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COVID-19 and post-pandemic travel behaviour changes

ABSTRACT

Responses to the COVID-19 pandemic vary internationally. The perceptions of particular destinations formed by such responses may substantially affect travel intention post pandemic. This study investigates the impact of perceptions towards trust, crisis management, health care system, and solidarity shaped by media on willingness to support a destination and travel intention post pandemic. Ten countries with different coping strategies, numbers of positive cases and mortality rate are studied. Trust, crisis management, health care system, and solidarity are identified as important predictors of future travel behavior. The results show the strong effects of solidarity and trust on willingness to support a destination and travel intention. The findings have potentially significant implications for post-COVID-19 destination marketing and recovery in the light of significant changes in the travel patterns of millions of people worldwide.

Keywords: Perceptions; COVID-19 pandemic; crisis management; trust; health care system; solidarity; travel intention

1. INTRODUCTION

The global pandemic of the novel coronavirus, COVID-19, is potentially the most extensively reported disease outbreak in modern history (World Health Organization [WHO], 2020; Gössling, Scott, & Hall, 2021). Unlike dengue fever or malaria, the impacts of COVID-19 are experienced in developed countries with a substantial media (Hall, Scott, & Gössling, 2020).

Mass media coupled with the proliferation of social media in the digital era are significant means of communication and although potentially playing a significant role in effective crisis management, also has a significant role in shaping destination image and affecting desire to travel to a destination (Koo et al., 2016). This is particularly significant given countries' different responses and coping strategies during the COVID-19 pandemic and the extensive media coverage given to them (Gössling et al., 2021). Additionally, the COVID-19 has significantly changed people's travel behavior and mobility-styles around the world and the recent literature has discussed the influence of the pandemic on tourist's perceived risk and associated changes in future travel behaviour (e.g. Matiza, 2020). Rastegar et al. (2021) argue that post-pandemic tourists are more prone to visit destinations they deem to be trustworthy, reliable and less risky.

Responses to COVID-19 have been varied with countries taking different approaches to managing the pandemic. Nevertheless, there is a limited discussion on how crisis management strategies and responses might affect destination perceptions and future travel intentions. This is particularly important as many destinations are preparing to support tourism recovery post pandemic in the light of significant changes in the travel patterns of millions of people worldwide.

This study aims to investigate how COVID-19 responses and impacts might affect perceptions of and future travel intentions to particular countries. Through a cross-country analysis of ten countries with different response strategies, case numbers, and mortality rate, this study develops and empirically tests an integrated model that links trust, crisis management, health care system and solidarity to behavioral intentions and willingness to visit a destination. The way governments provide information and communication about COVID-19 infection and mortality rates along with the openness and transparency of government institutions can substantially shape international perceptions of countries (Curtin & Gaither, 2007). The success of public policies that depend on public behavioral responses largely rely

on trust. The WHO Director-General emphasized the role of trust and solidarity for states in combatting the pandemic and observed “when there is mistrust, there is much less solidarity” (WHO, 2020). Countries handling of the COVID-19 pandemic (e.g., timely diagnosis and treatment, and health and policy responses) has affected individuals’ perceptions. For instance, a Pew Research Center’s survey related to COVID-19 indicated that U.S. image plummeted internationally because of its management of the coronavirus crisis (Pew Research Center, 2020). Furthermore, public perceptions of health and social care affect national image and reputation (Mitchell, 2011). For instance, a Health Foundation (2020) survey of the British public highlighted significant shifts in the public’s perceptions of government handling of COVID-19 and the country’s healthcare capacity. Furthermore, engagement in solidarity with one another in order to collectively respond to the COVID-19 crisis has been given special attention by global institutions, such as WHO, as an essential component of an effective public health response. The outcomes of this research provide insights into how effective crisis management and response can affect the perceived image of a destination internationally and potential tourists’ desire to visit. The practical implications of this study focus on approaches that can assist destinations in post crisis recovery.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Willingness to support a destination and travel intention

The efforts to repair the reputation and image of a destination after a crisis has been widely discussed (Avraham, 2015) as it affects tourists’ travel intentions. A positively held image of a destination can influence tourists’ willingness to support a destination by revisiting and recommending the destination to others (Chen & Tsai, 2007; Prayag et al., 2017). The latter is of significance for destinations which rely on repeat visitation as it usually costs much less in marketing terms to retain repeat visitors than to attract new ones (Um, Chon, & Ro, 2006).

Travel intention is “the subjective probability of whether a customer will or will not take certain actions that are related to a tourist service” (Moutinho, 1987, p.11) and reflects intent

or commitment to travel (Jang et al., 2009). An individual's degree of certainty and confidence toward a destination affect their response and behaviour. For Ajzen and Fishbein (1980) behavioral intentions are translated into individual perceptions of what they expect to do in a given situation. As an outcome of a mental process, travel intention is believed to lead to an action and transforms motivation into behavior (Jang et al., 2009). As a general rule, a more favorable attitude toward a destination leads to a stronger intention to visit. Research has demonstrated several factors in shaping travel intentions including familiarity (Chen, Hall, & Prayag, 2021); destination trust (Abubakar et al., 2017); word of mouth publicity (Abubakar et al., 2017) and cognitive beliefs (Nadeau et al., 2008).

