Bibliometric study of tourism destination image in Science Direct

Estudio bibliométrico sobre imagen de destinos turísticos en Science Direct

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ABSTRACT

Tourism destination image has been the centre of interest of several research last decades. This research aimed to develop a bibliometric analysis with retrospective-descriptive purposes on the academic international production available in Sciencedirect between 1997 and 2008. The scientific production was classified and analysed employing several bibliometric indicators, among which the following stand up: productivity by authors, chronological variations in the publications and research lines analysis. The analysis was developed using "TOURISM" AND "DESTINATION IMAGE" in the published articles. For the content analysis were employed the following software: Endnote X7, Bibexcel, Excel, Pajec and VOSviewer. The main results show the increase in the interest related to this construct, being Tourism Management the most productive journal. Furthermore, gaps were identified for forthcoming research related to big data analytics and its impact on the formation process of the tourism destination image.

Keywords: *destination image, bibliometric analysis, tourism*

RESUMEN

La imagen de destinos turísticos ha sido el objeto de estudio de numerosas investigaciones en las últimas décadas. La presente investigación tuvo como objetivo realizar un estudio bibliométrico con carácter retrospectivo descriptivo sobre la producción científica internacional de este constructo disponible en Sciencedirect entre 1997 y 2018. La producción científica fue clasificada y analizada a partir de diversos indicadores, entre los que se encuentran la productividad por autores, la variación cronológica de las publicaciones y el análisis de líneas de investigación. Se utilizaron las palabras claves ¨TOURISM¨ AND ¨DESTINATION IMAGE¨ en artículos originales publicados por revistas. Para el procesamiento y análisis de la información se utilizaron los softwares Endnote X7, Bibexcel, Excel, Pajek y VOSviewer. Los principales resultados muestran el crecimiento en el interés vinculado a esta temática, siendo Tourism Management la revista más productiva. Además, se identificaron brechas para futuras investigaciones destacándose el análisis de big data y su impacto en la formación de la imagen de destino.

Palabras clave: imagen de destino, análisis bibliométrico, turismo

INTRODUCTION

Nowadays tourism sector faces several challenges linked to market positioning and differentiation from competence to satisfy an increasingly exigent demand. Within this context, tourism destination image management plays a key role to achieve success, determined into a great extent in how potential customers perceive the destination itself from the formation of the induced image.

Although this research topic has become more important in recent years, the interest of scholars about this construct started in the '60s of the 20th Century. First research to deal with this issue was Boulding (1956), who suggested that image could have a bigger impact on human behaviour rather than objective information about a perceived object or the environment. On the other hand, the application of the concept of image to places and research started in the '70s of the 20th Century from different disciplines (Gallarza, Saura, & García, 2002). Precisely these types of research play a key role in tourism due to its impact on the marketing of tourism destinations.

Most of the research conducted on tourists perceptions focuses on the concept of destination image, which is defined as the perceptions of the destination attributes from individuals and its holistic impression... that consists of the functional characteristics related to the tangibles aspects and the psychological characteristics related to the intangible aspects (Echtner & Ritchie, 1993).

From the previous statements can be concluded why tourism destination image became popular research topics in tourism since it has been demonstrated its influence in the choice, satisfaction and post purchasing behaviour (Ramseook-Munhurrun, Seebaluck, & Naidoo, 2015). Even more, information and communication technologies have a great impact in the formation of TDI, since tourism web sites can proportionate virtual experience to tourism about a destination and influence the formation and positioning of the image (Doolin, Burgess, & Cooper, 2002). Management of image and its perceptions are the core of tourism advertising in the media.

Therefore, the management of image from social media is essential for tourism managers. Even more, the comprehension of the antecedents of destination image among residents and tourists; and their behavioural intentions offers destination management organizations (DMO's)

additional opportunities to improve their image (Stylidis, Shani, & Belhassen, 2017). In this way, DMO's can develop strategies oriented to improve tourists perceptions (Sanz, 2008).

These reasons justified the need on analysing this research topic and the statements on literature, although the various contributions to the construct, it seems to be a generalized agreement on the interpretation of the destination image as a subjective and multidimensional construct (Tasci, Gartner, & Cavusgil, 2007)

One of the tools that provide insights into the research is bibliometric, thus academic and scientific literature in several research areas have grown with an unprecedented dynamic. Furthermore, the development of academic online datasets has increased the opportunities for access to research at any time worldwide. Nowadays exist a growing need to evaluate the production and communication process of knowledge in educational sciences and the product of the scientific activity

Bibliometry can be defined as a technique of bibliological research that aims at, on one side, to study the size, growing and distribution of the bibliography in a specific field, and on the other side, study the social structure of the groups that produce it and employ it. Bibliometric scores provide quantitative and objective information about the results of the research process. They are employed to measure the quality of scientific papers -in example, productivity- or the impact of the papers -citation scores, trends analysis- (Dávila et al., 2009).

