Open the doors to tourism or remain cautious: Residents' dilemma amidst a pandemic

During a pandemic, residents of tourism destinations face the dilemma of whether to welcome tourists to help the economy rebound or to oppose their arrival to minimize the risk of contagion. This paper examines the influence of residents' perception of the economic crisis triggered by the pandemic and the health risks associated with tourist arrivals on their attitudes towards tourism impacts and willingness to support tourism development. To this end, a novel model is tested using structural equation modelling (SEM). The potential moderating effect of belonging to certain population groups is also analysed, namely (i) having a household member linked to the tourism sector, (ii) residing in the city centre, and (iii) belonging to a COVID-19 risk group. Perceived risk of contagion was found to be a stronger predictor of residents' support for tourism development than perception of the economic crisis; an effect that increases notably among residents of the most popular tourist areas of the city. These empirical findings provide useful information with a view to designing destination planning strategies during and after the pandemic.

Keywords: Perceived risk; perceived economic crisis; residents' attitudes; tourism development support; COVID-19

1. Introduction

In addition to attractive resources and adequate infrastructure, residents are often considered key to the development and implementation of successful tourism strategies in host communities (Sharpley, 2014). Keeping their attitudes and preferences in mind in planning will condition their receptiveness and support for tourism development (Gursoy & Rutherford, 2004; San Martín et al., 2018), as the host community's lack of involvement in tourism development or their hostile behaviour towards tourists may lead them to opt for another destination (Rasoolimanesh et al., 2015).

The coronavirus (COVID-19) pandemic declared by the World Health Organization on 11 March 2020 (Huang et al., 2020) has heavily hit the global economy in general and the tourism industry more specifically (Chica et al., 2021). In this context, the movement of tourists during travel, as well as their interactions with local communities and with each other, constitute a clear multiplier of infectious diseases (Gautret et al., 2012).

When a destination opens its doors to tourism, residents find themselves at a crossroads between welcoming tourists to contribute to the destination's economic recovery or remaining resistant to tourism for the duration of the pandemic to avoid the risk of contagion. If a particular tourist destination promotes tourism development during a pandemic to revive the local economy but residents are contrary to such a measure, it is possible that residents' attitudes of rejection may become even more extreme (Kamata, 2021). Therefore, it is especially important in such situations to detect the host community's attitudes towards tourism.

Given that the concepts of risk perception and crisis management are rooted in consumer behaviour (Qiu et al., 2020), numerous studies have looked at changes in travel demand patterns or people's intention to travel during the pandemic (Chua et al., 2021; J. Li et al., 2021; Zheng et al., 2021). In contrast, little attention has been paid in

the literature to the attitudes of destination residents towards tourist arrivals during the current economic and health crisis, with only three contributions (Joo et al., 2021; Kamata, 2021; Woosnam et al., 2021).

In addition to the scarcity of studies on this target group, it is worth noting that although Europe is the world's leading tourism destination (UNWTO, 2021), European countries are among the least studied when assessing residents' attitudes towards tourism (Hadinejad et al., 2019). Likewise, Rasoolimanesh et al. (2015) highlighted the lack of research on views of host communities in the context of World Heritage Sites. Indeed, the literature review showed a clear predominance of studies on 'sun and beach' tourism destinations (Eusébio et al., 2018; Garau-Vadell et al., 2018; Joo et al., 2021; Ribeiro et al., 2017). However, it is of interest to analyse residents' attitudes in less studied geographical settings, as cultural differences define how the host community reacts to tourism development.

With these research gaps in mind, and given the current economic and health situation, the main objective of this paper is to assess how residents' perception of the economic crisis and the risks associated with the pandemic affect their attitudes towards the impacts of tourism and, ultimately, their willingness to support tourism development in a European cultural heritage destination. This study also examines the modulating effects of area of residence, belonging to a COVID-19 risk group, and having a household member engaged in the tourism sector in the hypothesized structural relationships. To measure these relationships, a structural equation model (SEM) is proposed. The theoretical framework of the model is grounded in social exchange theory (SET; Ap, 1992), the most widely used theory for research on host community attitudes towards tourism as pointed out in the reviews of Gursoy et al. (2019), Hadinejad et al. (2019), Nunkoo et al. (2013), and Sharpley (2014). In our study,

however, we revise and extend on SET in a novel way as our model includes two new constructs to provide deeper insight: perceived risk and perceived economic crisis. In particular, the first construct ties in with protection motivation theory (PMT; Rogers, 1975).

The empirical study was carried out in the city of Cordoba, Spain, which boasts four UNESCO World Heritage Sites (UNESCO, 2021). Spain is the world's second largest tourist destination (UNWTO, 2021) and has been one of the hardest hit by COVID-19, ranking tenth in terms of cumulative deaths in May 2021 (Statista, 2021). To mitigate this situation, the Spanish government imposed heavy restrictions on mobility and the opening of commercial and catering establishments. These measures strongly damaged the economy of this tourism-dependent country, which suffered a drastic fall of 10.8% in GDP in 2020 (Spanish National Statistics Institute [INE], 2021).

