Visitors’ experience in a coastal heritage context: A segmentation analysis and its influence on in situ destination image and loyalty

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Abstract
Understanding visitors’ actual behaviour is key for tourist destinations to define strategies for different subgroups of experience-based visitors. The few studies that have analysed the influence of the intensity of visitors’ on-site experience on the formation of destination image also considered intentions and did not analyse its influence on loyalty. Also, existing research on previous experience with the destination or experiential familiarity has considered repeat visitors as a homogeneous group and failed to identify different patterns of experience. This study aims to overcome these gaps by grouping visitors based on their degree of experience (i.e., previous and on-site experience related to coastal and maritime cultural heritage activities) and ascertaining the extent to which a) the impressions of the destination and b) degree of loyalty of the visitors in subgroups differ. The sample included 720 questionnaires from domestic and international visitors in Aveiro, Portugal, leading to three groups with varying degrees of past and on-site experience: “destination enthusiasts”, “destination and heritage enthusiasts” and “destination and heritage discoverers”, thus supporting the intersection of these variables as valid for market segmentation. All groups presented dissimilar cognitive images and different levels of loyalty, but no differences were found in the affective image.

Keywords: visitor degree of experience; coastal and maritime cultural heritage (CMCH); destination image; loyalty; behavioural segmentation; Portugal

1. Introduction

Nowadays many tourist destinations face challenges in offering different experiences and promoting strategies that will retain loyal tourists and capture new visitors. Also, it is consensual that destination loyalty is affected directly and indirectly by tourism experiences (Loureiro, 2014; Prayag et al., 2013) and by destination image (Chi & Qu, 2008; Prayag & Ryan, 2012). Thus, many opportunities can arise from the synergy between tourism and cultural heritage, which can offer a set of on-site heritage experiences that influence visitors’ image perception and their evaluation of the quality of a destination (de Freitas et al., 2021; Atasoy & Eren, 2023). It also has a direct effect on their satisfaction and loyalty (Hosany & Witham, 2010). Heritage destination loyalty is gaining importance mainly due to tourist inflows, and new approaches to dealing with competition (Kumar, 2016).

The interrelation of destination experience (i.e., previous visits and on-site experiences), image and loyalty are relevant according to literature. Some authors identified the need to study such interplay (e.g., Smith et al., 2015; Iordanova & Stylidis, 2019; Stylidis et al., 2020a).

Many studies have successfully researched visitor experience (i.e., past, and on-site). However, they do not segment visitors based on actual behaviour alone. Such segmentation can have strong implications for tourism theory and practice. Some authors considered visitors’ intentions (Iordanova & Stylidis, 2019), but an intention is not a guarantee of action. Other researchers considered repeat visitors as a homogenous group, and did not categorize them (e.g., Chi, 2012, Lau & McKercher, 2004; Lim et al., 2016).

Additionally, other previous studies did not consider the degree of experience (past and on-site), with a lack of studies that evaluate how visitors’ degree of experience may affect their image perception and loyalty.

Thus, tourism segmentation studies have neglected the experiential part of tourism. According to the literature, on-site experiences predominantly affect tourists’ perceptions of landscapes (Pafi et al., 2021) and destination image (Iordanova & Stylidis, 2019) and consequently impacts loyalty (Kim et al., 2019). However, these studies tend to adopt segmentation practices by which people are grouped based on sociodemographics (e.g. nationality, occupation) or psychographic variables (Stylidis et al., 2018). Psychographic segmentation is a practice that divides the groups based on their psychological traits, such as personality, attitudes, or perceptions (Armstrong et al., 2009), motivations (Fennell, 1996), and cultural perspectives (Edwards & Griffin, 2013).

As far as we can ascertain, there has been no study carried out in which there is a segmentation of visitors according to the degree of experience (including previous destination experience and on-site heritage experience). Also, no study went further to analyse the differences in these sub-groups regarding in situ image perceptions and expected loyalty. To overcome this gap, this study aims to answer the following question: Based on their previous experience with the destination (i.e., experiential familiarity) and on-site experience with the coastal and maritime cultural heritage (CMCH), do visitor sub-groups have different image perceptions and levels of loyalty?

The work done to date has found a positive relationship between the degree of familiarity and image (Baloglu, 2001; Ceylan et al., 2021; Stylidis et al., 2020a) and between the degree of on-site experience and image (Iordanova & Stylidis, 2019). When visitors are exposed to increasing stimulus at a destination (e.g. on-site experiences), it motivates them to have a more favourable evaluation of destination image, since they are now more aware of the reality (Zajonc, 1968). Consequently, it leads to improved
recognition and a greater sense of familiarity, and thus induces a more favourable reaction (Montoya et al., 2017).

Identifying visitor subgroups will contribute to understand the effect of distinct levels of experience and the way it influences image perception and loyalty. It can be helpful to plan and alleviate tourism flows in peak season, because identifying visitors who have a personal connection to the locale and its heritage experiences, and who are positively influenced by the destination image can contribute to promoting tourism flows throughout the year. The segmentation approach allows destinations to have strategic information that contributes to achieving an economy of scale. This is particularly relevant for destination competitiveness and for developing custom-made promotional initiatives directed at regular and potential visitors, based on their preferences and characteristics (Domènech et al., 2023).

This research considers that perception of destination image (DI) and degree of experience can vary significantly. So, visitors may have different perceptions of image and loyalty according to segments of visitors (which depend on their degree of experience). Bearing this in mind, the objective of this study is to: (1) ascertain the pertinence of the following intersection: the degree of past experience with on-site experience; this is used as grounds for segmenting enabling distinct groups of visitors to be identified; (2) examine whether visitors with an experience-based outlook have distinct cognitive and affective images of the destination; and (3) to evaluate if there are varying levels of loyalty to the destination among segments.

The research area, Aveiro (Portugal), is a coastal city whose image is built on its urban canals and coastal and maritime cultural heritage (CMCH). The population sample comprises city visitors (i.e., domestic, and international, first-time, and repeat visitors). Like many other destinations, the city has built its destination branding strategy on and around major attractions (Weidenfeld et al., 2016), as they are considered crucial in satisfying visitors (Garrod et al., 2007; Iordanova & Stylidis, 2019). The city has faced an increased tourist demand in the past years due to its proximity to Porto, the northern Portuguese capital, and to several CMCH experiences (e.g., boat tours in traditional moliceiro boats). Thus, Aveiro is suitable to explore the presence of tourism segments with different degrees of previous destination experience and CMCH on-site experience.

