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Understanding crowding perceptions and their impact on place experience: Insights from a mixed-methods study

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Abstract

The existing research on the impact of crowding on visitors' experiences has yielded mixed results, mainly due to inadequate conceptualization and measurement of the phenomenon. To address this issue, we adopted a mixed-methods approach. We first conducted a qualitative study (Study 1, focus group based) to understand (i) how consumers perceive crowding at leisure places, (ii) the sources of crowding (spatial or social), and (iii) its effects on their experiences and future behaviors. For Study 2 we collected quantitative data through a survey ($n = 537$ respondents) to estimate the association between objective and subjective measures of crowding, the relative contribution of human and spatial crowding to visitors' overall crowding perceptions and its impact on satisfaction and behavioral intentions. The results indicated there is a weak association between objective and perceived human crowding, which makes subjective measures more appropriate for assessing crowdedness. A formative two-dimensional (human and spatial) conceptualization of crowding more adequately captures visitors' perceptions. The influence of each dimension is context-dependent, such that human crowding is more problematic for visitors to monuments, while cruise ship tourists are less tolerant of spatial crowding. The findings also revealed that crowding negatively affects visitors' satisfaction, while its impact on behavioral intentions is mostly nonsignificant for cruise ship tourists.

KEYWORDS
behavioral intentions, crowding, cruise tourism, human crowding, satisfaction, spatial crowding

1 | INTRODUCTION

Crowding is a major concern for travelers visiting leisure places (Aebli et al., 2022; Papadopoulou et al., 2023). The desire to travel is so strong that crowds of tourists have been reported as blocking access to famous attractions, such as the picturesque quay in Portofino, Italy (Symons, 2023). Crowding caused by an excessive influx of visitors results in negative outcomes for both local residents and tourists, for example, a reduced ability to move around, undesirable physical contact and competition for the same facilities. These inconveniences may diminish the perceived image of a destination and the quality of the place experience (Klein, 2011; Li et al., 2017).

Overcrowding seems to be particularly frequent and difficult to tackle in cruise ship destinations, especially when several vessels arrive simultaneously (Jacobsen et al., 2019). The grandeur of the newest cruise ships, with capacities of around 7000 passengers, and the surge in cruise tourism demand, has increased destination crowding, which needs to be efficiently managed (Papathanassis, 2020).

Previous studies have commonly captured tourists' perceptions of crowding levels through a single question requiring a numerical answer, for example: "on a scale of 1-7, how crowded is this place?" (e.g., Neuts & Nijkamp, 2012; Szuster & Peng, 2021). Others have used objective measures of human density as a proxy for perceived crowding (e.g., Edwards et al., 1994; Li & Hensher, 2013). However, these measures do not accurately gauge tourists' perceptions of crowding, since they fail to identify the source of the experienced discomfort, which might be due to spatial or social (human) constraints (Li et al., 2017). The inadequate assessment of crowding perceptions might also explain the mixed results obtained in previous studies in terms of their impact on visitors' satisfaction and future behavioral intentions.

Given the growing impact of overcrowding and the inconclusive research findings regarding its dimensions and influence on visitors' experiences, the present study employs a mixed-methods research design (Figure 1). In Study 1 we adopt a qualitative exploratory approach to gather insights into consumers' perceptions of crowding while traveling, and their impact on place experience. In Study 2 we conduct a survey-based quantitative study to (i) test the association between objective and subjective measures of crowding, (ii) assess the relative contribution of human and spatial crowding to overall crowding perceptions and (iii) quantify the structural relationships among perceived crowding and visitors' satisfaction and post-visit intentions (intention to return, intention to recommend and intention to spread electronic word-of-mouth). The present study makes several contributions to the literature. First, it revealed that only a weak association exists between objective and perceived human crowding, thus establishing that subjective crowding measures are more effective for assessing crowding perceptions than are objective data. Second, this research improves the current understanding of crowding perceptions by conceptualizing perceived crowding as a composite variable consisting of both a human and a spatial dimension. Moreover, the study empirically assesses the influence of crowding on visitors' satisfaction and post-visit behavioral intentions, including intention to share information online about destinations. In addition, unlike previous studies that assessed crowding perceptions based on visitors' memories (e.g., Ruiz et al., 2021) or through online simulations (e.g., Park et al., 2021), this research combines the findings of both exploratory inductive data obtained from focus groups and from in situ travelers' perceptions of crowding (gathered over 2 months), which enhances the quality and validity of the findings. Last, the study is original in crystallizing the findings of an exploratory and a descriptive study, which contrasts with previous single-method, cross-sectional and context-specific research into destination crowding. The study, thus, adds to the growing body of literature examining crowding in travel destinations.

2 | LITERATURE REVIEW

2.1 | Crowding definition and measures

Crowding has been associated with negative assessments of the density of visitors to specific places (and visitor density has been shown to cause stress [Graefe et al., 1984]) and with the exceeding of destinations' carrying capacity thresholds (Jurado et al., 2013; Vaske & Donnelly, 2002). Carrying capacity in the tourism context has two components (i) a "capacity issue," related to the number of individuals (i.e., quantitative values) that can visit a destination without having a negative impact and (ii) a "perceived capacity issue," related to the level of tourism activity that tourists will accept before it reaches their dissatisfaction thresholds (i.e., a psychological perception) (Coccossis & Mexa, 2016; Pikkemaat et al., 2020). When visitors

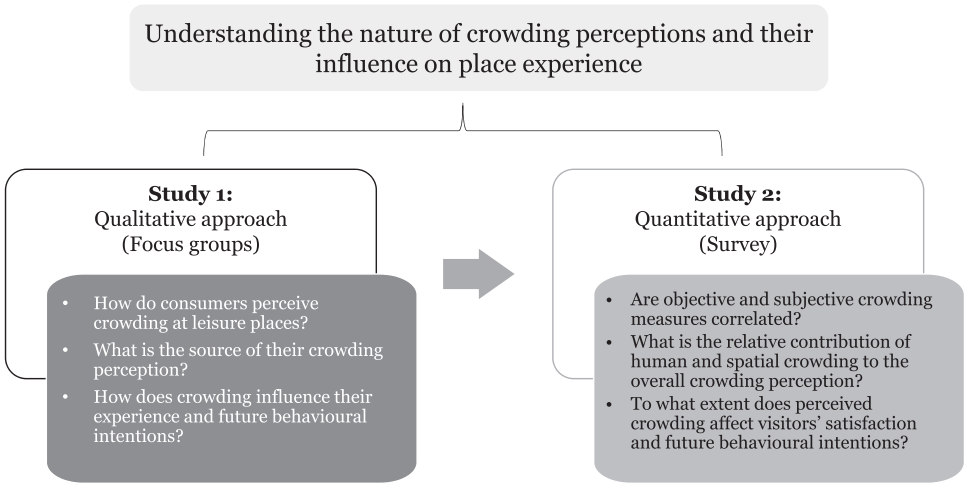


FIGURE 1 Overview of the research process.

experience crowding perceptions, this suggests that the management of tourist flows is inadequate, and that the maximum number of people who can simultaneously visit a destination is being exceeded. This, in turn, has impoverishing effects on the sustainability of destinations (Cerveny et al., 2020; Jin et al., 2016), such as infrastructure congestion and damage to natural resources and cultural heritage.

The literature distinguishes between two types of crowding, human and spatial. Human crowding is related to the number of people in an area at a given time, while the term "spatial crowding" is used to describe restrictions to free movement in a certain place (Kim et al., 2016; Machleit et al., 2000). In the context of tourist destinations, human crowding relates to an excess of people and the level of interaction between them, while spatial crowding relates to the physical characteristics of a location, that is, available space and design (e.g., street layout and width), which is associated with movement and access difficulties, among other effects (Albayrak et al., 2020; Buzova et al., 2019; Zehrer & Raich, 2016). Unlike human crowding, which relates to the number of people present in an area, spatial crowding relates to environmental elements (e.g., buildings and roads) and their interrelationships (Albayrak et al., 2020; Pikkemaat et al., 2020). Thus, crowding is the result of human density and spatial density, which arise either when there is an excessive volume of people in a destination, or there is limited available space.

