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# From netnography to segmentation for the description of the rural tourism market based on tourist experiences in Spain<sup> $\diamond$ </sup>

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Keywords: Tourist experiences Netnography Multiple correspondence analysis (MCA) Cluster analysis Segmentation This study aims to offer a basis for developing appropriate response strategies through understanding tourists' natural perceptions related to their rural tourism experiences and the characteristics of the rural tourism market segments. To achieve this purpose, the netnography methodology, which is an online participatory observation technique based on user-generated online content that enables market researchers to observe natural consumer behaviors, was conducted on 1002 tourists' opinions in three online communities. Qualitative information derived from netnography combined with quantitative tools, multiple correspondence analysis and cluster analysis, allows for the segmentation of the rural tourism market. It has been confirmed that three market segments exist in rural tourism in Spain and three corresponding themes have also been derived from the results; comfort-driven visitor, rural ambiance spender, and active leisure seeker. This study is significant in that it began with the qualitative collection of user-generated online content from netnography and finished with the quantitative segmentation of the market based on tourist experiences.

#### 1. Introduction

Customer experiences in rural tourism have been considered an essential factor that can drive the success and innovation of the industry (Ellis & Rossman, 2008; Stamboulis & Skayannis, 2003; Zehrer, 2009). Tourists generally seek distinctive and engaging experiences and their decisions are affected by images of the destination (Ellis & Rossman, 2008; Mossberg, 2007; Prebensen & Foss, 2011). For the sustainability of tourism, three changes are needed: the optimized utilization of local resources, the harmonization of diversified stakeholders' needs, and the improvement of tourists' satisfaction through offering meaningful experiences (Kastenholz, Carneiro, Marques, & Lima, 2012). Considering that tourists pursue experiences of diversity and high quality on short-term holidays, rural areas must make an effort to provide distinguished, attractive and diverse customer experiences (Lane & Kastenholz, 2015). Accordingly, understanding individual perceptions associated with customer experiences in rural tourism is important (Ritchie & Hudson, 2009). In order to be successful, it is necessary for rural tourism to seek ways of satisfying customers' needs, which is first done by viewing the diversified customer experiences through tourism research (Uriely, 2005).

Among the many ways to explore customer experiences, segmentation is useful for creating a better market positioning strategy since it can offer desirable information about customers and insights on meeting their needs (Matzler, Pechlaner, & Hattenberger, 2004). According to Buhalis (2000), segmentation is important because each tourism destination is only able to fulfill specific types of demands. Therefore, each tourism destination has to understand the needs of its potential customers and endeavor to attract the proper customer group. It is also crucial to be aware of existing segments for effective and efficient rural tourism management and marketing. The information on clear segments allows for the development of promotion and communication programs (Park & Yoon, 2009). Various research articles over the years have addressed market segmentation in rural tourism, but the majority of them have segmented the data based on motivation (Chen, Lin, & Kuo, 2013; Park & Yoon, 2009; Polo Peña et al., 2014; Rid, Ezeuduji, & Pröbstl-Haider, 2014), benefits (Frochot, 2005; Martins-Almeida, Correia, & Pimpão, 2014; Park, Lee, & Yoon, 2014), and activity (Eusébio, Carneiro, Kastenholz, Figueiredo, & Soaresda Silva, 2017; Pesonen & Tuohino, 2015). There is a distinct lack of market segmentation research

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based on tourist experiences in rural tourism. In addition, most of the segmentation research on rural tourism has focused on quantitative research like customer interview surveys. The existing quantitative research based on researchers' viewpoints has a limitation, which is that it is difficult to reflect the potential needs and deep insights drawn from consumer opinions due to the use of uniform survey questionnaires and limited choice options during the response process. Thus, many scholars have argued that an in-depth understanding of customer experiences through complementary methods is needed (Neuhofer, 2016).

In this atmosphere, netnography has recently attracted attention (Stockinger, 2015). Since online environments such as online communities, blogs, or social networking services (SNS) have been rapidly developed due to the spread and diffusion of the internet and because opportunities to clearly understand consumer desires and experiences through user-generated content have been increasing, the application of netnography has been spreading. Netnography has been defined as a form of genealogy drawing from researching communities and their cultures, which are accessible through online communications (Kozinets, 2015). Netnography can complement the existing limitations of other quantitative or qualitative research because it can grasp customers' vivid experiences and honest opinions through online data created by the customers themselves (Mkono, 2012). As user-generated content like tourist reviews contains numerous texts, photos, and videos related to tourism experiences, it can be an appropriate resource for analyzing the experiences and complaints of various tourists in tourism research (Lu & Stepchenkova, 2015). In consideration of these points, this study has attempted to derive more meaningful findings that combine qualitative and quantitative analysis by applying netnography to rural tourism.

Much investment has been made into rural tourism in Spain in order to break the monotony of Spanish tourism, which is dominated by beaches and the sun, and also to help farmers gain additional economic income through ways other than agricultural production (Besteiro, 2006). Rural tourism in Spain has been able to grow rapidly along with urban dwellers' desire to take a short, calm, and meaningful break in a completely different environment from that of the city (Grande & Maynar, 2010). However, in spite of this external growth, Spanish rural tourism has a weakness: low profitability, which is supported by the fact that Spanish rural tourism has a shorter average stay and lower economic impact than other types of leisure tourism (INE, 2018). This means that tourists have a resistance to high prices in rural tourism (Correia & Oliveira, 2016). This situation requires a clear direction for small Spanish rural tourism owners, whose survival is threatened and seek to provide rural tourism products and services that will capture tourists' hearts. To this end, it is important to understand the needs of rural tourism tourists in Spain. In particular, a detailed exploration of the rural tourism experiences pursued by tourists is a priority for understanding and satisfying their needs.

The purpose of this study is to offer a basis for developing appropriate response strategies by understanding customers' natural perceptions related to their rural tourism experiences as well as the characteristics of the rural tourism market segments through applying the non-artificial survey method, netnography, and providing it to rural tourism providers.

#### 2. Literature review

#### 2.1. Netnography

The changes produced by the invention of the internet have compelled the discovery of new research methods that could allow the who, what, when, where, and how amongst various online environments and diverse virtual communities to be determined (Turpo Gebera, 2008). Netnography is separate from ethnography in the time required to collect information and the degree of researcher engagement in the research field (Clemente-Ricolfe & Escribá-Pérez, 2014). Netnography is characterized by the freedom that people feel in expressing their perceptions as compared to the inconvenience of completing a structured questionnaire that forces them to respond to questions about their direct experiences (García, 2011). Due to this, netnography enables market researchers to observe natural consumer behaviors, such as consumer opinions about products or information searches (Kozinets, 2015). Netnography allows researchers to confidentially observe consumer behavior in various cultures and internet communities (Ji, Li, & Hsu, 2016). Fox and Roberts (1999) explained that netnography is the use of sociology in virtual social spaces and online interactive communities. Netnography is a research technique using publically accessible information in order to comprehend and identify the consumer needs that influence decisions made online (Kozinets, 2015).

In comparison to other commercial research techniques, netnography has advantages such as low cost, rapid collection of diverse opinions, accessibility to research participants, higher reflective quality of online opinions, and the acquisition of useful and interesting results with a relatively small number of messages, provided that they have extensive descriptions. On the other hand, it also has disadvantages, such as suspicions about the honesty of the user when taking advantage of the use of a pen name and the need to complement it with other techniques to ensure a more accurate analysis (Kozinets, 2015; Xun & Reynolds, 2010).