This study attempts to contribute to the tourism literature on resident attitudes and support for the development of cultural tourism in a context of an economic and health crisis by providing valuable information for professionals and managers in destinations with similar characteristics to the one analysed. The results reveal that the host community's perceptions of risk are a key determinant of support for tourism. Therefore, to regain stakeholder trust, it is crucial that sustainable destination planning envisage the design and implementation of strategies to mitigate perceived risk among residents.

2. Theoretical background

2.1. Attitudes towards tourism and support for tourism development

Since the 1970s, numerous studies have examined residents' attitudes towards tourism development and the factors that determine such attitudes, thus reflecting the importance of involving the local community in sustainable tourism development for a

given destination (Choi & Sirakaya, 2005; Rasoolimanesh et al., 2015).

Attitude forms part of an individual's psychological construct and refers to how they evaluate objects, places, and various issues. Such evaluations can be positive (favourable) or negative (unfavourable) in nature (Choi & Sirakaya, 2005). Most authors have studied residents' perceptions and attitudes as equivalent concepts (Sharpley, 2014; Sinclair-Maragh et al., 2015). However, according to San Martin et al. (2018), attitude is a psychological variable that implies a more consistent disposition than perceptions.

In an attempt to build a theoretical framework of destination residents' support for tourism, several theories have been developed. Of these, SET has been the most widely used to explain residents' attitudes and support for tourism development (Ap, 1992; Hateftabar & Chapuis, 2020; McGehee & Andereck, 2004; Nunkoo et al., 2013; Nunkoo & Gursoy, 2012; Stylidis et al., 2014; Vargas-Sánchez et al., 2015). The key to the success of this theory could lie in the recognition of the heterogeneous nature of the host community, where diverse groups of individuals may have different attitudes towards tourism, that is, it provides a logical and intuitive framework to explain why residents exhibit positive or negative attitudes towards tourism impacts (Nunkoo et al., 2013). According to the foundations of this theory, residents assess tourism impacts and will support tourism development if they believe that the benefits (positive impacts) outweigh the costs (negative impacts) (Ap, 1992; Nunkoo et al., 2013; Sharpley, 2014; Stylidis & Terzidou, 2014). Most often, tourism impacts have been analysed in the literature from a two-dimensional (positive/negative) or a three-dimensional approach (economic/socio-cultural/ environmental) (Gursoy et al., 2019).

Nonetheless, SET has been considered insufficient to explain the complexity of residents' attitudes and their corresponding behaviours (Andereck et al., 2005;

Rasoolimanesh et al., 2015; Sharpley, 2014). Residents' attitudes towards tourism development, as well as towards the positive and negative impacts it brings, are influenced by a number of factors that have been widely explored in the literature, including the personal economic benefits obtained from tourism, attachment to the community, their degree of participation in planning and decision-making, the state of the local economy, or their own socio-demographic characteristics, among others (Andereck et al., 2005; Rasoolimanesh et al., 2015). In this study, we selected two factors related to the COVID-19 pandemic that have been little studied: the perceived economic crisis and the perceived risk of contagion among residents.

2.2. Perceived economic crisis

In addition to the dramatic health consequences caused by COVID-19, the economic implications have been devastating in terms of job losses, a decline in consumption as a result of falling incomes, or decreased investment by businesses and the self-employed (Bofinger et al., 2020).

In previous studies conducted in tense economic scenarios, changes in the attitudes and behaviours of individuals have been verified at the population level given that people's attitudes are determined by alterations of both a psychological and economic nature (Voon & Voon, 2012). Therefore, the economic context in which attitudes are assessed is a fundamental aspect, since the attitudes of local communities towards tourism and their support for tourism development may differ markedly in times of economic crisis and economic boom (Garau-Vadell et al., 2018). However, it is important to emphasize that it is individuals' 'subjective' rather than 'objective' perception of the economy (or as measured by different macroeconomic indicators) that affects residents' attitudes (Gabel & Whitten, 1997). Despite this, few studies have

considered the perceived economic crisis as an antecedent of residents' attitudes towards perceived impacts and support for tourism (Hateftabar & Chapuis, 2020).

2.3. Perceived risks

The pandemic brought on by the new coronavirus has emerged as the greatest hazard facing the tourism industry in recent history (Zenker & Kock, 2020). Hazards can be defined as 'potential threats to humans and their well-being . . . while risks are the probabilities of a threat occurring' (Smith, 2013, p. 11). From a theoretical viewpoint, the distinction between risk and uncertainty lies precisely in the above definition: risk has a known associated probability (e.g. a 10% chance of becoming infected), whereas uncertainty does not (Quintal et al., 2010), although both terms are often used interchangeably according to Yang and Nair (2014). However, adding 'perceived' to the term 'risk' would represent subjective expectations of a potential threat rather than the actual likelihood of negative consequences for the individual (Quintal et al., 2010). Therefore, it is likely that individuals in the same environment will perceive the sources of risk or the level of risk of each source differently.

Tourists' perceived risk of the spread of infectious diseases (such as the SARS virus, avian influenza, or Ebola) has been analysed by Novelli et al. (2018) and Rosselló et al. (2017), among others, while other studies have focused on people's travel intentions in the face of risks in the current pandemic (Bae & Chang, 2021; J. Li et al., 2021; Zheng et al, 2021). Thus, much of the literature evaluates perceived risk through the eyes of the tourist. A possible explanation for this may be that tourists experience information asymmetry, which in turn could heighten their risk perception (Joo et al., 2021).