The existing literature reveals that crowding elicits both negative (Liu & Ma, 2019; Pons et al., 2006) and positive reactions, based on a destination's popularity and fame (Petr, 2009; Shi et al., 2017). Previous tourism-focused studies have shown that human crowding can be both beneficial and detrimental to the visitor's experience (Kim et al., 2016; Sanz-Blas et al., 2019; Shi et al., 2017), while spatial crowding evokes only unfavorable perceptions (Buzova et al., 2019; Kim et al., 2016; Sanz-Blas et al., 2019).

Positive crowding assessments have been labeled as "good crowding" (Popp, 2012), which is associated with a crowd's contribution to the tourist experience. More specifically, higher social density can create a stimulating atmosphere, and a space where social interaction is encouraged (Kim et al., 2016; Popp, 2012). The act of socializing with either locals or other tourists, who speak different languages and come from different cultures, adds to the authenticity of the travel experience (Sanz-Blas et al., 2019).

Negative reactions to crowding are linked to the exceeding of destinations' carrying capacities (Garrigos-Simon et al., 2004), mainly to social carrying capacities (Navarro Jurado et al., 2013); these reactions generate negative perceptions, attitudes and emotions, such as stress (Popp, 2012). This can lead tourists to undergo unpleasant experiences that diminish their satisfaction (Papadopoulou et al., 2023), and even prompt them to avoid destinations (Luque-Gil et al., 2018).

Two measures can be used to assess crowding: a quantitative (objective) measure related to excessive visitor numbers; and a qualitative (subjective) measure of the diminished quality of place experience, indicated by lower satisfaction levels (psychological perception) (Jin et al., 2016; Navarro Jurado et al., 2013; Neuts & Nijkamp, 2012; Pikkemaat et al., 2020; Zehrer & Raich, 2016).

While one might expect to find a strong correlation between the number of people who visit a place (i.e., density) and the individual's perceptions of crowding, studies conducted in residential and public transportation settings suggest there is a weak/no relationship between the objective and subjective measures of crowdedness (e.g., Edwards et al., 1994; Li & Hensher, 2013).

Tourism studies have either used objective measures of crowding (e.g., Shi et al., 2017; Tokarchuk et al., 2022) or, more commonly, assessed subjective crowding perceptions through a single item (posing one question) (e.g., Neuts & Nijkamp, 2012; Zhang & Chung, 2015). However, some researchers have argued that a single item cannot accurately measure tourists' perceptions of crowding, given that they involve both cognitive and physiological states (Li et al., 2017). Accordingly, the present study conceives perceived crowding as a bidimensional construct, comprised of human and spatial crowding (Kim et al., 2016; Machleit et al., 2000). We analyze the source of crowding perceptions to identify which of the two crowding dimensions contributes more to the formation of the perceptions and, therefore, has a more negative effect on the tourist experience.

To the best of the authors' knowledge, no previous studies have investigated the association between objective crowding measures and subjectively perceived crowding in the tourism destination context; rather, they used either objective or subjective measures. Hence, the following research question is posed:

RQ. Is there an association between objective and subjective measures of crowding (i.e., human and spatial crowding)?

2.2 | Crowding and its impact on visitors' satisfaction and future behaviors

Previous research into the impact of crowding on tourist satisfaction and behaviors has yielded mixed results (Jacobsen et al., 2019; Kim et al., 2010; Mehta, 2013). Several studies have provided evidence that perceptions of crowding have a negative impact on tourist satisfaction (e.g., Kim et al., 2016; Papadopoulou et al., 2023; Zehrer & Raich, 2016). These studies showed that congestion, long waiting times and lack of access to desired services and attractions negatively affect tourists' experiences and their overall evaluation of destinations. However, other studies have reported that a positive relationship exists between crowding perceptions and satisfaction (Díaz-Sauceda et al., 2015; Noone & Mattila, 2009). This might be due to (i) the number of visitors at a destination being less than expected (Díaz-Sauceda et al., 2015; Palau-Saumell et al., 2014); and/or (ii) tourists' hedonic motivations for the visit (Noone & Mattila, 2009). Some studies have reported that the relationship between the two variables is nonsignificant (Li et al., 2017; Nian et al., 2023). As Nian et al. (2023) argued, the adoption of visitor management strategies and site protection policies and the advent of smart

tourism have improved visitor satisfaction and loyalty, thus overcoming the problems associated with perceived crowding.

Exploratory studies examining crowding perceptions in cruise ship destinations have identified that satisfaction can be affected both positively and negatively (Buzova et al., 2019; Sanz-Blas et al., 2019). More specifically, some tourists evaluate perceived crowding as adding value to the experience, while others say it prevented them from enjoying their visits. These findings show that crowding is not always negative and can contribute positively to the tourist experience and to satisfaction (Kim et al., 2016; Neuts & Nijkamp, 2012; Sanz-Blas et al., 2019). Nonetheless, as there is more evidence for the negative effect of crowding on tourist satisfaction than there is for it having a positive or neutral impact, we propose the following hypothesis:

H1. The higher the perceived level of crowding, the lower the satisfaction with the destination visit.

Studies into the relationship between perceived crowding and post-visit behavioral intentions also offer contradictory findings. The majority of studies document that the perception of crowding negatively impacts tourists' intentions to return to a destination. The greater is the perceived level of crowding, the lower is the tourist's willingness to return to a destination (Navarro Jurado et al., 2013; Papadopoulou et al., 2023). However, Yin et al. (2020) found that crowding perceptions did not significantly affect tourists' revisit intentions. This surprising result might be explained by the popularity of a destination (Petr, 2009), which makes revisiting it worthwhile despite the crowding encountered there. On the basis that there is greater evidence that crowding has a negative impact on revisit intentions than there is for it having a positive or neutral impact, the following hypothesis is proposed:

H2. The higher the perceived level of crowding, the lower the intention to return to the destination.

The extant literature also reveals that perceptions of crowding negatively impact on tourists' intentions to recommend a destination, and to share positive experiences with other potential tourists (Papadopoulou et al., 2023). Nevertheless, the effects of overcrowding are not always negative; previous research has documented that a direct and positive relationship exists between crowding perceptions and tourists making recommendations (Abubakar & Mavondo, 2014). There may be two reasons for this; first, they may expect crowding in many destinations (e.g., Rome) and, second, because they feel they can cope with the situation, for example, by changing their itineraries to visit popular attractions etc. at less busy times (Machleit et al., 2000). Another explanation could be the hotspot effect associated with certain destinations, which causes tourists to show greater tolerance toward crowding (Jacobsen et al., 2019). However, given the prevalence of studies reporting a negative association between tourists' perceptions of crowding and their intentions to recommend destinations, we propose the following hypothesis:

H3. The higher the perceived level of crowding, the lower the intention to recommend the destination.

New technologies allow visitors to recommend tourist destinations through electronic media. Electronic word-of-mouth is the opinions, comments and recommendations that individuals share through social networks, blogs, forums and review sites (Donthu et al., 2021; Kwon & Kim, 2020; Mukhopadhyay et al., 2023). Consumers today increasingly share their travel experiences on holiday review websites such as TripAdvisor and Expedia (Babić Rosario et al., 2020; Gonçalves et al., 2018). Electronic word-of-mouth has become a complement to traditional face-to-face recommendation behaviors. In the destination context, electronic word-of-mouth has been defined as informal communications made by tourists to inform others about the characteristics and use of tourism services and their providers through the internet (i.e., online platforms enabling social interaction, integrated tourism websites, social networks) (Litvin et al., 2018). Past studies have identified references to crowding in travel-focused electronic word-of-mouth (Bigné et al., 2023; Buzova et al., 2019, 2020; Zanibellato et al., 2018). For example, in the cruise ship destination context, Buzova et al. (2019) showed that visitors who perceive crowding during their visits tend to make unfavorable comments about their experiences on social media and integrated tourism websites (e.g., discouraging visits to the port of call, or certain attractions). Bigne et al. (2023) also showed that negative online reviews about a destination were based mainly on perceptions of crowding or overcrowding. Based on the above evidence, we propose the following hypothesis:

H4. The higher the perceived level of crowding, the lower the intention to recommend the destination online.

