Academic Contributions in Asian Tourism Research: A Bibliometric Analysis

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Abstract. Bibliometrics is a fundamental field of information science that helps to draw quantitative conclusions about bibliographic material. During the last decade, the use of techniques and bibliometric studies has experienced a significant increase due to the improvement of information technology and its usefulness to organize knowledge in a scientific discipline. This paper presents an overview of the most productive and influential Asian universities and countries in academic tourism research through the use of bibliometric indicators, according to information found in the database Web of Science (WoS). This database is considered one of the main tools for the analysis of scientific information. In order to analyze the information obtained, several rankings of universities and countries have been carried out, both global and individual, based on a series of bibliometric indicators, such as the number of publications, the number of citations and h-index. Analyzing the results, we observe that within tourism research in Asia, the most influential countries are China, Taiwan and South Korea, and that the leading university is Hong Kong Polytechnic University.

Keywords: Bibliometrics · Tourism · Asia · Web of science · H-Index

1 Introduction

Historically, tourism research has been a field in which there have been very few scientific publications, especially compared to other areas, such as finance or economics. However, especially during the last decade, thanks to the evolution of information technology, the economic expansion in many countries, globalization and,

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mainly, the expansion of tourism, the number of publications in this field has increased very considerably. Thereby, in recent years there have been many papers that have helped to improve knowledge on this field, because how to face tourism demand has become a major concern in many countries.

To carry out a study on academic research in a particular field, there are different methodologies. Nonetheless, the most common is the one that we used in this study, which is called bibliometrics. Bibliometrics is defined as a discipline that quantitatively analyzes the bibliographical material [8]. This methodology is becoming very popular within the scientific community, particularly thanks to the development of the Internet, which facilitates access to bibliometric databases such as the Web of Science (WoS). More recently, the scope of this methodology has expanded and been integrated into a broader discipline that also includes scientometrics and informetrics [4].

Many studies have used bibliometric techniques to provide a complete overview of a field of research. There are many areas in which these kinds of studies have been developed. The most important bibliometric contributions in different fields are reflected below.

In the field of management, Podsakoff et al. [37] provided a comprehensive overview of the same, identifying through an analysis of the structure of publication and citations the most influential institutions and authors on the basis of the 20 most influential journals in management. In the field of production management and operations, Pilkington and Meredith [36] analyzed the most influential works using the citation analysis approach and Hsieh and Chang [25] presented an overview of the discipline, identifying the most influential authors, institutions and countries.

In the field of entrepreneurship, bibliometric studies have also been published; being one of the most important and recent works that of Landström et al. [28], which has provided a comprehensive overview of this discipline.

In economics there are a lot of studies examining the state of the art through a bibliometric approach. For example, Laband and Piette [27] studied the influence of economic journals for the period 1970–1990. A more modern study of the most influential journals in this field is that of Stern [38]. Other works, such as Dusansky and Vernon [19] and García-Castrillo et al. [20], have focused their study in order to determine the most productive and influential institutions in this field. In the meantime, other authors have devoted to make a bibliometric analysis of a particular country or region, such as Europe [16, 30], China [18] or Germany [39], among others.

Being economics a very wide field of research, there are many bibliometric studies that have focused on a specific topic. Wagstaff and Culyer [42] developed a bibliometric analysis in health economics that provides a complete overview of this research area during the last forty years, analyzing the authors and the most influential institutions as well as the most cited papers in this area. Moreover, Baltagi [3] and Hall [21] studied the authors, institutions and most productive countries in econometrics. In ecological economics, Hoepner et al. [24] published a bibliometric study providing an overview of the field.

In finance, many bibliometric studies have also been published. Among these there is Alexander and Mabry [2], which provided an overview of financial research, presenting some rankings with respect to the most influential authors, institutions and journals in this field, as well as a list of the 50 most cited papers within the financial

community. Besides, Borokhovich et al. [6] also presented a ranking of the leading authors and institutions in finance. In the meantime, other publications were based on analyzing the influence of financial magazines, such as studies of Borokhovich et al. [7] and Currie and Pandher [17]. Finally, we can emphasize that a considerable amount of bibliometric studies in finance have focused on analyzing specific regions or countries, such as Chan et al. [11], which analyzes Europe, Chan et al. [12], which focuses on Asia and Chan et al. [13], which examines Canada.

Accounting is also a discipline that has been analyzed by many bibliometric studies. Among others, there are studies that have analyzed the quality of accounting journals [5]. For his part, Brown and Gardner [10] and Brown [9], were devoted to provide rankings using citation analysis of papers, authors and institutions leading the field. As in finance and economics, bibliometric studies examining a specific country or region have also been published, as the study of Chan et al. [14], which presented an overview of research in accounting and finance in Australia and New Zealand from 1991 to 2010.