H1: Willingness to support a destination after COVID-19 crisis has a positive effect on travel intention.

2.2 Trust, Intention to travel and willingness to support

Trust is “one party's confidence in an exchange partner's reliability and integrity” (Morgan & Hunt, 1994, p. 23), and reflects an individual's feeling of security and willingness to rely on other people or things. Trust is an effective means to minimize uncertainty and the perception of risk. For instance, Han and Hyun (2015) argue that tourists are more prone to visit destinations they deem to be trustworthy and reliable. Abubakar et al. (2017) indicate the important effect of destination confidence on the intention to revisit. Saleem, Zahra, and Yaseen (2017) also highlight the significant positive relationship between trust and repurchase intention.

In a political context, trust links ordinary citizens to the institutions that are intended to represent them (Bianco, 1994) and political trust is as an important determinant of public support for government policies (Nunkoo, Ramkissoon, & Gursoy, 2012). Trust in government policies and actions has become a significant challenge in the case of the COVID-19 pandemic (Fancourt, Steptoe, & Wright, 2020). Public trust in the government's policies and associated

efforts to handle the pandemic is critical as it underpins public beliefs and behaviors toward a country's health system (Fancourt et al., 2020).

Trust towards a tourist destination is a multidimensional construct that largely depends on the honesty of local inhabitants and public and private institutions (Artigas et al., 2017). Similarly, how people perceive country performance during the COVID-19 pandemic influences trust in government announcements regarding COVID-19 (Fancourt et al., 2020). Given the extant literature, the following hypotheses are proposed:

H2: Trust has a direct positive effect on willingness to support a destination after the COVID-19 crisis

H3: Trust has a positive direct effect on travel intention to visit a destination after the COVID-19 crisis

H4: Trust has a positive indirect effect on travel intention to visit a destination through willingness to support a destination after COVID-19 crisis

2.3 Crisis management, willingness to support and intention to travel

The negative impacts of crises on tourism are well documented (Chew & Jahari, 2014; Hall, 2010; Hall et al., 2016). Travel risk perceptions, including physical, financial and health risks, can be due to natural hazards (Chew & Jahari, 2014), political instability (Li et al., 2018), epidemic or other crises (Hall, 2010). Disasters and crises directly and negatively affect destinations by significantly reducing arrivals and expenditure because of safety and security fears (Hall, 2010).

It has long been recognized that tourist perception of risk towards a destination plays a critical role in behaviour and intention to travel (Chew & Jahari, 2014; Li et al., 2018). However, if managed effectively, crisis can also offer the opportunity for renewal and image restoration. For instance, focusing on positive communication with stakeholders and effective communication via positive media attention is significant for recovery efforts (Ulmer & Sellnow, 2002). Destination perceptions are also important for ongoing loyalty (Zenket et al., 2019).

Likewise, tourists' perceptions of a destination can indirectly affect intention to travel to a destination through willingness to support the destination (Hall & Prayag, 2021). Given the extant literature, we posit the following hypotheses:

H5: Crisis management has a positive effect on willingness to support a destination after COVID-19 crisis

H6: Crisis management has a positive direct effect on intention to travel to a destination after COVID-19 crisis

H7: Crisis management has a positive indirect effect on travel intention through willingness to support a destination after COVID-19 crisis

2.4 Healthcare system, willingness to support and intention to travel

Tourists prefer to visit destinations with a positive image that they can trust and which they believe can offer high quality services (Chew & Jahari, 2014). Even before COVID-19 this was important in the case of healthcare systems, as trust in their reliability and quality assurance can positively influence the willingness of potential users to travel to a destination (Han, 2013). The quality of medical services and healthcare facilities is a crucial factor affecting travel intention for medical tourists (Ye, Qiu, & Yuen, 2011). For instance, Na et al. (2016) identified the positive effect of attitudes towards the healthcare system on travel intention. Medical tourists' willingness to rely on a destination's healthcare system can encourage intention to visits and financial commitment to purchase the product (Abubakar et al., 2017). Healthcare systems have a critical and visible role in reducing the pandemic's impacts (WHO, 2020). Therefore, we suggest that perceptions towards the healthcare system will potentially have a positive direct effect on both willingness to support and intention to travel to a destination (including a positive indirect effect on intention to travel through willingness to support) for general tourists. Given the extant literature, the following hypotheses are proposed:

H8: Healthcare system has a positive effect on willingness to support to a destination after COVID-19 crisis

H9: Healthcare system has a positive direct effect on intention to travel a destination COVID-19 crisis

H10: Healthcare system has a positive indirect effect on travel intention through willingness to support a destination after COVID-19 crisis

2.5 Solidarity, willingness to support and intention to travel

Solidarity is “emotionally and normatively motivated readiness for mutual support, as in the slogan ‘one for all and all for one’” (Laitinen & Pessi, 2014, p. 1). In the case of a crisis, feelings of solidarity can encourage assistance (Davies & Savulescu, 2019). In the case of COVID-19, the UNWTO (2020) has called for solidarity between countries by stressing the importance of international dialogue and cooperation. This is particularly important as evidence shows that feelings of solidarity in each country play a significant role in combating the pandemic (UN, 2020).