Figure 2 depicts the proposed theoretical model and poses the RQ.

3 | STUDY 1

To build a more comprehensive picture of how visitors experience a crowded place during their holidays, and to ensure that our hypotheses do not lack any conceptual elements, we organized two focus groups in which participants could freely discuss their thoughts and feelings about their experiences of crowdedness.

3.1 | Focus group design and procedure

We conducted two face-to-face focus groups, each with eight members, both women and men, aged between 21 and 54. As to the profile of the participants, a market research company recruited frequent international travelers of the following nationalities: Spanish, Italian, Polish, Chinese, Peruvian and Ecuadorian. The group moderators followed a semi-structured discussion guide covering

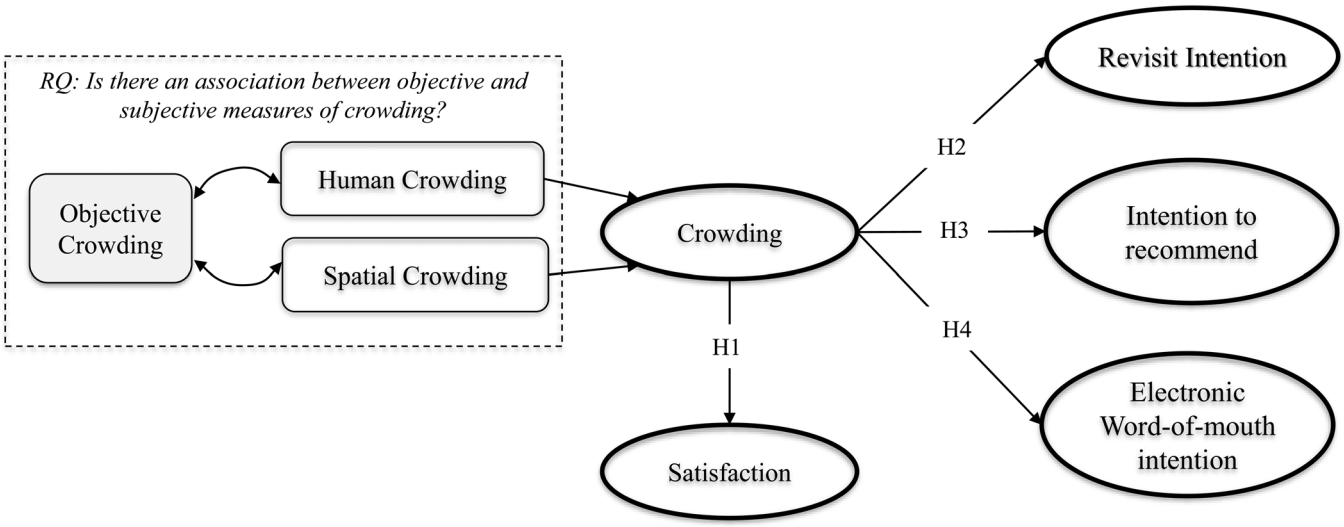


FIGURE 2 Theoretical model.

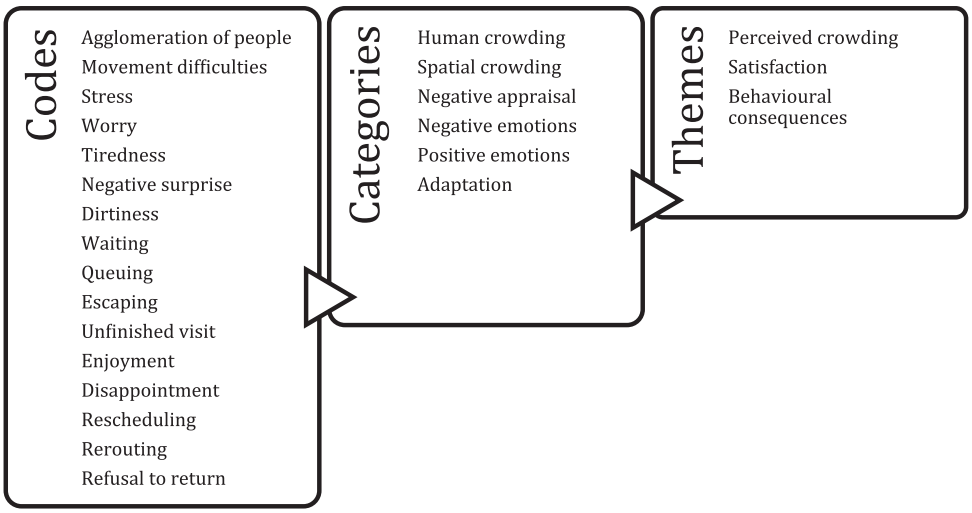


FIGURE 3 Data coding: First-order codes, categories and aggregated themes.

several topics. First, the moderators invited the participants to recall a time when they had experienced crowding while being on holiday and to share their memories with the rest of the group. Thereafter, the moderators focused the discussions on the way the experience of crowding made the participants feel. In a next step, the moderators led the discussion to pursue a second objective, that is, to discover how the participants' perceptions of crowding affected their overall assessments of destinations/monuments (i.e., satisfaction) and their future behavioral intentions toward the places. The focus groups lasted for about 60 min and were immediately transcribed.

To analyze the data, we adopted a thematic coding-based inductive approach. Two researchers coded the textual information gathered from the focus groups independently, and then combined the data they gathered, and compared the results. When discrepancies emerged, the research team resolved the issues together. We identified 16 first-order codes, which we grouped into seven categories and, finally, aggregated into three themes (see Figure 3). For example, the first-order codes "rescheduling," "rerouting," "queuing," and "waiting" were grouped into the "adaptation" category, which was then coupled with the "avoidance" category in a single theme labeled "behavioral consequences."

3.2 | Results

The respondents reported they had experienced crowding in a wide variety of places: monuments (e.g., the Colosseum), destinations (e.g., Barcelona, Rome), sightseeing attractions (e.g., Cuzco), festivals (e.g., full moon party), theme parks and shopping centers. When describing their memories of crowdedness, some of the participants pointed at

physical constraints as the source of their perceptions of crowding, while others blamed the amount of people present. Hence, examples of both human and spatial crowding featured in the narratives, as can be observed from the following excerpts:

> In my case, I did not like Barcelona because there were a lot of people, and it is a very crowded city. So, to visit the historical monuments and places of interest was really difficult.

> When we got to visit the main city, Palma, we started to get overwhelmed because there were a lot of people; we had booked a hotel in the centre of the city, but there was no way to locate the hotel, there were a lot of people on the streets, and many drunk tourists, it was agonising to move around the city.

It should be noted that perceptions of crowding can arise even if only one of the crowding types is present. Some of the focus group participants reported experiencing crowdedness just because of the number of people around them, even when their freedom to move was not constrained by the presence of others. This might depend on the context, since visitors to monuments/attractions generally reported experiencing only the human dimension of crowding, the spatial dimension being mentioned only rarely. This might be due to the maximum established capacity of visitors allowed to enter monuments/attraction sites for security and preservation reasons. In contrast, destinations are open spaces and, thus, access to popular areas is more difficult to control, hence both type of crowding perceptions were said to be usually present. The following excerpt illustrates perceived human crowding, with no physical limitations (i.e., spatial crowding), during a visit to a monument:

> You go to see the Alhambra, but you can't see anything with so many people around, you couldn't even look around. I really wanted to go there to see those monuments, but it was impossible.