As for academic tourism research, which is the scientific discipline that will be analyzed in this study, it can be noted that a considerable number of bibliometric studies have also been published. Among these studies, some have been devoted to develop rankings of journals, some to rankings of institutions and countries, and others to rankings of authors. Eventually, regional analyses have also been carried out.

Among the authors who have focused their study analysis in magazines, we can highlight McKercher et al. [33], which presented the results of a study made over 70 journals in tourism and hospitality, through surveys to 314 experts in tourism and 191 experts in hospitality. Subsequently, Svensson et al. [40] studied the empirical characteristics of tourism and hospitality journals. Later, Hall [22] developed a ranking of the most influential magazines in tourism, based on the information obtained in the SCOPUS database. That very same year, Cheng et al. [15] focused on identifying which were the most published topics in major travel magazines. In 2012, McKercher [32] introduced a measure to assess the relative influence of a particular journal, calculating the number of citations received by a tourism magazine, divided by the number of citations received by all the Tourism-Related magazines as a whole.

Other bibliometric studies in tourism have preferred to focus on identifying the authors, institutions and influential countries in this field. Among these is the study of Jogaratnam et al. [26], which analyzed the major tourism institutions and countries, based on the publication of three major tourism research journals: the ATR, the JTR, and TM. Meanwhile, Law et al. [29] analyzed which were the most influential countries and institutions in tourism and hospitality research, concluding that the United States was the main publishing country in this field, while universities specializing in tourism and hospitality were the leaders in this area of research. As for the identification of the most influential authors, Zhao and Brent Ritchie [43] focused on identifying the authors who had received more citations during the period between 1985 and 2004. McKercher [31] did the same, though analyzing the periods 1970–2007 and 1998–2007.

Furthermore there is the study of Palmer et al. [35], which aimed to make a bibliometric analysis of the use of statistical methods in tourism research. Based on 12 tourist magazines published in a period of 5 years, it determined the percentage of papers in which statistical techniques were applied.

Finally, we can emphasize that regional bibliometric analysis have been also conducted in tourism. First, Tsang and Hsu [41] did a regional analysis of tourism in China and later Albacete-Sáez et al. [1] developed a regional analysis of tourism in Spain.

The main objective of this paper is to present a comprehensive and updated overview of the most influential universities and Asian countries in tourism research, by applying a series of techniques and bibliometric indicators. All the information under study is collected from the database Web of Science (WoS), which is considered the most influential database in academic research, since it only indexes magazines with high quality standards. The main advantage of this study is that the information is analyzed taking into account a wide range of indicators, such as the total number of publications, the total number of citations, the h-index and certain citation thresholds, allowing us to have a very broad view of the most important universities and Asian countries in tourism.

This paper is divided into two parts. First, the most influential Asian universities in tourism research are discussed, thus presenting a general and a specific ranking for each magazine included in the analysis, from Asian universities that have published a large number of papers. Other indicators, such as the total number of citations and the h-index, are also included. Moreover, an identical analysis of universities is developed, but this time for the most influential Asian countries in academic tourism research.

The paper is organized as follows. In Sect. 2, the methodology used to conduct this study is described. In Sect. 3, the main results of the study are analyzed, which, on the one hand, refers to the most productive and influential Asian universities according to WoS, and on the other hand refers to the most relevant Asian countries. Section 4 ends the article summarizing the main conclusions and results of the study.

2 Methodology

In this study, given that there is no set methodology to determine the value of a set of papers in a university or country, information concerning tourism research in Asia is analyzed mainly through the combination of three indicators [34]: the total number publications, the total number of citations and the h-index. This way, it is possible to develop a full analysis of this information.

Regarding the total number of publications it is necessary to underline that it is often associated with a measure that determines the productivity of a university or country. However, using the total number of publications as a single indicator to make a bibliometric analysis has a number of limitations. First, not all the papers have the same number of pages, there may be papers of 3 pages and others with more than 20 pages, and WoS assigns a unit to each publication regardless of the length of each paper. Secondly, it is difficult to compare the publications of two different magazines, yetit is not the same publishing paper in the top journal of tourism than in an average quality magazine. The value of publishing a paper in the best magazine of the field should be much higher than publishing in another journal, and WoS does not consider this distinction, because it assigns a unit to each publication regardless of where it has been published.