The application of netnography has been growing rapidly since systematic netnography research guidelines were presented by Kozinets (2002). In terms of developing sectoral weightings, marketing research is still primarily used, but this netnographic research is spreading rapidly within various academic fields such as tourism and sociology due to the proliferation of social media (Bengry-Howell, Wiles, Nind, & Crow, 2011). Netnography can be a very useful way to analyze tourist experiences since tourists' reviews are usually completed at the post-tour stage, which means that netnography can then be used to obtain the broader vision of tourist experiences (Zhang & Hitchcock, 2017). Netnography utilizes the varied virtual environment of tourism and the situation that people from the same cultural and social level participate increasingly in virtual communities (Munar, Gyimóthy, & Cai, 2013). As online communities generated by users, which enable potential tourists to look for tour information easily, continue growing, researchers have a great opportunity to grasp tourist experiences at ease (Mkono & Markwell, 2014).

Pearce and Wu (2018) applied the netnography research method to tourists' reviews from Tripadvisor.com to analyze the structure of entertainment tourists' experiences. The result shows that international tourists generally perceived the traditional and unique style of tourism as a positive experience. Rageh, Melewar, and Woodside (2013) attempted to clarify the detailed tourist experiences using the netnography methodology. For this purpose, the reviews from Tripadvisor.com and holidaywatchdog.com left by tourists who visited branded Egyptian resorts were analyzed. Through this analysis, customer experiences were categorized into eight dimensions: comfort, education, pleasure, novelty, perception, relationship, safety, and beauty. Dillette, Douglas, and Andrzejewski (2016) conducted a netnographical research by extracting the reviews from wellness tourists on Tripadvisor.com in order to explore the tourists' experience structure. As a result of the analysis, the tourists' experience structure was defined in four dimensions: body, mind, spirit, and environment.

There is no prior research applying netnography to rural tourism. This study is the first to apply netnography in the field of rural tourism.

#### 2.2. Segmentation in rural tourism research

Market segmentation is widely recognized as an effective method for exploring consumer behavior. Segmentation of tourism markets should be completed in order to create marketing strategies for differentiating the target audiences. Segmentation indicates that a market is made up of subgroups which have distinctive perceptions and needs (Mok & Iverson, 2000), and generally, can be defined as the procedure for splitting a whole market into segments in order to offer practical marketing implications (Middleton, Fyall, & Morgan, 2009). Market segmentation is applied to clarify targeted tourist groups, develop and offer better tourism packages, maximize the tourist benefits at tourism destinations, and establish an efficient tourism policy and positioning strategy (Nickerson, Jorgenson, & Boley, 2016; Xia et al., 2010). The variables used to segment the tourism market can be motivation, benefits sought by customers, attributes for vacation, lifestyle, personality, image, and experience, in addition to traditional factors such as demographic, economic, and geographical characteristics (Middleton et al., 2009).

In a large number of rural tourism studies, factor-cluster segmentation has been used. First of all, diversified studies have segmented the rural tourism market based on motivation. Chen et al. (2013) indicated four segments based on motivation for the rural tourism market in their study: relaxation and novelty pursuers, physical utility pursuers, socialization and accessibility pursuers, and trend pursuers. Rid et al. (2014) identified four Gambian rural tourist segments based on motivation: sun and beach pursuers, beach and multi-experience pursuers, nature and heritage pursuers, and multi-experience pursuers. Polo Peña, FríasJamilena, Rodríguez Molina, and Rey Pino (2014) segmented the rural tourism market by motivation: undertaking activities in the rural area, enjoying a rural destination's services and facilities, and visiting a rural destination. Applying factor-cluster segmentation, Park and Yoon (2009) defined four different segments for the Korean rural tourism market: learning and excitement, want-it-all, passive tourists, and family togetherness. Next, market segmentation by the benefits sought by customers is effective in establishing a marketing strategy that differentiates the target market because it divides the market in terms of the value pursued by tourists (Botschen, Thelen, & Pieters, 1999). Park et al. (2014) conducted segmentation according to the benefits sought by customers. The result of this study is that five rural tourism market segments: the pursuit of spending time with family, the pursuit of escape from the daily routine, the pursuit of learning and socialization, the pursuit of rural experience, and the pursuit of education were found to exist in Korea. Frochot (2005) conducted market segmentation on the basis of benefits pursued by rural tourists in Scotland, using factor-cluster segmentation. As a result, the market was divided into active type, rural type, resting type, and contemplating type. Almeida, Correia, and Pimpão (2014) segmented the rural tourism market by benefits: want-it-all, family oriented, relaxers, and ruralist. Meanwhile, some studies have broken down the rural tourism market on the basis of activity. Eusébio et al. (2017) indicated four Portuguese rural tourism segments based on activity: summer family vacationers, inactive, passive nature observers, and active visitors. Pesonen and Tuohino (2015) segmented the rural tourism market by activity, using factor-cluster segmentation. As a result, the market was divided into spa goers, well-being enthusiasts, and sporties.

Segmentation by multiple correspondence analysis (MCA) is considered a useful method for segmentation in case the application of traditional factor-cluster segmentation is not possible since respondents must only answer yes, no, or not sure instead of using Likert-type scales. Through MCA, the associations between respondents who are close to each other and other variables can be quantified (Carroll, Green, & Schaffer, 1987). There are also some other existing segmentation studies of the rural tourism market that apply MCA. Agapito, Valle, and Mendes (2014) comprehended tourist's perceptions by segmenting the Portuguese rural tourism market based on sensory experiences by applying MCA. The four themes for the segments, balanced experience, rural experience, nature-based experience, and generic beach related experience were suggested. Albaladejo-Pina and Díaz-Delfa (2005) examined the rural tourism market demand by accommodation type, applying MCA.

The aforementioned studies are characterized by MCA with the data collected through a quantitative consumer survey. However, there is no other existing tourism research that segments by MCA with usergenerated online data. The application of MCA in this investigation differs from the existing studies because it analyzes user-generated online data instead of the data through a quantitative consumer survey.

#### 2.3. Rural tourism experiences

According to Schmitt (1999), a company's ability to provide quality customer experiences is a prerequisite to maintaining its competitiveness. Customer experiences can be defined as the customers' subjective responses naturally formed by them in the indirect contact process through a series of communication activities such as advertisement, PR, events and promotions, as well as the direct contact process between a company and its customers through products and services (Meyer & Schwager, 2007). Mascarenhas, Kesavan, and Bernacchi (2006) insisted that customer experiences were made up of affective experience, which means the feeling customers have while using products and services, sensory experiences that stimulate the five senses, as well as cognitive experiences that provide functional benefits to customers. Shaw (2005) also viewed customer experiences as a fusion of cognition, affect, and senses and argued that companies that provide affective and sensory experiences together with cognitive experiences could have the best competitive edge. The structure of the tourist experiences includes cognitive factors related to beliefs or knowledge about tourist attractions as well as emotional factors related to feelings about tourist attractions (Baloglu & McCleary, 1999). This study presupposes customer experience as a combination of cognitive, affective and sensory experiences based on previous literature.

