Abstract

**Purpose** – This study aims to demonstrate the application of computer-aided text analysis (CATA) software in identifying primary associations and impressions of a specified tourist destination.

**Design/methodology/approach** – The Leximancer software is applied on primary information to analyze the concepts evoked by a destination. Because no specific planning has been done for destination image marketing strategies for rural tourism in Andalusia, this study visualizes and determines clusters of the main attributes associated with this destination.

**Findings** – The analysis identifies the main clusters among associations and impressions of the destination that can be useful in developing strategies.

**Research limitations/implications** – Only a target segment is studied, with a relatively small sample size.

**Practical implications** – Leximancer can not only be applied to online user-generated content, but primary information can also be mapped to generate a holistic destination image. Furthermore, identification of the relevant attributes and impressions can serve to identify unique assets to help tourism organizations develop a destination.

**Social implications** – Several implications concerning destination marketing are outlined.

**Originality/value** – Although previous studies have applied Leximancer and other CATA software, the present research uses a new approach. Deriving the primary information on destination image using an unstructured methodology, the concepts evoked by a destination are mapped. Because there is a lack of research on rural tourism in Andalusia and its destination image, its associated attributes are studied.

**Keywords** Destination image, Leximancer, Andalusia, Destination attributes, CATA software, Distinctive attributes

**Paper type** Research paper
1. Introduction
This study applied content analysis software to examine all associations connected with a specific tourist destination.

According to the Instituto Nacional de Estadística (INE) of Spain, there has been a growth in rural accommodation in Andalusia (in southern Spain) in recent years (INE, 2020). As of January 2020, there were an estimated 2,336 open establishments (INE, 2020).

Because no specific planning has been done regarding destination image marketing strategies in Andalusia, this study visualized and determined the themes of the main images associated with rural tourism of this destination. This study can provide destination management organizations a fast and practical approach to determine the concepts associated with a destination.

2. Theoretical framework and content analysis
2.1 Destination image and awareness
There is no consensus on a specific definition of destination image (Jenkins, 1999). Example definitions are provided in Table 1.

Though multiple methods of researching destination images are used, there is no single accepted definitive research measure (Pike, 2002).

Internal perceptions lead to an unconscious assessment by tourists, not entirely based on physical or functional attributes of the tourist destination, but on holistic attributes (Echtner and Ritchie, 1991, 1993). The overall image is considered an independent dimension of the destination image, greater than the sum of the different cognitive and affective components (Baloglu and McCleary, 1999).

Destination image is therefore a multidimensional global impression, but there is no consensus on the dimensions that form this holistic impression (Bigné et al., 2009).

Other authors, such as Kock et al. (2016) and Josiassen et al. (2015, p. 32), label the descriptive attributes of a destination as destination imagery. They define destination imagery as “an individual’s diverse cognitive and affective associations relating to a destination.” These associations enable individuals to characterize a destination without necessarily evaluating it (Kock et al., 2016).

Echtner and Ritchie (2003) present two basic approaches to measure destination image:
Structured methodology in which image attributes are specified and incorporated into a standardized instrument, commonly a set of Likert-type scales.

Unstructured methodologies are another form of measurement used in destination image research when image attributes are not specified at the onset of the study.

Structured methodologies enable the comparison of several destinations (Jenkins, 1999), but scale items are usually not designed to identify the unique characteristics of products (Echtner and Ritchie, 2003). Stepchenkova and Morrison (2008) revealed that structured methodologies enable evaluation and comparison, but they can be focused on certain destination attributes, and it can be difficult to capture the holistic aspect of a destination image. Thus, unstructured methodologies can present a more holistic picture (Echtner and Ritchie, 1993).

### 2.2 Content analysis and computer-aided text analysis software in tourism research

Weber (1990) describes content analysis as a research method that uses a set of procedures to make inferences from text. Content analysis is based on statistical processing of text corpora (Weber, 1990). Using such analysis, the most commonly occurring terms in a body of text are extracted, and the frequency of their occurrence is registered in a matrix (Berelson, 1952). This methodology has been used in areas such as psychology and communications (Stepchenkova et al., 2009). According to Duriau et al. (2007), although content analysis is a descriptive method, it has several advantages as it provides access to individual or collective structures such as values, intentions, attitudes and cognitions.