Given this last limitation, the optimal solution would be to assign a value to each magazine, so that if the best magazine has a value of 5 and another magazine has a value of 1, the act of publishing paper in the best magazine is equivalent to publishing five papers in another journal. Still, this is not an easy task. The closest thing to this solution is to use the Impact Factor. The Impact Factor, provided by the Web of Science (WoS) through the JCR, is a measure used to identify the value of a magazine. This indicator is calculated as follows:

$$\mathrm{IF} = \frac{\mathrm{citations}_{n-1} + \mathrm{citations}_{n-2}}{\mathrm{papers}_{n-1} + \mathrm{papers}_{n-2}}$$

Specifically, this indicator represents the number of citations during the year n received by the papers published in years n–1 and n–2 in the magazine, with respect to the number of journal papers published in years n–1 and n–2. As we can observe, to calculate this indicator, only the last two years are taken as reference. Because of this, the 2-year Impact Factor has received considerable criticism since it is relatively easy to manipulate its value through certain techniques, such as the use of self-citations. For this reason, the 5-year Impact Factor, which is calculated in exactly the same way as the Impact Factor 2-year, but including five years instead of two, is becoming increasingly important. By including a longer period of time, it is more difficult to manipulate and, therefore, it usually represents a more accurate value of reality, as the most popular magazines are always those that tend to obtain a highest 5-year Impact Factor.

Another important limitation presented by WoS arises when the total number of citations as a single indicator is used to make a bibliometric analysis. The number of citations is used as a measure to identify the influence of a paper, a university or a country, among other things. However, there are a number of limitations. First, much like the number of publications, it is not the same receiving a citation in a paper published in a top journal than in an average quality journal. Given this limitation, we have already mentioned that the Impact Factor serves to somehow reduce it. Yet another limitation is that some topics always receive more citations than others, regardless of the quality of the papers, only because they are published in the best-known magazines or because the nature of that particular topic attracts more researchers. Accordingly, very high quality papers may receive fewer citations than papers of lesser quality.

As regards the h-index [23], it is a measure that allows evaluating the quality of a set of documents, combining the number of publications and the number of citations under the same approach. Thus, if a college has an h-index of 43 it means that of all the works published the university, there are 43, which have received at least 43 citations. Despite being a very useful measure it presents a number of limitations. Its main limitation is that it cannot distinguish between different levels of citation, so that if a university has just published 15 papers and these have received more than 1,000 citations (this is a very extreme example), the h-index is 15. If another university has published 15 papers with 15 citations each, their h-index will also be 15, although it is clear that the first university has a much greater influence.

Concerning all the information that has been used in this work to reach the conclusions that will be discussed below, the database that was used to collect this

information is the WoS, currently owned by Thomson and Reuters. Overall it is a very practical and easy-to-use database, where most of the information can be found directly through the use of keywords in the search bar, and once obtained the results, these can be filtered according to different options offered by the database. Despite this, it has the limitation that only material that is indexed in the WoS can be found directly through the automatic scanning process. Therefore, if we are looking for a very old paper or one of the first papers published by a magazine that was not indexed since the very first volume, it will probably not appear automatically. In order to try to find it, the paper should be searched manually using the "Cited Referenced Search", which allows searching for any paper that has received at least one citation.

We should keep in mind that apart from the WoS, there are other databases that could be used to perform this analysis, such as Scopus, Google Scholar and EconLit. However, it seems that the WoS is best suited to the purpose of this analysis, since it provides objective and important information for the most relevant journals and papers. Currently the WoS includes more than 15,000 journals and 50,000 papers, which are classified into 251 thematic categories and 151 areas of more general research. Among these 251 categories, the category "Hospitality, Leisure, Sport & Tourism" is included, and within this category a selection of 20 journals concerning tourism research and related areas, which can be seen in Table 1, has been made.

Table 1. List of journals included in the analysis

Acronym	Journal title	Impact factor	5 year impact factor
ATR	Annals of Tourism Research	2.795	3.216
APJTR	Asia Pacific Journal of Tourism Research	0.566	–
CHQ	Cornell Hospitality Quarterly	1.165	1.694
CIT	Current Issues in Tourism	0.958	1.241
IJCHM	Int. J. Contemporary Hospitality Management	1.623	–
IJHM	Int. J. Hospitality Management	1.837	2.466
IJTR	Int. J. Tourism Research	1.024	1.498
JHLST	J. Hospitality, Leisure, Sport & Tourism Education	0.062	0.325
JHTR	J. Hospitality & Tourism Research	1.125	1.602
JLR	J. Leisure Research	0.592	1.382
JST	J. Sustainable Tourism	2.392	3.134
JTCC	J. Tourism and Cultural Change	0.238	–
JTR	J. Travel Research	1.884	2.487
JTTM	J. Travel & Tourism Marketing	0.695	0.966
LS	Leisure Sciences	1.109	1.862
LSt	Leisure Studies	1.096	1.237
SJHT	Scandinavian J. Hospitality and Tourism	0.882	1.087
TE	Tourism Economics	0.573	0.901
TG	Tourism Geographies	1.327	1.302
TM	Tourism Management	2.377	3.382