METHODOLOGY

This bibliometric study possesses a descriptive retrospective character being analysed original articles about tourism destination image in the period 1997-2018 published on peer-reviewed journals and hosted in Science Direct. The data for this analysis was obtained through the search of the next parameters: "Tourism" AND "destination image".

From each article where extracted Title, Full name of the authors, Year of publication and Journal Name. This information was processed using Endnote X7 software to correct duplicated outcomes and then Bibexcel (v2016-

02-20) and Microsoft Excel for the analysis of production indicators, references actuality and statistical analysis of the data. In addition, the outcomes of Bibexcel allowed to analyse the collaboration indicators, generate the collaboration network map using Pajek software and the correspondence maps of the thematic descriptors using VOSviewer 1.6.8.

RESULTS AND DISCUSION

Productivity of articles (1997-2018)

In the 1997-2018 period were published 987 original articles and research was divided in seven years period. The first period, 1997-2004 had the lowest productivity, with a total of only 64 papers. From 2004 there is evidence of an increase in the research, coinciding with the emergence of web 2.0 that brought higher importance to this area of study. From 2005-2011 a total of 197 articles where published, amount approximately three times bigger than the previous period. However, the higher productivity was developed between 2012-2018 with 726 papers, which evidence the increasing interest in this construct and its accelerated growing.

Figure 1. Published papers per year
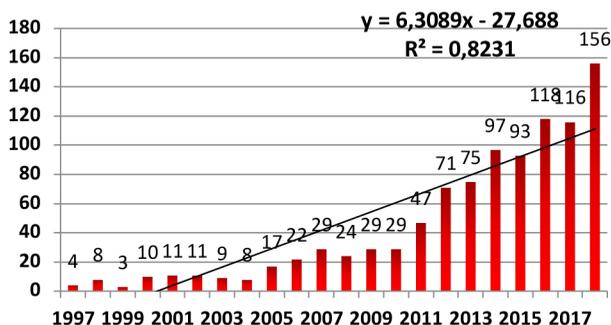
Productivity per journals

The academic journals where authors publish the most where Tourism Management with a total amount of 350 articles, representing a 35% of the total, followed by Annals of Tourism Research with 134 articles (14%),

Journal of Destination Marketing & Management with 125 (13%), Tourism Management Perspectives with 73 articles (7%) and the journal Procedia – Social and Behavioural Sciences with 61 articles, representing 6% of the total. These journals concentrate the 75% of the total published articles. The other 25% is distributed as follows: 5 journals published 145 articles distributed in 46, 35, 33, 16 and 11 respectively; 2 journals only published 5 articles each; seven published three articles each, while 12 and 36 journals published 2 and 1 each respectively.

Table 1: Articles in the main journals

Journal	#	%	Accum.(%)
Tourism Management	350	35,46	35,46
Annals of Tourism Research Journal of Destination	134	13,57	49,03
Marketing & Management Tourism Management	125	12,66	61,70
Perspectives Procedia - Social and	73	7,39	69,09
Behavioral Sciences	61	6,18	75,27

Actuality of the references

The analysis of the bibliographic reference's actuality was developed using Price index that shows the rate of references with five or fewer years. From the 987 analysed articles, 580 belongs to the last five years, for a reference actuality of 0.59, which is considered high in this type of research.

Furthermore, Price index was used to analyse the most productive journals, where Journal of Destination Marketing & Management presents the higher score of 0.9 while Annals of Tourism Research presented the lowest score since from its 134 articles, only 39 belongs to the last five years period.

Table 2: Price index of selected journals

Journal	Total of articles	≤ 5 years	Price Index
Tourism Management	350	163	0.47
Annals of Tourism Research Journal of Destination	134	39	0.29
Marketing & Management	125	112	0.90
Tourism Management Perspectives	73	59	0.80
Procedia - Social and Behavioral Sciences	61	46	0.75

Personal productivity

The review showed a total of 501 authors in total. From then, the most prominent authors are presented in the following table. Among them, the most productive were Xian Li with 11 articles, Cris Ryan and Svetlana Stepchenkova with 9 articles each and Alastair M. Morrison, Bob McKercher and Steven Pike with 8 articles each.

Table 3: Personal productivity

Authors	Number of published articles
Xiang Li	11
Chris Ryan	9
Svetlana Stepchenkova	9
Alastair M.Morrison	8
Bob McKercher	8
Steven Pike	8
James F. Petrick	7
Dimitrios Buhalis	7
Seyhmus Baloglu	7
Philip L.Pearce	6
Hany Kim	6
Brian Garrod	6

Relationship of the most productive authors and journals Most of the published articles by the most productive authors were in the main journals mentioned in Table (X), and its distribution is presented in table 4. Among them are Xian Li and James F. Petrick who published all their articles in some of these journals.