| Author(s) | Definition |
|-----------|------------|
| Hunt (1975) | Impressions that a person or persons hold about a state in which they do not reside |
| Lawson and Bond-Bovy (1977) | An expression of knowledge, impressions, prejudice, imaginations and emotional thoughts an individual has of a specific object or place |
| Crompton (1979) | The sum of beliefs, ideas and impressions that a person has of a destination |
| Assael (1984) | Total perception of the destination that is formed by processing information from various sources over time |
| Moutinho (1987) | An individual’s attitude toward the destination attributes based on their knowledge and feelings |
| Echtner and Ritchie (1991) | The perceptions of individual destination attributes and the holistic impression made by the destination |
| Kotler et al. (1994) | The image of a place is the sum of beliefs, ideas and impressions that a person holds of it. |
| Baloglu and Mc Cleary (1999) | An individual’s mental representation of knowledge, feelings and global impressions about a destination |
| Murphy et al. (2000) | A sum of associations and pieces of information connected to a destination, which would include multiple components of the destination and personal perception |
| Tapachai and Waryszak (2000) | Perceptions or impressions of a destination held by tourists with respect to the expected benefit or consumption values |
| Kim and Richardson (2003) | The subjective interpretation of reality made by the tourist |
| Bigné et al. (2009) | A totality of impressions, beliefs, ideas, expectations and feelings accumulated toward a place over time |
| Matos et al. (2012) | It consists of all that the destination evokes in the individual; any idea, belief, feeling or attitude that tourists associate with the place. |
| Lai and Li (2016) | Image is a set of complex mental impressions and total feelings that a potential tourist holds of a product, place or tourism destination. |

Table 1. Highlighted definitions of destination image
Table 2 highlights several studies that apply different computer-aided text analysis (CATA) software applied to tourism research. The development of CATA has facilitated the analysis of large amounts of qualitative data (Stepchenkova and Mills, 2010). CATA has been applied to tourism research using different softwares, including CATPAC (Woelfel, 1998), ORDER (Kirilenko, 2007) and Leximancer (Choi et al., 2007; Darcy and Pegg, 2011; Scott and Smith, 2015; Wu et al., 2014). For example, Leximancer has been used to study destination image (Boo and Busser, 2018; Sun et al., 2015; Tkaczynski et al., 2015; Tseng et al., 2015).

As recent works show, content analysis is an emerging research topic (Cheng and Jin, 2019; Yu and Zhang, 2020; Wong et al., 2020).

3. Methodology
To present an example of the analysis, this study analyzed the concepts evoked by rural tourism in Andalusia, which is a community in the south of Spain with highly diverse climates and landscapes.

Rural tourism has been a vector of development in Andalusia (Ferrari et al., 2010; Martin et al., 2019), but increased efforts to manage its strategic destination image are needed. This study selected this destination as there is a lack of research on Andalusia’s rural tourism destination image. Using an unstructured approach (Stepchenkova and Li, 2014; Stepchenkova et al., 2009), this study analyzed the words that a specified segment of target customers (university students taking the last courses of their degrees) associated with this rural destination to examine their mental image, or overall representation of the destination. Stepchenkova and Morrison (2008) argue that the holistic component alludes to the mental picture, or overall representation of the destination, and resembles the overall component of the destination image.

A questionnaire was designed with only one open-ended question to obtain answers using non-aided recall. This allowed attributes to be recalled from a respondent’s memory without any cues offered by the researcher, because a strongly associated destination attribute is more likely to be recalled.

In the previous literature, top-of-mind awareness has been considered a rigorous measure (Laurent et al., 1995; Stepchenkova and Li, 2014).

The survey was conducted to study the words that a destination evokes in an individual. The participants were students of an Administration and Management degree course at the Faculty of Economics and Business Studies, University of Málaga, Spain. The following were the two reasons these individuals were selected:

1) They were young students who are common customers of rural tourism.
2) They were of similar ages, interests and other characteristics, thereby reducing the possible impact of unwanted variables and influences.