3 Analysis of Results

In this section the main results of the analysis of the information collected in WoS are analyzed. Analysis of these results can be divided into two parts. First, a ranking, global and individual, is made of the most influential and productive magazines at the Asian level regarding the publication of research papers in tourism universities. Moreover, an identical ranking of universities is presented, though concerning the most influential and productive Asian countries in terms of tourism research.

3.1 The Most Influential and Productive Asian Universities in Tourism Research

Many Asian universities have published papers contributing to tourism research. Table 2 presents a ranking of the 50 most productive Asian universities, classified by the number of papers published in one of the 20 journals listed in Table 1. In order to obtain a more detailed picture of each university and identify which are the most influential ones, other indicators such as the total of citations received, the h-index and certain citation thresholds are also included.

Table 2. The most productive and influential institutions in Asia in tourism research

R	Institution	Country	TP	TC	H	>100	>50	>20
1	Hong Kong Polytechnic U	CHN	561	4238	31	2	15	61
2	Kyung Hee U	KOR	127	861	15	0	2	12
3	Sejong U	KOR	110	1007	19	0	2	19
4	Sun Yat Sen U	CHN	52	354	5	1	1	1
5	Dong A U	KOR	42	398	13	0	0	6
6	National Chiayi U	TW	37	184	7	0	0	3
7	National Cheng Kung U	TW	35	363	8	1	3	5
8	National Kaoh U Hospitality and Tourism	TW	34	39	3	0	0	0
9	Ming Chuan U	TW	33	689	12	2	4	8
10	National Taiwan Normal U	TW	32	161	6	0	0	2
11	National Chung Cheng U	TW	29	197	6	0	1	3
12	Chinese Culture U	TW	28	591	11	1	2	9
13	Jinwen U Science and Technology	TW	27	118	6	0	0	1
14	National Chi Nan U	TW	26	96	4	0	0	2
15	National U of Singapore	SG	25	350	11	0	1	9
16	Pusan National U	KOR	24	103	5	0	0	1
17	U of Hong Kong	CHN	23	284	8	0	1	4
18	National Taiwan U	TW	23	134	7	0	0	2
19	Fu Jen Catholic U	TW	23	121	6	0	0	2
20	U of Macau	CHN	21	57	5	0	0	0
21	Nanyang Technological U	SG	20	119	7	0	0	1
22	Chinese U Hong Kong	CHN	20	95	6	0	0	0

(*continued*)

Table 2. (*continued*)

R	Institution	Country	TP	TC	H	>100	>50	>20
23	Kaohsiung Medical U	TW	19	323	12	0	0	6
24	National Chiao Tung U	TW	19	173	7	0	0	3
25	U Malaya	MY	19	64	5	0	0	0
26	Seoul National U	KOR	16	69	4	0	0	1
27	Beijing International Studies U	CHN	15	91	6	0	0	1
28	Peking U	CHN	14	118	5	0	0	3
29	Hong Kong Baptist U	CHN	14	55	5	0	0	0
30	Macau U Science and Technology	CHN	14	46	3	0	0	1
31	Kyonggi U	KOR	13	436	7	1	4	4
32	Tunghai U	TW	13	90	5	0	0	2
33	National Chin-Yi U Technology	TW	13	80	4	0	0	2
34	Hanyang U	KOR	13	50	4	0	0	0
35	U Sains Malaysia	MY	13	32	4	0	0	0
36	National Dong Hwa U	TW	12	86	4	0	0	2
37	Nanjing U	CHN	12	37	3	0	0	0
38	National Central U	TW	11	149	5	0	1	3
39	National Chung Hsing U	TW	11	149	5	0	1	3
40	Kyungnam U	KOR	11	101	6	0	0	1
41	Feng Chia U	TW	11	82	5	0	0	2
42	National Sun Yat Sen U	TW	11	77	4	0	0	2
43	Pai Chai U	KOR	10	127	4	0	1	3
44	South Chinese U Technology	CHN	10	114	6	0	0	2
45	City U Hong Kong	CHN	10	42	4	0	0	0
46	Asia U Taiwan	TW	10	33	2	0	0	0
47	U Science and Technology of China	CHN	10	22	3	0	0	0
48	Chung Hua U	TW	9	146	5	0	0	4
49	Keimyung U	KOR	9	75	6	0	0	0
50	Dongseo U	KOR	9	25	1	0	0	1

Abbreviations: >100, >50, >20 = number of papers with more than 100, 50 and 20 citations; TP, TC and H = Total papers, citations and *h*-index in tourism journals indexed in WoS.