Thus, the objective of this study is added to the literature on tourism by demonstrating that there are distinct visitor segments who have different degrees of experience with the destination and with on-site heritage experiences. These visitor segments present both dissimilar destination image perceptions and future loyalty intentions. Thus, this study shows the relationship between the degree of experience and the destination in the circumstances of coastal regions’ sustainability.

2. Literature review

2.1. Segmentation in tourism

Segmentation is a crucial tool for a tourism destination since it allows the definition of market segmentation strategies (Dolnicar, 2008) and the design of tourism policies. It reveals visitors' patterns and provides information regarding niche markets (Pafi et al., 2020). It is a process that allows a heterogenous group to be split into homogenous groups of consumers that share common preferences, having highly similar profiles (Fernández-Hernández et al., 2016). It allows an understanding of specific types of visitors (Dolnicar, 2004) offering a competitive advantage in the tourism market (Dolnicar, 2008). Markets can be segmented in several manners using sociodemographic, geographic, behavioural, and psychographic features (Dolnicar, 2005, Kotler & Keller, 2009).
Studies using actual behaviour regarding the degree of experience as a segmentation approach are still scarce. However, there is an increasing interest in behaviour-based market segmentation among decision makers (Brochado et al., 2022). Most studies segment tourists based on sociodemographic or on psychographic variables related to motivation or attitude (Stylidis et al., 2018).

The next sections further emphasise how the degree of experience can be central to distinguishing segments within the tourist market. Visitors' experiences cannot be given "a priori" (Bruner, 2005, p. 11), since they are the result of several interactions with locals, places and activities (Pafi et al., 2021). Thereby, the paper is in line with the call of Ferreira da Silva et al. (2022) to explore the relevance of heritage experiences on DI. It is a key issue for regional differentiation, especially regarding coastal areas. Finally, it analyses segments or cluster differences regarding cognitive and affective image, and destination loyalty.

2.2. On-site experience and destination image

According to Pine and Gilmore (1998), economies evolved from product-based and service-based to experience-based. To date, much of the research regarding tourist experience and destination image has focused on experience aspects: entertainment, educational, escapism, and aesthetics (e.g., Hosany & Witham, 2010; Loureiro, 2014). More recently, some authors focused on the relevance of memorable experiences (e.g., Kim et al., 2018, Rasoolimasnesh et al. 2021) and meaningful experiences (Câmara et al., 2023). Few studies have considered the intensity of on-site experience (e.g., Iordanova & Stylidis, 2019) to analyse its influence on image formation. As far as we can ascertain, there has been no study carried out that has considered the influence of the intensity of on-site experience on loyalty. According to Smith (2015), there is a lack of studies focusing on the effects of on-site experience and engagement on in situ destination image, a gap highlighted by Martín-Santana (2017) and that Iordanova and Stylidis (2019) tried to overcome.

Destination image has many definitions, but none are universally used (Iordanova, 2015). One of the most used is “the sum of beliefs, ideas and impressions a person has of a destination” (Crompton, 1979, p. 18). Despite its complexity and multiplicity, most researchers agree that the construct includes several dimensions (Gallarza et al., 2002; Jani & Nguni, 2016; Tasci et al., 2007). This multidimensional and multi-faceted construct is a result of DI dimensions (i.e. cognitive, affective and conative) and characteristics.

The cognitive dimension is related to the knowledge visitors have of the attributes of the destination. It can be acquired with or without previous visits (del Bosque & San Martín, 2008). The affective dimension is connected to the feelings towards its features. Finally, the conative dimension is considered the behavioural response (Beerli & Martin, 2004; Pike & Ryan, 2004). Several authors relate it to loyalty (e.g., Bosque & Martin, 2008; Chi & Qu, 2008; Kim et al., 2018; Oppermann, 2000; Petrick, 2004). Also, the conative dimension is usually measured by the intention to recommend the destination to others and to revisit it in the future (Agapito et al., 2013; Stylidis et al., 2020a).

Image is a dynamic construct that evolves over time and space (Stylidis et al., 2020a). It is influenced by multiple factors, such as a) cultural background (Carvalho, 2022), b) tourist supply and demand (Marine-Roig & Ferrer-Rosell, 2018), c) destination natural and cultural resources and d) on-site experiences (Pafi et al., 2020). DI can have three stages (a priori, in- situ and posteriori) according to different phases of a tourist's experience (Iordanova, 2017). Visitors' on-site perceptions have a strong impact on the formation of in situ and a posteriori images (Iordanova & Stylidis, 2019) and consequently, it can influence their behavioural intentions (Kim et al., 2019).
Experience influences the creation of memories of a destination. It is relevant for the tourism industry since it has a strong impact on tourists’ intentions (Tsai, 2016). This is especially important for coastal areas, particularly regarding coastal and maritime cultural heritage (CMCH). Despite being at risk of disappearing, CMCH still contributes to the identity of a coastal region. It is also an important asset in differentiating tourist destinations, considering that tourists tend to select coastal areas that include heritage assets (Pafi et al., 2021) with on-site activities (Carvache-Franco et al., 2021; Lacher et al., 2013). Therefore, CMCH as a tourism product may significantly impact tourist experience and loyalty (Ferreira da Silva et al., 2022).

Both tourism experience and DI directly and indirectly affect destination loyalty (Stylidis et al., 2020a). Positive experiences lead to tourist satisfaction, defining the level of interest to revisit destinations and promoting positive word of mouth (WOM) (Alazaizeh et al., 2022; Rasoolimanesh et al., 2021). Some authors also mention that the level of involvement and the intensity of the visit, i.e., places and duration (Beerli & Martín, 2004) and the number of activities (Iordanova & Stylidis, 2019) can influence DI. For example, a longer stay could lead to more activities and different images (Fakeye & Crompton, 1991). In addition, other studies point to the importance of memorable experiences (Rasoolimanesh et al., 2021; Stoleriu et al., 2019).

Several authors state that further studies should focus on tourists’ in situ image by assessing the on-site experience and level of intensity (Iordanova & Stylidis, 2019; Smith et al., 2015; Vogt & Andereck, 2003). Ashworth (1989) highlights the direct and positive relationship between visiting various attractions and events with having greater knowledge about the destination (i.e. cognitive image).