In a tourism context, emotional solidarity explains the relationships between tourists and destinations (Woosnam et al., 2020). “Emotional solidarity has generally been recognized as a significant predictor of how people think or behave in relation to tourism” (Joo et al., 2020, p. 340). Woosnam et al. (2015) investigated tourists' perceived safety through emotional solidarity in two Mexico-United States border regions and identified that emotional solidarity plays a significant role in affecting how tourists perceive the relatively safety of a destination (Woosnam et al., 2015). The finding is important as safety and security are vital factors affecting tourist decision making and travel intentions (Hall, 2010).

Solidarity in destinations can result in a higher level of support for the industry and positively affect tourists' perception and their reactions to the destination (Joo et al., 2019).

H11: Solidarity has a positive effect on willingness to support a destination after COVID-19 crisis

H12: Solidarity has a positive direct effect on intention to travel to a destination COVID-19 crisis

H13: Solidarity has a positive indirect effect on travel intention through willingness to support a destination after COVID-19 crisis

Figure 1 shows the conceptual framework of this study.

[Figure 1 about here]

3. RESEARCH METHODOLOGY

3.1 Data collection

This study applied a quantitative method using an online questionnaire created in Google platform to collect data. The question items to measure *trust* (Nunkoo et al., 2012; Artigas et al., 2017; Fancourt et al., 2020), *crisis management* (Chew & Jahari, 2014; Li et al., 2018; J. Li et al., 2020), *health care system* (Abubakar et al., 2017; Na et al., 2016), *solidarity* (Joo et al., 2019; Joo et al., 2020), *willingness to support a destination* (Chen & Tsai, 2007; Prayag et al., 2017), and *travel intention* (Zenker et al., 2019), were adapted from previous literature (Appendix 1). All items were measured using a 7-point Likert scale anchored 1 (strongly disagree) and 7 (strongly agree). The questionnaire was developed for ten different countries including China, South Korea, Italy, Germany, Iran, USA, Sweden, UK, New Zealand, and Turkey. The rationale behind selecting these ten countries are their differences in approaches to combat the spread of the coronavirus (Pew Research Centre, 2020). The high number of mortality rate and infection cases in countries which were subjected to the increasing media coverage in the initial phase of the COVID-19 pandemic (e.g., Italy, Iran, South Korea, China), and later phase (e.g., US, UK) were also considered.

A screening question was included at the beginning of the questionnaire (*In thinking about media coverage of the COVID-19 outbreak which of the following countries have you most followed with respect to news and information regarding COVID-19?*). The respondents were asked to select one country other than their country of residence and country of origin. Following the answer to this question, respondents were transferred to the specific questions for the selected country. All question items were the same, except for the name of the country.

The questionnaire was distributed on social media (Facebook, LinkedIn, Twitter) on several occasions to gain wider geographic outreach from May to August 2020, when most of the countries were experiencing lockdowns and restrictions. A total number of 584 questionnaires were collected, 42 questionnaires were excluded because of missing values, with 542 completed questionnaires qualifying for analysis. Among the 542 usable questionnaire, 115 (12.8%) followed the news for China in media; 24 (2.7%) for South Korea; 76 (8.5%) for Italy; 49 (5.5%) for Germany; 21 (2.3%) for Iran; 140 (15.6%) for USA; eight (0.9%) for Sweden; 53 (5.9%) for UK; 12 (1.3%) for Turkey; and 44 (4.9%) for New Zealand.

Of the 542 respondents, 268 (49.4%) were male, 267 (49.3%) were female, and seven (1.3%) did not reveal their gender. The majority of respondents (69.2%) belong to the 25-34 and 35-44 age groups, 129 (23.8%) were older than 45, and 36 (6.6%) younger than 25. The majority of respondents (83.6%) had college and university level education. For 299 respondents (55.1%) social media was the main source of information on COVID-19.

This study checked the Common Method Variance (CMV) issue using the full collinearity variance inflation factor (VIF) (Kock, 2015), and the correlation matrix procedure. For composite-based approach such as partial least squares – structural equation modeling (PLS-SEM), Kock and Lynn (2012) recommended the threshold of 5 for acceptable full collinearity VIF, which in the current study all full collinearity VIFs of constructs are lower than 5 (e.g., ranged 1.537 – 4.51) indicating the model free of CMV. In addition, based on the correlation matrix procedure, the correlation between constructs using PLS-SEM are lower than 0.9, indicating CMV is not an issue in the current study.

3.2 Analytical technique

This study applies partial least squares – structural equation modeling (PLS-SEM) to assess measurement and structural models. PLS-SEM is a preferred approach for prediction-oriented study (Hair et al., 2019), and the current study aims to predict the willingness of tourists to support destinations and their post COVID-19 travel intentions. Therefore, PLS-SEM was a suitable approach for this study compared to covariance based – SEM, which have low

predictive power (Hair et al., 2019). SmartPLS 3.0 (Ringle et al., 2015) has been used to perform PLS-SEM in this study. In order to assess mediators, the product of the coefficient approach using the bootstrapping resampling method has been applied (Nitzl et al., 2016).

