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Research Paper

New trends in information search and their influence on destination loyalty: Digital destinations and relationship marketing

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ABSTRACT

Increasingly destination management organizations are engaging with consumers through digital media, communicating with them in a long-term relationship. Numerous studies have shown that social media influence the intentions of travellers to visit one destination over another. However, the literature has paid little attention to the relationship between information-seeking behaviour and the development of destination loyalty. In that sense, this study analyses how tourists are consulting more digital information and using several different information sources, which influences the time tourists are sharing at a few destinations, becoming more loyal to multiple destinations at the same time (horizontal loyalty). However, this topic has not yet been stressed in the tourism context. This study therefore attempts to show that: (a) the difference in behaviour when it comes to the use of several information sources, depending on tourists' profiles (nationality and socio-demographic characteristics), and (b) although there are no significant differences regarding the use of the different social media in terms of destination-loyal and horizontal-loyal tourists, the impact of the different sources of information on loyalty (behavioural and attitudinal) is different. Social media has a greater impact on attitudinal loyalty. To achieve those goals, a wide survey with 6964 questionnaires was developed, considering tourists from 17 European countries. Those results are useful in making decisions concerning digital development strategies and loyalty programs to tourist destinations.

1. Introduction

Tourists search for information that helps them make better decisions when it comes to choosing a holiday destination, and they do so using different channels (Ho, Lin, & Chen, 2012) that have evolved over time. The start of the Internet and social media has altered the way tourist knowledge spreads, and it has turned into the most commonplace information search (Xiang & Gretzel, 2010). In addition, these global platforms allow travellers to share their experience (Gretzel, Lee, Tussyadiah, & Fesenmaier, 2009; Gupta & Kim, 2004) and the content generated by users in those platforms plays a key role in planning trips, including decisions regarding revisiting destinations and loyalty (Litvin, Goldsmith, & Pan, 2008; Yoo & Gretzel, 2011). Understanding how travellers have adapted to these changes is essential in order to identify and to develop effective communication strategies (Xiang, Wang, O'Leary, & Fesenmaier, 2014).

Not only have the search methods used by tourists changed, but also the relationship regarding loyalty towards tourist destinations.

Nowadays, tourists not only share their time with different sources of information and specific social media, but also share their holiday time within several destinations at the same time, staying loyal to several of them, which is known as horizontal loyalty (McKercher, Denizci-Guillet, & Ng, 2012).

On the one hand, understanding how tourists access information is important in order to make marketing choices (Bieger & Laesser, 2004), depending on the different tourists' profiles (Chiang, King, & Nguyen, 2012; Gursoy & Chen, 2000; Hyde, 2007; Jun, Vogt, & MacKay, 2007; Luo, Feng, & Cai, 2005; Xu, Morgan, & Song, 2009). On the other hand, numerous studies have shown that the information sources have an influence on the intentions tourists have of visiting a particular destination (Dey & Sarma, 2010), and it is the first step before planning a trip and making decisions. This process has become more complicated with the introduction of new sources of information (Xiang, Wang, O'Leary, & Fesenmaier, 2014). Nevertheless, the literature available has not focused specifically on how social media influences different kinds of loyalty (Hudson, Roth, Madden, & Hudson, 2015). Therefore, it is

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necessary to capture the key aspects of joint use of the different social media and traditional sources of information when planning a trip, and determine the existing relationship towards loyalty typologies to tourist destinations.

It is subsequently vital to examine the following in depth: (a) the difference in behaviour when it comes to the use of several information sources depending on tourists' profiles (nationality and socio-demographic characteristics), and (b) the relationship between the information sources used and loyalty towards destinations. In doing so, a better understanding of how tourists vary their behaviour between the different sources and different destinations is obtained.

2. Literature review

When tourists make the decision to travel, they find difficulties when assessing the quality provided if they have not visited these locations before (Kim, Lehto, & Morrison, 2007). Information sources are used to reduce uncertainty during the decision-making process (Xiang et al., 2014). Furthermore, tourist behaviour regarding the use of social media differs depending on the segments analysed: nationalities and socio-demographic characteristics (Bieger & Laesser, 2004; Bolton et al., 2013; Bonn et al., 2001; Kim, Xiang, & Fesenmaier, 2015), and information sources have been traditionally analysed considering their influence in explaining the next visit to a destination (Baloglu, 2000). However, the influence on repeating visits (loyalty), considering both behavioural and attitudinal loyalty, has been omitted in the literature. In this process, different variables must be included to explain this loyalty behaviour, such as motivations and image (Gursoy, Chen, & Chi, 2014; Sun, Chi, & Xu, 2013).

2.1. Information sources

Social media use on the Internet by travellers has become a dominant way of searching for information (Pan, MacLaurin, & Crotts, 2007; Xiang & Gretzel, 2010), with several types of content generated by consumers (Munar & Jacobsen, 2014), such as wikis (i.e. Wikipedia), blogs and microblogs (i.e. Twitter), social media (i.e. Facebook), communication exchange channels (i.e. Flickr, YouTube), and review channels (i.e. TripAdvisor). In this context it is crucial to identify what the most relevant new information sources are in order to consider them in this study.

According to Chan and Guillet (2011), Twitter and Facebook are the most widely used social media sites in the industry. Thus, Twitter is the most popular microblogging service (Jansen, Zhang, Sobel, & Chowdury, 2009), and Facebook is the most-used social media platform among European tourists (Escobar-Rodríguez, Grávalos-Gastaminza, & Pérez-Calañas, 2016). Besides Twitter and Facebook, YouTube, Flickr, and TripAdvisor are among other popularly used social media sites in the industry. Thus, YouTube is the second-largest worldwide search engine after Google (Welbourne & Grant, 2015), being the leader in the distribution of video content. Flickr is the most popular photo-sharing social media site (Zielstra & Hochmair, 2013), although new players (e.g. Instagram) are taking over this position. Finally, TripAdvisor is the largest community travel site in the world (TripAdvisor, 2016). Table 1 shows references that support the relevance of these social media sites and the importance of analysing them to pursue the goals of this study.

