

## BIBLIOMETRIC ANALYSIS OF TOURISM RESEARCH FOR THE PERIOD 2007-2016

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### ABSTRACT

The aim of this study was to identify trends in tourism literature in bibliometric terms by analyzing scientific studies carried out over the past decade and to reveal the similarities and differences of the trends between Turkey originated and other international publications. The research data comprised of 4473 studies published between 2007-2016 in the top-five journals of tourism field according to the Journal Citation Reports and 213 Turkey-originated studies published in 19 tourism and hospitality journals. The journals were examined in terms of number and types of publications, author-institution-country productivity, citation analysis, conceptual orientations and citation burst. In order to reveal the links between key words and the leading studies, social network analysis was utilized. Social network analysis facilitates mapping the links in a research community and specifying the key actors for the field development. According to research findings, experimental researches were observed to have an important place in both Turkey originated and other international publications. It was determined that topics of organizational behavior and management fields were studied the most, particularly the concepts such as attitude, perception, intention, experience, behavior and satisfaction were measured. Turkey originated publications often

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addressed conflict and behavior issues whereas other international publications focused on sustainable tourism, destinations, local people and travel experiences. It is considered that the research results would enable individuals interested in tourism discipline, in both scientific and sectorial terms, to have an overview of the research scope and intellectual framework of the field.

## INTRODUCTION

The increasing importance of tourism for national and local economies and its cultural and sociological effects enabled it to develop as a discipline and led researchers from different disciplines to become interested in the field. Improvement of tourism over years and its multidisciplinary structure require its bibliometrical analysis both in quantitative (basic and further technical analysis) and qualitative ways (literature search) (Koseoglu, Sehitoglu, & Parnell, 2015: 359).

As a widely accepted definition in literature, bibliometrics is the application of mathematical and statistical methods on books and other communication mediums (Pritchard, 1969: 348). Bibliometrical studies allow determination of quality of the studies in a specific field, evaluation of the concepts and definition of trends in the field. Thus, it helps researchers have an overview of the main studies and trending topics leading the field (Kasemodel, Makishi, Souza, & Silva, 2016: 73-83). Citation analysis in bibliometrical studies allows determination of basic reference sources on a specific topics and evaluation of the quality of scientific publications as well as their effects in a specific discipline. Although bibliometrical analysis could be applied on various documents, it mainly focuses on journals. Academic journals are important communication channels for researchers. Also, journals function as a glass through which the evolution of a specific discipline could be observed (Xiao & Smith, 2006: 490-1).

Bibliometrical techniques can be classified under the evaluative or relational categories. Evaluation techniques generally try to evaluate the impact of the scientific research in order to compare the relative scientific contributions of two or more individuals or groups (Benckendorff, 2009a: 2-3). Evaluative techniques consist of productivity measurements (publication, author, organization and country-related productivity), of impact measurements (rating of journals, and document, author, journal

citation analyses) and of hybrid metrics embodying both productivity and impact measurements (Hall, 2011; Koseoglu, 2016: 154). On the other hand, relational techniques discover the relationships in the researches such as the structure of the research fields, new research themes and techniques. Word analysis, co-authorship analysis and co-citation analysis are the most widely-used visual techniques to reveal relationships (Benckendorff & Zehrer, 2013: 126). Word analysis refers to the analysis of data obtained through checking the frequency of the use of the words on titles, key words and summary of publications and it is one of the important indicators showing the concepts that were in the focus of the studies in a specific field (Ukşul, 2016: 67). Within the scope of co-author analysis, the collaborations realized by researchers in a particular scientific community to contribute to general knowledge base of the community are examined (Racherla & Hu, 2010: 1012). Co-citation analysis is defined as “the frequency with which two documents are cited together”, and co-citation occurs when two or more authors, documents or journals are cited together as a reference in another document simultaneously. (Small, 1973; Diodato, 1994; Osareh, 1996: 155). Co-citation analysis focuses on the possibility that documents often cited together in reference lists would have a point in common. Co-citation analysis reveals the relationship network among the documents, and thus, provides predictions on intellectual structure of the field (Benckendorff, 2009c).

The analysis of progress in knowledge and theory emphasizes the effect of academic forces and trends forming the knowledge production besides understanding the development of ideas and interpretations. Such researches facilitate search of the intellectual structure of a discipline (Benckendorf & Zehrer, 2013: 122). In this study, it is aimed to determine trends in the field through examining bibliometrical features of the studies published in Turkey- originated and other international tourism literature within the scope of the data gathered from Web of Science database. In order to achieve the mentioned goal, two main questions were attempted to be answered in the study:

(1) What kind of distribution do the Turkey-originated and other international publications show when they are examined through evaluation-based bibliometrical techniques (publication numbers, publication types, author-institution-country productivity and citation analysis)?