Cognitive experience are understood to be the thoughts and beliefs customers have due to the functional benefits formed in the process of purchasing and using products and services (Fiore & Kim, 2007). As a result of the individual's perception of the facilities of the tourist destination itself, cognitive experience about the tourist destination is formed (Stepchenkova & Mills, 2010). In terms of cognitive experiences in rural tourism, functional attributes such as rural-based activities, the infrastructure of rural tourism and tourism attractions around rural areas create a variety of tourist experiences (Knutson & Beck, 2008). Rural tourism mainly consists of activities created with various combinations of sports and adventure, cultural tourism, natural tourism, ecotourism, wine tourism, and food tourism of rural background (Lane, 2009). BignéAlcañiz, SánchezGarcía, and SanzBlas (2009) viewed cognitive experience as tangible or measurable functional components such as accommodation and price levels.

According to Cohen, Pham, and Andrade (2008), affective experience can be defined as emotions that customers feel when they use products or services or those that they could imagine feeling, even if they don't actually use them. According to Son and Pearce (2005), an emotional experience in the field of tourism refers to the tourists' individual feelings about destinations, which can be expressed as preference, neutral, or non-favorite. Diversified tourism and hospitality studies have founded their attention on the influence of the customers' affective experiences on overall customer satisfaction, their word of mouth, and their purchase intention (Bigné, Mattila, & Andreu, 2008; Ladhari, 2009; Martin, O'Neill, Hubbard, & Palmer, 2008). In terms of affective experiences in rural tourism, to escape from the negative emotions accumulated in urban life is the main reason why tourists pursue the rural tourism experience (Figueiredo & Raschi, 2012). Rural tourism relieves urban tourists from the stress of urban life by inspiring them with positive emotions (Kastenholz, JoãoCarneiro, PeixeiraMarques, & CorreiaLoureiro, 2018). In addition, the tranquility and relaxation associated with emotional fullness are the important experiences that tourists seek in rural tourism (Sharpley & Jepson, 2011). Finally, the interactions between tourists and rural tourism hosts can be another emotional level of rural tourism experience (Choo & Petrick, 2014).

To have a sensory experience is to feel aesthetic pleasure, excitement

and satisfaction through the stimulation of the five senses: sight, hearing, smell, touch and taste (Schmitt, 1999). Diversified tourism studies have empathized that properly stimulating five senses of tourists plays an important role in creating value, relative to a customer's interests and leading to his/her positive reactions (Agapito, Mendes, & Valle, 2013; Mossberg, 2007; Walls, Okumus, Wang, & Kwun, 2011). Some hospitality and tourism studies have addressed noise at the destination, the overall atmosphere, and the surrounding environment as attributes that create positive sensory experiences (Callan & Bowman, 2000; Devi Juwaheer, 2004). In terms of sensory experiences in rural tourism, rural tourism studies reveal landscape as well as nature can be considered essential rural tourism experiences (Kastenholz et al., 2012). They not only provide a strong motivation for tourists to choose rural tourism, but also influence their evaluation of the perceived quality after his/her rural tourism experience (Marujo & Santos, 2012). The visual experience that nature and scenery offer to tourists can play a role in purifying the minds of tourists (Frochot, 2005).

#### 2.4. Research questions

In comprehensive consideration of the literature review, this study attempted to segment and characterize the Spanish rural tourism market based on tourist experiences by understanding tourists' natural perceptions through applying the non-artificial survey method, netnography. In order to analyze the characteristics of the Spanish rural tourism market based on tourist experiences, the following research questions were established (Fig. 1.). The first research question points out to the use of netnography to explore the rural tourism experiences that customers pursue. The second question is used to discover significant experiential themes for rural tourism from the tourist experiences derived through netnography. The third deals with the segmentation of the rural tourism market in Spain based on the tourist experiences derived through netnography. The next three questions inquire about the connections between the tourist experiences pursued and the various trip types (fourth), price levels paid (fifth) and demographic variables (sixth).

#### 3. Methods

#### 3.1. Selection of observation target

In this investigation, netnography was applied because customers are increasingly accessing online communities for more objective information (Kozinets, 2015). The representative online communities of

Clubrural, Escapadarural, and Toprural were chosen and targeted based on the number of visitors in order to extract tourist experiences by analyzing visitor opinions. Each rural tourism online community has extensive information about more than 30,000 rural accommodations throughout Spain and allows for the reading of various user opinions about a particular rural accommodation. A netnography study was conducted on 1002 tourist opinions, including 400 users at Toprural, 347 users at Clubrural, and 255 users at Escapadarural (Table 1.). Only tourist opinions from within the four years of 2016–2019 were analyzed, considering the relatively recent economic recovery of Spain after several years of negative growth since the economic crisis occurred in 2008.

#### 3.2. Data collection

In order to respond to **research question 1**, in this study, the netnography methodology was used to analyze the tourists' reviews that were shown to have a great influence on other tourists' decisions (Kozinets, 2015).

For the validity and reliability of the investigation, four criteria were considered. First, opinions that are suspected to be on owners' self-promotion were excluded. Second, opinions assigned by 'visit region', which means the seventeen regions in Spain visited by tourists, reflected. Third, in order to gather diversified opinions from different perspectives, negative opinions, as well as positive ones, were selected. The data were processed using the experiences mentioned and the rating (1–5) as evaluated by the tourists regarding the respective variables. Fourth, additionally, for the collection of opinions on various aspects, opinions not only on the popular places but also on the unpopular ones were applied.

This study was not based on data mining using specific software for data collection, but rather on the researchers' observations and interpretations of the overall experiences of each individual tourist expressed in the customer review section. In order to avoid bias, the tourists' reviews were not selected based on their contents, but rather through a random sampling of dates within each online community and

#### Table 1

Target onlin	e communities
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Name	Website	Answers
Toprural	www.toprural.com	400 (39.9%)
Clubrural	www.clubrural.com	347 (34.6%)
Escapadarural	www.escapadarural.com	255 (25.5%)



Fig. 1. Research questions.

year. A random procedure, which is a mechanism to make random decisions, was used. After key sentences expressing tourist experiences were extracted from the tourists' reviews for qualitative analysis, the meanings of each sentence were summarized into words of experiences, which would be later used as variables, for quantitative analysis. Even though the expressions used were different, words with similar meanings were bound to one type of experience, and even if there were no experience words in a sentence, the sentence was classified into a specific experience after its synthetic meaning was interpreted. For example, if a tourist opinion was written as "The owner was very attentive to us, explaining everything we could do, where to visit, where to eat. He made us feel like home.", the researchers collected data by interpreting it as an experience word 'customer care'. Depending on the tourists, just one experience or several experiences may have been derived from each opinion. Immediately after data collection, whether the same tourist's opinion for a particular rural tourism accommodation was posted on multiple sites or not was checked, in order to prevent duplicate responses from being reflected in survey data.

Through analyzing the 1002 opinions, the important experiences in rural tourism pursued by customers were derived from the data. After the opinions were collected, the same comments were individually reviewed by two researchers. In the case of any difference of interpretation between two researchers, the messages were reviewed by a third researcher.

Due to the nature of the netnography study, which was based on user-generated content online, there was a limitation of items that could be used as variables. For example, as 'gender', 'trip type', which consists of family, friend group and couple, and 'price level' which means prices that each customer paid for a specific rural tourism accommodation for one night per person with '10–19 euros' as a low price, '20–39 euros' as a medium price, and '40–66 euros' as a high price, were able to be obtained, they could be used as variables. But since it was impossible to grasp the attributes such as 'travel frequency', 'education level', 'income level', 'age', and 'profession', they couldn't be used as variables in this study.