Previous studies have tried to understand how tourists use the Internet to gather information, as well as the best way for tourist suppliers to make the most out of those channels (Araña, León, Carballo, & Gil, 2015; Buhalis & Law, 2008; Chung & Buhalis, 2009; Ho et al., 2012; Kladou & Mavragani, 2015; Litvin et al., 2008; Pan & Fesenmaier, 2006; Papathanassis & Knolle, 2011; Xiang & Gretzel, 2010). Recently, there has been an advance in research related to social media and the Internet in the destination context and their use when establishing relationships with tourists and loyalty

(Casaló, Flavián, & Guinalú, 2010; Kim & Hardin, 2010; Wang & Fesenmaier, 2004; Xiang & Gretzel, 2010) and the impact it has when planning a holiday (Gretzel & Yoo, 2008; Sigala, Christou, & Gretzel, 2012; Xiang & Gretzel, 2010). However, there is a need to keep enhancing knowledge regarding the differences among segments when using the social media (Kim et al., 2015). On the other hand, Stepchenkova, Shichkova, Kim, Pennington-Gray, and Rykhtik (2015) noted that for tourists with a loyal behaviour, the Internet seems to be the main source used when choosing a holiday destination. However, there has not yet been an in-depth study of the influence of the use of the Internet and the particular social media sites on the development of the different kinds of loyalties towards tourist destinations.

The analysis of information sources, on the one hand, and the analysis of loyalty, on the other, should take into account the different groups of tourists. In particular, information-seeking behaviour has a significant relationship with demographic characteristics (Buhalis & Law, 2008). Previous studies have tried to understand the existing differences in the information-seeking behaviour of different groups of tourists. Socio-demographic characteristics such as nationality, gender, and age have been used as segmentation criteria. For example, Gursoy and Chen (2000) examined the external information-seeking behaviour of travellers from Germany, the United Kingdom and France, and four distinct segments of information-seeking behaviour were identified. Gursoy and Umbreit (2004) ran a cross-cultural comparison of the information-seeking behaviour of travellers from the EU member countries where six market segments emerged. However, these studies have not paid particular attention to the use of social networks and online media as a source of tourist information. For example, Gursoy and Chen (2000) and Chen and Gursoy (2000) analysed social media as a general category, without considering the differences among them. Something similar happens in the work of Gursoy and Umbreit (2004): they ask about the use of Internet information and Minitel (a videotex service developed in France). Thus, it is necessary to try to better understand this phenomenon by studying the differences among the use of the specific social media and the different socio-demographic segments.

More recently Kim et al. (2015) examined various aspects of Internet use among four generational groups, including the Silent Generation, Baby Boomers, Generation X, and Generation Y, over a six-year period. Findings show a high adoption rate of the Internet among all generations, but there are important differences related to information search, trip planning activities, and Web sites used for online booking.

2.2. Antecedent factors of loyalty

Consumer loyalty is one of the most critical marketing constructs (Tasci, 2016). According to the literature, there are two elements of loyalty (Baloglu, 2002; Kumar, Shah, & Venkatesan, 2006): behavioural and attitudinal. From a behavioural point of view, loyalty can be understood as a current revisit to a holiday destination. An attitudinal approach represents the personal attitude and emotions that play a part in showing loyalty to a destination. The intention of revisiting a destination in the future is a manifestation of the latter.

Previous literature on loyalty has also shown that customers may be loyal to more than one brand (Brown, 1953; Cunningham, 1956; Dowling & Uncles, 1997; Jacoby & Kyner, 1973; Oliver, 1999; Olson & Jacoby, 1974; Sharp & Sharp, 1997; Yim & Kannan, 1999). This fact has not been thoroughly studied in the tourist sector, despite having proven its presence in other market environments, in which tourists can be loyal to several destinations at the same time, which has been referred to as horizontal loyalty in recent studies (McKercher et al., 2012).

Properly understanding tourist loyalty will help identify different segments of visitors (Melián-González, Moreno-Gil, & Araña, 2011;

Table 1
Literature supporting the importance of different social media sites in tourism.

Social Media site	References
Twitter	Hennig-Thurau, Wiertz, and Feldhaus (2015); Jansen et al. (2009); Kaplan and Haenlein (2010); Lo, McKercher, Lo, Cheung, and Law (2011); Palmer and Koenig-Lewis (2009)
Facebook	Escobar-Rodríguez et al. (2016); Illum, Ivanov, and Liang (2010); Lo et al. (2011); Palmer and Koenig-Lewis (2009); Waters, Burnett, Lamm, and Lucas (2009)
YouTube	Kaplan and Haenlein (2010); Kim et al. (2007); Palmer and Koenig-Lewis (2009);
Flickr	Angus, Stuart, and Thelwall (2010); Donaire and Galí (2011); Kaplan and Haenlein (2010); Lo et al. (2011); Stepchenkova and Zhan (2013); Stylianou-Lambert (2012)
TripAdvisor	Gupta and Kim (2004); Xiang et al. (2014)
Wikipedia	Fang, Kamei, and Fujita (2015); Hanna, Rohm, and Crittenden (2011)

Petrick, 2005). Thus, numerous studies have attempted to examine the differences between first-time visitors and repeat visitors (Weaver & Lawton, 2011), finding differences, for example, in socio-demographic aspects (Li, Cheng, Kim, & Petrick, 2008; McKercher & Wong, 2004), motivations (Lau & McKercher, 2004; Li et al., 2008), information search (Li et al., 2008), and perceived image of the destination (Fakeye & Crompton, 1991). However, no research to date has analysed the differences in the use of information sources by the different typologies of loyal tourists attending to its main dimensions: attitudinal versus behavioural, and destination versus horizontal.

Before revising the antecedents of loyalty, a brief description of each segment differentiated in this study and its proposed tag follows (see Fig. 1):

Segment 1: Behavioural Horizontal Loyalty (BHL)

This segment is composed of tourists who display repeat visits to different destinations within the competitor set (the Canary Islands in this study). This means that they are loyal to several destinations at once. This requires in this study at least two previous visits to two or

more islands within the Canary Islands.

Segment 2: Attitudinal Horizontal Loyalty (AHL)

This segment comprises tourists who, like the previous group, manifest previous repeat visits to different destinations within the competitor set (the Canary Islands). Additionally, they show an intention to visit the destination in the near future (within the next two years in this study).