As Sharifpour et al. (2014) pointed out, there continues to be a gap in the literature on perceived risk from the perspective of residents. Perceived risk among

residents and its relationship to attitudes towards tourism has not been addressed in the context of previous epidemics, and only a few recent studies have examined this issue in the context of the COVID-19 pandemic (Joo et al., 2021; Woosnam et al., 2021). While under normal circumstances the risks assumed by the host community are minimal compared to those assumed by visitors, residents' perceived risks regarding a massive influx of tourists are likely to multiply during the COVID-19 health crisis (Zenker & Kock, 2020). Given that the arrival of large numbers of infected tourists in a destination increases the likelihood of the spread of infectious diseases and puts additional pressure on the local health system (Gautret et al., 2012), feelings such as anxiety or panic among destination residents may increase dramatically during a pandemic (S. N. Li et al., 2021). In response, residents would seek to minimize the risks associated with tourism as a potential source of contagion (Qiu et al., 2020), and the negative impacts of tourism could be exacerbated in times of pandemic.

2.4. Groups of residents

As knowledge of an issue increases, hypothesized relationships become more complex and moderating effects rather than direct effects gain interest (Keikhosrokiani et al., 2018). Moderating effects can be used for making comparisons between groups. Given that the balance between the costs and benefits of tourism may vary across groups of residents (Qiu et al., 2020), a novel contribution of this study is that we performed multi-group analyses to examine the potential moderating effect of group membership. Specifically, we considered three factors, which are described below:

(i) Economic dependence on tourism. This factor enables differentiating between respondents who live with a household member linked to the tourism sector and those who do not, since involvement in the tourism industry may be a determining factor of their attitude. Several studies have postulated that residents who work in the tourism

industry (or who have a household member employed in the tourism industry) will exhibit a more favourable attitude towards tourism than those who do not (McGehee & Andereck, 2004; Rasoolimanesh et al., 2015; Stylidis et al., 2014). However, others studies have reported exactly the opposite (Smith & Krannich, 1998).

(ii) Spatial factor. This factor distinguishes between residents living in the city centre and those residing in other areas of the city, since the arrival of infected people to a tourist destination during a pandemic may have a stronger effect among residents living in areas with the highest tourist influx (the city centre in the case of Cordoba). Again, there is little consensus in previous studies. While some authors have found that residing close to tourism sites has a positive effect on attitudes towards the impacts of tourism (Belisle & Hoy, 1980; Janusz et al., 2017; Sheldon & Var, 1984), others have suggested that these residents had less favourable attitudes toward tourism, perhaps because saturation may prevent them from enjoying leisure resources (Jurowski & Gursoy, 2004) or entail other inconveniences such as noise or litter (Tyrrell & Spaulding, 1984).

(iii) Vulnerability. This factor allows distinguishing between residents belonging to a COVID-19 risk group and those that do not. Belonging to these groups could increase residents' fear of contracting the disease, thus leading to a negative attitude towards tourism. No previous studies have examined this factor.

3. Conceptual framework and hypotheses formulation

In line with the theoretical underpinnings of SET, residents who exhibit a positive attitude towards tourism impacts tend to view tourism development favourably, while residents with more negative attitudes are less likely to support tourism development, that is, they may oppose such development if they consider that the costs outweigh the

benefits. Bearing this in mind, and in line with section 2.1, the following hypotheses have been formulated:

H1: There is a positive relationship between residents' attitudes towards the positive impacts of tourism and their support for tourism development.

H2: There is a negative relationship between residents' attitudes towards the negative impacts of tourism and their support for tourism development.

The perceived economic crisis in Spain, where unemployment rates are among the highest in Europe (Eurostat, 2022), is likely to affect residents' attitudes towards the impacts of tourism and support for tourism development. Hence, the more intense the level of perceived crisis, the more favourable residents' attitudes towards tourism impacts will be and the greater their support for tourism, as Garau-Vadell et al. (2018) has shown. Based on the above, and in line with section 2.2., the following hypotheses have been formulated:

H3: There is a positive relationship between residents' perceived economic crisis and their attitudes towards the positive impacts of tourism.

H4: There is a negative relationship between residents' perceived economic crisis and their attitudes towards the negative impacts of tourism.

H5: There is a positive relationship between residents' perceived economic crisis and their support for tourism development.

Our study is among the first to propose an integrative model to assess perceived risks of tourism among residents during the COVID-19 pandemic. Specifically, we examine the relationship between such risks, attitudes towards tourism, and support for tourism development in a destination. In line with the above arguments (section 2.3), the following hypotheses have been proposed:

H6: There is a negative relationship between residents' perceived risk and their attitudes towards the positive impacts of tourism.

H7: There is a positive relationship between residents' perceived risk and their attitudes towards the negative impacts of tourism.

H8: There is a negative relationship between residents' perceived risk and their support for tourism development.

Based on the above hypotheses, we propose the conceptual framework shown in Figure 1.