(2) What are the important concepts and the leading resources found as a result of the examination of Turkey-originated studies and

other international publications through the relationship-based bibliometrical techniques (word analysis and co-citation analysis)?

In the present study, implications on the nature of tourism, knowledge structure and specific research themes are planned to be discussed in terms of leading researches, authors, institutions and countries in the tourism field. It will allow the researchers to have an overview on the epistemological structure of the field, the current research themes in the field and reference books to be benefited from within the framework of those themes. Sectorial developments occur in coordination with the scientific developments. Therefore, the present study serves as a guideline to the sector representatives because of scientifically putting forward the dynamics and route of today's tourism. In addition, the examination of the trends in Turkish tourism literature in comparison with the other international tourism literature and revealing the similarities and differences within the context of the research themes, provide information about to what extent the Turkish tourism researches match up with or separate from the developments in the world.

### **BIBLIOMETRICAL RESEARCHES IN THE FIELD OF TOURISM**

The fact that tourism has developed as a discipline resulted in the increase in number of scientific publications, publishers and academic institutions which brought along the necessity to interpret and summarize the scientific knowledge in the field. Specified as studies allowing trends in a specific field to be examined, bibliometrical researches also draw great interest in tourism recently, as they do in every field (Hall, 2011:16).

Within the scope of bibliometric researches carried out in the field of tourism, Ballantyne, Packer, and Axelsen (2009) examined the improvement in tourism researches by way of categorizing 2868 articles under 21 topics area that were published in 12 important tourism journals between 1994 and 2004. The most studied topics in articles were tourist/visitor researches (focused on behavior and choices), tourism planning (focused on improvement of tourism, strategy and demand prediction), destination (focused on image, improvement and management) and marketing (focused on market segmentation and promotion) representing 37% of all articles. In addition, while the productivity of authors and institutions from USA and Britain has decreased, publication productivity of Australia, New Zealand and Asian countries has increased. Among 17.413 tourism-themed studies from 1900

to today, Zhang, Lyu, and Yan (2015) specified the USA, Britain and Australia as the countries producing the most efficient publications; and New Zealand, China, Britain and Australia as the countries producing publications with the closest cooperation. According to the authors, *Annals of Tourism Research* and *Tourism Management* are the most productive journals; Hong Kong Polytechnic University is the most productive institution. According to the results of co-citation network analysis in the last 10 years, the most studied topics in the field of tourism are online tourism, customer perception and behavioral intention, tourism demand prediction and destination's competitive capacity.

Benckendorff (2009b) indicated that the publications published in the *Journal of Sustainable Tourism* between 1999 and 2008 were significantly affected by the geography and ecology. Furthermore, in this study, three clusters on which the researches focused were specified, as well. These are: improvement of sustainable tourism, eco-tourism and management of the effects of tourism. On the other hand, among 2486 articles published in *Annals of Tourism Research*, *Journal of Travel Research* and *Tourism Management* journals between the years of 1996 and 2010, Benckendorff and Zehrer (2013) found that the trendiest topics in the field of tourism were sociology, anthropology and psychology. In that study, tourism, as a social phenomenon, was divided into three clusters: tourism planning, perception of tourists and local people, and customer behaviors.

According to Karagöz and Yüncü (2013), management, human resources and education topics are the key actors in tourism knowledge network in 385 doctorate theses produced in Turkey between 1991 and 2010. In terms of information production in the field of tourism at doctorate level, it is mainly focused on management sciences. However, other fields under the social sciences are ignored while a non-flexible and limited approach is adopted. Similarly, Evren and Kozak (2014) found that management and organization topics followed by tourism marketing and tourism economy were dominant in 1217 articles published in Turkish tourism journals between 2000 and 2010. In addition, it was observed that vast majority of the studies was carried out with the help of empirical techniques. In their study on 135 Turkey-originated studies published in 14 of the leading international tourism/hospitality journals between 1984 and 2013, Koseoglu et al. (2015) found that experimental methods were utilized in 96.3% of the articles and the most studied topics were customer behavior, tourism policies, tourism development, tourism marketing and business management. Results showed that the most productive authors

were Metin Kozak and Cevat Tosun. In addition, it was observed that the authors who contributed the most to the literature were holding the professor title; that authors generally contributed to journals with one article; while, authors cooperation was highest in articles.