Analyzing the above table, we can observe that Hong Kong Polytechnic University is the most productive Asian university in tourism by far, having published 561 papers, whereas the second-ranked has published only 127. Despite having published many fewer papers than the first, the second and third in the ranking, Kyung Hee University and Sejong University, also stand well above the rest of universities, with 127 and 110 publications, respectively. The fourth most productive university has only about 50 publications.

According to other indicators such as the number of citations and h-index, the composition of the top 3 ranking does not vary The Hong Kong Polytechnic University is the most influential one with an overwhelming advantage over the rest, while the

Kyung Hee University and Sejong University swap positions in the ranking, being a little more influential Sejong University.

In the same way that we have just now analyzed a ranking of the 50 most productive in tourism research Asian universities, the same ranking (including only the top 10 or top 5) is individually made for most journals included in Table 1. Thus, we can see which are the most dominant in each of the most influential magazines in Asian tourism research universities. This ranking can be observed in Table 3.

We observe that the monopoly of Hong Kong Polytechnic University is very clear, occupying the first position in the ranking in each of the 12 most influential journals in tourism. In the journals related to leisure, Hong Kong Polytechnic University does not dominate so clearly, since, for example, neither the LS nor the JLR are present in the top 5. However, in the 20 remaining journals if it does not occupy the first position, it is always within the top 5.

As in the case of the general ranking, Kyung Hee University and Sejong University are always on top of the ranking, normally occupying the second or third position in each of the magazines. Nevertheless, it can be noted, first, that in the top 10 of the ATR, Kyung Hee University does not appear, and second, that in the TE Sejong University is not present. Apart from these three universities, there is none that stands out, since depending on the magazine, they appear in the ranking.

To end this section, it must be highlighted that one of the limitations of applying bibliometric techniques to universities, is that a university can become productive and influential not only by publications of its own researchers, but also by the collaboration of researchers from other universities. Furthermore, it has to be kept in mind that university researchers can get in and out of it at any time.

3.2 The Most Influential Asian Countries in Tourism Research

This section presents a ranking of the 17 Asian countries that have published a paper in one of the 20 journals listed in Table 1. This ranking is sorted according to the number of publications in these 20 most influential tourism journals, so that the first one in the ranking will be the most productive country, and the last one the least productive. As we have done for universities, apart from the number of publications, in order to have a broader view of each country other indicators such as the total of citations, the h-index, certain citation thresholds and, finally, the productivity of each country, have been included. This ranking is reflected in Table 4.

By analyzing the table above, it is very clear that China is the most productive and influential Asian country in this field, since it obtains the best results in all variables (except productivity), with significant difference with respect to the second in the ranking. In the second position there is Taiwan, whose value of indicators such as the total of publications, total of citations and h-index are very similar to those of South Korea, which appears in third position. Fourth is Malaysia. Other Asian countries with a significant number of publications are Japan, Singapore, Thailand, India and Iran.

The other countries in the ranking (which are countries that are developing, such as Bangladesh, Sri Lanka, Nepal, Laos, Vietnam, etc.) have just published 5 papers. Consequently, these countries do not have a strong influence on the field tourism research. Yet, we should stress the case of Malaysia, since despite being a country that

Table 3. Institutions with the highest number of papers in eighteen selected journals