The open-ended question was formulated to allow respondents to describe the evoked concepts in their own words, with a non-aided recall approach. The respondents were allowed to freely describe the attributes or impressions they had of the destination. Several studies have examined destination image under an unstructured approach. For example, to study Russia’s stereotypical holistic images, Stepchenkova and Morrison (2008) formulated the following question:

Q1. What images or characteristics come to mind when you think of Russia as a travel destination?
| CATA       | Author(s)            | Research theme                                                                 | Sample size | Data source                                                                 |
|-----------|----------------------|---------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------|
| Leximancer| Wu et al. (2014)     | Tourists’ experiences in Beijing’s Silk Market                                   | 149 review items | International tourist reviews on TripAdvisor                                |
|           | Tseng et al. (2015)  | Major themes about Mainland China’s destination image                           | 630 bloggers | Internet information and user-generated content                             |
|           | Tkaczynski et al. (2015) | Fraser Coast destination image                                                 | 517 vacationers | Self-administered questionnaire during and post vacation                    |
|           | Sun et al. (2015)    | Perceptions of New Zealand’s South Island landscapes                            | 235 Chinese tourists interviewed | An open-ended semi-structured questionnaire where tourists had to select from a series of photographs of iconic components |
| Chiu et al. (2017) | Tourists’ experiences of watching professional baseball games in Korea          | 152 reviews                                                  | International tourist reviews on TripAdvisor                                |
| Chiu and Leng (2017) | Tourists’ cycling experience in Singapore from online reviews                   | 409 reviews on local companies’ bike tour service | International tourist reviews on TripAdvisor                                |
| Boo and Busser (2018) | Meeting planners’ online reviews of destination hotel                          | 696 reviews of 173 hotels                                               | International tourist reviews                                                |
| Pearce and Wu (2018)  | International tourists’ experiences of Sanjie Liu in southern China             | 359 reviews                                                      | Reviews in English on TripAdvisor                                           |
| Cheng and Jin (2019)  | Attributes that influence Airbnb users’ experiences                            | 181,263 reviews                                                  | International tourist reviews on TripAdvisor                                |
| CATPAC    | Govers et al. (2007a, 2007b) | Pre-visit perceived image of seven sample destinations                      | 1,100 online survey responses                                           | Visitors to the virtual travel community at Travellerspoint.com              |
|           | Zhang et al. (2016)  | A Beijing film tourist attraction (Grand View Gardens)                         | 20 residents                                                       | Data from qualitative interviews                                             |
|           | Zhang and Ryan (2018)| Local residents’ perceptions of a Chinese film site                            | 20 tourists and 20 local residents                                     | Data from qualitative interviews                                             |

(continued)
| CATA                      | Author(s)                                      | Research theme                                                                 | Sample size | Data source                                                                 |
|--------------------------|------------------------------------------------|--------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------|
| CATPAC and WORDER        | Stepchenkova and Morrison (2006)               | Russia’s destination image in the online environment                           | 212 websites | Online content of tour operator websites about Russia                       |
|                          | Stepchenkova and Morrison (2008)               | Stereotypical and effective images of Russia among US pleasure travelers       | 337 US pleasure travelers | Web-based survey with open-ended responses, comparing the favorability of effective images for US visitors and non-visitors |
| CATPAC and TextSmart     | Ryan and Cave (2005)                            | Conversations with various groups of residents and visitors in New Zealand with reference to Auckland as a visitor destination | 40 responses | Data from qualitative interviews                                           |
| CATPAC and Leximancer    | Trinh and Ryan (2017)                           | Similarities and differences between Australian, Chinese, German and New Zealand visitors to a Maori cultural site | More than 200 respondents | Data from qualitative interviews                                           |
| Nvivo                    | Xiao and Mair (2006)                            | China’s destination image in newspaper articles                               | 41 newspapers | Articles about China published in major English newspapers                |
|                          | O’Connor (2010)                                | Causes of satisfaction and dissatisfaction among reviewers                     | 100 hotels   | International tourist reviews on TripAdvisor                               |
|                          | Wong et al. (2020)                             | Hotel guest satisfaction in Kuala Lumpur                                      | 192 hotels   | Rated hotels on TripAdvisor                                                |
| CATPAC II SPSS           | Choi et al. (2007)                             | Image representations of Macau on the Internet                                | 61 websites  | Sample of websites (12 magazines, 15 travel guide, 20 travel trade and 14 travel blogs) |
| VBPRO and SPSS           | Andsager and Drzwiecka (2002)                  | Image representations of New York City and South Africa                       | 52 respondents | Data from qualitative interviews                                           |
| SPSS and TextSmart       | Lockyer (2005)                                 | The most important factors to consider when booking a motel or hotel         | Four focus groups using a modified nominal group approach                   | Focus group discussion                                                   |
| IBM Watson Explorer Content Analytics 11.0.1 | Nakayama and Wan (2018)                        | Cultural differences between Western and Japanese reviews of a Japanese restaurant | 56,159 Japanese reviews and 76,704 Western reviews | Tourist reviews on Yelp (www.yelp.co.jp)                                   |
Based on the three open-ended questions by Echtner and Ritchie (1993), which have been widely used in tourism destination image studies, and Stepchenkova and Morrison’s (2008) questions, our question was: “Please think for a moment about Andalusia’s rural tourism and then describe the concepts evoked in your mind.”