#### 3.3. Data analysis

With the purpose of responding to research question 2, multiple correspondence analysis (MCA) was applied in order to observe the relative position of more diversified tourist experiences. For this study, customer groups, according to the rural tourism experiences tourists seek, were defined as variables for MCA. They were placed into columns, and individuals into rows. Meaningful themes based on tourist experiences in rural tourism were extracted by analyzing the associations among tourist experiences. MCA, an exploratory and interdependent research technique, allows for the quantitative exploration of multiple variables with qualitative characteristics and a graphical description through the use of a perceptual map (Anderson, Hair, Black, & Babin, 2009; Nenadic & Greenacre, 2007). Since the described points which are near or far from each other explain association or dissociation on the perceptual map, MCA can examine relationships not only between variables but between the categories of each variable and can further group customers who pursue the same experiences (Carroll, Green, & Schaffer, 1986). In order to effectively interpret the perceptual map of MCA, a cross-tabulation table was applied (Do Valle, Mendes, & Guerreiro, 2012; Pan & Ryan, 2009). Thus, it was possible to obtain meaningful alternatives to segmenting customers through MCA (Carroll et al., 1987).

In order to answer **research questions 3, 4, 5, 6**, k-mean clustering was applied as a supplementary analysis to MCA (Ribeiro, Valle, & Silva, 2013). The market segmentation based on the tourists' perception of his/her experiences in rural tourism that resulted from MCA was extracted. Since the proximity of diversified variables in MCA shows the existence of tourists with similar profiles resulting from distinctive characteristics that reflect dissimilar groups of tourists, it is possible to

combine MCA with the k-mean clustering (Arimond & Elfessi, 2001; Greenacre, 2016). The variable obtained in segments, which originates from the dimensional scores in MCA and points out the clusters where each customer is classified, is contained as an additional variable on the MCA map. The customers' profiles and characteristics were analyzed by crossing the variable obtained as segments with the previous variables like 'tourist experiences', 'trip type', 'price level', 'gender', and 'region' (Do Valle et al., 2012).

The most common approach to using dimension reduction and cluster analysis has been to conduct them in a time-ordered sequence (Hwang, Dillon, & Takane, 2006). This approach may not generate an optimal cluster assignment since dimension reduction and cluster analysis have different criteria for optimization. The aim of the former is normally to maintain the maximum variance in the minimum number of dimensions. On the other hand, the aim of the latter is to assign the observations to clusters after finding those that are similar and dissimilar in the dataset (Vichi & Kiers, 2001). To solve this problem, the combinations of dimension reduction with cluster analysis has been needed. A new method 'joint dimension reduction and clustering', which implements dimension reduction and clustering together at the same time, has been proposed (Markos, Iodice D'Enza, & van de Velden, 2018). It overcomes the inconvenience of doing 'dimension reductions' and 'clustering' separately. In this study, the R package 'clustrd', that applies the method 'joint dimension reduction and clustering', was used, thus, the result of clustering was simultaneously displayed on the positioning map for MCA.

#### 4. Results

#### 4.1. Sample profile and extracted customer experiences

The demographic characteristics of the research samples are shown in Table 2. It shows that there were slightly more female customers (56.4%) than male. 'Trip type' consisted of 'family (45.1%)', 'friend group (28.4%)', and 'couple (26.4%)'. 'Price level', which refers to the prices that each customer paid for a specific rural tourism accommodation for one night per person, was composed of '10–19 euros (14.6%)' as a low level, '20–39 euros (65.2%) as a medium level, and '40–66 euros (20.3%)' as a high level. The online communities where the customers submitted opinions on his/her experiences in rural tourism are Toprural (39.9%)', 'Clubrural (34.6%)', 'Escapadarural (25.4%)'. The term 'visit region' evenly includes the seventeen regions of Spain visited by tourists for rural tourism.

There were 1002 personal opinions gathered, which could be broken down into 2921 comments. This large number of comments was possible because each tourist could either make several comments related to the rural tourism experiences, or only one. These experiences were derived from three dimensions: cognitive (978 comments), affective (1163), and

Table 2	
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Demography of	the	research	sample	S.
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Demographic factors	Answers
Gender	Male: 437 (43.6%), Female: 565 (56.4%)
Trip type	Family: 452 (45.1%), Friend group: 285 (28.4%), Couple: 265 (26.4%)
Price level	10-19 euros: 146 (14.6%), 20–39 euros: 653 (65.2%), 40–66 euros: 203 (20.3%)
Visit region	Andalusia: 72 (7.2%), Aragón: 70 (7.0%), Asturias: 75 (7.5%), Cantabria: 80 (8.0%),
	Castilla y León: 81 (8.1%), Castilla-La Mancha: 62 (6.2%), Catalonia: 82 (8.2%),
	Extremadura: 62 (6.2%), Galicia: 81 (8.1%), Balearic Islands: 7
	(0.7%), Canary Islands: 17 (1.7%),
	La Rioja: 48 (4.8%), Madrid: 55 (5.5%), Murcia: 31 (3.1%),
	Navarra: 72 (7.2%),
	Basque Country: 35 (3.5%), Valencia: 72 (7.2%)

sensory (780). The percentages in Table 3 are expressed with respect to the 1002 tourist opinions. With **research question 1** (How could netnography provide knowledge on the rural tourism experiences that customers pursue?) in mind, the cognitive experiences extracted are 'well-equipped' (31.8%), 'cleanliness' (26.7%), 'maintenance of facilities' (26.1%), 'activities' (6.8%), and 'value for money' (6.1%). The affective experiences extracted are 'customer care' (65.5%), 'coziness' (25.7%), 'convenience' (12.2%), 'relaxation' (9.8%), and 'privacy' (2.9%). The sensory experiences extracted are 'overall atmosphere' (26.6%), 'rustic landscape' (20.3%), 'gastronomy' (15.4%), 'natural environment' (9.3%), and 'lots of cultural tourism' (6.3%). This study showed that rural tourism experiences in Spain consisted of a combination of cognitive, affective and sensory experiences (Mascarenhas et al., 2006).

#### 4.2. MCA and cluster analysis

In order to synthetically investigate the association between the fifteen customer experiences, MCA was applied. According to Gifi (1990), if the first two dimensions dominate with regard to the variance explained and the third doesn't have more significance, just two dimensions are sufficient to analyze the data for MCA. In the present study, the contribution to the inertia, that is the percentage of variance, of dimension 1 and dimension 2 is 18.6% (Table 4.). The low variance demonstrated seems to be caused by many variables or a similar pattern in an individual's online opinion expression. Even though the percentages of variances of the two dimensions are low, it doesn't imply a lack of explanatory power in MCA (Agapito et al., 2014).

If the discrimination measure rating of a variable is high, it means that the variable is discriminated in the dimension (Nenadic & Greenacre, 2007). In order to distinguish the high ratings from the low ratings, the discrimination measure ratings, which are higher than the means were highlighted in bold (Table 5.). Variables such as 'natural environment' (0.278), 'activities' (0.202), 'coziness' (0.200), 'relaxation' (0.180), 'lots of cultural tourism' (0.173), 'well-equipped' (0.122), 'privacy' (0.094), 'overall atmosphere' (0.086), and 'convenience' (0.080) are discriminated in dimension 1. Variables such as 'maintenance of facilities' (0.415), 'gastronomy' (0.260), 'value for money' (0.156), 'customer care' (0.119), 'cleanliness' (0.064), and 'rustic landscape' (0.034) are discriminated in dimension 2.