	TM		IJHM		ATR		APJTR		JTTM		TE	
R	Institution	TP	Institution	TP	Institution	TP	Institution	TP	Institution	TP	Institution	TP
1	H. Kong Pol. U	120	H. Kong Pol. U	87	H. Kong Pol. U	50	H. Kong Pol. U	53	H. Kong Pol. U	82	H. Kong Pol. U	14
2	Sejong U	37	Kyung Hee U	27	Nat U of Singapore	15	Sejong U	8	Sejong U	11	Kyung Hee U	10
3	Kyung Hee U	27	Sejong U	22	Sejong U	11	N. Kaoh. U H. Tour	6	Kyung Hee U	8	Nat Chung Cheng U	8
4	Nat Cheng Kun. U	19	Dong A U	12	Kyonggi U	6	Fu Jen Catholic U	6	Dong A U	5	Nat Cheng Kung U	6
5	Nat Taiwan U	14	U of Macau	12	Sun Yat Sen U	6	Jinwen U Sci Tech	5	Hanyang U	4	Nat Chi Nan U	6
6	Ming Chuan U	13	Nat Taiw Norm U	10	Chinese Culture U	5	Kyung Hee U	5	N. Kaoh. U H. Tour	4	Sun Yat Sen U	5
7	Kaohsiung Med U	12	Sun Yat Sen U	9	Ming Chuan U	5	Sun Yat Sen U	5	Pusan Nat U	4	Chinese Culture U	4
8	Nat Chiayi U	11	Hong Kong Bapt U	8	Chin U Hong Kong	4	Dong A U	4	Feng Chia U	3	U Scienc. Tec. Chn	4
9	Chinese Culture U	10	N. Kaoh. U H. Tour	8	Peking U	4	I Shou U	4	Jeonju U	3	Chiba U	3
10	Nat Chiao Tung U	9	Nat Chi Nan U	7	U Keban. Malaysia	4	Pusan Nat U	4	MacauU Sci. Tech.	3	Monash U	3

	IJTR		IJCHM		JST		JTR		CHQ		JHTR	
1	H. Kong Pol. U	19	H. Kong Pol. U	39	H. Kong Pol. U	11	H. Kong Pol. U	34	H. Kong Pol. U	16	H. Kong Pol. U	28
2	Kyung Hee U	11	Kyung Hee U	11	Kyung Hee U	6	Kyung Hee U	5	Kyung Hee U	5	Sejong U	4
3	Nanyang Tech U	4	Dong A U	4	Sun Yat Sen U	4	Sun Yat Sen U	3	Chn U Hong Kong	4	Dong A U	2
4	U Malaya	4	Pusan Nat U	4	Beijing Int St.. U	3	Mac. U Sci.. Tech.	2	Sun Yat Sen U	4	Kyung Hee U	2
5	Nat Chiayi U	3	Sejong U	3	Dong A U	2	Nat Chiayi U	2	Tunghai U	4	Nat Chung Che. U	2
6	N Ka. U H Tour	3	City U Hong Kong	2	Fu Jen Catho. U	2	Sejong U	2	Dong A U	4	Pusan Nat U	2
7	Aletheia U	2	Jinan U	2	Jinw. U Sci Tech	2	South Chn U Tec.	2	Ming Chuan U	2	Cheongju U	1
8	Dong A U	2	Jinwen U Sci Tech	2	Kyungnam U	2	U of Hong Kong	2	Nat U Singapore	2	Chinese Culture U	1
9	Nat Chi. Tung U	2	Kyungnam U	2	Nat. Ec. U Vietnam	2	Asia U Taiwan	2	Pusan Nat U	2	Chn U Hong Kong	1
10	Nat Taiw Norm U	2	N. Kaoh. U H. Tour	2	Nat Taiw Norm U	2	Bangkok U	1	Sejong U	2	City U Hong Kong	1

	CIT		JHLST		TG		LS		JLR		JTCC	
1	U Malaya	6	Fu Jen Catholic U	6	Kyung Hee U	7	Nat Chiayi U	3	Seoul Nat U	3	Chongqi. Norm. U	1
2	H. Kong Pol. U	3	N. Kaoh. U H. Tour	5	H. Kong Pol. U	3	Nat Dong HWA U	3	U of Illi. Urb Champ.	3	Dongseo U	1
3	Sun Yat Sen U	3	Jinwen U Sci Tech	4	Dong A U	2	Sejong U	3	Nat Chiayi U	2	Hebrew U	1
4	Nan Kai U Techn.	2	Nat Taiw Norm U	4	Nanjing U	2	Honam U	2	U of Hong Kong	2	H. Kong Pol. U	1
5	Nat Taiw Ocean U	2	H. Kong Pol. U	3	Sun Yat Sen U	2	Hong Kong Bapt U	2	Chn U Hong Kong	1	MacauU Sci. Tech.	1

Abbreviations are available in Table 1.