[Figure 1 near here]

4. Study area and methods

4.1. Study area

The area selected to conduct the empirical study is Cordoba; a city located in the region of Andalusia in southern Spain (Figure 2). Spain boasts an extremely privileged position in terms of international tourism. The country has been the world's second-largest destination since 2017, only behind France, and received around 84 million tourists in 2019 (UNWTO, 2021).

[Figure 2 near here]

Although Spain is known worldwide for its sun and sand tourism, it also has a rich cultural heritage, as attested to by its 18 World Heritage Cities (UNESCO, 2021). The city of Cordoba belongs to that group, as it has no less than four sites inscribed in the UNESCO World Heritage List, making it the city with the largest number of UNESCO World Heritage sites in the world (Vora, 2018). The city is a cultural, mature, and seasonal destination, which in 2020 saw a 70% decline in the almost one million visitors it received in 2019 as a result of the pandemic (INE, 2021). These factors make

the city an exceptional case for the collection of data on residents' attitudes towards tourism.

4.2. Survey instrument

The instrument used to collect the information was a self-administered questionnaire, which was reviewed by a group of tourism experts to ensure the validity of the content. A pre-test consisting of 30 surveys was performed to verify the validity and ease of understanding of the selected items. Finally, the questionnaire was divided into four sections. For the first three sections, a 5-point Likert scale with response anchors ranging from 1 (strongly disagree) to 5 (strongly agree) was used. The last section collected the basic demographic characteristics of the respondents, together with information about their economic dependence on tourism and their possible inclusion in one of the COVID-19 risk groups.

Five constructs were included in the proposed model using items from previous works to ensure validity. To assess the perceived economic crisis (PEC) construct, residents were asked to rate their level of agreement with five statements adapted from Hateftabar and Chapuis (2020). Four statements relating to the perceived risk (PR) construct were adapted from Joo et al. (2021) and also included. The constructs related to residents' attitudes towards the positive (API) and negative impacts (ANI) of tourism were considered in their triple dimension (economic, socio-cultural, and environmental), each of which was measured by means of eight items and adapted from several previous works (Hateftabar & Chapuis, 2020; Kamata, 2021; Ribeiro et al., 2017; Vareiro et al., 2013; Vargas-Sánchez et al., 2009) to the context of the city of Cordoba. Support for tourism development (STD) in the current pandemic was assessed using five items adapted from Joo et al. (2021) and Kamata (2021). Specific examples of the items included the questionnaire are shown in Appendix B.

4.3. Sampling and data collection procedures

The target audience of the study consisted of residents from the city of Cordoba (Spain) aged 18 years or older who had resided in the city for at least one year. In 2020, the city had a population of 326,039 inhabitants, of which 56,910 were under 18 years of age (INE, 2021) so the final population universe comprised 269,129 inhabitants. The sample size was determined using Cochran's (1977) formula. In this specific case and for a confidence level of 95% and a ±5% margin of error, the necessary sample amounted to 384 persons.

Data were collected in April 2021 using a structured, self-administered questionnaire distributed in selected public areas (i.e. shopping areas and neighbourhoods) following a random day/time/site pattern (Bonn et al., 2005).

To achieve the highest possible response rate, respondents could choose to complete the questionnaire by scanning a QR code on their mobile phones or provide their answers orally to the interviewer. A total of 487 people were asked to complete the questionnaire, of which 37 refused on the grounds of lack of time or interest. However, after a thorough review of the data collected, following Hair et al. (2018), 16 questionnaires were discarded because of unanswered items or because they were clearly filled in randomly. Therefore, 434 valid responses were finally used in the analysis (effective response rate: 89.1%).

4.4. Data analysis

SPSS (v. 26.0) was used to analyse the descriptive statistics and determine the sociodemographic profiles of the respondents. To test the research hypotheses, structural equation modelling (SEM) using AMOS (v. 24) was performed. The two-step SEM approach was used. First, a confirmatory factor analysis (CFA) was performed to assess the validity and reliability of the measurement model. In the second step, the

hypotheses were tested and the causal relationships between the constructs were examined. Finally, a multi-group invariance analysis using z-scores was performed to assess the potential moderating effect of area of residence, belonging to a COVID-19 risk group, and tourism sector activity by a household member, and whether the path coefficients were invariant between groups. Critical ratios for differences between parameters were calculated using z-scores and a comparison was made between the constrained model and the unconstrained model.

5. Results

5.1. Overview of the sample

As can be seen in Appendix A, more than 40% of respondents were between 40 and 54 years of age (41.2%); 37.6% were between 18 and 39, and 21.2% were 55 years or older. An equal distribution by gender is observed. Almost a third of the sample resided in the city centre. Public employees and salaried employees accounted for slightly more than half of those interviewed and almost 60% of the sample had a monthly household income of €1001–€3000. Almost one out of five respondents acknowledged having a member of the household whose source of income was the tourism sector and, finally, 17.5% stated that they belonged to a COVID-19 risk group.

5.2. Test of common method bias (CMB) and normality

A Harman's single factor test was performed to check whether the data variance could be attributed to a single factor. Only 29.24% of the total variance was explained by one factor, which is less than the suggested limit of 50%, thus indicating no serious CMB (Podsakoff et al., 2003).