Taking synthetics into consideration for all information related to the fifteen variables gathered from customer experiences in rural tourism for dimension 1 and dimension 2, the positioning map for MCA was drawn (Fig. 2.). It was presented on the map, focusing on the associations among tourist experiences in rural tourism. This study implemented dimension reduction and clustering at the same time, thus, the result of clustering was able to be derived on the positioning map for MCA (Markos, Iodice D'Enza, & van de Velden, 2018). The respondents' coordinate values of MCA are performed to activate the k-mean clustering. Three clusters were determined by looking for maximizing the segment centers with minimizing the number of clusters and making a

#### Table 3

Experiences in rural tourism.	[N = 1002  tourist opinions.]	plural response].
	[	F

Categories	Frequency	Categories	Frequency
Cognitive	978	Sensory	780
Well-equipped	319 (31.8%)	Overall atmosphere	267 (26.6%)
Cleanliness	268 (26.7%)	Rustic landscape	203 (20.3%)
Maintenance of facilities	262 (26.1%)	Gastronomy	154 (15.4%)
Activities	68 (6.8%)	Natural environment	93 (9.3%)
Value for money	61 (6.1%)	Lots of cultural tourism	63 (6.3%)
Affective	1163		
Customer care	656 (65.5%)		
Coziness	258 (25.7%)		
Convenience	122 (12.2%)		
Relaxation	98 (9.8%)		
Privacy	29 (2.9%)		

Table 4

Eigenvalues.		
	Dim. 1	Dim. 2
Eigenvalue	0.102	0.084
Percentage of variance	10.2%	8.4%
Cumulative percentage of	10.2% (54.8% of var. of dim.	18.6%
variance	1&2)	(100.0%)

comparison of the results of lots of tests (Cairns, Sallu, & Goodman, 2014). Fig. 2 shows that there exist three key experience-based themes generated by representing rural tourism experiences located close to each other on the map. On the map, 'Coziness.y' indicates the response of a customer who mentioned coziness in his/her opinion, while 'Coziness.n' means the response of a customer who did not mention coziness in his/her opinion. The first group of rural tourism experiences is located above the horizontal axis. First of all, the theme of the first group was termed 'comfort-driven visitor', since it included affective experiences related to coziness, as well as cognitive experiences associated with rural tourist accommodations such as maintenance of facilities, cleanliness, and well-equipped. This theme is similar in comparison to the Spanish rural tourism segment 'enjoying a rural destination's services and facilities' found by Polo Peña et al. (2014), who pursue comfort from rural tourism destinations. It also can be seen that the segment 'seeking facilities-based comfort' exists in the Spanish rural tourism market, from the findings of Albaladejo-Pina and Díaz-Delfa (2009) that Spanish tourists value house size and the type of building when choosing rural tourism. For the first group, it seems to be important to mainly stay in rural accommodations of high quality. In sequence, the theme located in the right downward direction was named 'rural ambiance spender'. Given that the experiences contained in this group were rustic landscape, overall atmosphere, and gastronomy in sensory terms, as well as convenience and customer care in affective terms and value for money in cognitive terms, it is considered to be a group looking for enjoyment and quiet rest near rural tourism accommodations. Molera and Albaladejo-Pina (2007) defined the characteristics of Spanish tourists seeking an uncrowded, quality environment, quiet atmosphere and independence as a rural life tourist. In addition, since for Spanish tourists it is important whether or not rural tourism is located in the country-mountain area, they are willing to pay more for the location (Albaladejo-Pina & Díaz-Delfa, 2009). Finally, the theme portraved in the left downward direction was entitled 'active leisure seeker', since it seems to be a group that pursues enjoying active leisure in natural areas based on experiences such as activities, relaxation, privacy, natural environment, and lots of cultural tourism. In Spain, since the decade of the 1990s, it has already been very common that in many rural destinations, sophisticated tourist products are offered that include cultural or environmental routes, as well as sports, adventure or gastronomic activities (Cánoves, Villarino, Priestley, & Blanco, 2004). Among these products, perhaps the one that has grown the most in Spain is wine tourism (Molina, Gómez, González-Díaz, & Esteban, 2015) and adventure tourism linked to activities in nature (Martín & del Campo, 2019). At a great distance, but with some growth in recent years is olive tourism, mainly in the olive producing areas of central and southern Spain (Millán-Vazquez de la Torre, Arjona-Fuentes, & Amador-Hidalgo, 2017). Taken together, three rural tourism markets such as comfort-driven visitors, rural ambiance spenders, and active leisure seekers have been identified in Spain. With research question 2 (To what extent could netnography reveal significant experiential themes for rural tourism?) in mind, three key experience-based themes and the corresponding rural tourism experiences were suggested (Table 6.)

In this study, since it is based on the opinions written by tourists, the rural tourism experience variables were derived and market segmentation then proceeded, and references from tourists related to the experiences that make up each theme can be examined.

First of all, references related to the experiences such as well-

#### Table 5

#### Discrimination measures.

Variables	Dim.1	Dim.2	Mean	Variables	Dim.1	Dim.2	Mean
Cognitive				Sensory			
Well-equipped	0.122	0.094	0.108	Overall atmosphere	0.086	0.000	0.043
Cleanliness	0.004	0.064	0.034	Rustic landscape	0.001	0.034	0.018
Maintenance of facilities	0.000	0.415	0.208	Gastronomy	0.015	0.260	0.138
Activities	0.202	0.073	0.138	Natural environment	0.278	0.015	0.146
Value for money	0.089	0.156	0.123	Lots of cultural tourism	0.173	0.009	0.091
Affective				Active total	1.533	1.263	1.398
Customer care	0.009	0.119	0.064				
Coziness	0.200	0.005	0.103				
Convenience	0.080	0.017	0.048				
Relaxation	0.180	0.000	0.090				
Privacy	0.094	0.002	0.048				

Numbers in bold correspond to ratings higher than the means.



Fig. 2. Positioning map for clustering of MCA.

#### Table 6

Themes and detailed experiences.

	Comfort-driven visitor	Rural ambiance spender	Active leisure seeker
Cognitive	Well-equipped Cleanliness Maintenance of facilities	Value for money	Activities
Affective	Coziness	Convenience	Relaxation
		Customer care	Privacy
Sensory		Overall atmosphere	Natural
		Rustic landscape	environment Lots of cultural tourism
		Gastronomy	

equipped, cleanliness, maintenance of facilities, and coziness that make up the first theme 'comfort-driven visitor' are as follows:

"The house is fully equipped with everything you might need, from the bathrooms to the kitchen. We had the possibility to enjoy a spa and sauna, to make barbecues in the patio with garden, as well as to use the children's playroom and the football table itself."

(Mo\*\*\*\*\*, 03/2017)

"The house is clean and mostly tidy. It has everything you need, clean sheets and towels. Ideal for a weekend  $\ldots$  "

(Is\*\*\*\*, 08/2016)

"The facilities cannot be of better quality. The sports spaces are also very well maintained. It is the general comment of all who attend. I will visit again absolutely."