To obtain deeper insights from data for the causal model, fuzzy-set Qualitative Comparative Analysis (fsQCA) as a prediction asymmetric approach was employed (Ragin, 2006; Rasoolimanesh et al., 2021). The fsQCA using fsQCA 3.0 software has been performed to identify the sufficient and necessary conditions or combination of predictors to predict willingness to support a destination and travel intention. The fsQCA technique is a set-theoretic approach which can identify sufficient causal combinations of predictors (i.e. configurations and recipes) to predict an outcome (Ragin, 2006). The consistency and coverage should be greater than 0.8 and 0.2 respectively to identify a sufficient configuration (Ragin, 2009; Rasoolimanesh et al., 2020).

To check the adequacy of data for the current study, G*Power was used to calculate the minimum sample size based on power analysis (Hair et al., 2017). The results of power analysis using G*Power showed the minimum sample of 204 to generate the power of 0.95. In addition, Reinartz et al. (2009) recommended a sample of 100, when we apply PLS-SEM to get sufficient power for analysis. Therefore, a total number of samples of 542 is more than enough for this study.

4. RESULTS AND FINDINGS

4.1 Assessment of the model using PLS-SEM

The conceptual model includes six reflective constructs namely: *trust (TR)*, *crisis management (CM)*, *health care system (HCS)*, *solidarity (SOL)*, *willingness to support a destination (WSD)*, and *travel intension (TI)*. To assess the measurement model of the six reflective constructs, reliability, convergent validity, and discriminant validity were required to be established (Hair et al., 2019). The loading of associated items to each construct, the composite reliability, and

the rho_A should be greater than 0.7, and the average variance extracted (AVE), should be higher than 0.5 to establish reliability and convergent validity (Ali et al. 2018; Hair et al., 2019). Table 1 shows the results of assessment of measurement model of six reflective constructs indicating acceptable reliability and convergent validity. To establish discriminant validity, two conservative criteria, the Fornell-Larcker criterion and the heterotrait-monotrait (HTMT) ratio have been applied. According to the Fornell-Larcker criterion, the square root of AVE of each construct should be greater than the correlation of that construct with any other construct in the model (Hair et al., 2017), and the value of HTMT ration should be lower than 0.9 to establish discriminant validity (Ali et al., 2018). Table 2 and Table 3 show acceptable discriminant validity using both approaches.

[Table 1 about here]

[Table 2 about here]

[Table 3 about here]

To assess the structural model, the R^2 and Q^2 were first estimated. The results showed 0.50 and 0.566 for the R^2 of *willingness to support a destination* and *travel intention*, respectively, indicating a very high R^2 for behavioral studies (Hair et al., 2017). Moreover, the value 0.40, and 0.46 for the Q^2 of *willingness to support a destination* and *travel intention* revealed high predictive power of model using in-sample predictive validity assessment methods (Ali et al., 2018). However, recent literature for prediction-oriented studies have recommended application of out of sample approaches like $PLS_{predict}$ (Shmueli et al., 2019). To assess the predictive power of *willingness to support a destination* and *travel intention* using $PLS_{predict}$ the $Q^2_{predict}$ for the indicators of these two endogenous constructs in the model was checked and the value of $Q^2_{predict}$ for all items should be higher than zero (Shmueli et al., 2019). The root mean squared error (RMSE) of PLS-SEM model was also compared with the linear model's (LM) RMSE, and the values should be lower for the RMSE of PLS-SEM model (Shmueli et al., 2019). Table 4 shows the results of assessment of predictive power of model

using the $PLS_{predict}$. The results show acceptable predictive power for *willingness to support a destination* and *travel intention* using out of sample approach. Therefore, using in-sample criteria (e.g. R^2 and Q^2) and out of sample approach (e.g. $PLS_{predict}$), the results confirmed the high predictive power of the model and antecedents to predict *willingness to support a destination* and *travel intention* of international tourists post COVID-19.

[Table 4 about here]

Table 5 show the results of hypothesis testing for direct and indirect effects of *trust*, *crisis management*, *health care system*, and *solidarity* on *willingness to support a destination* and *travel intention*. The results support a very strong and positive effect of *willingness to support a destination* on *travel intention* (**H1**). For the effects of antecedents, the results show the strong and positive effects of *trust*, and *solidarity* on *willingness to support a destination* (**H2 & H11**), while the effect of *solidarity* is stronger compared to the effect of *trust* on *willingness to support a destination*. The results could not support the effects of *crisis management* and *health care system* on *willingness to support a destination* (**H5 & H8**). The results also showed the positive indirect effect of *trust* on *travel intention* (**H4**), whereas the direct effect of *trust* on *travel intention* (**H3**) is statistically significant, but negative, indicating the importance of *willingness to support a destination* as a mediator and to transfer the effect of *trust* to *travel intention*. For the effect of *crisis management* on *travel intention* the results support direct effect (**H6**) but the indirect effect and mediation role of *willingness to support a destination* (**H7**) could not be supported. The findings could not support the direct or indirect effects of *health care system* on *travel intention* (**H9-H10**). For *solidarity*, the results showed the significant indirect effect on *travel intention* through *willingness to support a destination* (**H13**), whereas the direct effect of *solidarity* on *travel intention* could not be supported (**H12**). Therefore, in summary, *trust* and *solidarity* showed the positive and strong effect on both *willingness to support a destination* and *travel intention*, indicating the importance of these two factors compared to *crisis management* and *health care system*. In addition, the results showed the mediation role of

willingness to support a destination for transferring both effects of *trust* and *solidarity to travel intention*.