### 2.3. Previous experience and destination image

Familiarity is a key determinant of DI (Baloglu, 2001; Beerli & Martín, 2004; Casali et al., 2021) and influences behavioural intentions (Chi et al., 2020; Stylidis et al., 2020). It could be affected by past visits and/or exposure to information regarding the destination (Baloglu & McCleary, 1999; Tan & Wu, 2016). Previous visits are considered by several authors as an important indicator of familiarity with the destination. They are also crucial for assessing destination image and loyalty (Chen & Lin, 2012; Sun et al., 2013; Tan & Wu, 2016).

Visitors establish emotional relationships with the tourist destination they visit, creating a sense of belonging towards the place (Tsai, 2012), which contributes to building stronger ties and consequently more positive perceptions of a destination (Tan & Wu, 2016; Stylidis et al., 2017) and promoting long-term relationships (Rasoolimanesh, 2021). Therefore, experiential familiarity is of key importance in explaining different aspects of visitors’ perceptions and behaviour, which helps researchers to comprehend the process of image formation (Chen & Lin, 2012; Tan & Wu, 2016).

The relationship between visitors and destinations allows researchers to further understand the success of a tourist destination (Prayag et al., 2013). Several authors state that visitors’ confidence increases with the level of familiarity with the destination (Floyd et al., 2004; Kim et al., 2019; Sharifpour et al., 2014; Stylidis et al., 2020a).

Despite the relevance of familiarity, different definitions of the concept result in some inconsistencies regarding the construct being unidimensional or multidimensional (Tan et al., 2016). A vast majority of studies consider it as a unidimensional construct measured by past visits (i.e. experiential familiarity) (Ceylan et al., 2021; Smith et al., 2015, Vogt & Andereck, 2003). Some argue that experience not only could improve DI (Chen & Lin; 2012; De Nisco et al., 2015; Prentice, 2004) but also motivate visitors to
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return and promote long-term relationships (Rasoolimanesh et al., 2021; Tsai, 2012). This is relevant due to the impact of past experience on cognitive image (Pike & Ryan, 2004). It also demonstrates the importance of personal knowledge for repeat visitors (De Nisco et al., 2015; Rasoolimanesh et al., 2021; Sharifpour et al., 2014; Tsai, 2012). However, others consider that familiarity is a multidimensional construct that should be conceptualized by integrating two components: experiential and informational familiarity. They pointed out that before travelling, visitors are exposed to several types of information (e.g. advertisements, brochures, websites) that could be considered indirect familiarity (Baloglu, 2001; Kim et al., 2018).

Regarding the type of visitors, “first-time” and “repeat” visitors have different image perceptions. While the first values attractiveness, the latter prioritises the quality of a destination. Both are relevant for the income stability of a destination and could positively affect new visitors’ decisions through WOM (Fallon & Schofield, 2004). Other authors who support this idea consider that this difference exists because repeat visitors have a primary DI, perceived due to live information, whereas first-time visitors carry secondary images from marketing actions or WOM, which do not have the same power as experiential information (Li et al., 2021; Prats et al., 2016; Schofield et al., 2020; Tan & Wu, 2016). Therefore, some destinations develop marketing strategies focused on repeat visitors, which costs less than attracting first-time visitors (Tsai, 2016).

Several studies confirmed different perceptions of DI in first-time and repeat visitors (e.g. Li et al., 2021). Chi & Qu (2008) report that visitors’ overall satisfaction is proportionally related to the increase of visit frequency (Chi & Qu, 2008). Familiarity is significant for tourist destinations, considering that the experience within a destination is an important aspect that can also affect DI. Thus, familiarity can be a variable to consider when defining a marketing strategy, as it allows groups to be segmented and targeted. Some studies suggested that if an image is created within experiential familiarity, it will probably persist and resist other sources of information, such as marketing campaigns (Ozdemir et al., 2012; Tsai, 2012).

2.4. Experience and destination loyalty

Loyalty is defined as a “deeply held commitment to rebuy or repatronise a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour” (Olivier, 1999, p.34). When applied to the tourism field, a destination itself could be considered a product (Yoon & Uysal, 2005); visitors’ interactions with a destination can also be seen as a tourism product (Jiang & Yan, 2022).

Destination loyalty is a relevant indicator of the success of a tourist destination due to its implications for retaining previous visitors and attracting new ones. Due to its relevance for destinations, it is one of the most studied topics in tourism field (Stylos & Bellou, 2019). Loyal tourists are considered an attractive segment for destinations as they usually stay longer, get more involved in activities and disseminate positive recommendations (Correia et al., 2015; Lau & McKercher, 2004; Petrick, 2004). Also, the costs involved in promotion campaigns are lower for repeat visitors since they already know the destination (Lau & McKercher, 2004).

Following Stylidis et al. (2020b) destination loyalty was initially conceived by adopting two approaches: a) perceiving a destination as “recommendable” (Chen & Gursoy, 2001) and b) the degree of intention to revisit a destination (Oppermann, 2000). These conceptualizations emphasise existing a lack of consistency on literature regarding destination loyalty. Also, several researchers connect loyalty to
conative image (Agapito et al., 2013), since they consider it the image action dimension (e.g. Kim, 2018; Li et al., 2010, Woosnam et al., 2020).

Loyalty tends to be measured from different perspectives. According to Zhang (2014), these could be behavioural or attitudinal perspectives, or even a combination of both. The latter is called “composite loyalty”, which could be a more accurate form of measuring tourists’ loyalty (Chen & Gurson, 2001). Behavioural loyalty is related to previous/actual visits to a destination, and it is also termed as “past loyalty” (Tasci et al., 2022). Attitudinal loyalty refers to the intention to revisit or to recommend the destination (Zhang et al., 2014), also named “future loyalty” (Yoon & Uysal 2005).

In this study, a concept of future destination loyalty is employed which considers two variables: intention to revisit in the next two years and intention to recommend. “Previous visits” was used as one of the segment variables to identify different experienced-based subgroups. Also, future loyalty is expected to be influenced by repeated behaviour (expressed in terms of how many times tourists had visited the destination) (Stylidis et al., 2020).

Despite the numerous research studies on destination loyalty, for this study it was necessary to analyse how visitors’ loyalty to a destination may vary in segments or clusters based on their degree of experience with the destination, taking into account both past and on-site experience.