As mentioned above, there are many bibliometrical studies examining the tourism discipline specific to Turkey or at an international dimension in specific journals, academic theses, under specific titles and within specific time ranges. In those studies, such variables as author-institution-country productivity and collaboration, citation analyses, research methodologies and research themes were examined. Since each research was carried out within the framework of different time ranges and data resources, it could be misleading to come to a general conclusion over the research findings. However, it can be indicated that the tourism research themes in the publications in Turkey mainly focus on business and management sciences whereas the tourism marketing and planning are mainly discussed topics in other international studies. Although similar evaluation and relationship-based techniques are examined in current study, the distinguishing part is the examination of trends in Turkish tourism literature in comparison with the other international tourism literature.

## METHODOLOGY

The present study was carried out using the document examination method within the framework of descriptive analysis. Bibliometrical study methodology enables the scientific production on the research topic to be visualized through objective techniques and explained in numbers (Kasemodel et al., 2016: 74).

The purpose of the study is to put forward the image of scientific development and trends in tourism literature over 10 years at Turkey-originated and other international level. This was done by bibliometrically analyzing 213 Turkey-originated studies published between 2007-2016 in 19 tourism-hospitality journals and 4473 studies published between 2007-2016 in *Tourism Management (TM)*, *Journal of Travel Research (JTR)*, *Journal of Sustainable Tourism (JST)*, *Cornell Hospitality Quarterly (CHQ)* and *Annals of Tourism Research (ATR)*, which are the top-five journals in tourism field according to *Journal Citation Report (JCR) 2016*. 19 journals in which Turkey originated studies are published in and top-five journals

are indexed in “Hospitality, Leisure, Sport & Tourism” research field in Thomson Reuters Web of Science database.

The reason for choosing the mentioned journals is because they are considered as the top-five tourism journals in the fields of tourism due to their citation numbers, impact factor and h-index according to 2016 JCR data, they are at Q1 quarter in JCR and SCImago Journal & Country Rank (SJR) (2017). JCR enables assessing and comparing the performance of the journals and determining the trend journals within the important research fields (Web of Science, 2017) whereas SJR, developed based on the information from Scopus database, is a publically accessible portal containing the scientific indicators of journals and countries. Journal clusters are ranged in SJR and JCR and they are divided into four quarters as Q1-Q2-Q3-Q4. Q1 represents the quarter of the journals with the highest value (SJR, 2017).

The continuous change and development of the scientific information brings along a continuous transformation in research fields and topics under scientific disciplines. The main reason for choosing the time range of 2007-2016 in the present study is to provide an insight to the current situation of the information structure in tourism field. In addition, the other reason is that Journal of Travel Research, Journal of Sustainable Tourism and Cornell Hospitality Quarterly have started to be indexed in Web of Science after 2007.

In the study, the data of top-five journals and Turkey-originated studies were acquired from Web of Science database. Turkey-originated publications were found in 19 out of 23 tourism and hospitality journals. In this regard, top-five journals and Turkey-originated publications were examined in the context of publication numbers according to years, type of publications, author-institution-country productivity and citation analysis. In addition, 4394 studies acquired by excluding Turkey-originated studies published in top-five journals and data from 213 Turkey-originated studies were examined comparatively via Word analysis.

Besides deriving the current topics and trends in tourism literature in the last 10 years through word analysis, similarities and differences between Turkey-originated researches and other international literature were put forward, as well.

Social network analysis was used in order to determine the concept trends in Turkey originated and other international publications. By

means of mapping and visualizing the relations in a research community, social network analysis ensures definition of the key actors in an information network, test of the structure and discovery of the factors effective for the improvement of a field (Karagöz & Yüncü, 2013: 211-2). Network analysis allows the examination of wide and complex structures such as academic research communities. Mathematically, a network is a graphic in which every participant in the network is named as an actor and presented as a node (Racherla & Hu, 2010: 1016-7). On the other hand, CiteSpace II application was used for the analysis of social network. CiteSpace II is a Java application that supports structural and time-wise analysis of various networks deriving from scientific publications (Chen, Ibekwe-SanJuan, & Hou, 2010: 10).

As a result of the analyses, relations were visualized, and statistical information was presented about the structure of the network formed. In this context, network density, network modularity and mean silhouette values were calculated. Q-modularity takes value ranging from 0-1, and the values close to 1 indicate closer relations and connections within the clusters. In general, Q modularity value between 0.4-0.8 is accepted as the indicator of a good clustering. On the other hand, mean silhouette takes value ranging from -1 and 1, and the fact that the value is close to 1 indicates that the actors in the network are consistent and similar (Li, Ma, & Qu, 2017: 80).