Segment 3: Behavioural Destination Loyalty (BDL)

This segment is composed of tourists displaying a repeat pattern to a single destination. Thus, tourists can be described as BDL if they make at least two or more visits to the same destination (one island in this study) within the competitor set (the Canary Islands) and they have not visited any other islands.

Segment 4: Attitudinal Destination Loyalty (ADL)

	Behavioural Loyalty	Attitudinal Loyalty
	Actual visits in the past	Actual visits in the past plus intention to visit it in the future
Horizontal Loyalty	Behavioural Horizontal Loyalty (BHL): This segment is comprised of tourists who have visited different islands within the competitor set Canary Islands.	Attitudinal Horizontal Loyalty (AHL): This segment comprises tourists who manifest repeat visits to different islands within the competitor set Canary Islands, and at the same time, they manifest a high probability to visit the destination Canary Island in the near future
Multiple destination		
Destination Loyalty	Behavioural Destination Loyalty (BDL): This segment is composed of tourists who make at least two or more visits to the same island, within the Canary Islands, and they have not visited to any of the other islands.	Attitudinal Destination Loyalty (ADL): This segment is composed of tourists who are loyal to one only destination, like BDL tourists, but they show a high likelihood to visit the destination Canary Island in the near future
One single destination		

Fig. 1. Segments by loyalty.

Table 2
Tourists' profile.

		Percentage
Nationality	Germany	607
	Austria	5.80
	Belgium	5.80
	Denmark	5.82
	Spain	5.83
	Finland	5.90
	France	5.77
	Holland	5.79
	Ireland	5.79
	Italy	5.80
	Norway	5.70
	Poland	5.80
	Portugal	6.59
	Russia	5.82
Sweden	6.19	
Switzerland	5.74	
United Kingdom	5.82	
Gender	Man	49.58
	Woman	50.40
Age	From 16 to 24	19.60
	From 25 to 34	20.03
	From 35 to 44	19.70
	From 45 to 54	20.19
	From 55 to 64	14.70
	More than 64	5.69

ADL tourists are those who are loyal to one only destination. Like BDL tourists, these tourists visit the same destination two or more times, and they have not visited other destinations within the competitor set (the Canary Islands). Furthermore, ADL tourists show a high likelihood to visit the destination (Canary Islands) in the near future.

Although the focus of this paper is to analyse the influence of information sources on loyalty and its typologies, this analysis cannot be done separately without considering at the same time the influence that other variables exert on loyalty. Earlier literature highlights several factors that encourage people to revisit a destination: information sources (traditional and new), demographic characteristics, motivations, and perceived image (cognitive, affective, and overall) of the destination (Assaker, Vinzi, & O'Connor, 2011; Hudson, Wang, & Gil, 2011; McDowall, 2010; Sun et al., 2013). Although, there are other determinants of loyalty (e.g. satisfaction, quality), this study has focused its attention on those that either have been less discussed in the literature, such as information sources, or have been the subject of research but a consensus about the direction and magnitude of these relationships has not been reached.

Although numerous studies have identified the image as an antecedent of loyalty (Bigné, Sánchez, & Sánchez, 2001; Chen & Tsai, 2007; Faullant, Matzler, & Füллер, 2008; Loureiro & González, 2008; Prayag & Ryan, 2012; Prayag, 2008), they have not analysed the relationship among the different dimensions of image (cognitive, affective, and overall) and the different typologies of loyalty. Most authors have analysed the impact on loyalty of cognitive image (Chen & Tsai, 2007; Chi & Qu, 2008; Prayag & Ryan, 2012) or overall image (Bigné et al., 2001; Campó-Martínez, Garau-Vadell, & Martínez-Ruiz, 2010; Loureiro & González, 2008), considering to a lesser extent attributes that measure the affective image (Zhang, Fu, Cai, & Lu, 2014). The incorporation of the affective component suggested by Prayag and Ryan (2012) could help to understand the relationship between image and loyalty. Moreover, antecedents of horizontal loyalty have been omitted in previous studies.

Previous studies have, meanwhile, analysed the impact of travel motivations on tourist loyalty (Sun et al., 2013). These motivations can be classified into push and pull factors (Crompton, 1979; Dann, 1977). According to Dann (1977), internal reasons (push) linked to the

tourists' desires include the need to escape, relax, gain prestige, health, adventure, and social interaction. However, attraction factors (pull) are related to the attractiveness of the destination and include tangible resources such as historical, artistic, cultural, natural, and culinary resources. When the trip motivation is internal, an intense and satisfying experience in the destination will have a positive effect on the intention to revisit it (Hosany & Martín, 2012). Moreover, according to Antón, Camarero, and Laguna-García (2014) external reasons (pull) could disappear when the destination becomes familiar to an individual and both medium- and long-term goals have been reached, implying a lower intention to revisit. Thus, travel motivations of individuals either can act as inhibitors of loyalty or can encourage it.

Finally, previous research has revealed that there is a direct relationship between the personal characteristics of tourists and loyalty (Alegre & Garau, 2010; Kozak & Rimmington, 2000; Mechinda, Serirat, & Gulid, 2009; Ozdemir et al., 2012). For example, Chen and Gursoy (2001) found that older tourists are more likely to recommend destinations and make repeat visits than younger people. With respect to income, Ozdemir et al. (2012) found that tourists with higher incomes are less likely to be loyal (intention to revisit and recommend). However, more in-depth research on this topic is still needed.

3. Methodology of the study

Europe is still the region with the greatest number of travellers in the world, an area that represents more than half the international arrivals a year (UNWTO, 2015). Therefore, the population used for this study consisted of tourists over 16 years of age (both genders) from the main 17 European countries travelling to the destination being researched: Germany, Austria, Belgium, Denmark, Spain, Finland, France, Holland, Ireland, Italy, Norway, Poland, Portugal, Russia, Sweden, Switzerland, and the United Kingdom.

A computer-aided Web interview (CAWI) was used to conduct the research in the 17 countries previously mentioned. The initial sample consisted of 8500 tourists (500 in each country), and the real final sample consisted of 6964 tourists, with between 400 and 459 tourists per country. Potential responders were selected from a panel sampling owned by a professional survey company. Within each country, we made a random selection, taking into account the stratification variables of the geographic location and province, on the one hand, and, on the other, gender and age, in order to guarantee the sample's representativeness. Only people who have previously travelled abroad were considered. A more detailed breakdown of the characteristics of the sample is shown in Table 2.