(Ma\*\*\*\*\*, 09/2016)

"The house was in perfect condition with equipment that we felt at home. It was very comfortable with everything we needed."

(Ju\*\*\*\*\*, 02/2019)

Next, references related to the experiences such as value for money, convenience, customer care, overall atmosphere, rustic landscape, and gastronomy that influence on the second theme 'rural ambiance spender' are as follows:

"The house has a very large kitchen, a comfortable and cozy living room, two bathrooms and the water come out hot and with pressure. It has the more quality and value for the price. The house seemed excellent."

(Fr\*\*\*\*\*\*, 11/2017)

"Regarding the stay, the house has enough rooms, many bathrooms, kitchen amenities, and above all, a fenced exterior where there is everything."

(Mi\*\*\*\*\*, 12/2017)

"The owner is a woman of the most endearing who has gone out of her way to give us all the necessary explanations to make sure that we take full advantage of our vacation in her beautiful land. She opened the doors of her home in a detailed, generous and affectionate way."

(Ma\*\*\*\*, 09/2017)

"The house is super maintained, decorated in the last detail, and with a rustic but comfortable touch. It's nice to wake up with the crowing of the rooster .... what a big difference to the noise of the cars. The environment is a huge gift."

(Ju\*\*\*\*\*, 06/2019)

"The house was clean and comfortable, with a terrace overlooking olive groves and hillsides. The landscape that surrounds the farmhouse is wonderful. There is an impossible greener valley in which absolute tranquility is breathed."

(Uk\*\*\*\*\*\*. 09/2016)

"The breakfast very rich and super good quality. In the area, where to eat and what places to visit that were worth it."

(Da\*\*\*\*, 07/2017)

Finally, references related to the experiences such as activities, relaxation, privacy, natural environment, and lots of cultural tourism that make up the third theme 'active leisure seeker' are as follows:

"Perfectly equipped house and the tennis, soccer, and ping-pong court has been fun for seniors and children. We have enjoyed hiking and horse riding, too."

(Ra\*\*\*\*\*, 10/2018)

"A very quiet place to fully enjoy your free time and disconnect from noise. Whether you go with friends or with children, you have everything at hand, zero worries. A beautiful cabin with all possible comforts."

(Lu\*\*\*\*\*, 05/2017)

"An ideal place for a family getaway to enjoy nature. We chose here because we found it a beautiful and well-located natural enclave not only to make excursions in the countryside with the children but also to know the nearby villages."

(En\*\*\*\*\*, 04/2017)

"The even better environment has the Jewish quarter. It is full of natural charms and Roman, Arab and medieval heritage, you will find routes and excursions of all kinds."

(Ro\*\*\*\*, 08/2018)

In order to capture the key themes and to identify the segmentation based on tourist experiences, k-mean clustering was performed, applying the respondents' coordinate values of MCA as input variables. Three segments were derived and, accordingly, three key themes were proposed. Segment centers and the quantity of individuals corresponding to each segment are shown in Table 7. Segment 1 is the largest, containing 41.1% of all individuals. In second place is segment 2 with 40.1% of participants. Finally, segment 3 is defined with 18.8% of individuals.

#### 4.3. The profile of the three segments

Fifteen rural tourism experiences were crossed with the three segments (Table 8.). The chi-square test was performed because the cells with expected values of less than 5 did not exceed 20% of the total (11.1%). Chi-square test (chi-square = 1252.9, p-value = 0.000) shows that there is a significant dependence relationship between the three segments and tourist experiences in rural tourism. Thereby, these results

#### Table 7

Segment centers and quantity of individuals.

	Comfort-driven visitor (Segment 1)	Rural ambiance spender (Segment 2)	Active leisure seeker (Segment 3)
Dim.1	0.006	0.015	-0.047
Dim.2	0.027	-0.023	-0.008
Individuals	412 (41.1%)	402 (40.1%)	188 (18.8%)

verify that in terms of experiences in rural tourism, the three segments are differentiated **research question 3** (How valuable are the rural tourism segments in Spain based on the tourist experiences derived through the use of netnography?).

Regarding **research question 4** (Which connections could be encountered between the various types of rural tourism trips and the experiences pursued?), Table 9 shows that there are differences among the three segments in terms of trip types (chi-square = 35.261, p-value = 0.000). Amongst the trip types, the proportion of 'family' and 'friend group' is relatively high in segment 1. In segment 2, the trip type has a relatively high proportion of 'couple'. In segment 3, 'couple' and 'family' trip types are evenly distributed.

With regards to **research question 5** (Which connections could be found between the various price levels tourists pay and the experiences pursued?), Table 10 shows that each segment is different from the others in the price level dimension (chi-square = 20.020, p-value = 0.000). The '20–39 euros (medium price)' and '10–19 euros (low price)' price levels are the majorities in segment 1. Segment 2 mainly uses the rural tourism accommodations at the '20–39 euros (medium price)' price level. In segment 3, the '40–66 euros (high price)' price level is mainly distributed.

Chi-square = 20.020, p-value = 0.000 (<0.05)

The attributes in demography are shown in Table 11. In order to respond to **research question 6** (Which connections could be identified between the tourist demographic variables and the experiences they pursue?), whether the three segments differ in demographic variables was analyzed. No significant association was found for gender (chi-square = 1.702, p-value = 0.427) while there was a difference among three segments regarding region (chi-square = 51.533, p-value = 0.016). In segment 1, the proportion of Catalonia, Galicia, La Rioja, Madrid, Murcia, Navarra, and Valencia is relatively high. Those who have visited to Andalusia, Asturias, Cantabria, Catalonia, Galicia, Canary Islands, and Basque Country mainly belong to segment 2. In segment 3, Aragón, Cantabria, Castilla-La Mancha, Castilla y León, Extremadura, Murcia, and Basque Country are majorities.

#### 5. Discussion and conclusions

This study was conducted in order to understand the rural tourism market segments in Spain, based on customers' natural perceptions of rural tourism experiences collected through the application of netnography. This study confirmed diversified rural tourism experiences are pursued by Spanish tourists, which means that they enjoy rural tourism with a variety of motivations and in diverse ways. According to the result of this study, it was confirmed that three market segments exist in rural tourism in Spain and three corresponding themes were also derived from the results. In this study, three key themes associated with rural tourism experiences were derived from the analysis and rural tourism markets were segmented. The characteristics of each key theme are as follows: above all, the first theme was named 'comfort-driven visitor' that lays emphasis on staying mainly in rural accommodations of high quality. It included tourist experiences such as maintenance of facilities, cleanliness, well-equipped, and coziness. This segment contains a high proportion of people who enjoy rural tourism in 'family' or 'friend group' units and seek accommodations at a relatively affordable price. This is presumably because the segment 'comfort-driven visitor' utilizes rural tourism with a focus on rural tourism facilities for gatherings with family or friends.

In sequence, the second theme was entitled 'rural ambiance spender', which is characterized by the pursuit of enjoyment and quiet rest around rural tourism accommodations. They pursue experiences in rural tourism such as convenience, customer care, overall atmosphere, rustic landscape, gastronomy, and value for money. This segment has a high proportion of 'couple' units and consists of people paying relatively medium prices for rural tourism accommodations. These results are presumed to stem from the fact that the segment 'rural ambience

#### Table 8

Frequency distribution of experiences in rural tourism by segments.