From the 92 articles published by the most productive researchers, 74 published in the most productive journals, which represents 80% of the total. Among them are Tourism Management and Journal of Destination Management and Marketing with 69% and 14% respectively. On the other side, evidence shows that 51 of the 350 articles in Tourism Management where conducted by the most productive authors

Figure 2. Principal journals used by the productive authors
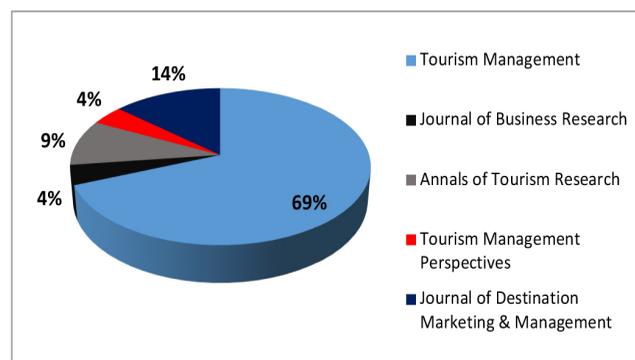
Number of authors per article

The maximum number of authors per article was seven (Table 5) and there is a predominant number of papers published by two or three authors, which represents 35.97% and 30.70% respectively.

Table 5: Number of authors per article

Authors	Articles	%
1	160	16,21
2	355	35,97
3	303	30,70
4	125	12,66
5	29	2,94
6	13	1,32
7	2	0,20
Total	**987**	**100,00**

Social collaboration analysis

Social collaboration analysis is described in the red nodes of figure 3. The total number of authors was 1053 and the average of authors per article was 1.06.

Distribution of authors with productivity levels

Table 6 presents the distribution according to the productivity level (small, medium and high). 38.1% of the authors are small level producers while 61.6% are medium-level producers. Only 0.19% (1 author) belongs to a high productivity level.

Table 6: Productivity levels

Classification	Articles	Frequency	
		n	%
High level	10 o más	1	0.19
Medium level	2-9	309	61.6
Small level	1	191	38.1
Total		501	100

Principal research lines

Figure 4 presents the relationship between the research nodes found in the 987 articles about tourism destination image between 1997 and 2018. The most frequent key words according to the map are destination image, tourism, social media and tourism marketing, among others.

Figure 4. Published papers per year

Table 4: Productivity levels

Authors	Total of articles	Tourism Management	Journal of Business Research	Annals of Tourism Research	Tourism Management Perspectives	Journal of Destination Marketing & Management	Other journals
Xiang Li	11	7	2	2			0
Chris Ryan	9	5			2		2
Svetlana Stepchenkova	9	5				2	2
Alastair M.Morrison	8	7					1
Bob McKercher	8	4		3			1
Steven Pike	8	4			1	2	1
James F. Petrick	7	5		1		1	0
Dimitrios Buhalis	7	4				2	1
Seyhmus Baloglu	7	5					2
Philip L. Pearce	6	2	1	1			2
Hany Kim	6					3	3
Brian Garrod	6	3					3
Total	**92**	**51**	**3**	**7**	**3**	**10**	**18**

Figure 3. Social collaboration
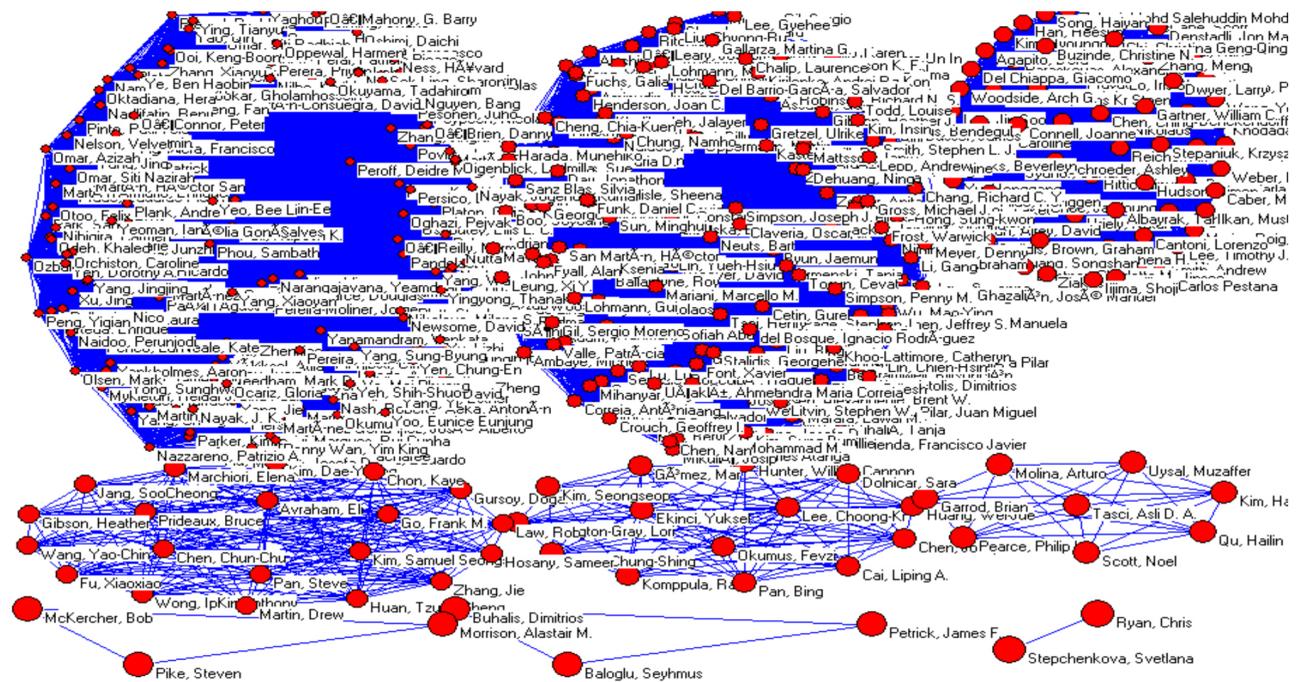
CONCLUSIONS