3. Research methodology

3.1. Research area
The empirical work was undertaken in the city of Aveiro, a coastal municipality with a population of 80,978 (Instituto Nacional de Estatística [INE], 2021a), located in the Centre region of Portugal. It is the district capital of Ria de Aveiro region, and one of its 11 municipalities (five of them being coastal). It was selected as it is a coastal area with a set of coastal and maritime cultural heritage and a wide range of activities and experiences, and is thus the appropriate context for exploring visitors’ behaviour.

Ria de Aveiro is a coastal lagoon, with great diversity in habitats and bird species, classified as a site of community importance (SCI) and special protection area (SPA), part of the Natura 2000 network. The coastal lagoon and the proximity to the sea have promoted a long tradition in several related activities such as artisanal salt production, seaweed gathering, shipbuilding and fishing, with a strong influence on the identity of the region and its cultural heritage. Although some of these activities have already disappeared (e.g., seaweed gathering with traditional boats) the tourism experiences are closely related to some of the CMCH of the region: tours in traditional boats, visits to the traditional salt pans, the lighthouse, the traditional colourful houses of Costa Nova, or the seafood gastronomy.

Aveiro is an attractive tourism destination and its proximity to the city of Porto has contributed to an increase in tourism over the last seven years (INE, 2019). In 2019, it had 215,338 overnight visitors, an increase of 7% compared to 2018, which is in line with the national average rate (INE, 2019). Tourism growth has brought pressures, mainly in the urban canals, and challenges to the municipality, especially when managing tourism flows in the city centre and finding a balanced tourist–resident relation in peak season. In 2021, even during the pandemic, the city had a lower decrease in visits (i.e. -36%) when compared to the national average (i.e., -50%), and to numbers of visits from 2019 (INE, 2021b).

3.2. Sample and data collection
The data collection comprises questionnaire surveys with Aveiro visitors, collected from August to October 2019, using a heterogeneous purposive sampling (Jennings, 2010). This method provides
heterogeneity and variance among Aveiro visitors. A total of 734 questionnaires were answered, of which 720 were useable for this study, with 377 domestic and 343 international responders. Visitors were approached in Aveiro city centre, near the canals, where tourist activities occur. The representativeness of the sample was increased by applying the questionnaire either during weekdays or weekends, at different times of day. Data protection was assured since the survey is anonymous and the confidentiality of the responses was assured. The questionnaire was first designed in Portuguese and then translated into Spanish, English, and French, as these are the main languages spoken by visitors to Aveiro.

3.3. Questionnaire design
The questionnaire was based on an in-depth literature review regarding CMCH and DI, and on an instrument applied by Stylidis et al. (2017) in Eilat, Israel. It was organized in four sections. The first section included questions related to travel behaviour, such as the purpose of the visit and number of previous visits to Aveiro and aimed to collect information regarding experiential familiarity. It was measured by asking respondents to indicate the number of past visits to Aveiro, from “none” to “five or more”. The second section comprised image, and aimed to capture visitors’ cognitive, affective, and overall image of Aveiro, as well as their level of loyalty to this destination.

A multi-item measure was used to indicate affective and cognitive image, as well as loyalty, to ensure the complexity and multifaceted characteristics of these concepts (Beerli & Martin, 2004; Stylidis et al., 2017). Visitors were asked to rate 14 cognitive attributes, based on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree), with 3 being the midpoint, and four affective attributes (i.e., distressing–relaxing, unpleasant–pleasant, boring–exciting, and sleepy–lively) (Baloglu & McCleary, 1999; Beerli & Martin, 2004; Pike & Ryan, 2004).

The overall image was measured as a single item, from 1 (very unfavourable) to 5 (very favourable). Two items were used for loyalty: planned intention to revisit (“How likely are you to visit Aveiro in the next two years?”) and intention to recommend (“How likely are you to recommend Aveiro to your friends and relatives?”), based on previous studies (Agapito et al., 2013; Stylidis et al., 2017). The third section included visits to CMCH and their intensity, following Iordanova and Stylidis (2019). Visitors were asked whether they had experienced or intended to experience each CMCH activity, and how many times they had experienced it.

To measure intensity, respondents were asked to indicate the number of experiences with each CMCH activity (i.e., moliceiro boat tours; salt pans; Costa Nova traditional houses; Barra lighthouse and seafood gastronomy) from “none” to “more than three”. The last section included the sociodemographic questions, such as gender, nationality, educational level, income, etc.

Before collecting the data, the questionnaire was validated by five academics with experience in survey design, which allowed a check for incongruences, structure, and simplification of questions. Later, a pilot test was carried out with 30 participants with a sample balanced between domestic and international, and visitors’ nationalities. The pilot test also allowed assessment of proper comprehension in the four languages of the questionnaire. Only minor issues (i.e., words) were corrected. The “transportation” cognitive attribute was removed, since the city is walkable, and transport was not used.

The pilot test served to confirm that the research instrument was adequate to represent the image of Aveiro as a tourist destination, thus showing the soundness of the various measurement scales and their items (i.e., cognitive image, affective image, destination loyalty).
4. Analysis and Results

Undertaking an analysis of the segments was considered the appropriate means to accomplish the study aims, since diverse tourist strata (or segments) can be identified according to their previous experience with the destination and on-site heritage experiences. It is also suitable to consider before assessing if the segments have different image perceptions or future loyalty intentions. The visitors’ typologies were created through the intersection of previous visits to the destination and on-site experiences. Other methods could have been useful to test the relationships between the constructs, such as regression analysis or structural equation modelling, but they are not as appropriate for the objectives of this study (Stylidis, 2020b). This method reveals visitors’ perspectives that are of key relevance to define marketing strategies and to plan integrated heritage experiences.

Prior to the analyses, a preliminary data analysis was carried out to detect possible outliers that needed to be excluded from the analyses, and to check for multicollinearity among the clustering variables, as indicated by Hair et al. (2018). Afterwards, and following Dolnicar (2008), the analyses proceeded in two stages to segment tourists according to their level of experiential familiarity with Aveiro, i.e., number of visits to Aveiro in the past, and on-site experience intensity regarding each CMCH activity.