As can be seen in Appendix B, all the skewness values were below |2.00| and the kurtosis values were below |7.00|, thus indicating no skewness and kurtosis problems in

the observed variables included in the SEM and fulfilling the normality criterion (Curran et al., 1996).

5.3. Measurement model

Prior to testing the proposed hypotheses, a confirmatory factor analysis (CFA) with structural equations was performed using the maximum likelihood extraction method to assess the goodness-of-fit of the model and the validity of the constructs (Hair et al., 2018). The measurement model was validated by assessing the reliability of the individual indicators through their loadings (Appendix B), as well as the internal consistency and convergent and discriminant validity (Table 3). The average variance extracted (AVE) and factor loadings were used to measure convergent validity, while discriminant validity was measured by calculating the square roots of AVE.

As can be seen in Appendix B, the factor loadings were above the cut-off value of 0.5 and statistically significant ($p < .05$), thus demonstrating satisfactory saturation between the indicators and each of the latent variables. Hence, the proposed model has a consistent scale with proven discriminant validity. Composite reliability (CR) was above 0.7, suggesting the internal consistency of the constructs of the measurement model. Cronbach's alpha values ranged from 0.83 to 0.93, which is above the suggested cut-off value of 0.7 (Nunnally, 1978) and indicates the adequate reliability of each construct. AVE was greater than 0.5, that is, all the constructs satisfy the AVE criterion proposed by Fornell and Larcker (1981). The discriminant validity requirement was also fulfilled, since all the square roots of AVE were greater than their corresponding inter-construct correlations (Hair et al., 2018) (Table 1), indicating that each factor was unique and did not overlap with the other factors.

[Table 1 near here]

To assess the model fit, the goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), normed fit index (NFI), comparative fit index (CFI), Tucker–Lewis index (TLI), and root mean square error of approximation (RMSEA) were used. The fit indices showed adequate values ($\chi2$/df = 2.79, GFI = .977, AGFI = .961, CFI = .981, NFI = .963, TLI = .975, RMSEA = .043), thus indicating that the proposed measurement model exhibited a good fit with the observed data.

5.4. Structural model and hypotheses tests

In addition to the measurement model, SEM (Figure 3) was used to study the relationships between the variables.

[Figure 3 near here]

The various fit indices were adequate: $\chi2$/df = 2.89, GFI = .971, AGFI = .957, CFI = .977, NFI = .967, TLI = .959, RMSEA = .037. The model explains 63.8% of the variance in support for tourism development (STD).

These findings confirm hypotheses 1 and 2. More specifically, the SEM path coefficients indicate that attitudes towards positive tourism impacts have a positive and significant influence on support for tourism development (β = .31, p = .001) and show a negative and significant relationship between attitudes towards negative impacts (ANI) and support for tourism development (β = -.12, p = .047).

Hypotheses 3, 4, and 5 focus on measuring the influence of the perceived economic crisis on the model. Hypotheses 3 and 5 posited that a perceived economic crisis would be positively related to residents' attitudes concerning positive impacts and their support for tourism development. The path coefficients from a perceived economic crisis to attitudes towards positive impacts (β = .28, p = .001) and support for tourism development (β = .12, p = .009) confirmed both hypotheses. The results also support the prediction (Hypothesis 4) that residents' perception of the economic crisis has a

negative and significant effect on their attitudes towards the negative impacts of tourism (β = -.14, p = .005).

Hypotheses 6, 7, and 8 aimed to test the influence of perceived risk of COVID-19 contagion in the model. The findings show that residents' perceived risk has a negative influence both on their attitudes towards positive tourism impacts (β = -.28, p = .001) and on their support for tourism development (β = -.57, p = .001). Consequently, hypotheses 6 and 8 can be accepted. In addition, perceived risk showed a significant and positive influence on attitudes towards negative tourism impacts (β = .48, p = .001), thus supporting Hypothesis 7.

Bootstrapping was used to test the significance of the mediating effect of attitudes towards tourism impacts. As can be seen in Appendix C attitudes towards both positive and negative tourism impacts exerted a partial mediating effect on the relationship between perceived economic crisis and support for tourism development and on the relationship between perceived risk and support for tourism development.

5.5. Multi-group comparison

Z-score comparison analyses were used to compare differences in the coefficients of the corresponding structural paths for the groups described in section 2.4. There is a significant difference between the two groups when /z/ > 1.645 and p < .05 (Bae & Chang, 2021).

The results (Table 2) show the following:

For respondents with a household member whose source of income was the tourism sector, the effect of attitudes towards positive impacts (API) on support for tourism development (STD) was higher.

The area of residence also shows significant differences. Specifically, the impact of both perceived risk (PR) and positive (API) and negative (ANI) attitudes towards

tourism impacts on support for tourism development (STD) was found to be greater among residents living in the city centre.

As concerns belonging to a COVID-19 risk group, differences were found regarding the effect of attitudes towards negative impacts (ANI) on support for tourism development (STD), with the effect being higher among more vulnerable individuals.