In general, the participants did not feel good about their experiences of crowdedness. The most frequently reported feelings when recalling their memories of crowding were: "stressed, very stressed," "nervous," "annoyed," "overwhelmed," "negatively surprised," "tired," "bored," and "worried." Apart from unpleasant emotions, some of the focus group members indicated that the excessive amount of people around them generated an impression of insecurity; they needed to be in "alert mode" because they were surrounded by too many strangers. One of the female participants even admitted suffering a strong physical reaction:

> I remember feeling a great sense of anxiety. I remember walking down the street and being constantly pushed by people. I remember feeling a great pressure in my chest and wanting to run away from there.

Interestingly, though, the Chinese participants showed greater tolerance toward crowding and declared that the presence of many people did not cause them any inconvenience. The following excerpt illustrates this:

> I went to Paris, and although there were a lot of people and I needed to wait in line at the attractions, I was happy with that. Despite waiting, I felt good there.

The experience of crowding did not only engender negative emotional reactions in the participants, it also significantly affected the overall visit and their sightseeing plans. Several participants reported diminished satisfaction due to the experience of crowding, the presence of so many other visitors did not allow them to fully enjoy the place. Others indicated that the excessive number of visitors increased waiting times and queuing. In addition, the respondents experienced a negative impact on the perceived quality of the sightseeing facilities in the destination, for example, garbage, excessive noise, traffic, caused by the high number of visitors. The crowdedness also generated in respondents the impression that the destination was disorganized and chaotic. Overall, we observed that satisfaction was negatively impacted.

> We ended up seeing only half of the Colosseum. So, yes, it [crowding] did affect my visit because we didn't get to enjoy the attraction.

> It [crowding] has made me spend more money, it has cost me more time and I have probably missed out on some things because of all the queuing; you end up not enjoying the trip and you leave with a bitter taste in your mouth.

The experience of crowding also had behavioral consequences for the visitors. The high social density made visitors adopt coping behaviors to reduce the negative impact of the agglomeration of people. Some respondents rescheduled their planned sightseeing itineraries to avoid the traffic of people. In a theme park, another participant had to spend more money to purchase a fast-line bracelet to skip the long queues. The following excerpts illustrate these experiences:

> Well, I wanted to get out of the place. Above all, I wanted to change my route. If I see that there are a lot of people, I change my route and I'll see that place another time or another day if I have enough days left.

> I go every year to Fuerteventura and I think that it's getting more and more crowded every year. [...] I had to pay a hundred euros more for a bracelet to be able

> to go on an attraction and not queue for hours and hours and hours.

Despite the experience of crowding, some of the participants reported going back to the places described year after year because of their uniqueness. Others, in contrast, declared their intention never to return to the destination, even to hotspots like Barcelona:

> That feeling [crowding] has made me refuse to go back to Barcelona. I would only go if I had to pick up my parents from the airport, but I won't go back if it is up to me.

Another participant highlighted a positive change in his perception of the crowdedness in Cuzco due to more efficient destination management:

> When I went to Cuzco, just before the pandemic, about a month before, everything was full of people: the flights, the ruins, the hotels, there were no reservations…It was more stressful to travel there than to stay at home, because everything was full. But with the pandemic everything changed, the whole system was reformulated and now the tours are better organised. You can now enjoy the place and feel comfortable there.

In general, the focus group participants described the crowding experienced across the various contexts as negative and reported that it affected their visits and elicited mostly unpleasant emotions. Moreover, the crowding also had consequences for their behaviors in terms of adopting coping strategies and even reluctance to continue the visit and/or make a return visit.

4 | STUDY 2

In Study 2, using survey data, we triangulated the findings of Study 1 by quantitatively assessing the proposed hypotheses. Furthermore, to address the RQ, we empirically estimated the association between objective crowding and subjectively perceived crowding.

4.1 | Data collection

The target population of the empirical study was tourists visiting Valencia, a major Spanish cruise ship destination. The data were collected through personal interviews using a structured questionnaire (available in several languages). Professional interviewers conducted the survey in the lobby of the cruise ship terminal, intercepting passengers as they returned from visiting the city. To ensure sample variability, we selected ships of various sizes, from different cruise lines, visiting the port of Valencia over the course of 2 months. The survey questionnaire included 11 questions, divided into four sections: the first section briefly asked visitors about their past cruise ship experiences, the second asked about their assessments of crowding perceptions, the third asked about their satisfaction with, and future behavioral intentions toward, Valencia, and the last asked questions that helped create a picture of their demographic profiles. The final sample consisted of 537 valid questionnaires. Female respondents were slightly more preponderant in the sample, that is, 56.3%. The average age was 58 years. The distribution of the sample by occupation type was: retired (51.4%), employed (42.6%) and unemployed (6.0%); as to education, 63.0% were college/university graduates. The sample included international cruise passengers mainly from the United Kingdom (36.0%), the United States (18.0%), and Germany (16.0%).

4.2 | Measurement

We operationalized subjectively perceived crowding as a bidimensional formative construct, that is, human and spatial crowding; these were adapted from Kim et al. (2016). Destination satisfaction was measured with three items, following Sanz-Blas and Carvajal-Trujillo (2014). Two behavioral intentions, that is, intention to return to, and intention to recommend the port of call, were measured using one item each, following Andriotis and Agiomirgianakis (2010), while intention to spread electronic word-of-mouth was assessed with two items, following Morosan (2013). Seven-point Likert-type scales (ranging from (1) "strongly disagree" to (7) "strongly agree") were used to measure the variables. To address the RQ, we used the number of cruise passengers and ships disembarking at the port of Valencia as an objective measure of crowding. The number of cruise passengers visiting the port on the days when the surveys were conducted ranged from 117 to 9516, that is, from only one ship arriving, to five ships arriving on the same day.

4.3 | Results

We estimated the relationships specified in the theoretical model using partial least squares structural equation modeling (PLS-SEM), with Smart-PLS 4 software. To examine the significance of the associations between the objective measure of crowding and subjectively perceived human and spatial crowding we performed Pearson correlations with SPSS 28.

4.3.1 | Measurement model validation

The reliability indicators of the reflectively operationalized constructs (i.e., satisfaction, revisit intentions, intention to recommend and electronic word-of-mouth) all returned satisfactory values, that is, the Cronbach's αs had scores above 0.7, and composite reliability index scores above 0.8. Furthermore, convergent validity was confirmed, as all loadings were significant and above 0.6 (see Table 1).

TABLE 1 Measurement model assessment.

Construct/dimension and indicator	VIF	Weight	Loading	*t* Value (bootstrap)	Cronbach's α	CR	AVE
Crowding (2° order)					n.a	n.a	n.a
Human crowding	1.485	0.396			0.897	0.928	0.763
HUM1			0.901	124.535			
HUM2			0.896	97.050			
HUM3			0.842	64.455			
HUM4			0.854	61.261			
Spatial crowding	1.485	0.720			0.965	0.973	0.878
SP1			0.931	111.458			
SP2			0.934	109.111			
SP3			0.947	105.432			
SP4			0.945	149.362			
SP5			0.928	105.691			
Satisfaction					0.883	0.928	0.811
SAT1			0.849	44.810			
SAT2			0.927	122.501			
SAT3			0.923	121.846			
Revisit intention					1.000	1.000	1.000
RINT1			1.000	-			
Intention to recommend					1.000	1.000	1.000
WOM1			1.000	-			
Electronic word-of- mouth intention					0.866	0.937	0.881
eWOM1			0.949	173.616			
eWOM2			0.929	100.081			

Abbreviations: AVE, average variance extracted; CR, composite reliability; VIF, variance inflation factors.