Experiences in rural tourism	Comfort	-driven visitor (Segment 1)	Rural ar	nbiance spender (Segment 2)	Active le	eisure seeker (Segment 3)	Total	
	Num.	%	Num.	%	Num.	%	Num.	%
Cognitive								
Well equipped	204	63.9	35	11.0	80	25.1	319	100.0
Cleanliness	155	57.8	74	27.6	39	14.6	268	100.0
Maintenance of facilities	226	86.3	15	5.7	21	8.0	262	100.0
Activities	0	0.0	7	10.3	61	89.7	68	100.0
Value for money	2	3.3	58	95.1	1	1.6	61	100.0
Affective								
Customer care	209	31.9	325	49.5	122	18.6	656	100.0
Coziness	102	39.5	62	24.0	94	36.4	258	100.0
Convenience	32	26.2	85	69.7	5	4.1	122	100.0
Relaxation	31	31.6	12	12.2	55	56.1	98	100.0
Privacy	5	17.2	2	6.9	22	75.9	29	100.0
Sensory								
Overall atmosphere	99	37.1	142	53.2	26	9.7	267	100.0
Rustic landscape	57	28.1	106	52.2	40	19.7	203	100.0
Gastronomy	13	8.4	93	60.4	48	31.2	154	100.0
Natural environment	12	12.9	9	9.7	72	77.4	93	100.0
Lots of cultural tourism	10	15.9	2	3.2	51	81.0	63	100.0

Chi-square = 1252.900, p-value = 0.000 (<0.05).

#### Table 9

Frequency distribution of trip type by segments.

Trip type	Comfort-driven visitor (Segment 1)		Rural am	Rural ambiance spender (Segment 2)		Active leisure seeker (Segment 3)		Total	
	Num.	%	Num.	%	Num.	%	Num.	%	
Couple	79	19.1	130	32.3	56	29.8	265	26.5	
Family	189	45.9	162	40.3	101	53.7	452	45.1	
Friends	144	35.0	110	27.4	31	16.5	285	28.4	
Total	412	100.0	402	100.0	188	100.0	1002	100.0	

Chi-square = 35.261, p-value = 0.000 (<0.05).

#### Table 10

Frequency distribution of price level by segments.

Price level	Comfort-driven visitor (Segment 1)		Rural ambiance spender (Segment 2)		Active leisure seeker (Segment 3)		Total	
	Num.	%	Num.	%	Num.	%	Num.	%
10-19 euros	60	14.5	51	12.7	35	18.6	146	14.5
20-39 euros	285	69.2	270	67.2	98	52.1	653	65.2
40-66 euros	67	16.3	81	20.1	55	29.3	203	20.3
Total	412	100.0	402	100.0	188	100.0	1002	100.0

spender' seeks to enjoy the rural atmosphere and is willing to pay more money for this.

Finally, the third theme is 'active leisure seeker', which is characterized by pursuing a variety of ways to enjoy active leisure in natural areas. The experiences included are activities, relaxation, privacy, natural environment, and lots of cultural tourism. This group enjoys rural tourism in 'couple' or 'family' units. In this segment, the high price level is the most common price range. These results may be because the segment 'active leisure seeker' pursues a variety of activities around nature and rural areas and would gladly pay more for rural tourism accommodations that provide the conditions for such activities.

This study also confirmed that different themes related to rural tourism experiences were created according to the characteristics sought by customers, which were primarily based on trip types and price levels. The first theme 'comfort-driven visitor' was mainly composed of 'family' and 'friend group' as the type of rural tourism pursued by tourists. In the second theme 'rural ambiance spender', the proportion of 'couple' was relatively high, and in the third theme 'active leisure seeker', the trip type had a relatively high proportion of 'couple' and 'family'. In terms of price level, the first theme 'comfort-driven visitor' contained a number of tourists seeking low and medium price levels. While the medium price level category was mainly distributed into the second theme 'rural ambiance spender', high price level was the majority in the third theme 'active leisure seeker'.

#### 5.1. Theoretical and methodological implications

This study contributes to the existing literature in terms of theory and methodology. First, in the theoretical terms, this study was able to derive themes based on rural tourism experiences. The first theme 'comfort-driven visitor' is similar to 'inactives' in Portugal (Eusébio et al., 2017) that show a passive attitude and present low literacy levels and with higher familiarity levels with rural areas; 'the relaxers' in Scotland (Frochot, 2005) that prefer cheaper accommodations and do not practice many activities; 'passive tourists' in South Korea (Park & Yoon, 2009) with low motivation but educated and wealthy; and 'enjoying rural destination's services and facilities' in Spain (Polo Peña et al., 2014) with the pursuit of comfort in rural tourism. According to Hearne and Salinas (2002), being well-equipped is a very important attribute in choosing rural tourism. Also, in terms of functionality, the maintenance of facilities is an important experience pursued by tourists (Polo Peña et al., 2014).

With regard to existing research, the second theme 'rural ambiance spender' is consistent with the segment 'ruralist' derived from Almeida,

#### Table 11

Frequency distribution of demographic variables by segments.

	Comfort-driven visitor (Segment 1)		Rural ambiance spender (Segment 2)		Active leisure seeker (Segment 3)		Total	
	Num.	%	Num.	%	Num.	%	Num.	%
Gender								
Man	184	44.7	179	44.5	74	39.4	437	43.6
Woman	228	55.3	223	55.5	114	60.6	565	56.4
Total	412	100.0	402	100.0	188	100.0	1002	100.0
Chi-square = 1.702, p-v	alue $= 0.42$	27 (>0.05)						
Region								
Andalusia	29	7.0	32	8.0	11	5.9	72	7.2
Aragón	27	6.6	26	6.5	17	9.0	70	7.0
Asturias	23	5.6	38	9.5	14	7.4	75	7.5
Cantabria	22	5.3	41	10.2	17	9.0	80	8.0
Castilla-La Mancha	25	6.1	25	6.2	12	6.4	62	6.2
Castilla y León	29	7.0	31	7.7	21	11.2	81	8.1
Catalonia	34	8.3	34	8.5	14	7.4	82	8.2
Extremadura	25	6.1	23	5.7	14	7.4	62	6.2
Galicia	34	8.3	34	8.5	13	6.9	81	8.1
Balearic Islands	5	1.2	1	0.2	1	0.5	7	0.7
Canary Islands	5	1.2	10	2.5	2	1.1	17	1.7
La Rioja	26	6.3	16	4.0	6	3.2	48	4.8
Madrid	33	8.0	14	3.5	8	4.3	55	5.5
Murcia	20	4.9	4	1.0	7	3.7	31	3.1
Navarra	36	8.7	26	6.5	10	5.3	72	7.2
Basque Country	8	1.9	18	4.5	9	4.8	35	3.5
Valencia	31	7.5	29	7.2	12	6.4	72	7.2
Total	412	100.0	402	100.0	188	100.0	1002	100.0

Chi-square = 51.533, p-value = 0.016 (<0.05).

Correia, and Pimpão (2014) or the term 'rural explorers' determined by Dong, Wang, Morais, and Brooks (2013). This group shares an interest in the rural lifestyle from other empirical research such as 'traditional ruralists' in Portugal (Kastenholz, Davis, & Paul, 1999), 'the rurals' in Scotland (Frochot, 2005) or 'rural life tourists' in South-Eastern Spain (Molera & Albaladejo-Pina, 2007). In rural tourism choices, customer care created through the interaction between rural tourism hosts and tourists should also be seen as an important attribute (Choo & Petrick, 2014). Additionally, previous studies show that a rustic landscape is a key resource of rural tourism (Figueiredo & Raschi, 2012; Kastenholz et al., 2012). Simultaneously, gastronomy is regarded as an important attractor in maximizing the tourist experiences on a sensory level (Everett, 2008).