The sample included respondents over 18 years old and the median in the age class of 35–54. Most came from European countries, namely Spain, France, and Germany, but also from Brazil, which is in line with official statistics for tourism in Ria de Aveiro region (Deloitte, 2019). Respondents came from 31 countries and 74.5% are European. The remain came from the rest of the world, with Brazil representing 15.4%. Around 50% are repeat visitors: 1% had visited once in the past, 24.4% two to three times and 24.7% four times or more. Over 75% experienced or intended to experience moliceiro boats, Costa Nova traditional houses, the salt pans and seafood gastronomy. Around 70% had experienced or intended to experience the Barra lighthouse.

First, a hierarchical cluster analysis was conducted, using Ward’s method and the squared Euclidean distance, to identify a set of solutions. Clustering solutions were identified by examining the agglomeration coefficients and computing the percentage changes in heterogeneity between stages (Hair et al., 2018) and considering the dendrogram. After examining the agglomeration coefficients, the largest increases in heterogeneity were observed between the third and second stage and between the fourth and third stage, suggesting three- and four-cluster solutions; the three-cluster option offered the most meaningful results.

The second procedure adopted was a non-hierarchical clustering, the K-mean algorithm, used to further examine the clustering solutions found in the first step, which indicated three and four clusters. From the results, it can be seen that the most meaningful version is that formed by three cluster (Table 1).

The first cluster included 32.4% of the participants (n = 233), who had visited Aveiro three to four times in the past and had experienced all CMCH activities once, except for the Barra lighthouse; it was thus named “Destination enthusiasts”. The second cluster accounted for 17.5% of the sample (n = 126) and included participants who visited Aveiro five times or more in the past and mainly had two to three CMCH experiences, one with the traditional boats, and more than three with Costa Nova houses; it was then designated “Destination and heritage enthusiasts”. The third cluster comprised half of the sample (n = 361, 50.1%) and was named “Destination and heritage discoverers”, since it included mainly tourists who were first-time visitors in Aveiro and had not yet experienced CMCH activities.
Then, a discriminant analysis was carried out to examine the accuracy of the previously identified solution, which was then validated by assessing cluster stability and criterion validity. The latter was assessed by using a MANOVA procedure. It was used to analyse differences between clusters on a set of variables, which were not included in the cluster solution (overall image, intention to recommend and intention to revisit), but were theoretically connected to the clustering variables. The two extracted canonical discriminant functions were statistically significant (p < 0.001), both showing strong canonical correlations, indicating a significant relationship between the functions and the dependent variable (Prayag et al., 2013). Additionally, the hit ratio is very high, showing that the discriminant functions correctly placed 97.8% (n = 704 out of the 720) of respondents in the expected cluster (Hair et al., 2018).

### Table 2. Discriminant analysis of destination experience clusters.

<table>
<thead>
<tr>
<th>Discriminant Function Results</th>
<th>Discriminant Functions</th>
<th>Eigenvalue</th>
<th>Canonical Correlation</th>
<th>Wilk’s Lambda</th>
<th>Chi-square</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>14.76</td>
<td>0.97</td>
<td>0.02</td>
<td>2713.32</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1.83</td>
<td>0.80</td>
<td>0.35</td>
<td>742.94</td>
<td>&lt; 0.001</td>
</tr>
</tbody>
</table>

**Classification results**

<table>
<thead>
<tr>
<th>Actual group</th>
<th>No of cases</th>
<th>Predicted group membership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1</td>
<td>233</td>
<td>1 (97.0%), 2 (0.9%), 3 (2.1%)</td>
</tr>
<tr>
<td>Cluster 2</td>
<td>126</td>
<td>9 (7.1%), 117 (92.9%), 0 (0.0%)</td>
</tr>
<tr>
<td>Cluster 3</td>
<td>361</td>
<td>0 (0.0%), 0 (0.0%), 361 (100.0%)</td>
</tr>
</tbody>
</table>

Hit ratio: 97.8%

To validate the three-cluster solution, cluster stability and criterion validity were assessed (Hair et al., 2018). To analyse cluster stability, the observations were sorted in a different order, and the K-means cluster analysis was re-run. Cluster solutions from both analyses were then compared. Findings showed that most observations were grouped with the same observations they had clustered in the first cluster solution (98.3% for cluster 1, 96.8% for cluster 2 and 99.2% for cluster 3), supporting cluster stability. To assess criterion validity of the three-cluster solution, its relationship with theoretically related variables was tested (Hair et al., 2018). Based on findings from previous studies, destination familiarity and destination experience are related to variables such as overall DI and loyalty, which is operationalized in intention to revisit and to recommend the destination. A MANOVA procedure was
then carried out to analyse differences between clusters regarding overall image, intention to revisit and intention to recommend, showing significant differences between clusters in the dependent variables, $\lambda = .70$, $F (6, 1430) = 46.22$, $p < .001$, $\eta^2 = .16$, thus confirming previous research and reinforcing the criterion validity of the three-cluster solution. Specifically, the three clusters showed significant differences concerning intention to recommend, $F (2, 717) = 5.87$, $p = .003$, $\eta^2 = .02$ and to revisit $F (2, 717) = 148.77$, $p < .001$, $\eta^2 = .29$. “Destination and heritage enthusiasts” (cluster 2) presented significantly more intention to recommend (M = 4.75) and to revisit (M = 4.74) than “Destination and heritage discoverers” (cluster 3, M = 4.53 and M = 2.91, respectively). “Destination enthusiasts” (cluster 1) evidenced a significantly lower intention to revisit (M = 4.36) than “Destination and heritage enthusiasts” (M = 4.74), but higher than “Destination and heritage discoverers” (M = 2.91). The three clusters were then profiled to analyse differences between them regarding sociodemographic variables (Table 3).