TABLE 2 Measurement model. Discriminant validity.

	Crowding	Satisfaction	Revisit intentions	Intention to recommend	Electronic word-of-mouth intention
Crowding	n.a.	0.166	0.076	0.163	0.127
Satisfaction	−0.140	**0.901**	0.487	0.649	0.370
Revisit intention	−0.059	0.459	**1.000**	0.696	0.378
Intention to recommend	−0.092	0.610	0.696	**1.000**	0.356
Electronic word-of-mouth intention	0.117	0.327	0.357	0.335	**0.939**

Note: Along the diagonal: Squared roots of the average variance extracted; below the diagonal: inter-construct correlations; above the diagonal: heterotrait-monotrait ratios. All correlations in bold are significant ($p < 0.05$).

Abbreviation: n.a., not applicable.

The discriminant validity of the reflective constructs was confirmed as the average variance extracted (AVE) of the variables were greater than the inter-construct correlations (Fornell–Larcker criterion) and the heterotrait-monotrait (HTMT) ratios were less than 0.90 (see Table 2).

The formative nature of crowding means that we had to analyze its weights, given that they provide information on the importance of each dimension in the formation of the variable (see Table 1). To analyze multicollinearity, we calculated the variance inflation factors of the variables in the research model; all presented values lower than

TABLE 3 Structural model results.

Hypothesis	Path coefficient (β)	Weights	t Value (bootstrap)
H_1: Crowding → Satisfaction	−0.140		3.249
H_2: Crowding → Revisit intention	0.005		0.148
H_3: Crowding → Intention to recommend	−0.007		0.212
H_4: Crowding → Electronic word-of-mouth intention	0.166		5.200
Human crowding → Crowding		0.396	28.166
Spatial crowding → Crowding		0.720	43.653

3.3, which indicates multicollinearity is not a problem in the model (see Table 1).

4.3.2 | Structural model assessment

After establishing the validity of the measurement model, we estimated the structural model (see Table 3), obtaining the standardized path coefficients (β) and associated t-values through bootstrap resampling with 5000 subsamples. In addition, we calculated both the explained variance (R2) and the predictive relevance (Q2) of the model.

The results revealed that (i) crowding perceptions influenced tourists' satisfaction, given that a negative and significant relationship exists between the two constructs (β = −0.140), (ii) crowding perceptions did not affect post-visit behaviors, that is, neither the crowding-revisit intention relationship (β = 0.005) nor the crowding-intention to recommend structural link (β = −0.007) were significant and (iii) crowding perceptions were associated with sharing recommendations online, as the structural relationship between the two constructs was positive and significant (β = 0.166).

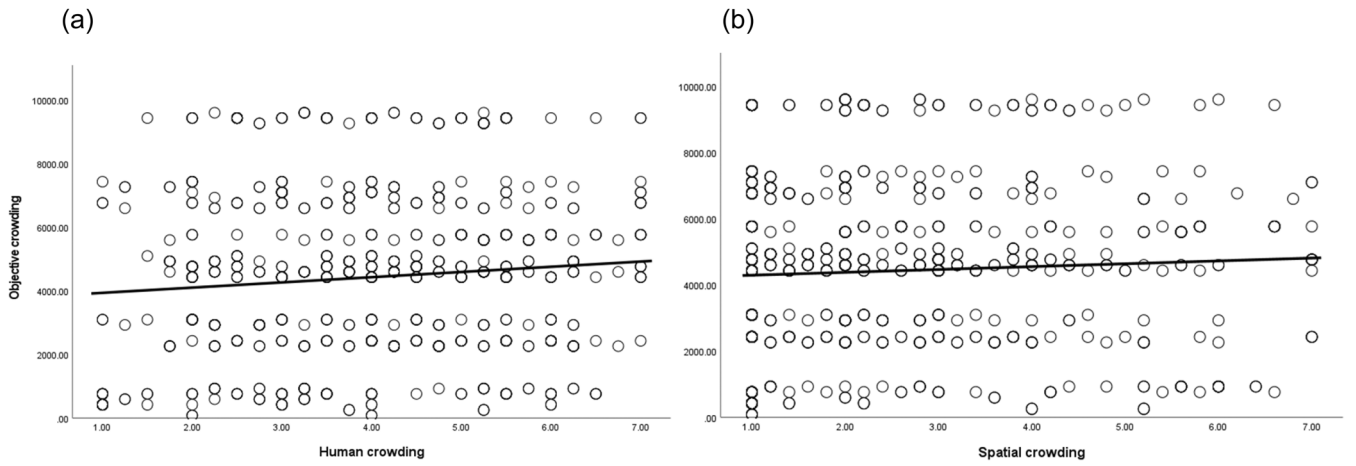
The interpretation of the weights of the two crowding dimensions, human (0.396) and spatial (0.720), showed that the spatial contributed more to the formation of crowding perceptions. To assess the predictive power of the proposed model we examined the R2 values of the dependent variables (i.e., satisfaction, revisit intention, intention to recommend and electronic word-of-mouth intention), all of which exceeded the recommended 0.10 minimum. The predictive relevance of the model was also adequate, given that the Q2 values obtained were greater than zero.

4.3.3 | Assessment of the relationship between objective crowding and subjectively perceived crowding

After the reliability and the validity of the subjective measures of spatial and human crowding were established, we estimated the significance of their association with an objective measure of crowding, that is, the number of cruise passengers visiting the port of call. The results of the Pearson correlations conducted, and their corresponding scatter plots, are shown in Figure 4. The data shows that a positive and significant relationship existed between the number of cruise passengers visiting the port of call and subjectively perceived human crowding ($r = 0.096$; p value = 0.009) on the day of the visit, although the association is weak. As for the relationship between the objective measure of crowding and spatial crowding, the correlation coefficient is positive, but not significant ($r = 0.056$; p value = 0.128).

5 | CONCLUSIONS, DISCUSSION AND MANAGERIAL IMPLICATIONS

The present study, taking both a qualitative and quantitative perspective, increases understanding of visitors' perceptions of place crowding and their influence on their satisfaction and post-visit behavioral intentions. The findings of (qualitative) Study 1 offer insights into an array of crowding experiences across various holiday destinations and attractions, finding that crowds do not always evoke the same type of perceptions. Sometimes a multitude of people makes visitors feel discomfort (i.e., human crowding), while at other times it is movement restrictions that visitors find intolerable (i.e., spatial crowding), or sometimes they feel both at the same time. It is important for destination managers to identify the causes of crowding perceptions because they have a negative influence on visitors' experiences in terms of stress, anxiety and annoyance, which results in dissatisfaction. These negative sensations and appraisals have important consequences for tourists' behaviors, such as not returning to a destination, seeking less crowded alternatives and not recommending the destination to others. Thus, the present study provides evidence that crowding affects the quality of visitors' place experiences, as well as their emotional and affective responses, satisfaction and behavioral intentions, but that this impact is setting dependant, as noted by the focus groups. Hence, the study overcomes the limitations of existing context-specific studies into crowding (i.e., studies that examined only one place/event, e.g., a festival) (Luque-Gil et al., 2018; Neuts & Nijkamp, 2012; Papadopoulou et al., 2023) by providing insights into travelers' experiences of crowding in various types of location (e.g., destinations, monuments, theme parks) and, thereby, establishing that these perceptions (i.e., spatial or human crowdedness) are context/place dependent.



		Objective Crowding
Human Crowding	Pearson correlation	0.096*
	p-value	0.009
Spatial Crowding	Pearson correlation	0.056
	p-value	0.128

FIGURE 4 Results of the correlation analyses. (a) Relationship between objective and human crowding and (b) Relationship between objective and spatial crowding.