[Table 5 about here]

4.2. Results of fsQCA

To gain deeper insights from the data and to analyse the causal model this research applied the fsQCA as an asymmetrical set-theoric approach (Ragin, 2006). Using fsQCA, the sufficient combinations of predictors (i.e. configurations or causal recipes), and necessary conditions to generate the outcome can be identified (Ragin, 2009; Rasoolimanesh et al., 2021). To identify the sufficient configuration, the consistency and coverage should be higher than 0.8 and 0.2 respectively (Ragin, 2009; Rasoolimanesh et al., 2020). Table 6 shows the results of fsQCA for sufficient configurations to predict high and low levels of *willingness to support a destination*. Table 6 shows seven configurations to generate high level of *willingness to support a destination* including: 1) TR*SOL, 2) TR*~CM*~HCS, 3) ~CM*~HCS*SOL, 4) TR*CM*HCS, 5) CM*HCS*SOL, 6) ~TR*CM*~HCS*~SOL, and 7) ~TR*~CM*HCS*~SOL. The results of configurations 1 to 5 show the importance of *trust* and *solidarity* to generate high level of *willingness to support a destination*, consistent with the results of PLS-SEM. However, the results of fsQCA reveal more complex sufficient configurations to predict high level of *willingness to support a destination* in configurations 6 and 7. The configurations 6 and 7 show high level of *willingness to support a destination*, when only *crisis management* and *health care system* are high and the rest of predictors are low for some cases, highlighting the heterogeneity among the respondents. Interestingly, the results of fsQCA to predict low level of *willingness to support a destination* show some sufficient configurations (e.g., 4, 5, 5, and 7), for which the level of *trust* and *solidarity* are high but which generate a low level *willingness to support a destination*. These sufficient configurations highlight the complex situation for the effect of predictor on *willingness to support a destination*, which cannot be identified and detected by only symmetrical and regression-based approaches such as PLS-SEM. The results of fsQCA for sufficient configurations for *travel intention* (Table 7) show exactly the

same configurations as *willingness to support a destination*, indicating similar behaviors of these two concepts in the model.

[Table 6 about here]

[Table 7 about here]

5. DISCUSSION

This research examined the effects of perceptions towards trust, crisis management, health care system, and solidarity on willingness to support a destination and travel intention in the post-COVID-19 era for ten countries with different approaches to managing the pandemic, positive cases and mortality rate. The results showed a high predictive power for the model, indicating *trust*, *crisis management*, *health care system*, and *solidarity* as important predictors of future travel behavior. These results contradict previous findings showing that, despite the negative impact of crises on tourist's destination image, it may not always negatively affect travel intention (Li et al., 2018). However, these results are supported by other studies on the influence of media on travelers (e.g., Kim, 2012).

The results of this study revealed that media and crisis management approaches influence individual perceptions towards a country which, in turn, can induce intention to travel to the destination. This is consistent with other analyses of the effect of COVID-19 pandemic on national image. For instance, the survey of Pew Research Center (2020) illustrates that the image of the United States and its reputation has declined following its handling of the pandemic.

Results of both PLS-SEM and fsQCA emphasize the importance of *trust* and *solidarity* to predict *willingness to support a destination* and future *travel intention* for post COVID-19 era compared to *crisis management* and *health care system*. The effects of *solidarity* on *willingness to support a destination* and *travel intention* are stronger compared to the effects of *trust*, highlighting the key role of *solidarity* for willingness of tourists to support and intention

to travel to a destination. This argument also finds support in previous research on trust which found that tourists are more prone to visit a destination deemed trustworthy and reliable (Han & Hyun, 2015; Abubakar et al., 2017). As a multidimensional construct, trust largely depends on local inhabitants and public and private institutions (Artigas et al., 2017). In the case of COVID-19 individual perception of a country performance in dealing with the pandemic is partly based on how honest and trustworthy they deem government announcements regarding COVID-19 (Fancourt et al., 2020). This is particularly important for media exposure given the positive impacts of media coverage on destination trust and travel intention (Abubakar et al., 2017).

The results of fsQCA as an asymmetrical approach identified more sufficient combinations of factors (e.g., configurations) to predict the *willingness to support a destination* and *travel intention* of tourists post COVID-19. The importance of *trust* and *solidarity* were emphasized by the results of fsQCA consistent with the PLS-SEM results, by these two factors appearing in several sufficient configurations. Similarly, positive media image induces a desire to travel to the destination (Chen et al., 2014). This result suggests that governments' communications and perceptions of solidarity during the outbreak can generate a positive image of a country. The positive impacts of open communication during crises on effective recovery is well recognized (Hall & Prayag, 2021; Ulmer & Sellnow, 2002), and this research reinforces that transparency in communication is crucial in establishing destination's credibility and trust.

The results of fsQCA highlighted the importance of *crisis management* and *health care system* in some sufficient configurations to predict the high level of *willingness to support a destination* and *travel intention*, when other factors have low levels for significant number of respondents. This result emphasizes the importance of better contextualizing suggestions that health and safety will affect post-COVID-19 travel decisions (Turnšek et al., 2020), as well as earlier findings that perceived risks may not negatively affect destination image (Chew & Jahari, 2014) as some tourists might even be more curious to visit such destinations (Li et al.,

2018). Therefore, by disclosing the complexity of findings and combination of factors to predict *willingness to support a destination* and *travel intention*, the results of the fsQCA identified the importance of all predictors but for different groups of tourists, highlighting tourist heterogeneity.