**Table 3. Profile of the visitors**

<table>
<thead>
<tr>
<th>Clusters</th>
<th>1 “Destination enthusiasts”</th>
<th>2 “Destination and heritage enthusiasts”</th>
<th>3 “Destination and heritage discoverers”</th>
<th>Chi-square</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>67.0%</td>
<td>54.0%</td>
<td>60.3%</td>
<td>6.15</td>
<td>0.047</td>
</tr>
<tr>
<td>Male</td>
<td>33.0%</td>
<td>46.0%</td>
<td>39.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18–34</td>
<td>40.3%</td>
<td>31.7%</td>
<td>40.0%</td>
<td>6.73</td>
<td>0.151</td>
</tr>
<tr>
<td>35–54</td>
<td>34.8%</td>
<td>34.1%</td>
<td>36.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55+</td>
<td>24.9%</td>
<td>34.1%</td>
<td>23.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single, divorced, widowed</td>
<td>50.6%</td>
<td>57.1%</td>
<td>45.3%</td>
<td>5.59</td>
<td>0.61</td>
</tr>
<tr>
<td>Married, common-law marriage</td>
<td>49.4%</td>
<td>42.9%</td>
<td>54.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visitor origin</td>
<td></td>
<td></td>
<td></td>
<td>223.04</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Domestic</td>
<td>81.1%</td>
<td>78.6%</td>
<td>24.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International</td>
<td>18.9%</td>
<td>21.4%</td>
<td>75.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country of residence</td>
<td></td>
<td></td>
<td></td>
<td>4.69</td>
<td>0.105</td>
</tr>
<tr>
<td>European</td>
<td>82.2%</td>
<td>59.3%</td>
<td>74.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-European</td>
<td>17.8%</td>
<td>40.7%</td>
<td>25.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VFR (visiting friends/relatives)</td>
<td>16.7%</td>
<td>27.0%</td>
<td>12.2%</td>
<td>15.08</td>
<td>0.001</td>
</tr>
<tr>
<td>Planning to visit other cities</td>
<td>54.1%</td>
<td>61.1%</td>
<td>72.9%</td>
<td>22.74</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Stay in the city</td>
<td></td>
<td></td>
<td></td>
<td>33.37</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>1 day/Aveiro</td>
<td>63.5%</td>
<td>54.8%</td>
<td>65.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-3 days/Aveiro</td>
<td>27.5%</td>
<td>15.9%</td>
<td>23.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 3 days</td>
<td>9.0%</td>
<td>29.4%</td>
<td>11.6%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Clusters were found to differ significantly regarding tourists’ sociodemographic attributes such as gender, nationality, and visitor origin. “Destination enthusiasts” (cluster 1) includes significantly more women (67.0%) and more European tourists (82.2%) than “Destination and heritage enthusiasts” (cluster 2, 54.0% and 59.3%, respectively). Regarding visitor origin, “Destination and heritage discoverers” (cluster 3) is composed by more international tourists (75.3%) than the other two clusters. Significant differences were also found concerning other variables: visiting friends and relatives (VFR), plans to visit other cities and the number of days tourists were planning to stay in Aveiro. Thus, “Destination and heritage enthusiasts” (cluster 2) indicated “visiting family and friends” more frequently...
as a reason for their visit to Aveiro (27.0%) than “Destination and heritage discoverers” (cluster 3, 12.2%). Additionally, the latter reported intending to visit other cities more frequently (72.9%) than the other two clusters. Regarding the number of days to stay, differences were found between “Destination enthusiasts” (cluster 1) and “Destination and heritage enthusiasts” (cluster 2). Cluster 1 included more tourists who planned to stay for two to three days (27.5%) and less who intended to stay for more than three days (9.0%) than cluster 2 (15.9% and 29.4%, respectively).

4.1. Differences between clusters regarding DI
The study adopted the one-way ANOVA procedure, with a Games-Howell post-hoc test, which is considered the most suitable when clusters are of different sizes (Field, 2017). These tests were then carried out to examine differences between the three clusters regarding cognitive and affective DI, and loyalty to Aveiro.

Regarding cognitive image (Table 4), significant differences were found in tourists’ perspectives in terms of scenic beauty, interesting natural heritage, different gastronomy, appealing restaurants, wide variety of shops and clean environment. “Destination enthusiasts” (cluster 1) were found to value scenic beauty and a wide variety of shops more (M = 4.39 and M = 4.03) and the clean environment less (M = 4.06) than “Destination and heritage discoverers” (cluster 3, M = 4.27, M = 3.83 and M = 4.23, respectively). “Destination enthusiasts” (cluster 1) and “Destination and heritage enthusiasts” (cluster 2) value interesting natural heritage more (M = 4.22 and M = 4.33) than “Destination and heritage discoverers” (cluster 3, M = 4.05). Concerning different gastronomy and appealing restaurants, these attributes were more valued by “Destination and heritage enthusiasts” (cluster 2, M = 3.93 and M = 4.17) than by “Destination enthusiasts” (cluster 1, M = 3.61 and M = 3.89, respectively) and “Destination and heritage discoverers” (cluster 3, M = 3.59 and M = 3.78).

Table 4. Differences between clusters regarding cognitive DI

<table>
<thead>
<tr>
<th>Items</th>
<th>Clusters</th>
<th>F Ratio</th>
<th>sig</th>
<th>Post Hoc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pleasant weather</td>
<td>3.99 3.94 4.11</td>
<td>3.15</td>
<td>0.043</td>
<td>n. s</td>
</tr>
<tr>
<td>Scenic beauty</td>
<td>4.39 4.37 4.27</td>
<td>3.43</td>
<td>0.033</td>
<td>1 vs. 3</td>
</tr>
<tr>
<td>Interesting natural heritage</td>
<td>4.22 4.33 4.05</td>
<td>10.46</td>
<td>&lt; 0.001</td>
<td>1, 2 vs. 3</td>
</tr>
<tr>
<td>Interesting cultural heritage</td>
<td>4.06 4.10 4.02</td>
<td>0.67</td>
<td>0.514</td>
<td>---</td>
</tr>
<tr>
<td>Different gastronomy</td>
<td>3.61 3.93 3.59</td>
<td>8.89</td>
<td>&lt; 0.001</td>
<td>1, 3 vs. 2</td>
</tr>
<tr>
<td>Variety of tourist attractions</td>
<td>3.85 3.81 3.81</td>
<td>0.21</td>
<td>0.808</td>
<td>---</td>
</tr>
<tr>
<td>Quality accommodation</td>
<td>3.51 3.61 3.49</td>
<td>1.19</td>
<td>0.305</td>
<td>---</td>
</tr>
<tr>
<td>Appealing restaurants</td>
<td>3.89 4.17 3.78</td>
<td>13.28</td>
<td>&lt; 0.001</td>
<td>1, 3 vs. 2</td>
</tr>
<tr>
<td>Wide variety of shops</td>
<td>4.03 3.92 3.83</td>
<td>4.40</td>
<td>0.013</td>
<td>1 vs. 3</td>
</tr>
<tr>
<td>Ease of access</td>
<td>4.27 4.38 4.27</td>
<td>1.09</td>
<td>0.336</td>
<td>---</td>
</tr>
<tr>
<td>Good value for money</td>
<td>3.77 3.75 3.80</td>
<td>0.25</td>
<td>0.778</td>
<td>---</td>
</tr>
<tr>
<td>Personal safe and security</td>
<td>4.32 4.37 4.33</td>
<td>0.28</td>
<td>0.753</td>
<td>---</td>
</tr>
<tr>
<td>Friendly local people</td>
<td>4.25 4.49 4.27</td>
<td>2.21</td>
<td>0.110</td>
<td>---</td>
</tr>
<tr>
<td>Clean environment</td>
<td>4.06 4.19 4.23</td>
<td>4.44</td>
<td>0.012</td>
<td>1 vs. 3</td>
</tr>
</tbody>
</table>