The results of the exploratory phase of the research were mostly confirmed by the quantitative study, which focused on overcrowding experienced during a cruise ship visit. However, the data obtained provided a negative answer to the RQ, as the evidence suggests that objective measures of crowding (i.e., the number of cruise passengers disembarking on that day at the destination) is not a proxy for subjectively perceived human and spatial crowding, given their respectively weak and nonsignificant statistical associations. This finding clearly suggests that objective measures of crowding are not superior to subjectively perceived human and spatial crowding assessments. The significant, although low, correlation between objective and human crowding might be due to the salience of the visual stimuli evoked by a large number of people converging on a single place rather than the spatial limitations imposed by those people, which, in turn, might be explained by the destination's infrastructure.

The present study is novel in that it adopts a new conceptualization of the measurement of perceived crowding, that is, a distinction is made between the relative contributions of its spatial and human dimensions, thus decomposing the perceptions into more actionable elements. In doing so, the study challenges the commonly accepted single-item measurements of crowding and makes the case that it should be assessed multidimensionally. Another significant finding of the study is that spatial crowding contributes more than does human crowding to the formation of visitors' overall crowding perceptions. This result indicates that tourists visiting a cruise destination are less sensitive to the visual impression of crowds than to the limitations imposed on their mobility by these crowds. Although the interviewees perceived the destination as busy/crowded in terms of numbers of people and vehicles, they found the lack of space and the difficulty in moving freely around the destination more bothersome. A plausible explanation for their lack of concern about the numbers of people present in the destination might lie in the increasing trend toward the construction of cruise ships that accommodate thousands of people and, hence, their expectations about the number of other visitors accompanying them during their visits will be low (Dowling & Weeden, 2017). Another reason for the weaker contribution of human crowding in this port of call might be that it is one of the major Spanish cities. In contrast, smaller island towns can easily be overwhelmed by the arrival of just one cruise ship, given their more limited physical dimensions and, therefore, the perception of human crowding might be more pronounced.

The research indicated that the perception of crowding in a destination negatively influences tourists' satisfaction with their visits. In other words, an inadequate management of tourist flows in the destination was shown to lower visitors' assessments of their place experience. These results are consistent with those of by Zehrer and Raich (2016), who also demonstrated that crowding had a significant negative effect on tourist satisfaction.

Surprisingly, though, the present study did not establish a direct, significant link between visitors' perceptions of crowding and their intentions to revisit or recommend the destination. The reduced

expectations of cruise ship visitors might explain this result. More specifically, cruise ship tourists might be accustomed to crowding through their past experiences and may also be influenced by the media discourse about the crowding associated with cruise holidays. This result is in line with Castaldo et al. (2021), who revealed that tourists' intentions to go on cruises are not altered by crowding expectations. Another explanation of this result might lie in Liang et al.'s (2021) proposal that crowding is perceived as being intrinsic to some tourist activities, such as festivals and other, similar events. Similarly, cruise ship tourists visiting destinations on medium to large cruise ships are accustomed to being accompanied both onboard and onshore by several thousands of fellow passengers for several days. Hence, they might not be disturbed by having masses of people around them, given that they have become accustomed to this circumstance. As a result, cruise ship passengers' experience of crowding might not have an impact on their intentions to revisit the destination, given that they are aware that the crowding was due to the cruise ship's arrival, and that the place is probably not usually so busy.

Although the study found no significant relationship between crowding and visitors' intentions to recommend the destination, we identified an effect on intention to spread electronic word-of-mouth. The relationship between the two variables is positive, which suggests that respondents who reported that the destination was crowded were more likely to write reviews and post pictures about the destination on their social networks or other opinion platforms (e.g., Cruisecritics.com, TripAdvisor.com). Thus, the present study supports previous works that also proposed that there is a positive relationship between the level of crowding visitors experience and their subsequent electronic word-of-mouth behaviors (Liang et al., 2021; Zanibellato et al., 2018). This can be explained by tourists' willingness to share their opinions and experiences both with their friends and relatives, and with the cruise traveler community in general. Those who have already visited a port of call are likely to warn potential tourists about overcrowded areas and/or busy periods of the day, which, in turn, may benefit these tourists, but may also damage the destination's image by characterizing it as being overcrowded.

This research has practical implications for urban tourism planners, cruise companies and port authorities. The findings suggest that these agents should develop effective mobility strategies to manage visitor flows in destinations, particularly when several cruise ships are scheduled to arrive on the same day. Dispersal strategies involving rewards (e.g., discount tickets, gift cards) might be adopted to modify visitors' space-time activities while visiting destinations (Högberg et al., 2020; Shoval et al., 2020). For example, attractions and monuments might offer price reductions for early morning visits, or visits nearer to closing times, to reduce overcrowding during the busiest hours of the day. To redistribute masses of tourists, Su et al. (2022) suggested decentralizing tourist hotspots, generally concentrated in city centers, by providing more options for sightseeing and interaction with locals in peripheral and suburban parts of destinations. This would involve developing and promoting tourism infrastructure in less visited areas, so that visitors might explore and enjoy less-known parts of destinations. Taking this concept further in distance terms, destinations and cruise lines might extend the activities, tours and excursions marketed to visitors beyond the urban/suburban/peripheral nucleus by including hinterlands in their offer (i.e., sightseeing in smaller towns and cities in a 50–75 km radius). This might significantly reduce both perceived and objective crowding and, at the same time, promote little known but authentic experiences and monuments in other local, and less-local, areas.

Digital technologies might be leveraged to reduce overcrowding and place demand. Mobile apps, interactive maps, and online tourist information systems could provide tourists with real-time information on visitor flows, alternative routes, and practical tips, thus helping them to plan their visits more efficiently. For example, waiting times for the main tourist attractions might be provided in the official destination website, a mobile app could send automatic notifications to visitors warning them where they might encounter long queues and suggesting alternative, off the beaten track, attractions. In addition, destination managers might share information daily on social media about the numbers of visitors expected to arrive in destinations based on flight schedules, accommodation bookings and cruise ship arrivals, which would forewarn tourists that crowding may be likely in the main attractions, and try to divert them to other places of interest. Destination managers should also regularly collect and analyze crowding and density data to better understand visitor patterns, and to help them make informed decisions. Feedback from tourists should also be gathered to evaluate the effectiveness of crowd management strategies, and to make adjustments to these strategies when necessary.

Improved transportation management might also be a remedy for destination crowding. Enhancing public transportation infrastructure by connecting the port and the city's main attractions might help distribute tourists more efficiently.

Given the greater weight of spatial crowding in overall crowding perceptions, urban planners and tourism authorities should keep their main tourist attractions as spacious as possible. Offering alternative routes to reach the main sightseeing zones/attractions might also help reduce visitors' perceptions of spatial crowding. To enhance mobility at tourist destinations, wayfinding, and traffic signage should be installed in those areas where visitor density provokes discomfort. Furthermore, reducing the number of tourists per guided tour might also help improve visitors' mobility around attractions: group tours of about 20 members would be more appropriate than groups of 40–50 (currently the norm in cruise ship-sponsored excursions).

In addition, destination management entities should undertake educational campaigns aimed at both visitors and local communities. These might (i) disseminate information about the impact of overcrowding, respect for the environment and local culture and (ii) promote sustainable and responsible tourism practices among visitors, such as respect for the natural environment, waste reduction, conscious use of resources, support for the local economy and respect for local norms and traditions. Tourists may not be fully aware of the impact they can have on destinations. Communication

campaigns could prepare visitors to respect the local culture and, thus, enhance their coexistence with residents. Educating tourists about the behaviors they should adopt to avoid altering or damaging local ecosystems and cultural heritage should be among the strategies adopted to cope with the negative effects of overcrowding.

In addition, destination managers should evaluate and monitor the carrying capacity of tourist attractions, implementing reservation systems to distribute visitors more evenly during peak seasons. The use of timed-entrance tickets would help manage visitor flows. Another preventive measure would be to place access controls at the entrance of major tourist hotspots. For example, automatic counters might be installed to inform visitors and locals about increased people density, which could be used to restrict access to already crowded areas.