Media coverage of a crisis can shape individuals' perception toward a phenomenon. These findings suggest that the exposure of individuals to both mass media and social media during COVID-19 largely affect the perceived image of a country (national responses to the pandemic, morality rate and infections cases) and also factors inducing travel intention and willingness to support a destination.

6. CONCLUSION

6.1 Theoretical implications

This study addresses the lack of research during the COVID-19 outbreak on influences on travel intention of prospective travelers by providing a picture of individuals' perceptions towards ten countries. The findings indicate that perceptions play a significant role in driving the willingness to support a destination which, in turn, can influence the intention to travel to the destination.

This study has several theoretical contributions. *First*, this study investigates how media exposure affect people's intention to travel to a destination in the COVID-19 pandemic context. The empirical results of this study provide evidence that media exposure plays a significant role in shaping prospective travelers' intention to travel to a destination. *Second*, this study contributed to the link between tourists' intention to travel to a destination after COVID-19 and other important predictors. The antecedents of *trust*, *crisis management*, *healthcare system* and *solidarity* have not been tested in previous studies in relation to the pandemic in a tourism context and this can thus be considered as a unique theoretical contribution.

6.2 Practical implications

The study results have important managerial implications. *First*, as attested by this research, destinations perceptions and their influences, such as media exposure, are of crucial importance to individuals' intention to travel to a destination and their willingness to support it. COVID-19 has captured attention in different media since its onset. As a result, crisis management strategies, and information factors such as the number of infection cases and the mortality rate in different countries have been covered by media. Such coverage can affect the perceived image of a country. Image restoration is of a critical significance in the destination recovery plan of destination marketing organizations (DMOs) and governing bodies in charge of national tourism policy formulation. Many destinations worldwide are now focusing on public health and recovery strategies (Rastegar, Higgins-Desbiolles & Ruhanen, 2021). Therefore, it is crucial to recognise that perceptions shaped during the pandemic will significantly affect future travel behaviours. The latter will need greater attention in the recovery process and strategies. Marketing initiatives, advertising campaigns, media relations and crisis communication techniques need to be effectively used by DMOs, destination managers and national tourism administration in their image recovery process along with recognition.

This research also demonstrated the high importance of trust and solidarity in predicting willingness to support and intention to travel to a destination. Transparent communication about health system response, infection cases and the mortality rate is of paramount significance to building trust. However, fostering public trust in government and ensuring effectiveness need to be guided by the principles of transparency, integrity, accountability, and stakeholder participation (OECD, 2020). At national level, officials are suggested to leveraging public communication to counteract disinformation and support policy. Public communication is a key element of such agenda and is required to be handled through digital platforms and channels and media markets through which information is framed and delivered.

6.3 Limitations and directions for future research

The empirical results of this study should be considered in the light of some limitations which provide grounds for future research. First, data gathered from an online survey has coverage difficulties as most online surveys do (Hwang & Fesenmaier, 2004). Nevertheless, to overcome this challenge, an effort was made to distribute the survey through different channels (including social media platforms) which led to an acceptable response rate.

The study also tried to ensure accessibility to different respondents in various countries. Furthermore, to gain an acceptable response rate, the survey remained online for a period of four months so that the maximum reach and coverage ensured. Nevertheless, the generalization of our findings is limited for different populations given that the Internet is the only source for data collection. Future research is suggested to expand the scope of investigation by alternative qualitative and longitudinal research methods.

Second, given that the study's focus was on the travel intention of prospective tourists, there is already pre-existing different degrees of knowledge and information of respondents about a destination. Although, to try and allow for this, we had included a question about previous visits to countries to compare the differences between visitors with prior experience and without. Future research may want to expand the scope of investigation to those with friends and family at a destination or a previous travel experience to a destination to examine how this may affect revisit intention and WOM publicity. Similarly, further attention needs to be given to the relative salience of different types of information sources and if the trust placed in them changed over the course of a crisis event.

A *third* limitation of this research is the relationship between responding to the survey and the specific COVID-19 infection cases and mortality rate at that time which may have affected the responses of respondents.

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Figure 1. Conceptual framework