In order to reach the set goals, the consideration set analysed was the Canary Islands. The justification of this selection is that the Canary Islands is a leading European destination (Gil, 2003), with more than 14 million international tourists a year, and it is a very well-known and popular destination in Europe. The Canary Islands consist of seven islands: Tenerife, Gran Canaria, Lanzarote, Fuerteventura, La Palma, La Gomera, and El Hierro, with a complex ecosystem (García-Rodríguez, García-Rodríguez, & Castilla-Gutiérrez, 2016), with an interesting complementary relationship between them (Promotur, 2012) that makes this consideration set ideal for studying horizontal loyalty. Furthermore, the analysis of this complementarity has been noted for other authors, claiming for further research applied to destinations geographically close (Shih, 2006). Thus, this study has taken as a competitive set, the seven islands (destinations) within the Canary Islands.

Fieldwork was carried out using a structured questionnaire that included socio-demographic variables, sources of information, image, and loyalty. In order to conduct a more in-depth study of tourist loyalty to the consideration set and to bring together tourists in the different groups, they were asked about their loyal behaviour and attitude. First of all, they were asked whether they had ever visited the Canary Islands before (no time frames were used) and, if so, which islands they had visited and how many times. Tourists who had visited the consideration

Table 3
Loyalty profile of tourists.

		Frequency	Percentage
No visitors		4897	70.3
Visitors	First visit	826	40.0
	Loyal	1241	60.0
	Total visitors	2067	29.7
Total		6964	100
Behavioural horizontal loyal (BHL)		996	80.3
Behavioural destination loyal (BDL)		245	19.7
Attitudinal horizontal loyal (AHL)		331	26.7
Attitudinal destination loyal (ADL)		81	6.5

set (Canary Islands) twice or more were considered loyal tourists. Then they were invited to answer the following question (attitudinal loyalty): 'On a scale of 1–7, how likely do you think it is that you will go on holiday to the Canary Islands in the next two years: 1 indicates very unlikely and 7 very likely?' Tourists who marked a 6 or 7 out of 7 were considered to be attitudinally loyal. Table 3 shows a description of the sample loyalty profile.

With regard to the social media sites they used, tourists were asked: 'Have you ever used social and digital media on the Internet to find out information about the destination you visit?' If so, tourists were asked to indicate which social media site they had used. This was a multiple-choice question, and they were able to choose among several alternatives according to the literature review: TripAdvisor, Facebook, Flickr, YouTube, Twitter, Wikipedia, and Others.

With regard to traditional sources of information, tourists were asked: 'Please indicate the sources through which you have received the information on the Canary Islands'. Thus, tourists had to choose between tour operators' brochures; leaflets; holiday guide books; news, articles, documentaries, and information about the destination in different media; the Internet through the official Web site of the destination; other Internet sources; travel agents; friends and relatives (word of mouth); and other sources. Finally, motivations and image were measured following validated scales from previous studies (Baloglu & Mangalolu, 2001; Beerli & Martin, 2004; Beerli, Meneses, & Gil, 2007; Carballo, Araña, León, & Moreno-Gil, 2015; Fodness, 1994).

Once the questionnaire, in the corresponding language of the tourists, was pretested and the necessary corrections to questions that seemed difficult to understand had been completed, we proceeded to carry out the survey. Once the field work was completed, the corresponding quality controls were applied: the online system, after being programmed, revised the interviews conducted and detected how long the participants took to answer the survey. All surveys answered in less than three minutes were not accepted as valid. Additionally, 10% back-checks and authentication of the respondent interviewed was realized.

Finally, an analysis was conducted of the significant differences using a chi-square test among the different groups to analyse the first goal and a logit binomial analysis in order to look into the second goal. In this case, we chose the logit model based on the random use theory. This model is especially appropriate when working with endogenous binary qualitative variables in the tourism field, despite the availability of other statistical techniques (Alegre & Cladera, 2006; Barros & Assaf, 2012; Perales, 2002). The goodness of fit of a logit model was assessed by $-2 \log$ likelihood (LL) ratios and their associated chi-square.

4. Results and discussion

In order to accomplish the first goal (differences in social media use by nationalities, age, and gender), the total sample was analysed. Table 4 summarises significant differences by nationality revealed during this study regarding the use of the main digital sources of

information consulted when choosing a holiday destination. It can be confirmed that there are important differences in the use of social media depending on each nationality, except when it comes to the use of Flickr. This result makes us think of the possibility of a common pattern in the use of pictorial content in social media, regardless of the nationality, as opposed to other contents and formats. This requires further analysis in this regard in other geographic contexts, adding other photo social networks (Instagram, Pinterest), given the important implications this would have in tourist communication. More specifically, the social media sites used more often by tourists when planning their trips are Wikipedia, Facebook, and YouTube. TripAdvisor plays a significant role in United Kingdom and Ireland, whereas Twitter and Flickr have a less significant role in all the countries.

Table 5 summarises significant differences by gender regarding the use of the main digital sources of information consulted when choosing a holiday destination by European travellers. It can be stated that there are no differences regarding the use of social media such as TripAdvisor, Facebook, and Wikipedia. However, there are differences in the rest of the media. The differences in the use of video and photographic content is worth mentioning (YouTube and Flickr), suggesting the need to adapt the content depending on tourists' gender, where men have a more intensive use of them.

The study also revealed significant differences by age in the use of the main digital sources of information when choosing a travel destination (see Table 6). Younger generations show a more significant use of all the media, except when it comes to the use of Wikipedia, where figures are similar for all age groups. In terms of photo and video content, however, the difference is even higher in favour of younger tourists.