For content analysis of the responses, Leximancer was used to analyze the data. Leximancer (2011) is content analysis software that uses word frequency and co-occurrence to identify main concepts via a co-occurrence matrix.

A total of 210 surveys were issued, and 123 valid responses were received. Leximancer is different from other content analysis software such as NVivo or CATPAC because it applies its own algorithms to analyze the data (Tseng et al., 2015). Leximancer performs semantic extraction followed by relational extraction (Smith and Humphreys, 2006).

4. Results

Figure 1 shows how Leximancer quantified and displayed the conceptual structure of the themes detected. Leximancer simulates relationships between the concepts (Smith and Humphreys, 2006) and creates clusters of words. The resulting concept map allows us to visualize concept frequency (brightness), total concept connectedness, direct inter-concept relative co-occurrence frequency (ray intensity) and total inter-concept co-occurrence (proximity) (Smith and Humphreys, 2006). Colored spheres represent themes and dots represent concepts. Themes are heat-mapped, so red (Andalusia) is the most important theme.
Figure 2 shows how Leximancer examined the relative strength of the connecting lines between concepts. By clicking on each concept and examining the relative strength of the connecting lines, we can appreciate their co-occurrences.

Figure 2 displays the concepts that respondents linked with this destination, for example, warm summer, relax, olive trees, quiet, pleasant or cortijo. Cortijo refers to a large country house with accessory buildings such as workers’ quarters, granaries, sheds to house livestock and oil mills, and it usually has a wall enclosing a courtyard (López Ontiveros, 2003); this word was not translated.

Table 3 provides a thematic summary of the nine main themes and their connectivity rates. The left column indicates the relative importance of the clusters within the dataset. Of these, Andalusia is the most important theme, with 100% connectivity.

Table 4 reports the rankings of name- and word-like concepts. Relevance is calculated based on the frequency of occurrence (the concept of tourism occurs 42 times and has a relevance of 100%).

As Table 4 shows, Andalusia is associated with the concepts such as “relax,” “warm summer” and “olive trees.”

“Fish” has a richer meaning, as it appears to relate to consuming fried fish, a typical dish of the coastal zones of Andalusia.

As in Tseng et al.’s (2015) study on China, Andalusia should be considered to create an overall and united impression rather than a fragmented destination image, making it an individual theme.
In the second stage, Leximancer identified the terms that were associated with favorable and unfavorable sentiments.

Table 5 presents selected concepts with a favorable sentiment and their related word-like attributes. For example, for the first concept, “tourism,” 100% of the comments about white houses mentioned tourism.

Therefore, as Table 5 shows, by classifying the concepts together with their rating, we can determine if they are most likely to occur in comments indicating positive or negative feelings.

| Theme      | Connectivity(%) |
|------------|-----------------|
| Andalusia  | 100             |
| Tourism    | 50              |
| Mountains  | 26              |
| Landscapes | 15              |
| Enjoy      | 8               |
| Hiking     | 5               |
| Tranquility| 2               |
| Wonderful  | 2               |
| Farmhouses | 1               |

Table 3. List of obtained themes

| Word-like          | Count | Relevance(%) |
|--------------------|-------|--------------|
| Tourism            | 42    | 100          |
| People             | 11    | 26           |
| Place              | 10    | 24           |
| Warm summer        | 8     | 19           |
| Relax              | 8     | 19           |
| Landscapes         | 8     | 19           |
| Quiet              | 5     | 12           |
| Trekking           | 5     | 12           |
| Beautiful          | 5     | 12           |
| Hiking             | 5     | 12           |
| Enjoy              | 5     | 12           |
| Cortijo            | 5     | 12           |
| Mountains          | 3     | 7            |
| Fish               | 3     | 7            |
| Tranquility        | 3     | 7            |
| Pleasant           | 2     | 5            |
| Countryside        | 2     | 5            |
| White houses       | 2     | 5            |
| Olive trees        | 2     | 5            |
| Natural environment| 2     | 5            |
| Farmhouses         | 2     | 5            |
| Friends            | 1     | 2            |
| Friends            | 1     | 2            |
| Wonderful          | 1     | 2            |