6. Discussion and conclusions

This study may be the first to analyse the dilemma faced by residents in a pandemic context of whether to welcome tourists to contribute to the destination's recovery or to remain resistant to tourism to avoid the risk of contagion. In this dilemma, two antagonistic forces play a decisive role: 'perceived economic crisis' and 'perceived risk'. To this end, a structural model was developed and tested to analyse the influence of perceived economic crisis, perceived risk, and attitudes towards negative and positive impacts on support for tourism development. A second novelty of this study is that it has examined the effect that belonging to certain population groups may have on the model results and found significant differences in some relationships.

In line with SET, the results show a positive relationship between attitudes towards positive impacts and support for tourism development and a negative relationship between attitudes towards negative impacts and support for tourism development. These findings are in line with the previous literature (Eusébio et al., 2018; Nunkoo & Gursoy, 2012; Rasoolimanesh et al., 2015). The first (positive) relationship could be due to the awareness of residents in tourism-dependent destinations (such as the one analysed) that tourism development has strong and important economic impacts for locals (Gursoy & Rutherford, 2004; Stylidis et al., 2014). In addition, the relationship between attitudes towards negative impacts of tourism and support for tourism was found to be weaker than the association between

attitudes towards positive impacts and support for tourism (Gursoy et al., 2019; Gursoy & Rutherford, 2004; Hateftabar & Chapuis, 2020; Ribeiro et al., 2017; Vargas-Sánchez et al., 2009). This finding demonstrates that attitudes towards negative tourism impacts are largely offset by those associated with positive ones, thus indicating overall support for tourism among residents.

However, when analysing the effect of belonging to specific population groups on these relationships, the following findings have been obtained. First, the effect of attitudes towards positive tourism impacts on support for tourism is greater among respondents with a household member whose source of income is tourism. In short, household dependence on the tourism industry seems to generate stronger attitudes towards positive impacts and hence greater support for tourism. This finding is in line with SET's rationality rule and the findings reported by Rasoolimanesh et al. (2015) and McGehee and Andereck (2004), among others. In contrast, membership in this group showed no significant differences regarding the relationship between attitudes towards negative tourism impacts and tourism support, which could be due to the low average scores given to negative impacts, as reported by Woosnam et al. (2021).

Second, we examined the effect of residing in the city centre (where three of the four city's World Heritage Sites are located). Although several studies have analysed the effect of distance to areas of greatest tourist influx on how residents evaluate the costs and benefits of tourism (Jurowski & Gursoy, 2004; Tyrrell & Spaulding, 1984), few have examined the effect of this distance on how certain factors influence support for tourism. Our results show that attitudes towards tourism impacts have a greater effect on support for tourism among residents living in the city centre. In other words, support for tourism among these residents depends to a greater extent on their attitudes towards both positive and negative tourism impacts. This is largely because residents

living in the city centre interact most with tourists and are therefore more aware of both the positive and negative impacts of tourism than other members of the community (Andereck et al., 2005). The study of Rasoolimanesh et al. (2019) found no significant differences in the effect of certain factors (including economic, cultural, and environmental factors) on perceptions of tourism development among residents living within the vicinity of heritage tourism sites and those living at a further distance from them.

Finally, the effect of belonging to a COVID-19 risk group was analysed. For this group, the results show that only the relationship between attitudes towards the negative impacts of tourism and tourism support is stronger. This suggests that the group that is more prone to serious illness is also more aware of the costs of tourism development.

The results also show that perceived economic crisis (PEC) is positively related to residents' attitudes towards positive impacts and their support for tourism. A possible explanation for this relationship is that residents who perceive the economic crisis more acutely will be more aware of the benefits of tourism and will ultimately be more willing to support tourism development. These findings are consistent with those of Hateftabar and Chapuis (2020), although their study was not conducted in a context of an economic crisis caused by the pandemic. These results are also consistent with other studies such as that of Stylidis and Terzidou (2014). Although these authors did not specifically consider the variable PEC, they concluded that economic crises tend to increase support for tourism development (STD). A negative relationship between PEC and attitudes towards negative impacts was also observed. This is in line with Garau-Vadell et al. (2018), who found that if tourism is seen as a solution to overcome a sharp economic decline, residents' perceptions of the costs will be reduced. In short, the results confirm the idea that residents tend to overvalue the benefits and undervalue the

costs of tourism in a depressed economy (Nunkoo & Ramkissoon, 2010) and that the more necessary residents consider an improvement in the economy to be, the greater their support for tourism development (Gursoy & Rutherford, 2004). Furthermore, these results do not show significant differences between groups, not even between those who have a household member whose source of income is tourism and those whose do not. This may be because residents who do not directly benefit from tourism also fear its decline, as it may end up negatively affecting them as well (Wyllie, 1998).