Regarding the second goal of this study, the analysis consists of the influence of information sources and their effect on loyalty. Thus, the sample used considers all the tourists who are loyal to the destination consideration set. Table 7 shows the intensity of the use of the different sources of information, whether traditional or digital, by each of the main segments being analysed, destination and horizontal loyal. In general, the tour operator's brochures, the Internet and the comments of friends and relatives are the most popular sources of information, with Wikipedia, Facebook, and YouTube the most common social media among tourists. As it may be observed, the Internet seems to be the main source used for tourists with a loyal behaviour (BDL and BHL) when choosing a holiday destination, especially the use of Wikipedia, Facebook, and the website of the holiday destination itself, among the online options. Tour operator brochures are the most used traditional information source by those two groups. Internet use is also at the forefront if we analyse the sources used by attitudinal loyal tourists (ADL and AHL). Attitudinal loyal tourists show a very intensive use of TripAdvisor, and there is a significant decrease of other sources such as Wikipedia and YouTube. Concerning traditional sources, tour operator brochures are again the most common. This first result shows higher involvement in information searching by attitudinal loyal tourists (both ADL and AHL), but also an important difference in the types of sources, which helps DMOs better specify the communication strategies according to their objectives.

Despite the popularity of use of the different sources of information, there are significant differences among the sources used by BDL and BHL tourists, showing a higher use made by the latter. This happens with tour operators' brochures, official websites of the holiday destination, and information given by friends and relatives. Tourists who are loyal to only one destination have already found the holiday destination that meets their needs, and they therefore do not need to look for so much additional information, whereas those who change destinations are willing to search for more information. On the other hand, if the attitudinal element is taken into account (ADL and AHL), it can be seen that there are no significant differences in the use of information sources in order to find information regarding a holiday destination. These results imply the necessity to keep analysing differences between

Table 4
Differences in the use of social media by nationality.

	TripAdvisor	Facebook	Flickr	YouTube	Twitter	Wikipedia	Total
Germany	4.0%	14.7%	2.4%	10.4%	3.3%	17.0%	30.7%
Austria	2.5%	11.9%	0.0%	8.7%	1.2%	14.6%	31.0%
Belgium	3.5%	13.9%	1.2%	5.4%	1.0%	12.1%	26.7%
Denmark	9.1%	12.1%	1.5%	14.8%	1.7%	27.9%	88.9%
Spain	7.6%	24.6%	2.5%	12.8%	3.7%	19.0%	50.5%
Finland	6.3%	25.8%	1.5%	15.8%	3.2%	29.9%	44.8%
France	3.5%	12.7%	1.0%	6.0%	2.7%	8.5%	20.4%
Holland	3.7%	12.2%	1.5%	12.7%	5.5%	12.9%	45.4%
Ireland	28.5%	24.1%	1.5%	11.7%	2.5%	15.6%	50.6%
Italy	15.2%	31.8%	2.7%	18.7%	3.5%	24.4%	58.5%
Norway	10.3%	28.5%	1.8%	11.0%	2.0%	23.3%	52.0%
Poland	2.5%	25.4%	1.2%	20.4%	4.0%	29.1%	45.8%
Portugal	10.7%	24.4%	1.5%	15.5%	1.7%	20.9%	44.2%
Russia	2.2%	22.5%	1.0%	26.2%	10.9%	40.5%	72.1%
Sweden	9.3%	28.3%	0.9%	15.8%	0.7%	29.7%	58.2%
Switzerland	3.3%	11.3%	0.3%	5.3%	0.5%	11.0%	24.3%
United Kingdom	17.8%	18.8%	1.2%	10.6%	5.4%	12.6%	36.5%
Total	8.2%	20.2%	1.4%	13.1%	3.1%	20.6%	
Chi ²	415.610	200.409	23.425	174.136	132.148	303.920	
Sig	0.000	0.000	0.103	0.000	0.000	0.000	

Table 5
Differences in the use of social media by gender.

	TripAdvisor	Facebook	Flickr	YouTube	Twitter	Wikipedia	Total
Woman	8.6%	20.9%	0.9%	11.9%	2.7%	20.9%	48.7%
Man	7.8%	19.5%	1.9%	14.2%	3.6%	20.3%	43.1%
Chi ²	1.432	2.217	11.921	8.334	5.386	0.413	
Sig	0.231	0.137	0.001	0.004	0.020	0.520	

these four segments, within a more complex and overall analysis, in order to determine, in addition to no important differences in the use of information sources among them (no differences were found in the use of social media), to what extent the use of which specific sources actually determines the different loyalty typologies.

Once the first preliminary analysis has taken place regarding the use of sources of information, we will proceed to take a closer look in order to better understand their influence on loyalty, adding other explanatory factors of said behaviour to the sources of information. We have taken four binomial logit regression models with four different estimations: BDL, BHL, ADL, and AHL as dependent variables. As explanatory variables of those models, in addition to the sources of information used, cognitive image, overall image, and affective image variables, as well as socio-demographic variables such as income, age, and motivations to travel were added.

Before conducting the analysis of the considered models, we carried out a factorial analysis using the principal components method in order to examine the dimensions of both the cognitive image and the affective image, and the motivations, aiming to decrease their dimensions and identify determining factors.

Using said factorial analysis to analyse the cognitive image of the

Table 6
Differences in the use of social media by age.

	TripAdvisor	Facebook	Flickr	YouTube	Twitter	Wikipedia	Total
16–24	7.8%	28.0%	2.4%	19.0%	5.0%	26.7%	47.8%
25–34	12.3%	24.4%	1.9%	13.8%	3.2%	21.1%	48.1%
35–44	8.0%	18.3%	1.2%	11.4%	2.3%	18.0%	45.3%
45–54	7.3%	17.4%	1.1%	11.5%	3.3%	17.5%	44.7%
55–64	6.0%	14.2%	0.5%	10.4%	2.1%	19.6%	43.6%
More than 64	5.6%	10.9%	0.0%	8.3%	1.3%	20.2%	44.7%
Chi ²	43.859	121.625	26.352	63.709	28.046	46.067	
Sig	0.000	0.000	0.000	0.000	0.000	0.000	

destination, we identified three dimensions that explain 65.45% of the variance. As seen in Table 8, the first factor includes six items labelled *Sun, beach and lifestyle*. The second factor includes seven items regarding *Tourist leisure and general infrastructures*. The third factor has six items related to *Environmental factors*.

With regard to the affective image (Table 9), the factorial analysis summarises the variables used in two factors that explain 70.37% of the variance. The first factor, which has three items, has been named *Healthy and sustainable lifestyle*, whereas the second one has two variables related to the vibrancy of the destination, named *Emotional vibrancy of the destination*.