Table 4. Ranked concept list

Andalusia 19 45
Spain 3 7
| Selected concept: tourism | Selected concept: olive trees | Selected concept: warm summer |
|--------------------------|-----------------------------|-----------------------------|
| Sentiment | Count | Likelihood | Sentiment | Count | Likelihood | Sentiment | Count | Likelihood |
| Favorable | 2 | 50% | Favorable | 1 | 25% | Favorable | 1 | 25% |
| Related name-like | Count | Likelihood | Related name-like | Count | Likelihood | Related name-like | Count | Likelihood |
| Spain | 1 | 33% | Spain | 1 | 33% | Spain | 2 | 67% |
| Andalusia | 4 | 21% | Andalusia | 4 | 21% | Andalusia | 3 | 16% |
| Related word-like | Count | Likelihood | Related word-like | Count | Likelihood | Related word-like | Count | Likelihood |
| White houses | 2 | 100% | Pleasant | 1 | 50% | Olive trees | 1 | 50% |
| Friends | 1 | 100% | Warm summer | 1 | 12% | Pleasant | 1 | 50% |
| Mountains | 2 | 67% | People | 1 | 9% | Fish | 1 | 33% |
| Trekking | 3 | 60% | Tourism | 1 | 2% | People | 3 | 27% |
| Pleasant | 1 | 50% | | | | Relax | 1 | 12% |
| Countryside | 1 | 50% | | | | Place | 1 | 10% |
| Olive trees | 1 | 50% | | | | Tourism | 3 | 7% |
| Natural environment | 1 | 50% | | | | |
| People | 5 | 45% | | | | |
| Quiet | 2 | 40% | | | | |
| Cortijo | 2 | 40% | | | | |
| Warm summer | 3 | 38% | | | | |
| Fish | 1 | 33% | | | | |
| Tranquility | 1 | 33% | | | | |
| Relax | 2 | 25% | | | | |
| Beautiful | 1 | 20% | | | | |
| Hiking | 1 | 20% | | | | |
| Enjoy | 1 | 20% | | | | |

### Continued

| Selected concept: landscapes | Selected concept: mountains | Selected concept: people |
|-----------------------------|-----------------------------|--------------------------|
| Sentiment | Count | Likelihood | Sentiment | Count | Likelihood | Sentiment | Count | Likelihood |
| Favorable | 2 | 50% | Favorable | 1 | 25% | Favorable | 2 | 50% |
| Related name-like | Count | Likelihood | Related name-like | Count | Likelihood | Related name-like | Count | Likelihood |
| Andalusia | 1 | 5% | Andalusia | 2 | 11% | Andalusia | 2 | 11% |
| Related word-like | Count | Likelihood | Related word-like | Count | Likelihood | Related word-like | Count | Likelihood |
| Wonderful | 1 | 100% | Pleasant | 1 | 50% | Pleasant | 2 | 100% |
| Pleasant | 1 | 50% | Fish | 1 | 33% | Olive trees | 1 | 50% |
| Beautiful | 2 | 40% | Quiet | 1 | 20% | Warm summer | 3 | 38% |
| Mountains | 1 | 33% | Trekking | 1 | 20% | Mountains | 1 | 33% |

(continued)
| Enjoy | Relax | Beautiful | Fish | Cortijo | Quiet | Landscapes | Quiet | Beautiful | Place | Quiet | Travel | Travel | Travel |
|-------|-------|-----------|------|---------|-------|------------|-------|------------|-------|-------|--------|--------|--------|
| 1     | 1     | 1         | 1    | 1       | 1     | 1          | 1     | 1          | 1     | 1     | 2      | 2      | 2      |
| 20%   | 12%   | 1         | 1    | 20%     | 12%   | 1          | 9%    | 1          | 20%   | 9%    | 20%    | 20%    | 20%    |
| Quiet | Travel | 2         | Travel | 5      | Travel | 2          | Travel | 5          | Travel | 12%   | 12%    | 12%    | 12%    |
| 20%   | 20%   | 1         | 12%   | 20%     | 12%   | 9%         | 5%    | 1          | 20%   | 20%   | 12%    | 12%    | 12%    |

Table 5. The study of a holistic destination image.
Analyze the concept list and the frequencies of the effective concepts that appear in the results (Table 5), for example, with the concepts relax, quiet, tranquility and pleasant, no negative emotion appears in the results.