The final theme 'active leisure seeker' has connections with 'nature lovers' and 'active visitors' segments in Portugal (Eusébio et al., 2017; Kastenholz et al., 1999), 'the actives' and the gazers in Scotland (Frochot, 2005), and 'heritage & nature seekers' in Gambia (Rid et al., 2014). According to Chaminuka, Groeneveld, Selomane, and van Ierland (2012), outdoor activity should be considered a key attribute when choosing the rural tourism destination. In addition, the relaxation associated with emotional fullness is the most important experience that tourists seek in rural tourism (Sharpley & Jepson, 2011). Similar to the findings from previous studies, the natural environment plays an important role in choosing the rural tourism destination (Figueiredo & Raschi, 2012; Kastenholz et al., 2012).

This study enables researchers to promote an experiential approach by understanding the experiences pursued by rural tourists. Although there are specific experiences in which each theme has a deeper relationship, this study found that tourists seek comprehensive experiences in terms of the cognition, affection and sensory factors. In the first theme 'comfort-driven visitor', experiences in the cognitive dimension related to facilities were most highly considered in the selection process (Knutson & Beck, 2008). In the second theme 'rural ambiance spender', sensory experiences based on landscape and gastronomy were most emphasized and affective experiences related to customer care were considered next (Choo & Petrick, 2014; Kastenholz et al., 2012). In the third theme 'active leisure seeker', affective experiences based on relaxation and sensory experiences derived from nature and culture were primarily considered to be of equal important (Frochot, 2005;

#### Sharpley & Jepson, 2011).

Next, in the methodological terms, this study contributes to the existing literature. Above all, this study is significant in that it has quantitatively analyzed the tourist experiences and segmented the market through the qualitative application of netnography based on the tourists' voluntary opinions rather than on artificial consumer surveys (García, 2011). This study started with collecting user-generated online content from netnography. This means that the tourists' voluntarily revealed consciousness was observed online. Thus, it was able to deeply reflect the tourists' potential needs and reduce the possibility of errors and limited choice in the response process, due to the characteristics of netnography such as direct access to research participants and higher reflective quality of online opinions (Kozinets, 2015). Also, the characteristics of online-based netnography make it possible to access a wide variety of data. Therefore, it is possible to get a sufficient amount of data in a relatively short time to enable various quantitative analyses (Xun & Reynolds, 2010). The utility of data collection in terms of cost and time will be an important consideration for the use of netnography in many fields in the future. Finally, in this study, some quantitative analyses such as MCA, and clustering were performed by collecting online data generated from the experiences of 1002 customers. MCA is considered a good alternative segmentation method when respondents must only answer yes, no, or not sure, instead of the traditional factor-cluster segmentation based on Likert-type scales (Greenacre, 2016). Since the associations between respondents who are close to each other as well as other variables can be quantified through MCA, market segmentation becomes possible. It is also important to note that through MCA and clustering, this research was able overcome the limitation of data expression by collecting voluntary customer opinions (Markos, Iodice D'Enza, & van de Velden, 2018).

#### 5.2. Practical implications

Since tourist experiences based on the theme of each segment were identified, it's possible to know specifically which experiences to offer in order to implement each theme and attract the appropriate customer base. It allows for the establishment and implementation of effective marketing strategies for the targeted tourist groups. In this study, each theme includes relevant tourist experiences in three dimensions: cognitive, affective, and sensory. Therefore, it is possible to derive information on which destination identity should be pursued on the cognitive level, which memorable experiences should be provided on the affective level, and which sense should be stimulated for tourists on the sensory level, depending on the tourist attraction.

The results of this investigation can be applied to the tourism field. Rural tourism providers should choose one or two segments that are relevant to their own resources and environment and that are considered to be marketable in terms of segment size. They have to set up the primary target and secondary target to focus on. The need to derive a target-oriented positional strategy has emerged. Above all, if the first segment, 'comfort-driven visitor', is targeted, the core value to be offered to the customer is comfort. A positioning strategy should be centered on this core value, thus for example, 'like home' could be a positioning statement. The appealing point is that customers can enjoy special moments with the people who accompany them in a cozy atmosphere with sincere service. In order to implement this positioning strategy, improvements to the infrastructures, accommodation services and well-equipped facilities should be made.

Next, if the second segment, 'rural ambience spender', is set up as a core target, the core value to be provided to the customer is pleasure in rural environments. A positioning strategy should be developed around this core value, thus for example, 'unusual delight' can be a positioning statement. The appealing point of this positioning strategy is that a specific rural tourism experience can offer pleasure beyond customer expectations. In order to employ this positioning strategy, it is necessary to secure and improve the surrounding or complementary facilities that can be utilized and enjoyed. In addition, it is necessary to offer an atmosphere where tourists can feel an easygoing environment and friendly, warm hosts appeal to them.

Finally, if the third segment, 'active leisure seeker', is targeted, the core value is activity. A positioning strategy should be developed around this core value, thus for example, 'revitalization' can be a positioning statement. The appealing point of this positioning strategy is that a specific rural tourism experience adds creative inspiration and vitality to the customers' lives. Based on this idea, it is necessary to be able to discover something to experience by utilizing the surrounding cultural tourism as well as various activities to be able to be enjoyed in the natural environment. Based on this positioning strategy, it is necessary to develop the appropriate experiences that can be provided for the target, and to consistently communicate the positioning statement through the customer contact points of non-mass media communications such as the web site, social network services (SNS) and word-ofmouth. When evaluating management performance, the indicators appropriate for the characteristics of a selected segment should be developed and utilized in the evaluation process.

#### 5.3. Future lines of research and limitations

Netnography based on user-generated online content can have a wide range of applications in tourism research. First, segmentation by MCA after the collection of user-generated online content through netnography can be applied to diverse tourism research such as wine tourism, ecotourism, cruise tourism, and hospitality, as well as rural tourism. It would be possible to subdivide each unique tourism market into segments based on customer perspective by quantifying the associations between the respondents and variables of each market. In addition, through using the attributes derived from this netnography study, various research methodologies such as visual Q approach, choice experiments, and best-worst scaling, which are able to better define the market, can also be applied to these tourism studies.

However, the limitation of this study is that it was impossible to collect and verify the sociodemographic features (age, income, occupation, place of residence, etc.) of the customers since the study only analyzed opinions that the customers had already voluntarily left in online communities. These aforementioned aspects are especially interesting because they are considered sociodemographic variables and may have some influence on the customer's choices. Furthermore, this study is limited by a lack of information on customers' lifestyles and motivations for rural tourism, which can be obtained through the customers' direct responses. This shortage of information made it difficult to analyze the data more stereoscopically. For the future, supplementation through further offline quantitative research is needed. It would be necessary to combine online data from netnography with offline data such as personal interviews and focus group interviews to generalize them.

#### Author statement

All authors conceived and designed the research. Wookhyun An performed the research, analyzed the data, and drafted the manuscript. Silverio Alarcón Lorenzo revised the manuscript. All authors read and approved the final manuscript.

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