Table 4. The most productive countries in Asia in tourism research

R	Name	TP	TC	H	>100	>50	>20	Pop	Prod.
1	China	875	5913	41	3	18	77	1,350,695	0,648
2	Taiwan	519	3973	31	3	13	61	22,814.636	22,749
3	South Korea	427	3698	30	2	11	55	49,540	8,619
4	Malaysia	79	225	7	0	0	1	29,628.392	2,666
5	Japan	54	201	8	0	0	3	126,695.683	0,426
6	Singapore	53	525	13	0	1	11	5,353.494	9,900
7	Thailand	51	141	8	0	0	0	65,493.298	0,779
8	India	36	94	5	0	0	1	1,241,492	0,029
9	Iran	18	64	4	0	0	1	75,853.9	0,237
10	Indonesia	5	85	2	0	1	1	237,556.363	0,021
11	Philippines	4	22	2	0	0	0	99,084	0,040
12	Vietnam	4	0	0	0	0	0	91,519.289	0,044
13	Pakistan	3	1	1	0	0	0	182,565.320	0,016
14	Sri Lanka	2	10	1	0	0	0	20,277.597	0,099
15	Laos	2	0	0	0	0	0	6,677.534	0,300
16	Nepal	2	0	0	0	0	0	30,485.798	0,066
17	Bangladesh	1	10	1	0	0	0	167,671	0,006

Abbreviations: TP and TC = Total papers and citations in all the tourism journals indexed in WoS; >100, >50, >20 = number of papers with more than 100, 50 and 20 citations; H = *h*-index. Pop = Population in thousands; Prod = Productivity – Number of papers per million of inhabitants.

is not well developed, it ranks fourth in the ranking overcoming Japan, a fact that deserves great credit.

One thing that draws a lot of attention is that although Taiwan is the 4th ranked country with a smaller population, it appears in second position behind China. Whereupon, the productivity of this country is very high, publishing 22 papers per million inhabitants. To be aware of the amount of papers that are per million inhabitants, it is appropriate to compare it with the second ranked country with higher productivity, which is Singapore. With a quarter of the population of Taiwan, it occupies the sixth position in the rankings with an output of nearly 10 papers per million inhabitants. On the opposite side there is be India, which although being the largest Asian country (along with China) appears only in the eighth position of the ranking with a productivity of 0,029 papers per million inhabitants.

Finally it must be noted that only China, Taiwan and South Korea have managed to publish papers in tourist magazines, which have received more than 100 citations, and apart from these three countries, only Singapore and Indonesia have published one with more than 50 citations.

As it has been done with universities, was also prepared an individual ranking for each journal, in which the number of publications in tourism that every Asian country has published in each of the magazines mentioned. This classification can be seen in Table 5.

Table 5. Countries classified by the twenty tourism journals included in the analysis

		TM	IJHM	ATR	APJTR	JTTM	TE	IJTR	IJCHM	JST	JTR	CHQ	JHTR	CIT	JHLST	TG	LS	JLR	JTCC	LSt	SJHT	Total
1	China	184	134	92	80	90	33	36	47	28	41	28	32	14	9	13	5	3	4	1	1	875
2	Taiwan	154	95	30	49	24	39	24	12	12	7	12	8	7	22	3	12	3	2	2	2	519
3	South Korea	104	78	28	25	40	18	19	24	8	10	12	12	5	10	10	11	9	2	1	1	427
4	Malaysia	14	11	6	5	4	7	8	4	6	0	0	0	10	0	2	0	0	1	0	1	79
5	Japan	16	2	8	2	5	6	2	1	4	1	1	0	1	0	0	1	2	1	1	0	54
6	Singapore	15	1	22	2	1	0	5	0	1	0	3	0	0	0	1	0	1	1	0	0	53
7	Thailand	11	2	8	6	3	4	3	0	2	2	0	1	4	1	1	0	0	2	1	0	51
8	India	9	9	7	0	1	2	0	3	0	0	2	0	0	0	0	0	0	2	1	0	36
9	Iran	5	2	1	0	1	0	4	2	0	0	0	0	1	0	0	0	1	0	0	1	18
10	Indonesia	0	0	3	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	5
11	Philippines	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
12	Vietnam	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	4
13	Pakistan	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
14	Laos	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
15	Nepal	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
16	Sri Lanka	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
17	Bangladesh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1

Abbreviations are available in Table 1.