On the other hand, no significant differences were found regarding the affective DI (Table 5).

4.2. Differences between clusters regarding loyalty to Aveiro
When analysing differences between clusters for loyalty to Aveiro (Table 6), significant differences were found concerning tourists’ intentions to recommend and to revisit Aveiro in two years. “Destination and heritage enthusiasts” (cluster 2) showed a significantly higher intention to recommend Aveiro (M = 4.75), when compared to “Destination and heritage discoverers” (cluster 3, M = 4.53). “Destination and heritage enthusiasts” (cluster 2) was the cluster that presented the greatest intention to revisit Aveiro.
(M = 4.74), followed by “Destination enthusiasts” (cluster 1, M = 4.36) and “Destination and heritage discoverers” (cluster 3, M = 2.91). All clusters presented significant differences, with the third cluster presenting a value below neutral, much lower than the other two.

### Table 5. Differences between clusters regarding affective DI

<table>
<thead>
<tr>
<th>Items</th>
<th>Clusters</th>
<th>ANOVA</th>
<th>Post Hoc</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cluster 1</td>
<td>Cluster 2</td>
<td>Cluster 3</td>
</tr>
<tr>
<td>Relaxing</td>
<td>4.35</td>
<td>4.47</td>
<td>4.42</td>
</tr>
<tr>
<td>Pleasant</td>
<td>4.53</td>
<td>4.60</td>
<td>4.62</td>
</tr>
<tr>
<td>Exciting</td>
<td>3.89</td>
<td>3.94</td>
<td>3.86</td>
</tr>
<tr>
<td>Lively</td>
<td>4.01</td>
<td>3.93</td>
<td>3.94</td>
</tr>
</tbody>
</table>

### Table 6. Differences between clusters regarding loyalty to Aveiro

<table>
<thead>
<tr>
<th>Items</th>
<th>Clusters</th>
<th>ANOVA</th>
<th>Post Hoc</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cluster 1</td>
<td>Cluster 2</td>
<td>Cluster 3</td>
</tr>
<tr>
<td>Return to Aveiro in two years</td>
<td>4.36</td>
<td>4.74</td>
<td>2.91</td>
</tr>
<tr>
<td>Recommend Aveiro to others</td>
<td>4.62</td>
<td>4.75</td>
<td>4.53</td>
</tr>
</tbody>
</table>

### 5. Discussion and conclusions

This study aimed to cluster visitors to a coastal destination based on actual behaviour and to further analyse whether clusters (i.e., with different degrees of experience) have similar or different cognitive and affective images, and different levels of loyalty to the destination.

The results showed that there are three different groups with dissimilar degrees of experiential familiarity and on-site experience, which corroborates that the intersection of these variables can be used for segmenting visitors. The first and second clusters, “Destination enthusiasts” and “Destination and heritage enthusiasts”, are mainly composed of domestic visitors, whereas those in the last, “Destination and heritage discoverers”, are international.

“Destination enthusiasts”, the first cluster, includes visitors that have visited Aveiro between three and four times in the past and have experienced CMCH activities once. The group includes more women and European tourists. Almost 28% of the visitors planned to stay in the city from two to three days. The “Destination and heritage enthusiasts”, the smallest group, is composed by visitors that have visited Aveiro five times or more in the past and have two to three experiences with CMCH activities, or even more than three with the Costa Nova traditional houses. This group presented the highest number of people visiting family and friends as a reason for the visit. Almost 30% of the visitors planned to stay in the city for four or more days.

The third cluster, “Destination and heritage discoverers”, is the largest group, representing 50% of visitors, and included mainly international tourists who are first-time visitors and mainly have not experienced CMCH. However, it included a significant number of people who intended to experience it. This is the group that were most effusive about their plans to visit other cities.

The results also indicate significant differences on the group’s perceptions in six of the fourteen cognitive attributes analysed in this study. “Destination enthusiasts” value scenic beauty and a wide variety of shops more and a clean environment less when compared to “Destination and heritage
discoverers”. However, the three clusters appreciate the natural environment dimension. “Destination and heritage discoverers” highlighted pleasant weather as an important factor. This observation supports the argument that the natural environment dimension is important for international tourists and can affect destination selection, as discussed in previous studies (e.g. Chi and Qu, 2008).

Moreover, the interesting natural heritage item is particularly valued by “Destination enthusiasts” and “Destination and heritage enthusiasts”. The groups are mainly composed of domestic tourists who are more familiar with the destination, thus having had previous opportunities to know this natural heritage.

Furthermore, different gastronomy and appealing restaurants are more valued by those who have greater familiarity with the destination, such as “Destination and heritage enthusiasts”. As discussed in other studies, amenities and attractions are identified as important factors for travel decision-making (Chen & Tsai, 2007). Furthermore, it supports studies that indicate how past experiences have a positive influence on visitors’ image and on their destination choice (Chen & Lin, 2012).

The present study also compared affective image among the three groups, but no significant differences were found, confirming the findings of Vogt and Andereck (2003) and Vogt and Stewart (1998). Nevertheless, these findings are contradictory to those of Stylidis (2020) and others (Iordanova & Stylidis, 2019), who found differences both in cognitive and affective images of groups with different degrees of familiarity and on-site experience. The three groups value more the items “relaxing” and “pleasant” than the items “exciting” and “lively” to describe the destination.