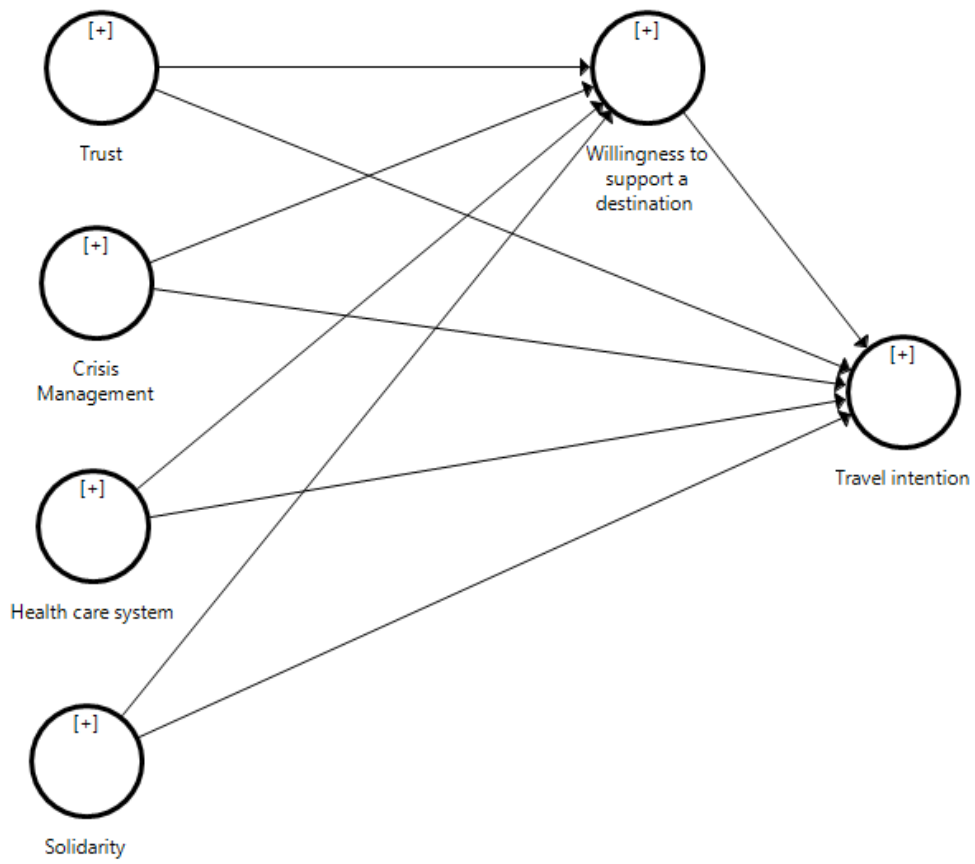


Table 1. Results of assessment of measurement model

Construct	Items	Outer Loading	CR	rho_A	AVE
Trust			0.961	0.947	0.861
	TR1	0.915			
	TR2	0.936			
	TR3	0.948			
	TR4	0.912			
Crisis Management			0.958	0.935	0.883
	CM1	0.940			
	CM2	0.950			
	CM3	0.929			
Health Care System			0.961	0.940	0.892
	HCS1	0.935			
	HSC2	0.959			
	HSC3	0.939			
Solidarity			0.941	0.923	0.763
	SOL1	0.877			
	SOL2	0.903			
	SOL3	0.890			
	SOL4	0.916			
	SOL5	0.773			
Willingness to Support a Destination			0.945	0.923	0.811
	WSD1	0.860			
	WSD2	0.903			
	WDS3	0.919			
	WSD4	0.920			
Travel Intention			0.938	0.935	0.883

T11	0.890
T12	0.909
T13	0.943

Note: See full name of items in Appendix 1

Table 2. Discriminant validity using Fornell-Larcker criterion

	Crisis Management	Health care system	Travel Intention	Solidarity	Trust	Willingness to Support a Destination
Crisis Management	0.940					
Health Care System	0.839	0.944				
Travel Intention	0.480	0.473	0.914			
Solidarity	0.805	0.782	0.534	0.873		
Trust	0.689	0.639	0.457	0.730	0.928	
Willingness to Support a Destination	0.564	0.561	0.746	0.680	0.626	0.901

Table 3. Discriminant validity using HTMT_{0.90} ration

	Crisis Management	Health care system	Travel Intention	Solidarity	Trust	Willingness to Support a Destination
Crisis Management						
Health care system	0.895					
Travel Intention	0.522	0.513				
Solidarity	0.867	0.840	0.586			
Trust	0.731	0.678	0.493	0.781		
Willingness to Support a Destination	0.605	0.601	0.812	0.738	0.670	

Table 4. Results of predictive power using $PLS_{predict}$

Items	$Q^2_{predict}$	RMSE	
		PLS-SEM	Linear Model
WSD1	0.359	1.566	1.569
WSD2	0.445	1.352	1.358
WSD3	0.384	1.432	1.433
WSD4	0.395	1.406	1.409
TI1	0.261	1.664	1.669
TI2	0.219	1.862	1.869
TI3	0.239	1.794	1.804

Table 5. Results of testing direct and indirect hypotheses

	Relationships	Direct/Indirect effect	Bias Corrected Cl_{0.95}	Supported
H1	WDS → TI	0.728	[0.660, 0.794]	YES
H2	TR → WDS	0.282	[0.187, 0.373]	YES
H3	TR → TI	-0.087	[-0.163, -0.012]	NO (Different sign)
H4	TR → WDS → TI	0.206	[0.134, 0.282]	YES
H5	CM → WDS	-0.073	[-0.185, 0.046]	NO
H6	CM → TI	0.104	[0.005, 0.204]	YES
H7	CM → WDS → TI	-0.053	[-0.137, 0.032]	NO
H8	HCS → WDS	0.064	[-0.039, 0.176]	NO
H9	HCS → TI	-0.019	[-0.127, 0.079]	NO
H10	HCS → WDS → TI	0.047	[-0.029, 0.128]	NO
H11	SOL → WDS	0.483	[0.380, 0.590]	YES
H12	SOL → TI	-0.019	[-0.127, 0.079]	NO
H13	SOL → WDS → TI	0.351	[0.275, 0.439]	YES