In the study, locations of concepts in the network were examined according to their betweenness centrality. Betweenness centrality measures the importance of the nodes locations in the network and stresses the potential key points in the network. In addition, citation bursts for the cited publications were identified. Citation burst is a metric that defines the sharp increase observed in the citation number of a reference in a certain period of time. Therefore, it could be indicated that a reference with a strong burst is in a specific relationship with the research trend during the burst period (Zhang, Chen, Wang, & Ordonez de Pablos, 2016: 1131-3).

## FINDINGS

### **Number of Publications**

4473 studies in total were published in the top-five journals between 2007 and 2016. Journals with the highest number of publications in top-five

journals are Tourism Management (n=1808) and Annals of Tourism Research (n=1123). There are 213 Turkey-originated publications between 2007-2016 published in 19 journals indexed in Web of Science, and Tourism Management (n=51), International Journal of Contemporary Hospitality Management (n=37) and International Journal of Hospitality Management (n=28) are the journals in which Turkey-originated studies are published the most. Turkey-originated studies in these three journals comprise 54.5% of total publications.

Table 1. *Number of Publications*

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
<b>TM</b>	193	148	125	131	200	195	186	175	229	226	<b>1808</b>
<b>JTR</b>	-	44	39	40	54	61	59	58	54	77	<b>486</b>
<b>JST</b>	-	45	53	72	54	61	91	76	82	110	<b>644</b>
<b>CHQ</b>	-	50	52	46	61	43	42	42	39	37	<b>412</b>
<b>ATR</b>	89	81	64	90	125	160	127	123	113	151	<b>1123</b>
<b>Turkey</b>	14	15	16	22	20	15	17	25	27	42	<b>213</b>

TM: *Tourism Management*; JTR: *Journal of Travel Research*; JST: *Journal of Sustainable Tourism*; CHQ: *Cornell Hospitality Quarterly*; ATR: *Annals of Tourism Research*

## Types of Publications

Table 2. *Types of Publications*

	Article	Book	Review	Review	Editorial	Material	Proceedings	Paper	Biographical	Item	Correction	Letter	Reprint	Total
<b>TM</b>	1377	376	37	13	3	3	3	2	-	-	-	-	-	1811
<b>JTR</b>	457	-	21	5	1	1	1	-	1	-	-	-	-	486
<b>JST</b>	513	92	16	18	-	2	3	3	-	-	-	-	-	644
<b>CHQ</b>	320	2	4	73	-	1	2	9	1	1	1	1	1	412
<b>ATR</b>	597	314	24	181	1	-	7	-	-	-	-	-	-	1124
<b>Turkey</b>	186	21	3	2	5	-	1	-	-	-	-	-	-	218

Calculations regarding the types of publications were done considering 4477 studies in top-five journals and 218 Turkey-originated publications. The difference between the total number and types of publications results from the fact that one publication could be evaluated in multiple types. According to analysis results, it is seen that 90.4% of the studies published in the top-five journals are composed of articles and books. In Turkey-

originated publications, articles and book summaries are dominant and the ratio of them in total is 95%.

### Productivity of Authors

213 Turkey-originated articles were written by 280 different authors in total. Among these articles, 27.7% (n=59) is single-authored, 39% is (n=83) two-authored, 23% (n=49) is three-authored, 6.6% (n=14) is four-authored, 3.3% (n=7) is five-authored and 0.5% (n=1) is six-authored. 29.6% (n=83) of the authors are foreigners. Total number of authors in Turkey-originated publications is 469. Authors that contribute to studies with one article comprise 48.6% (n=228) of total authors. The ratio of authors with 2-5 publications is 11.9% (n=56), of authors with 6-10 publications is 0.6% (n=3), of authors with 11-20 publications is 0.4% (n=2) and of authors with more than 20 publications is 0.2% (n=1). The top seven authors having contributed to the top-five tourism journals and Turkey-originated studies at most are presented in detail in the table 3.

Table 3. *Productivity of Authors*

Authors	Country/ Institution	Number of Publications
Rob Law	China/Hong Kong Polytechnic University	43
Colin Michael Hall	New Zeland /University of Canterbury	43
Chris Ryan	New Zeland /University of Waikato	39
Haiyan Song	China/Hong Kong Polytechnic University	32
Bob Mckercher	China/Hong Kong Polytechnic University	32
Sara Dolnicar	Australia/University of Queensland	29
Osman M. Karatepe	Turkish Republic of Northern Cyprus /Doğu Akdeniz University	29

According to data from the studies published in top-five journals, Rob Law was found to be the most productive author. Also, the number of authors from Hong Kong Polytechnic University in China draws attention in terms of publication productivity. Osman M. Karatepe (n=29) is the most productive author in Turkey-originated studies. The second most productive Turkish researcher is Metin Kozak (n=19).