Our findings support the argument discussed in research on first-time visitors and repeat visitors, namely that increased familiarity with the destination has a positive effect on visitors’ perception of the image (Baloglu, 2001; Prentice, 2004; Chen & Li, 2012, Stylidis et al., 2020). In this study the differences observed in some items show that the group with less familiarity, “Destination and heritage discoverers”, mainly credited a lower value to DI attributes. Thus, the relationship is proportional to the degree of familiarity.

It also confirms prior research that found visitors’ cognitive image is affected by their level of experiential familiarity and intensity of on-site experiences (Ceylan et al., 2021; Iordanova & Stylidis, 2019). It is aligned with conclusions that cognitive image perception is positively affected due to destination experience (Vogt & Andereck, 2003; Vogt & Stewart, 1998; Kim et al., 2019), and with studies that emphasised the importance of cultural heritage on the cognitive structure of image (del Bosque & San Martín, 2008). Apparently, both greater familiarity and higher on-site experiences reflect on more positive DI (Stylidis et al., 2020). Also, longer stays (e.g. “Destination and heritage enthusiasts”), mean more experiences, and differentiated images of the destination according to Fakeyed and Crompton (1991) and Iordanova and Stylidis (2019).

This study demonstrated that groups with more familiarity with the destination and more intensity of on-site experiences can be seen to display a higher degree of loyalty to Aveiro, part of which is the intention to return in the next two years and to recommend Aveiro to their friends and relatives. Previous research shows that visitors that have a more positive image tend to have greater loyalty (Zhang et al., 2014; Stylidis et al., 2017).
6. Implications, limitations, and future directions

6.1. Theoretical implications
Globally, the theoretical contributions of this study are threefold. Firstly, it contributes to extending knowledge. It assesses that besides DI and tourist motivations, people’s degree of experience can be used as a basis for segmentation. To date, previous studies regarding on-site experience intensity have included intentions. Also, most studies on familiarity considered repeat visitors as a homogenous group. Thus, this study exclusively considers actual behaviour to identify segments. By using “actual behaviour” it is possible to have a real assessment, not an assumption, which is particularly important since intentions do not always become actual behaviour (Juvan & Dolnicar, 2016).

Secondly, this study provides the literature with some insights into the effects of the degree of experience on DI and loyalty. This is a research area with limited studies in tourism literature. Thus, it contributes to knowledge on how the degree of both previous and on-site experience influences the perception of DI and loyalty.

Thirdly, although a recent work has confirmed the relation between on-site experience intensity and DI (Iordanova & Stylidis, 2019) it included intentions. Also, it did not evaluate the existence of diverse groups of visitors who present dissimilar behaviours based on previous and on-site experience intensity and their relationship with loyalty. Therefore, this study allowed confirmation of differences regarding image perception and visitors’ loyalty to a destination through the identification of different segments of visitors based on the intersection of these two variables.

6.2. Practical implications
The findings of this study could be useful for the tourism industry to improve on-site experiences. As demonstrated in the findings, visitors with higher levels of experience show a more favourable image of the destination, as well as greater intention to recommend and revisit Aveiro in the near future. This is of key relevance since this positive relationship may improve WOM and encourage others to visit the destination.

Also, it is important to other relevant stakeholders, destination marketing organizations (DMO) and decision makers to define marketing strategies that promote this heritage. It shows that sun, sand and sea (3S) tourism can also be carried out with heritage tourism, offering new alternatives (Carvache-Franco et al., 2021a). Heritage tourism contributes to attract visitors throughout the year, overcoming seasonality and contributing to minimizing tourism pressures on city centres during peak season and to promoting sustainable flows among CMCH assets. For example, it could be an opportunity to minimize the pressure felt by residents in Aveiro city centre in peak season and to answer to the demands of other peripheral municipalities to receive more visitors.

Additionally, it demonstrates that first-time visitors and repeat visitors have different DI perceptions (Li et al., 2021) and levels of loyalty. According to some studies, the image created due to experiential familiarity within the destination is very persistent and more resistant to other sources of information, such as marketing campaigns (Ozdemir et al., 2012; Tsai, 2012).

Furthermore, motivations such as escaping everyday life and relaxing can positively influence domestic tourists to decide on familiar coastal destinations (Carvache-Franco et al., 2021a). This is relevant information for decision makers and other stakeholders, since some destinations are developing marketing strategies focused on repeat visitors, which costs less than attracting first-time visitors (Tsai, 2016). Also, in a pandemic context, visitors tend to feel more comfortable in familiar destinations
Visitors' experience in a coastal heritage context: A segmentation analysis and its influence on in situ destination image and loyalty

(Rasoolimanesh et al., 2021). Moreover, these visitors promote the destination with more positive WOM (Alazaizeh et al., 2022).

The findings confirmed the positive relation between the degree of experience with image perception and loyalty. This information is relevant for tourism practitioners since it indicates measures that should be implemented. Revisits can be guaranteed by increasing DI, familiarity, and on-site experience. To achieve this, destinations could apply loyalty programmes that offer discounts to regular visitors, for example, promoting fidelity.

In the Ria de Aveiro region, for example, stakeholders could find partners to reach different market segments and define a variety of strategies to promote a more sustainable approach (Carvache-Franco et al., 2021b). Also, some coastal heritage sites provide outdoor experiences with a limited number of people, as they are in natural areas with protected status. This situation is an opportunity for local economies even during pandemic situations (Ferreira da Silva et al., 2022). Moreover, an integrated package with various CMCH activities could be offered to promote flows between central and more peripheral municipalities.

However, several limitations should be considered regarding the interpretation of the results in this study: a) the regional context, since the study was limited to one medium-sized coastal city located in the centre of Portugal; b) the sample method (i.e. purposive sampling) that could limit the generalizability of the findings to other destinations; c) the fact that the questionnaire should have included a filter question to indicate the day of the visit, since respondents could have been in the middle of their stay and still intend to experience CMCH activities; and d) the fact that it only measured experiential familiarity.

Future research should overcome these limitations since this study provides directions for continuing research on the relevance of on-site experience intensity, DI, and destination loyalty. It should measure overall familiarity and be carried out in multiple destinations, such as other European coastal cities. Data was collected in the 2019 peak season, before the pandemic, so a post-pandemic situation should also be considered to compare the results to this study, as multi-destination and longitudinal studies help improve the generalization/validation of results (Qu et al., 2011).

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