Furthermore, in view of the results, cruise lines are recommended to include cruise ship traffic, in addition to fuel costs and port fees, as a variable in their itinerary planning. In this way, the simultaneous arrival of several ships in a port would be avoided, and disembarkations could be distributed more evenly throughout the day or week. Port authorities should implement efficient protocols to speed up the disembarkation process and establish specific areas to organize passengers' visits to their final destinations at the port of call. Importantly, since crowding is related to visitor numbers exceeding destinations' carrying capacities, cruise tourism stakeholders should adopt measures to ensure that the visitors follow environmentally sustainable practices when ashore. Thus, for example, local authorities should limit the number of cruise ships docking simultaneously at their ports of call.

6 | LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

The present study has some limitations that should be taken into account when interpreting its findings. First, the focus groups included consumers from a limited range of nationalities, so the results should be interpreted with caution. Second, while (qualitative) Study 1 asked participants about the crowding experiences they most remembered and, thus, gained insights into the differences in their crowding perceptions (spatial vs. human) with monuments, theme parks and other destinations/attractions, (quantitative) Study 2 was limited to a single tourist type, that is, cruise ship passengers. Hence, future research might quantitatively compare the crowding perceptions of different tourist types (e.g., cultural travel, visiting friends and relatives, business trips) visiting the same destination to identify statistically significant differences. Third, the quantitative research was carried out in a single Mediterranean destination, which makes the results less generalizable to other destinations, thus they should be regarded as exploratory in nature. To overcome this limitation, further studies might validate the research model in other destinations. It would be particularly interesting to compare the results across various regions visited by cruise ships (i.e., Asia-Pacific, the Caribbean, Europe). It would also be worthwhile to further develop the proposed research model by including antecedents of crowding perceptions (personal and travel characteristics, motivations, perceived image, past experience, length of stay, involvement) and other possible outcome variables (e.g., memorability and pro-environmental behaviors). Similarly, the incorporation of moderating variables into the model could provide interesting insights. For example, cross-cultural differences in crowding perceptions might be tested in future studies, given that previous research has established that culture plays a role in determining customers' tolerance of crowdedness in a restaurant setting (Kim et al., 2010). Furthermore, there might be significant differences in tourists' crowding perceptions based on the size of cruise ships, or whether they visited the destination with a tour guide, or on their own.

Another limitation is that the quantitative study was based on a convenience sample of cruise ship visitors. These tourists have different demographic characteristics, interests and motivations to other types of visitors, which may limit the representativeness and generalizability of the results. In addition, they stay in destinations for a very limited time (often only a few hours), which affects how they experience the destination and their level of involvement with the local community. For a more complete understanding of crowding perceptions, future studies should analyze other tourist segments, key stakeholders, and local communities.

In addition, research into crowding could be expanded by incorporating the impact of associated factors, such as waiting times, accessibility to tourist resources, and interaction with local communities. Another future research line would be to examine how emerging technologies, such as artificial intelligence and big data, might be used to prevent and manage place saturation (e.g., prediction of visitor flows and real-time monitoring of the destination's carrying capacity).

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

Research data are not shared.

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REFERENCES

Abubakar, B., & Mavondo, F. (2014). Tourism destinations: Antecedents to customer satisfaction and positive word-of-mouth. *Journal of Hospitality Marketing & Management*, *23*(8), 833–864.

Aebli, A., Volgger, M., & Taplin, R. (2022). A two-dimensional approach to travel motivation in the context of the COVID-19 pandemic. *Current Issues in Tourism*, *25*(1), 60–75.

Albayrak, T., Güzel, Ö., Caber, M., Kılıçarslan, Ö., Dursun Cengizci, A., & Güven, A. (2020). How does perceived crowding moderate tourist shopping experience and satisfaction relationship? *International Journal of Tourism Cities*, *7*(1), 46–62.

Andriotis, K., & Agiomirgianakis, G. (2010). Cruise visitors' experience in a Mediterranean port of call. *International Journal of Tourism Research*, *12*(4), 390–404.

Babić Rosario, A., De Valck, K., & Sotgiu, F. (2020). Conceptualizing the electronic word-of-mouth process: What we know and need to know about eWOM creation, exposure, and evaluation. *Journal of the Academy of Marketing Science*, *48*(3), 422–448.

Bigne, E., Ruiz, C., Perez-Cabañero, C., & Cuenca, A. (2023). Are customer star ratings and sentiments aligned? A deep learning study of the customer service experience in tourism destinations. *Service Business*, *17*(1), 281–314.

Buzova, D., Cervera-Taulet, A., & Sanz-Blas, S. (2020). Exploring multisensory place experiences through cruise blog analysis. *Psychology & Marketing*, *37*(1), 131–140.

Buzova, D., Sanz-Blas, S., & Cervera-Taulet, A. (2019). 'Tour me onshore': Understanding cruise tourists' evaluation of shore excursions through text mining. *Journal of Tourism and Cultural Change*, *17*(3), 356–373.

Castaldo, S., Penco, L., & Profumo, G. (2021). Cruising in the COVID-19 pandemic era: Does perceived crowding really matter? *International Journal of Contemporary Hospitality Management*, *33*(8), 2586–2612.

Cerveny, L. K., Miller, A., & Gende, S. (2020). Sustainable cruise tourism in marine world heritage sites. *Sustainability*, *12*(2), 611.

Coccossis, H., & Mexa, A. (2016). *New directions in tourism analysis. The challenge of tourism carrying capacity assessment: Theory and practice*. Routledge.

Díaz-Sauceda, J., Palau-Saumell, R., Forgas-Coll, S., & Sánchez-García, J. (2015). Cross-border tourists' behavioral intentions: the Green Line of Nicosia, Cyprus. *Tourism Geographies*, *17*(5), 758–779.

Donthu, N., Kumar, S., Pandey, N., Pandey, N., & Mishra, A. (2021). Mapping the electronic word-of-mouth (eWOM) research: A systematic review and bibliometric analysis. *Journal of Business Research*, *135*, 758–773.

Dowling, R., & Weeden, C. (Eds.). (2017). *Cruise ship tourism*. Cabi.

Edwards, J. N., Fuller, T. D., Sermsri, S., & Vorakitphokatorn, S. (1994). Why people feel crowded: An examination of objective and subjective crowding. *Population and Environment*, *16*, 149–173.

Gonçalves, H. M., Silva, G. M., & Martins, T. G. (2018). Motivations for posting online reviews in the hotel industry. *Psychology & Marketing*, *35*(11), 807–817.

Graefe, A. R., Vaske, J. J., & Kuss, F. R. (1984). Social carrying capacity: An integration and synthesis of twenty years of research. *Leisure Sciences*, *6*(4), 395–431.

Högberg, J., Wästlund, E., Aas, T. H., Hjemdahl, K., & Nordgård, D. (2020). Herding the hordes: Using location-based services and mobile messaging to affect visitor behavior. *Journal of Hospitality & Tourism Research*, *44*(5), 870–878.

Jacobsen, J. K. S., Iversen, N. M., & Hem, L. E. (2019). Hotspot crowding and over-tourism: Antecedents of destination attractiveness. *Annals of Tourism Research*, *76*, 53–66.

Jin, Q., Hu, H., & Kavan, P. (2016). Factors influencing perceived crowding of tourists and sustainable tourism destination management. *Sustainability*, *8*(10), 976.

Kim, D., Lee, C. K., & Sirgy, M. J. (2016). Examining the differential impact of human crowding versus spatial crowding on visitor satisfaction at a festival. *Journal of Travel & Tourism Marketing*, *33*(3), 293–312.

Kim, D. Y., Wen, L., & Doh, K. (2010). Does cultural difference affect customer's response in a crowded restaurant environment? A comparison of American versus Chinese customers. *Journal of Hospitality & Tourism Research*, *34*(1), 103–123.