Table 6. Publication evolution by years and countries

Rank	Country	<94	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13
1	China	0	3	1	0	2	2	4	9	8	7	10	12	9	16	23	61	91	107	136	118	159
2	Taiwan	0	1	0	2	1	2	0	1	1	6	4	13	9	19	14	30	42	52	58	112	102
3	South Korea	3	1	0	3	2	2	1	4	6	7	9	10	15	14	14	18	40	35	65	69	76
4	Malaysia	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	5	10	15	17	13
5	Japan	2	0	0	1	0	1	0	0	1	1	0	0	2	2	4	5	5	7	5	9	5
6	Singapore	6	1	4	3	2	2	2	3	5	3	3	0	0	1	2	3	3	1	3	3	2
7	Thailand	1	0	3	1	0	1	0	0	0	2	0	1	0	1	1	7	2	6	5	8	8
8	India	3	0	0	1	1	0	0	1	0	1	0	0	0	0	2	0	3	3	8	4	8
9	Iran	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	3	5	5
10	Indonesia	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11	Philippines	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	1
12	Vietnam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
13	Pakistan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
14	Laos	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
15	Nepal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16	Sri Lanka	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
17	Bangladesh	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Analyzing this table, it is observed that China is the most influential Asian country in all tourism magazines that appear in this study, except in the TE, the JHLST, the LS, the LSt and the SJHT, which dominates Taiwan, and the JLR, which dominates South Korea. Apart from this, it can be mentioned that Singapore, in relation to the number of publications of other countries, and taking into account the position of each one of them in the ranking, appears well positioned in the ATR, while the same applies to Malaysia in the CIT. Finally, let us look into the publication evolution of Asian countries between 1994 and 2013. Table 6 presents the number of articles that each country has published in tourism journals between 1994 and 2013.

To conclude this section, it must be stressed that we must keep in mind that one of the constraints on rankings by country, is that a country takes into account the papers published in the universities within its very same borders, forgetting about the nationality of the researchers who publish such papers. The problem is that many good researchers usually move to the best universities. As a consequence, their publications only consider the country where the university is located (and in which researchers are working) and do not take into account the country of origin. Then, as for the Asian scope, the best universities are to be found in China, Taiwan and South Korea, which are precisely the three nations leading the ranking. Despite the fact that because of this limitation the nationality of researchers is not reflected, it is reasonable to develop this ranking, since the goal of this section is to find those Asian countries where the best papers in tourism research are published, regardless of who the authors are.

4 Conclusions

Through this study, a general bibliometric view of the most productive and influential Asian universities and countries in tourism research has been reflected. This analysis has been developed through the use of a set of techniques and bibliometric indicators applied to information gathered in the WoS, which is a database regarded as the most influential scientific research.

To try to have this complete view of universities and most influential Asian countries in the tourism research, rankings have been drawn on these countries and universities. In all rankings, the classification has been carried out taking into account the "number of publications" variable, an indicator that measures the productivity of the country or university in question. However, to try to get this overview, we have included more indicators such as the total number of citations, the h-index or certain citation thresholds, among others.

With regard to universities, there is no doubt that Hong Kong Polytechnic University is the most productive Asian university in tourism by far, having published 561 papers, while the second of the ranking, which is Kyung Hee University, has published only 127. In the third place there is Sejong University with 110 publications. The rest of Asian universities are much less productive, having published altogether less than 50 papers in tourism. These three universities, besides being the most productive, are also the most influential, receiving more citations, especially the Hong Kong Polytechnic University.

Analyzing the influence of these universities on each of the magazines in particular, we observe that the Hong Kong Polytechnic University is the one that has more publications in almost all journals under study. In addition, Kyung Hee University and Sejong University are always on the top of the ranking, normally occupying the second or third position in each of the magazines.

Referring to the most influential tourism research in Asian countries, China is clearly the most influential Asian country in this field. Second is Taiwan, followed closely by South Korea, which appears in third position.

Logically, the developing countries occupy the lowest positions of the ranking because they devote few resources to research. Yet, Malaysia stands out, since despite being a nation that is not well developed, it ranks fourth.

The case of Taiwan is striking. It occupies the second position in the ranking, being the 4th country in the list with a smaller population. Known for its high productivity, it publishes an average of 22 papers per million inhabitants, far ahead of the second most productive country, that is, Singapore, with about 10 papers per million inhabitants.

Analyzing this same ranking for each particular journal, we observe that China is the most influential Asian country in every magazine except the TE, the JHLST, the LS, the LSt and the SJHT, which dominates Taiwan, and the JLR, which dominates South Korea. The rest of countries have little influence on the magazines, as these three nations cover most of the papers published within their borders.

Once explained the main conclusions of the study, it should be noted that apart from the limitations of the different indicators, which are explained in the "Methodology" section of this work, this study has other limitations. First, it must be noted that rankings have been developed based on a given indicator. Nonetheless, depending on the indicator used, this classification may change its order easily. For this reason, the aim of this work is not to present an official ranking of universities or countries. On the contrary, the objective is to be a merely informative study, providing an overview of key information on tourism in Asia, through of a broad range of indicators. Finally, we must take into account that the overview of this field is presented basing on the information that was indexed in WoS in June 2014. Hence, it is not a dynamic view. Truthfully, it is rather static, since each week the database is updated, continually adding new contributions. Therefore, the results of this study reflect the situation of June 2014, a situation that may vary over time.

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