Perceived risk (PR) was found to be the best predictor of residents' support for tourism development (STD) as it has the greatest quantitative effect on STD, which is negative in this case. This finding suggests that residents view the arrival of tourists as a potential source of risk that increases the likelihood of contracting COVID-19, which in turn reduces their support for tourism, in line with Joo et al. (2021). Additionally, the findings show that PR influences residents' attitudes towards both the positive and negative impacts of tourism (negatively in the first case and positively in the second). In sum, those who perceive greater risk have a more pessimistic view of the overall impacts and are less supportive of tourism. This may have a theoretical basis in Rogers' (1975) PMT, which posits that the magnitude of perceived risk influences both attitudes and behaviours. However, a significant moderating effect by area of residence was also found: the negative influence of PR on STD is stronger among residents living in the city centre. This finding is congruent with the fact that the city centre attracts the largest number of tourists and its residents therefore come into contact with them more often. As a result, these residents are more aware than the rest of the community about the risks associated with the arrival of tourists. However, contrary to what might be expected, no significant differences were found when considering the effect of belonging to a vulnerable group for COVID-19, presumably because these people are

confident about the precautions they need to take to prevent infection or simply because they are unaware of their vulnerability.

The study makes the following theoretical and practical contributions. The theoretical contribution of this research is the incorporation of psychographic factors, such as perceived economic crisis and perceived risk, to analyse their influence on residents' attitudes and support for tourism in the context of a pandemic. To date, no previous studies have analysed these two psychographic factors in combination. Moreover, perceived risk through the prism of residents has received very limited attention in the literature. However, the COVID-19 pandemic has highlighted the academic relevance of studying this variable from the perspective of the host community. For this reason, our contribution analyses perceived risk in the framework of SET (Ap, 1992) jointly with PMT (Rogers, 1975).

The second of the novel theoretical aspects of this research is that it examines the moderating effect of belonging to certain population groups. Specifically, we have included vulnerability to contracting COVID-19 in the multi-group analysis. This is a discriminant factor specific to the current pandemic that has not been analysed in previous studies. Also, responding to the final recommendations of Joo et al. (2021), as well as Ribeiro et al. (2017), we have examined how economic ties to the tourism sector affect residents' views of tourism. Finally, the analysis of the moderating effect of hosts' place of residence has also produced interesting findings. In short, our results contribute to the increasing body of literature on crisis management and the social impacts of tourism and reduce the gap in the literature regarding analyses of perceived risk from the perspective of residents.

From a practical point of view, understanding the attitudes of destination residents in the context of a pandemic provides useful information for destination

planning strategies during and after the health crisis. Moreover, it highlights the crucial importance of developing marketing strategies that reduce these key stakeholders' perception of risk and emphasize the positive impacts of tourism rather than the negative ones, especially among residents of heritage tourism sites.

Given that perceived risk has been identified as the main predictor of residents' support for tourism, it is important to try to mitigate this factor in the host community. This can be achieved by designing contingency plans in conjunction with local residents to create and regulate the use and organization of safe spaces for tourists. New technologies based on the smart tourism approach can be used for this purpose (Bulchand–Gidumal, 2022). Such technologies allow stakeholders to access a platform where they can interact in a digital and intelligent way and obtain up-to-date information. Among many other aspects, this information could include the maximum permitted capacity and level of occupancy in real time of spaces often frequented by tourists, as well as the preferred itineraries for tourists to ensure the least possible interference in residents' daily lives.

Furthermore, given that this study shows that residents living in the city centre of Cordoba are those who feel most exposed to the risk of infection, communication campaigns will be more effective if they are segmented by geographical area.

Regardless of its theoretical and practical implications, this study also has certain limitations. First, as concerns data collection, it should be noted that our intention was to overcome the weaknesses of previous studies on resident risk that collected data online (Joo et al., 2021; Woosnam et al., 2021). For this reason, we decided to collect data at street level. However, it is true that a small portion of the population with extreme aversion to COVID-19 may have remained confined in their homes, which could have introduced some bias in the results.

Secondly, the study was conducted in a specific economic and health context. However, the perception of risk is changing due to the evolution of the pandemic itself, which allows differentiating between the various phases of the pandemic as new variants of the virus emerge and an increasing share of the population is vaccinated. Therefore, to increase the generalizability of the findings, it would be convenient to replicate the study in other cities and in distinct phases of the pandemic for the sake of comparison. Longitudinal studies would also be of interest to analyse how the extrinsic factor of seasonality is affected. Another option for future research would be to characterize resident profiles in greater depth by levels of perceived risk to determine the specific factors behind the differences. Although the geographical factor has already been identified in our study, a more in-depth analysis would presumably reveal other socio-demographic factors that could serve to differentiate the various profiles associated with risk.

Future studies could consider conceptual models built around risk comparable to the one proposed here but with some variants. In particular, a theoretical framework could be considered that integrates SET in conjunction with either emotional solidarity theory or place attachment theory.

Disclosure statement

No potential conflict of interest was reported by the authors.