In the case of motivations, six factors explain 70.37%. The first summarises those variables related to *Rest and relaxation* and it includes four items. The five items related to knowledge are summarised in factor 2, called *Knowledge and culture*. The third factor is *Prestige and social exhibitionism* and it has three items. *Sports* is the name of the fourth factor, which consists of three items. There are three items related to *Entertainment*, which is the fifth factor. The sixth factor consists of two items related to *Inter-relationships* (Table 10).

Once the dimensions of the variables to be included in the analysis have been reduced, Table 11 summarises the results obtained in the

Table 7
Information sources and differences in use between behavioural and attitudinal, and destination and horizontal loyal tourists.

	BDL%	BHL%	Chi ²	Sig	ADL %	AHL%	Chi ²	Sig	Total
Tour operator's brochures	24.9	31.3	3.86	0.049	43.2	48.3	0.69	0.407	7.1%
Tourist leaflets	13.5	15.0	0.35	0.555	19.8	21.5	0.11	0.737	3.4%
Holiday guide books	12.2	15.8	1.90	0.168	22.2	24.8	0.23	0.631	3.5%
News, articles, reports	16.7	18.5	0.40	0.527	24.7	28.1	0.38	0.538	3.9%
Destination official Web site	15.9	22.9	5.81	0.016	30.9	40.5	2.54	0.111	4.9%
Internet, other sources	26.1	28.8	0.76	0.385	44.4	44.7	0.00	0.965	6.8%
Travel agents	13.9	14.1	0.01	0.942	22.2	23.3	0.04	0.842	3.3%
Friends and relatives	19.2	24.9	3.55	0.060	33.3	35.6	0.15	0.696	5.9%
None of the above	8.6	6.9	0.79	0.374	3.7	5.4	0.41	0.525	1.9%
TripAdvisor	14.7	15.3	0.05	0.824	71.6	61.3	2.96	0.085	8.2%
Facebook	25.7	23.2	0.64	0.425	21.0	22.1	0.04	0.835	20.2%
Flickr	2.0	1.9	0.02	0.892	1.2	2.4	0.43	0.514	1.4%
YouTube	13.5	13.1	0.03	0.863	4.9	3.3	0.48	0.487	13.1%
Twitter	4.9	4.2	0.16	0.692	6.2	3.6	1.07	0.302	3.1%
Wikipedia	22.9	23.2	0.01	0.911	7.4	7.3	0.02	0.961	20.6%
Others	22.4	18.9	1.59	0.207	18.5	23.9	1.06	0.304	10.8%

Table 8
Cognitive image factorial analysis.

Variables	COG1	COG2	COG3	Cronbach's alpha	
The destination has good beaches	0.7943	0.2161	0.1159	0.876	
The destination is exotic	0.7876	0.1354	0.2196		
The destination has good landscapes and scenery	0.7221	0.2771	0.2851	0.902	
The destination has a pleasant climate	0.6925	0.2193	0.1479		
The destination has an attractive life style	0.5800	0.3684	0.4552		
The destination is fashionable	0.5109	0.4231	0.1932		
The destination has good nightlife	0.3095	0.7369	0.1369		
The destination is good for shopping	0.2154	0.7144	0.2999		
The destination has a wider range of leisure facilities on offer	0.4456	0.6805	0.2355		
The destination has a wider range of sports on offer	0.4224	0.6688	0.1969		
The destination has a great level of general infrastructure	0.3423	0.6612	0.3219		
The destination is accessible	-0.0133	0.6549	0.3756		
The destination has good hotels, apartments and chalets	0.5342	0.5877	0.2882	0.8809	
The destination is not crowded	0.3412	0.1015	0.7376		
The destination offers great personal security	0.2387	0.3606	0.7205		
The destination is clean	0.4782	0.2369	0.6936		
The destination has a good environmental situation without pollution	0.4959	0.2129	0.6820		
The destination is cheap for holidays	-0.0204	0.3447	0.6273		
The destination offers great political and social stability	0.1596	0.4834	0.6106		
Cronbach's alpha					0.945
% Explained variance: 65.448					
KMO: 0.952					
Bartlett: 89645.852					
Significance: 0.000					

Note: COG1: Sun, beach and lifestyle, COG2: Tourist leisure and general infrastructures, COG3: Environmental factors.

Table 9
Affective image factorial analysis.

Variables	IAF1	IAF2	Cronbach's alpha
Sustainable destination	0.86	0.05	0.738
Authentic destination	0.83	0.18	
Healthy destination	0.67	0.30	
Happy destination	0.16	0.90	0.806
Stimulating destination	0.19	0.89	
Cronbach's alpha			0.760
% Explained variance: 73.420			
KMO: 0.694			
Bartlett: 10417.695			
Significance: 0.000			

Note: IAF1: Healthy and sustainable lifestyle, IAF2: Emotional vibrancy of destination.

estimation of the four suggested models. The traditional sources of information used by tourists to find information regarding their holiday destination have an influence in the development of tourist loyalty towards those destinations. More specifically, the first regression model determined that tour operators' brochures (0.466), news and articles, (0.780), and travel agents (0.653) have a direct and positive effect on the development of BDL. In addition, the results of the second analysis show that the following variables determine the BHL: the tour operators' brochures (1.165); news, articles, and documentaries (0.950); and travel agents (0.403). The following other sources also have an influence on the development of the BHL but not the BDL: travel tour guides (0.577), official Web sites of the holiday destination (0.925), and friends and relatives (1.015). All of them, as can be observed in the table, have a direct effect on the BHL. However, it can also be observed in all cases, except travel agents, how the use of the different sources of information has more of an influence on the development of the BHL. This may be due to the fact that this latter type of tourist decides to visit other destinations within the competing

Table 10
Motivation factorial analysis.