The importance of the image as a tool to manage tourist destinations has been studied in the last forty years by several researchers (S Baloglu & Brinberg, 1997; Seyhmus Baloglu & McCleary, 1999; Beerli & Martín, 2004; Chen & Tsai, 2007; Chi & Qu, 2008; Fakeye & Crompton, 1991; Gallarza et al., 2002; Gartner, 1994; Hunt, 1975; D. Kim & Perdue, 2011; Estela Marine-Roig & Clavé, 2016; O'leary & Deegan, 2005; Pike, 2002; Stepchenkova, Kirilenko, & Shichkova, 2019). Early studies where motivated by the importance growing of the tourism sector and the need to identify the role of images in the motivations of potential customers (Hunt, 1975).

The results from this research evidence the significant increase in the scientific production about destination image since the development of web 2.0 and its importance for tourism destination organizations. Some researchers agree to conclude in their papers the evolution of image during the travel stages: pre-visit, in situ and post visiting (Martín-Santana, Beerli-Palacio, & Nazzareno, 2017). Some other approaches developed are linked to the process of image formation (Garay & Morales Pérez, 2017; H. Kim & Richardson, 2003; Richards, 2002); the impact of destination image in revisiting intention in the short and long term (Bigné, Sánchez, & Andreu, 2009) and how major sport events influence the image of a particular destination (Donaldson & Ferreira, 2009; Green, Lim, Seo, & Sung, 2010; Nadeau, Norm, Cakmak, Heslop, & Verwey, 2016).

Due to the nature of the construct, research topics from different disciplines have been linked to it. From this perspective, some scholars have analysed the affective component of TDI using tools and scales from psychology (S Baloglu & Brinberg, 1997; Nassar, Mostafa, & Reisinger, 2015; Russell & Pratt, 1980); others have developed their research to measure the impact of marketing (Abuhjeeleh, Shamout, Sleimi, & Harazneh, 2019); satisfaction (Hernández-Lobato, Solis-Radilla, Moliner-Tena, & Sánchez-García, 2006); loyalty (Bhat & Darzi, 2018; Sannassee & Seetanah, 2015); experiential management (Cervera-Taulet, Pérez-Cabañero, & Schlesinger, 2019); among others. In addition, the development of new technologies has created a new framework for the studies of the destination image. Social media effect on the motivations of tourist and its impact in destination image (Huertas, 2018; Lai, 2010); the role of online content through websites and blogs (Mwaura, Acquaye, & Jargal, 2013; Sun, Ryan, & Pan, 2015) and the employment of big data (E Marine-Roig, 2019; Qi

& Chen, 2019) are some of the new research lines that have aroused in the last decade.

The journals with a great extent of published articles in this field are Tourism Management (350 articles) and Annals of Tourism Research (134) articles, presenting a Pearce index of 0.47 and 0.29 respectively; while Journal of Destination Marketing & Management is in the third place of productivity (125 articles), 90% of them being published in the last 5 years. Articles were signed by 501 authors, being Xian Li the most productive with 11 articles in the most productive journals, as evidence of the existent relationship between the most productive authors and journals. In fact, 92 articles published by 12 authors were in these journals. The maximum number of authors per article was seven, with a predominance of two and three authors per article, while the collaboration index obtained was 1.06. The main thematic descriptors are destination image, tourism, social media and tourism marketing.

The main limitations of this paper are related to the absence of analysis related to descriptive data such as Institutions, Language and Origin Country of the research, due to limitations on the access to that data.

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