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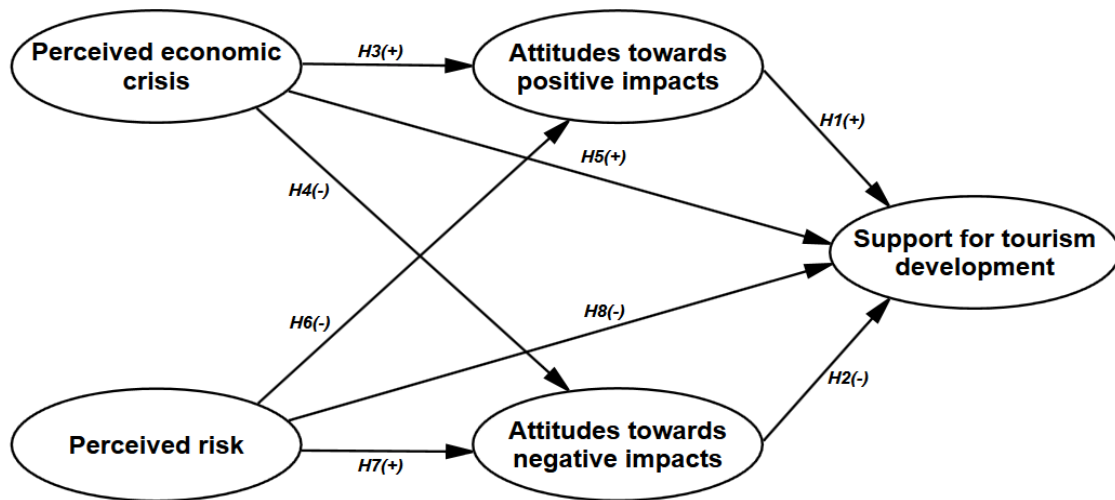
Figure 1. The research conceptual framework.

Figure 2. Geographical location of the city of Córdoba.
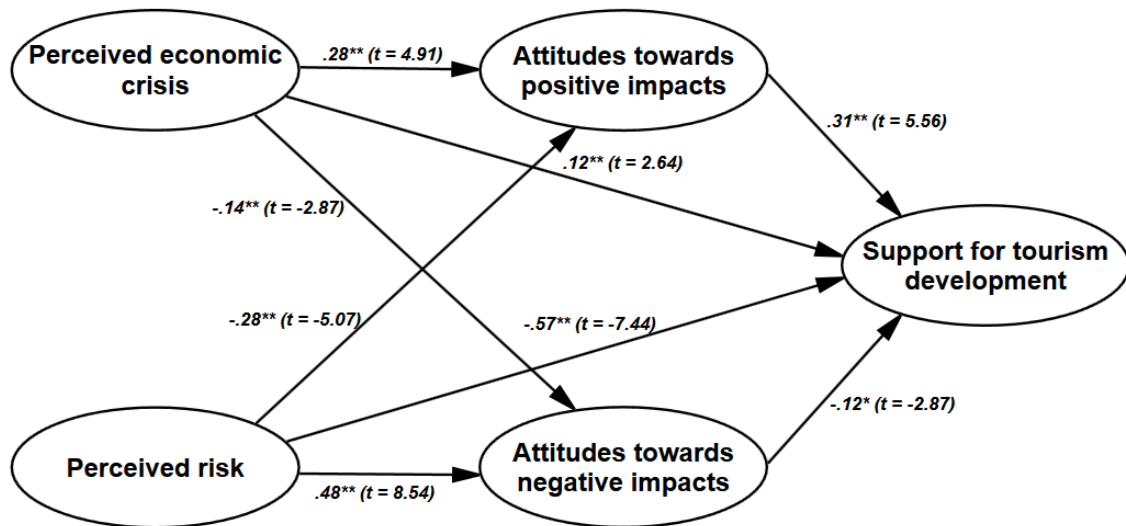
Source: The authors

Figure 3. The structural model.
Note:*p < .05 ** p < .01

Table 1. Internal consistency, convergent validity, and discriminant validity of the measurement model.

	α	C.R.	AVE	PR	API	ANI	STD	PEC
PR	.83	.82	.56	**.75**†				
API	.83	.88	.62	-.28*‡	**.79**			
ANI	.87	.88	.58	.48*	-.50*	**.76**		
STD	.84	.82	.60	-.61*	.47*	-.33*	**.77**	
PEC	.93	.78	.63	-.09	.29*	-.16*	.24*	**.80**

Notes: α: Cronbach's alpha. C.R.: composite reliability. AVE: average variance extracted. †Diagonal values are the square root of AVE for each construct. ‡ Correlations below the diagonal.
*p < .01

Table 2. Moderating effect of group membership.

	Household member linked to the tourism sector			Area of residence			At-risk group		
	No	Yes	z-score	City centre	Other	z-score	No	Yes	z-score
PEC--->API	.12***	.07	-1,03	.07*	.12***	1,25	.09***	1,01	1,00
PEC--->ANI	-.14*	-.21*	-.59	-.10	-.12*	-.18	-.10*	-1,12	-.92
PEC--->STD	.04*	.03	-.11	.05	.02	-.87	.04*	1,39	1,13
PR--->ANI	.53***	.57***	.22	.62***	.49***	-.93	.49***	.79***	1,64
PR--->API	-.14***	-.09	.90	-.15***	-.12***	.49	-.12***	-.14	-.29
PR--->STD	-.22***	-.26***	-.56	-.31***	-.16***	2,02**	-.23***	-.12	1,13
API--->STD	.21***	1,15***	4,1***	.53***	.14***	-2,79***	.30***	.45***	1,14

| ANI--->STD | -.04 | -.11* | -1,29 | -.06** | -.01 | 1,656* | -.05** | -.07 | -1,68* |

Notes:*$p < .05$ ** $p < .01$ ***$p < .001$. z-score: critical ratio of differences between parameters.