Variables	MOT1	MOT2	MOT3	MOT4	MOT5	MOT6	Cronbach's alpha
To relieve stress and tension	0.847	0.120	0.077	0.101	0.101	0.065	0.825
To rest and relax	0.844	0.019	0.062	0.001	0.175	0.042	
To escape from daily routine	0.844	0.130	0.055	0.031	0.170	0.060	0.819
To enjoy and spend time with family and friends	0.515	0.138	0.240	-0.033	0.213	0.115	
To know different cultures and life styles	0.073	0.870	0.024	-0.045	0.127	0.093	0.773
To broaden my horizons	0.044	0.867	0.068	-0.003	0.109	0.074	
To know new and different places	0.267	0.749	0.039	-0.067	0.274	0.090	0.783
To attend cultural events	0.042	0.624	0.227	0.245	0.080	0.210	
To be in contact with nature	0.253	0.431	-0.108	0.346	-0.014	0.417	0.826
To go to places friends have already visited	0.078	0.097	0.763	0.172	0.071	0.200	
To go to places that are fashionable	0.071	0.008	0.744	0.326	0.104	0.069	0.896
To tell friends about the holiday experience	0.129	0.096	0.733	0.149	0.126	0.267	
To go to comfortable places with good hotels and restaurants	0.466	0.096	0.560	0.017	0.082	-0.075	0.889
To do watersports	0.112	0.023	0.158	0.822	0.142	0.128	
To do recreational activities and sport	0.072	0.041	0.135	0.805	0.213	0.173	0.826
To play golf	-0.126	0.006	0.340	0.714	-0.053	0.028	
To look for adventures and pleasure	0.157	0.217	0.096	0.126	0.836	0.135	0.896
To do exciting things	0.211	0.256	0.086	0.089	0.791	0.088	
To look for entertainment and fun	0.361	0.055	0.168	0.134	0.693	0.150	0.896
To make new friends	0.058	0.178	0.262	0.185	0.165	0.840	
To mix with other people	0.100	0.207	0.239	0.121	0.198	0.834	0.889
Cronbach's alpha							
% Explained variance: 70.372							
KMO: 0.877							
Bartlett: 72078.921							
Significance: 0.000							

Note: MOT1: Rest and relaxation, MOT 2: Knowledge and culture, MOT3: Prestige and social exhibitionism, MOT4: Sports, MOT5: Entertainment, MOT6: Inter-relationships.

set after finding out information using those sources. Nonetheless, those who receive the information through travel agencies have a higher chance of becoming BDL, due to the fact that travel agents possibly are prescribers who have more of a restricted profile focused on specific destinations.

The third and fourth models estimated try to explain loyalty towards a destination and horizontal loyalty, taking into consideration the two main joint components of loyalty: attitude and behaviour. The third

model determined that, as happened with BDL, the tour operators' brochures have a positive and direct influence on ADL (0.907); there does not seem to be a relationship with the use of news, articles, and documentaries or travel agents, as was found in the case of behaviour loyal to a destination. However, the use of the official Web site of the destination (1.011) and comments of friends and relatives (1.004) have a positive and direct influence on the development of ADL. It can be confirmed that the official website of the destination and comments of

Table 11
Logit binomial models.

	Item	BDL		BHL		ADL		AHL	
		β	e	β	e	β	e	β	e
Social Media	TripAdvisor			0.321	0.141			0.63	0.211
	YouTube			-0.366	0.158	-1.311	0.579		
	Facebook					1.302	0.421		
	Flickr					3.033	1.283		
Traditional Information Sources	Tour operator's brochures	0.466	0.233	1.165	0.15	0.907	0.386	0.818	0.171
	The official Web site			0.925	0.164	1.011	0.445	0.866	0.183
	Friends and relatives			1.015	0.152	1.004	0.41		
	Holiday guide books			0.577	0.197				
	News, articles, reports	0.78	0.243	0.95	0.181				
	Travel agents	0.653	0.265	0.403	0.202				
Cognitive Image	Sun, beach and lifestyle	-0.27	0.089	-0.224	0.055			0.484	0.092
	General entertainment and tourism infrastructure							0.276	0.083
	Social and environmental situation							0.331	0.078
Affective Image	Emotional vibrancy of destination							-0.27	0.091
	Healthy and sustainable lifestyle			0.102	0.045				
Overall Image	Overall Image	0.215	0.076	0.198	0.047	0.794	0.167		
Demographic	Income	0.007	0.003	0.012	0.002				
	Age	0.12	0.053	0.238	0.033			0.169	0.051
Motivations	Relax			-0.101	0.046	0.437	0.205	0.192	0.085
	Knowledge	-0.211	0.077	-0.143	0.048				
	Status	0.168	0.079						
	Interact with others			-0.098	0.046				

friends and relatives play a role in influencing the attitude of people who wish to revisit a destination. Regarding sources of information that have an influence on the development of the AHL, it may be observed that only two of them have an influence on attitude: tour operators' brochures (0.818) and the official website of the destination (0.866). Although all the different sources of information showed an influence in the development of BHL, only two of them affect the affective element of loyalty. It is concluded that a greater overall importance should be given to tour operators' brochures and official websites. Additionally, travel agencies are also important when it comes to promoting just further visits to the destinations, not generating attitude, whereas using travel guides can develop a change among destinations and BHL.

On the other hand, regarding the use of the social media to find information about a travel destination, the suggested models determined that there is no relationship between the use of said media and the development of the BDL. However, a positive and direct relationship between the use of TripAdvisor (0.321) and the development of the BHL and a negative relationship between the use of YouTube (-0.366) and the manifestation of BHL can be observed. Furthermore, although none of the researched social media have an influence on the development of BDL, it was found that the use of Facebook (3.033), Flickr (1.302), and YouTube (-1.311) to find out information about their destination does have an influence on the development of ADL. As happens with BHL, the use of TripAdvisor has a positive influence on AHL (0.63), and the use of YouTube does not seem to show any influence when it comes to this type of loyalty.

The importance of TripAdvisor as a global platform to determine horizontal loyalty can be confirmed, as it allows travellers to share their experiences by publishing their opinions and similar ideas. Allowing users to compare destinations, as well as the large number of users they have, seem to be the factors that explain how it has such an influence on the development of BHL and AHL – forcing the tourists to compare destinations that can be visited in the future – as opposed to YouTube, which offers video content and does not compare destinations but rather focuses on a specific destination search, and in turn, has a negative effect on BHL. Although the relationship between users and brands in YouTube can help an emotional attachment evolve, this is not the case in our study, as YouTube does not seem to have a positive influence when it comes to ADL. Facebook and Flickr, on the other hand, do help develop that positive attitude towards one only destination, becoming referent channels to be used by DMOs.