Note: WSD= Willingness to support a destination; TI= Travel intention; TR= Trust; CM= Crisis Management; HCS= Health care system; SOL= Solidarity

Table 6. Sufficient Causal Configurations for WSD

Configurations	Raw coverage	Unique coverage	Consistency
Configurations for high WSD WSD = f (TR, CM, HCS, SOL)			
TR*SOL	0.821	0.026	0.922
TR*~CM*~HCS	0.576	0.016	0.915
~CM*~HCS*SOL	0.572	0.007	0.932
TR*CM*HCS	0.778	0.009	0.927
CM*HCS*SOL	0.789	0.015	0.915
~TR*CM*~HCS*~SOL	0.534	0.004	0.926
~TR*~CM*HCS*~SOL	0.537	0.008	0.920
solution coverage: 0.918 solution consistency: 0.846			
Configurations for low WSD ~WSD = f (TR, CM, HCS, SOL)			
~CM*~HCS	0.810	0.030	0.885
~TR*~HCS*~SOL	0.772	0.008	0.929
~TR*~CM*~SOL	0.777	0.014	0.927
TR*~HCS*SOL	0.568	0.005	0.909
TR*~CM*SOL	0.562	0.005	0.909
TR*CM*HCS*~SOL	0.556	0.010	0.940
~TR*CM*HCS*SOL	0.569	0.015	0.921
solution coverage: 0.905 solution consistency: 0.834			

Note: WSD= Willingness to support a destination; TI= Travel intention; TR= Trust; CM= Crisis Management; HCS= Health care system; SOL= Solidarity

Table 7. Sufficient Causal Configurations for Travel Intention

Configurations	Raw coverage	Unique coverage	Consistency
Configurations for high TI TI = f (TR, CM, HCS, SOL)			
TR*SOL	0.792	0.021	0.890
TR*~CM*~HCS	0.563	0.012	0.895
~CM*~HCS*SOL	0.562	0.006	0.918
TR*CM*HCS	0.757	0.010	0.903
CM*HCS*SOL	0.772	0.020	0.897
~TR*CM*~HCS*~SOL	0.532	0.005	0.924
~TR*~CM*HCS*~SOL	0.532	0.007	0.912
solution coverage: 0.892 solution consistency: 0.824			
Configurations for low TI ~TI = f (TR, CM, HCS, SOL)			
~CM*~HCS	0.798	0.036	0.871
~TR*~HCS*~SOL	0.750	0.008	0.902
~TR*~CM*~SOL	0.755	0.015	0.900
TR*~HCS*SOL	0.574	0.006	0.917
TR*~CM*SOL	0.567	0.004	0.915
TR*CM*HCS*~SOL	0.553	0.009	0.935
~TR*CM*HCS*SOL	0.562	0.011	0.908
solution coverage: 0.890 solution consistency: 0.818			

Note: WSD= Willingness to support a destination; TI= Travel intention; TR= Trust; CM= Crisis Management; HCS= Health care system; SOL= Solidarity

Appendix 1. List of Adapted items

Trust	
TR1	I trust the information and communication provided by the government of destination A about the infection and mortality rate of COVID-19
TR2	I have admired the openness and transparency of the government of destination A since the beginning of the COVID-19 outbreak
TR3	I would characterize the government of destination A as honest in their response to COVID-19
TR4	My level of trust in the information and communication provided by the government of destination A has increased since the start of the COVID-19 outbreak.
Crisis Management	
CM1	I admire the timely and early diagnosis and treatment of Covid-19 by the authorities of destination A
CM2	I admire the forceful and rapid response to COVID-19 in destination A
CM3	I admire the effective management of the supply chain risk and disruption (shortage of food and medicine) in destination A
Health Care System	
HCS1	I believe the healthcare system of destination A is reliable and robust
HCS2	I admire the timely and fast tracking of those exposed to COVID-19 in destination A
HCS3	I admire the high-capacity for COVID-19 testing in country A
Solidarity	Abubakar & Ilkan, (2016); Abubakar et al., (2017); Na et al., (2016)
SOL1	I believe the government of destination A cared about its people during COVID-19 crisis
SOL2	The government of destination A did the best to relieve and decrease the emotional and mental impacts of COVID-19 on affected people
SOL3	In destination A, all groups of people help and care about each other during COVID-19 crisis
SOL4	The government and people of destination A were close and together to overcome the COVID-19 crisis
SOL5	People help each other in different ways financially and non-financially to relieve and decrease the emotional and mental impacts on affected people
Willingness to Support a Destination	
WSD1	I would encourage my friends and relatives to travel to destination A after COVID-19 crisis
WSD2	I say good things about destination A on social media
WSD3	I would promote this destination to help tourism recovery
WSD4	If the destination agency / someone from the destination asked me to promote the destination, I would do all my efforts to do promote the destination.
Travel Intention	
TI1	If given the opportunity, I am willing to travel to destination A after COVID-19
TI2	I am planning to travel to destination A after COVID-19 in the near future
TI3	The likelihood of my travel to destination A is high