Klein, R. A. (2011). Responsible cruise tourism: Issues of cruise tourism and sustainability. *Journal of Hospitality and Tourism Management*. *18*(1), 107–116.

Kwon, K. N., & Kim, J. (2020). Understanding electronic word-of-mouth (eWOM) in social media: A multidimensional scale development. *Information & Management*, *57*(2), 103168.

Li, L., Zhang, J., Nian, S., & Zhang, H. (2017). Tourists' perceptions of crowding, attractiveness, and satisfaction: a second-order structural model. *Asia Pacific Journal of Tourism Research*, *22*(12), 1250–1260.

Li, Z., & Hensher, D. A. (2013). Crowding in public transport: A review of objective and subjective measures. *Journal of Public Transportation*, *16*(2), 107–134.

Liang, S., Li, C., Li, H., & Cheng, H. (2021). How do you feel about crowding at destinations? An exploration based on user-generated content. *Journal of Destination Marketing & Management*, *20*, 100606.

Litvin, S. W., Goldsmith, R. E., & Pan, B. (2018). A retrospective view of electronic word-of-mouth in hospitality and tourism management. *International Journal of Contemporary Hospitality Management*, *30*(1), 313–325.

Liu, A., & Ma, E. (2019). Travel during holidays in China: Crowding's impacts on tourists' positive and negative affect and satisfactions. *Journal of Hospitality and Tourism Management*. *41*, 60–68.

Luque-Gil, A. M., Gómez-Moreno, M. L., & Peláez-Fernández, M. A. (2018). Starting to enjoy nature in Mediterranean mountains: Crowding perception and satisfaction. *Tourism Management Perspectives*, *25*, 93–103.

Machleit, K. A., Eroglu, S. A., & Mantel, S. P. (2000). Perceived retail crowding and shopping satisfaction: What modifies this relationship? *Journal of Consumer Psychology*, *9*(1), 29–42.

Mehta, R. (2013). Understanding perceived retail crowding: A critical review and research agenda. *Journal of Retailing and Consumer Services*, *20*, 642–649.

Morosan, C. (2013). The impact of the destination's online initiatives on word of mouth. *Tourism Analysis*, *18*(4), 415–428.

Mukhopadhyay, S., Pandey, R., & Rishi, B. (2023). Electronic word of mouth (eWOM) research–A comparative bibliometric analysis and future research insight. *Journal of Hospitality and Tourism Insights*, *6*(2), 404–424.

Navarro Jurado, E., Damian, I. M., & Fernández-Morales, A. (2013). Carrying capacity model applied in coastal destinations. *Annals of Tourism Research*, *43*, 1–19.

Neuts, B., & Nijkamp, P. (2012). Tourist crowding perception and acceptability in cities. *Annals of Tourism Research*, *39*(4), 2133–2153.

Nian, S., Chen, M., Zhang, X., Li, D., & Ren, J. (2023). How outstanding universal value attractiveness and tourism crowding affect visitors' satisfaction? *Behavioral Sciences*, *13*(2), 112.

Noone, B. M., & Mattila, A. S. (2009). Consumer reaction to crowding for extended service encounters. *Managing Service Quality: An International Journal*, *19*, 31–41.

Palau-Saumell, R., Forgas-Coll, S., Sánchez-García, J., & Prats-Planagumà, L. (2014). Managing dive centres: SCUBA divers' behavioural intentions. *European Sport Management Quarterly*, *14*, 422–443.

Papadopoulou, N. M., Ribeiro, M. A., & Prayag, G. (2023). Psychological determinants of tourist satisfaction and destination loyalty: The influence of perceived overcrowding and overtourism. *Journal of Travel Research*, *62*(3), 644–662.

Papathanassis, A. (2020). The growth and development of the cruise sector: A perspective article. *Tourism Review*, *75*(1), 130–135.

Park, I. J., Kim, J., Kim, S., Lee, J. C., & Giroux, M. (2021). Impact of the COVID-19 pandemic on travelers' preference for crowded versus non-crowded options. *Tourism Management*, *87*, 104398.

Petr, C. (2009). Fame is not always a positive asset for heritage equity! Some clues from buying intentions of national tourists. *Journal of Travel & Tourism Marketing*, *26*(1), 1–18.

Pikkemaat, B., Bichler, B. F., & Peters, M. (2020). Exploring the crowding-satisfaction relationship of skiers: the role of social behavior and experiences. *Journal of Travel & Tourism Marketing*, *37*(8–9), 902–916.

Pons, F., Laroche, M., & Mourali, M. (2006). Consumer reactions to crowded retail settings: Cross-cultural differences between North America and the Middle East. *Psychology & Marketing*, *23*(7), 555–572.

Popp, M. (2012). Positive and negative urban tourist crowding: Florence, Italy. *Tourism Geographies*, *14*, 50–72.

Ruiz, C., Delgado, N., García-Bello, M. Á., & Hernández-Fernaud, E. (2021). Exploring crowding in tourist settings: The importance of physical characteristics in visitor satisfaction. *Journal of Destination Marketing & Management*, *20*, 100619.

Sanz-Blas, S., Buzova, D., & Schlesinger, W. (2019). The sustainability of cruise tourism onshore: The impact of crowding on visitors. *Sustainability*, *11*(6), 1510.

Sanz-Blas, S., & Carvajal-Trujillo, E. (2014). Cruise passengers' experiences in a Mediterranean port of call. The case study of Valencia. *Ocean & Coastal Management*, *102*, 307–316.

Shi, B., Zhao, J., & Chen, P.-J. (2017). Exploring urban tourism crowding in Shanghai via crowdsourcing geospatial data. *Current Issues in Tourism*, *20*(11), 1186–1209.

Shoval, N., Kahani, A., De Cantis, S., & Ferrante, M. (2020). Impact of incentives on tourist activity in space-time. *Annals of Tourism Research*, *80*, 102846.

Simón, F. J. G., Narangajavana, Y., & Marqués, D. P. (2004). Carrying capacity in the tourism industry: a case study of Hengistbury Head. *Tourism Management*, *25*(2), 275–283.

Su, X., Spierings, B., & Hooimeijer, P. (2022). Different urban settings affect multi-dimensional tourist-resident interactions. *Tourism Geographies*, *24*(4–5), 815–836.

Symons, A. (2023, May 5). Portofino has introduced no-waiting ones to stop tourists posing for selfies. *Euronews*. https://www.euronews.com/travel/2023/05/05/portofino-has-introduced-no-waiting-zones-to-stop-tourists-posing-for-selfies

Szuster, B. W., & Peng, M. (2021). Longitudinal perspectives on crowding and management at a beach park in Hawai'i. *Ocean & Coastal Management*, *211*, 105763.

Tokarchuk, O., Barr, J. C., & Cozzio, C. (2022). How much is too much? Estimating tourism carrying capacity in urban context using sentiment analysis. *Tourism Management*, *91*, 104522.

Vaske, J. J., & Donnelly, M. P. (2002). Generalizing the encounter-norm-crowding relationship. *Leisure Sciences*, *24*, 255–269.

Yin, J., Cheng, Y., Bi, Y., & Ni, Y. (2020). Tourists perceived crowding and destination attractiveness: The moderating effects of perceived risk and experience quality. *Journal of Destination Marketing & Management*, *18*, 100489.

Zanibellato, F., Rosin, U., & Casarin, F. (2018). How the attributes of a museum experience influence electronic word-of-mouth valence: An analysis of online museum reviews. *International Journal of Arts Management*, *21*(1), 76–90.

Zehrer, A., & Raich, F. (2016). The impact of perceived crowding on customer satisfaction. *Journal of Hospitality and Tourism Management*, *29*, 88–98.

Zhang, L., & Chung, S. (2015). Assessing the social carrying capacity of diving sites in Mabul Island. *Environmental Management*, *56*, 1467–1477.

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