type 3 Post (Table 2).
Source: Visita Madrid (2020e, August 6)

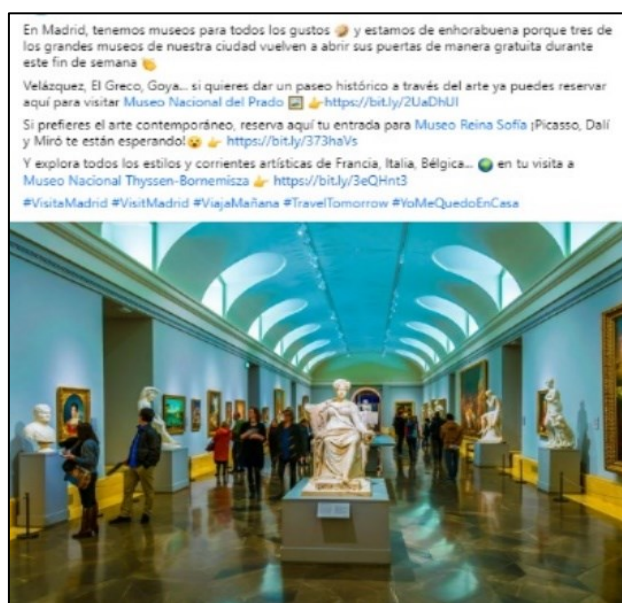


Image 4: Type 4 Post (Table 2)
Fuente: Visita Madrid (2020c).



Image 5: Type 5 Post (Table 2).
Source: Visita Madrid (2020b).