With regard to the rest of variables introduced in the model, we came across the following results. Concerning the cognitive image, the higher the rating by tourists of the attributes related to the sun and beach and lifestyle, the lower the chance of a loyal behaviour to only one destination and horizontal loyalty. This could be related to the fact that those cognitive image characteristics are easy to find in other destinations, which makes them easily replaceable. However, the better the ratings given by tourists to this particular characteristic, the higher the chance to develop AHL, which suggests that such positive ratings affect the repetition of the destinations that shared this perception. Other attributes of the cognitive image, such as tourist leisure and general infrastructures, and the environmental factors also have a positive and direct influence on AHL, being considered a comparative advantage of the competitive set analysed versus other different destinations.

When referring to the affective image, the higher the ratings of attributes related to a healthy and sustainable lifestyle, the more tourists tend to become BHL, whereas the higher the ratings of a vibrant affective image of the destination, the lower the chances of becoming AHL. Therefore, affective image has an influence on shared visits among destinations, where some shared elements among them, such as sustainability and lifestyle, promote this relationship, whereas other more unique and specific ones of one only destination (vibrancy), reduce it. Finally, the overall image, as could be expected, has a direct effect on almost all types of loyalty.

Meanwhile the older the tourist (0.120), the higher the chance of becoming a BDL, and in addition, the same can be confirmed regarding BHL and AHL. This may be explained by the likelihood of visits after having gone on many holidays throughout life, as well as the tendency to become more stable when growing older. Also, the higher the tourists' earning incomes (0.007), the better chance for tourists to show a loyal behaviour, whether that may be to only one destination or horizontal loyalty. This could be due to the higher probability of travelling overall, although it is true that this does not seem to lead to a higher attitudinal loyalty.

Furthermore, the motivation of getting to know new and different places, new cultures, and new lifestyles has a negative influence on BDL (-0.211) and BHL (-0.143). In both cases, those motivations reduce the development of loyalty. Tourists who decide to visit a destination following such motivations with one only visit probably satisfy their short- and long-term needs; therefore, the probabilities of returning decrease. However, the estimated value of the parameter is lower than in the case of BHL, which may be understood as the fact that horizontality can provide tourists with a certain degree of getting to know something new, whereas when we are considering competing destinations – and therefore 'similar products' – it ends up being a factor that reduces the chance of repeating.

However, the higher the motivation of prestige and social exhibitionism, the higher the chances of becoming a BDL (0.168). Although those tourists have already satisfied their short-term needs, they have decided that they have already found a destination that meets their needs. Therefore, any time they need to satisfy those needs, they will return to the same destination: 'This is the place'. In addition, when tourists are looking for a place to relax (-0.101), knowledge (-0.143), or to meet other people (-0.098), they are less likely to become BHL, as it seems that adding visits to similar destinations does not provide added value to those motivations. To sum up, looking for a place to relax does have a positive influence on ADL and AHL, which can be explained by a true achievement of 'relaxation' associated with the place visited and the competitive set vs. other types of destinations and holidays, suggesting that there is the need to look deeper into the analysis of experiential loyalty.

5. Conclusion

The results of this study do not only confirm that tourists have included the Internet and social media as a critical way of searching for information when planning their holidays, but also show the vital importance of these sources in inducing loyalty to destinations at different levels: behavioural and attitudinal loyalty, and towards one only destination, or horizontal loyalty. The study explores the differences of the use of online and offline sources of information regarding holiday destinations among the different identified groups of loyal tourists. The results have allowed for marketing managers of destinations to be able to develop better marketing strategies, using conventional communication media as well as social media.

The first general contribution of this paper is to show differences in behaviour when it comes to the use of the several information sources depending on tourists' profiles (nationality and socio-demographic characteristics). More specifically, the study starts by identifying the significant differences in the use of social media consulted by tourists when it comes to choosing a travel destination, depending on their nationality, gender, and age. Therefore, the destination marketing managers, in designing their marketing strategies, must make the most out of this fact and use the most popular media among the target market as a means of promotion, applying both more generic or global sources (i.e. Wikipedia for all age groups, Flickr for all nationalities), and other more specific ones with differences among segments (i.e. YouTube and Flickr, with more emphasis on men). Additionally, this study reveals the possibility of a common pattern in the use of pictorial content in social media, regardless of the nationality, as opposed to other contents

(video). Finally, and as expected, younger generations show a more significant use of all the media –except when it comes to the use of Wikipedia – that seems to be an 'all-ages' content source.

The second contribution of the study is that proving that there are sources of information that have an influence on the development of loyalty, the use of either type of source of information determines the kind of loyalty tourists develop. There are also significant differences in the use of the different traditional sources of information used by BDL and BHL tourists, but no differences between both groups when it comes to using social media. However, it is not enough to identify the differences between both segments regarding their behaviour when searching for information; it is also necessary to understand whether those sources and media are explanatory factors that induce loyalty. Although there are no significant differences regarding the use of the different social media used by ADL and AHL tourists either, the impact of the different sources of information on loyalty is different. The effect of the perceived image (cognitive, affective, and overall), demographic variables, and motivations has also been known to influence the different types of loyalty.

The results of this study contribute to the existing literature regarding destination marketing, more specifically literature related to information sources, with a special emphasis on digital media and their influence on destination loyalty, given the lack of research within this context. In addition, these results are useful to continue advancing the analysis of brand architecture for destinations that are sharing a series of tourists alternatively. Thus, to manage AHL appropriately, DMOs can use these analyses in defining the way in which their contents should be structured in each of the information sources, from their own website to their presence on TripAdvisor.

Finally, future papers should consider and try to explain other manifestations of loyalty, such as vertical and experiential loyalty. Moreover, other variables should be added in order to help explain loyalty further. It would also be advisable to expand the number of digital sources of information analysed by introducing new platforms. For example, Instagram has become a referent in the photographic content. Furthermore, replicate these analyses with different types of competing destinations in other geographic areas. Finally, taking the differences found regarding the use of social media depending on the different nationalities into account, a more in-depth analysis should be conducted introducing nationality as a variable that has an influence on the development of the different types of loyalty analysed.

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