5. Discussion and conclusions

5.1 Conclusions

This research demonstrated the application of CATA software in identifying primary associations and impressions of a specified tourist destination by investigating the following questions:

Q1. What unique attributes are associated with Andalusian rural tourism?
Q2. What are the main clusters of associations and impressions of the destination?
Q3. What attributes are associated with a favorable sentiment?

Thus, the main clusters were identified, and the key concepts extracted show the distinct attributes associated with Andalusia, such as cortijo, fish, tranquility, warm summer, olive trees and white houses.

The progress in the field of destination marketing and techniques to measure a destination image, along with the development of effective marketing practices, could be helpful for the development of rural tourism.

5.2 Theoretical implications

Unstructured approaches have been increasingly recognized as a relevant technique because they allow a wide view of the concept and reveal holistic and psychological impressions associated with a destination.

The results presented herein demonstrate how a text-mining tool can be used to study the image of a tourist destination by visualizing the structure of concepts and themes. This technique maps the structure of the evoked concepts and identifies links between the words associated with a specific tourist destination.

The application of the Leximancer approach provided a picture of the attributes associated with Andalusia’s rural tourism by revealing visual diagrams and figures along with lexical concepts. The results represent a preliminary exploration of the image of Andalusia.

5.3 Practical implications

The present research aims to fill a gap in the literature owing to a lack of recent destination image studies with a focus on Andalusia’s rural tourism. Andalusia is a tourist area with diverse landscapes, which offers warm temperatures and beaches. The international image of Andalusia as a destination has traditionally been related to the sun and sand, but, in recent years, rural areas have increased the offer of tourist products based on their own natural and/or cultural resources (Andrades-Caldito et al., 2012). Andalusia could benefit by diversifying and increasing their emphasis on other types of product, such as those related to rural tourism.

Rural tourism in Andalusia has been growing in the past few years, and occupancy levels of rural accommodation have begun to recover since the spring of 2020, after travel restrictions owing to the COVID-19 pandemic were eased (INE, 2020).

From a managerial perspective, improvements are needed in the communications strategy of the selected area, especially against the background of the current global crisis.
The identification of the relevant attributes and impressions could also serve to identify unique selling propositions to help tourism organizations develop the destination. Analyzing the concept list and their frequencies, results reveal that “relax,” “quiet” and “tranquility” are positively associated with Andalusia.

Amid the present global public health crisis, we propose that the association with these attributes could be increased. Branding techniques could be adopted to emphasize these attributes and the uniqueness of rural tourism in Andalusia.

In the current context of the COVID-19 pandemic, mass tourism could be associated with crowdedness and risk, and tourists could have increased propensity to avoid overcrowded and mass tourism destinations (Zenker and Kock, 2020). Zhu and Fumin (2020) highlight that rural tourism has several advantages (e.g. low density of tourist flow, relaxation) that could help tourists feel safe in the context of the pandemic. There is a potential to develop rural tourism during the tourism recovery phase of Andalusia.

5.4 Limitations and proposals for future research

Though the proposed technique can be useful for certain purposes, it alone cannot show a location’s destination image because the nature of the construct, identified by Gallarza et al. (2002), is complex, as the concept is not static and there are multiple factors or variables that comprise a location’s destination image.

The application of Leximancer provided a more comprehensive picture of the concepts evoked by rural tourism in Andalusia, but one of the major limitations of this study was that it was conducted on a convenient sample.

Further research is needed to apply the results to destination branding, because it is a complex process that must be evaluated by taking the conditions of the existing organic image and marketing-generated image, destination size and composition and positioning and target markets into consideration (Cai, 2002).

Future research could also compare the results obtained among different software programs such as Leximancer, CATPAC, and WORDER. A post-COVID study of the concepts associated with rural tourism in Andalusia is encouraged. As Zenker and Kock (2020) reveal, the images that potential tourists attribute to the destination could have changed owing to the COVID-19 pandemic.

To enhance the understanding of the concepts evoked by a destination, this study must be replicated in other destinations.

We hope this research can provide information for the understanding of destination image and help destination marketing organizations adopt branding techniques to emphasize the uniqueness of rural tourism in Andalusia.

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