### **Productivity of Institutions**

For the determination of institution productivity, institution changes of authors were taken into consideration, and where two or more authors were from the same institution, those institutions were considered as one and the calculations were done, accordingly. Turkey-originated studies were conducted by 125 different institutions. 44% (n=55) of these institutions is from Turkey and 66% (n=70) of them is composed of foreign institutions. The best five productive institutions in Turkey-originated studies are Doğu Akdeniz University (n=37), Muğla University (n=26), Akdeniz University (n=23), Dokuz Eylül University (n=18) and Gazi University (n=15), respectively. On the other hand, regarding the top-five journals, the best five productive institutions were found to be China/Hong Kong Polytechnic University (n=230), Australia/Griffith University (142), Australia/Queensland University (n=111) England/Surrey University and USA/Cornell University (n=99), respectively.

### **Country Productivity and Collaborations**

While calculating country productivity, in case when two or more authors from the same country contributed to a study, these countries were considered as one. The number of publications of top ten countries that published the highest number of publications between 2007-2016 and the number of Turkey-originated publications in these top-five journals are presented in the table 4.

In total, 97 countries contributed to the top-five journals. USA (25.9%) and Australia (15.2%) had the highest contribution, and the ratio of contribution by top ten countries was 92.5%. Besides country productivity, collaboration of Turkey-originated publications with other countries was also determined. In each publication, countries with more than one author were considered as one. Accordingly, it was found that total 24 different countries were collaborated with. The top five countries

with the highest portion of common publication are USA (n=39), New Zealand-England (n=8) and Portugal-Spain (n=5), respectively.

Table 4. *Country Productivity*

Countries	Number of Publications	Percent(%)
USA	1157	25,9
Australia	679	15,2
England	589	13,2
China	450	10,1
Spain	295	6,6
New Zealand	256	5,7
Canada	242	5,4
Taiwan	208	4,7
Scotland	128	2,9
South Korea	127	2,8
Turkey	79	1,8

### Citation Analysis

In the period that the study was conducted, 2756 citations in total were made from Turkey-originated publications. Annual average citation number is (275,6) and average citation number per publication is (12,9). The study which has the highest number of citation among the 213 Turkey originated study is "Destination attachment: Effects on customer satisfaction and cognitive, affective and conative loyalty" (n=177). The study with the highest number of citation among the studies published in top-five journals is "Progress in information technology and tourism management: 20 years on and 10 years after the Internet – The state of eTourism Research" (n=523). The citation numbers of publications were presented in detail in the table 5.

According to the data presented in Table 5, Tourism Management is the journal with the highest number of citation and the highest average citation number (19.21) per publication. On the other hand, Cornell Hospitality Quarterly has the lowest citation number and the lowest average citation number (7.57) per publication. In the above-mentioned top-five journals, there are publications with the citation number ranging from 1-10 (%36, 3). While 1.2% of the publications have 100 and more citations, 22.9% of them are not cited at all. Turkey-originated publications

mostly have 1-10 citation range and they comprise 46.5% of total publications. In addition, 0.9% of the publications have more than 100 citations and 19.2% of them are not cited. Having examined the Turkey-originated publications on the basis of journals they were published in, it was observed that the studies published in Tourism Management journal had the highest number of citation (n=1379). Citations made on those studies comprise 50% of total citations.

Table 5. *Citation Counts According to Publication Number*

Citation Counts	TM	JTR	JST	CHQ	ATR	Turkey
100 <	37	2	4	0	12	2
81-100	40	7	8	1	15	3
61-80	45	13	13	2	23	5
41-60	102	32	23	10	53	5
21-40	297	75	89	25	139	25
11-20	321	122	114	61	140	33
1-10	578	213	253	190	389	99
0	388	22	140	123	352	41
<b>Publication/Citation</b>	<b>1808/34745</b>	<b>486/8269</b>	<b>644/8654</b>	<b>412/3120</b>	<b>1123/14576</b>	<b>203/2756</b>

### **Word Analysis and Citation Bursts of non-Turkey-Originated Studies in Top-Five Journals**

The most frequently used words in published in top-five journals were presented in Figure 1 through dimensioning in line with their degree of centrality.

The network is formed by 155 nodes (words), 816 connections and is divided into 8 clusters. The density of the network is 0.0684, modularity value is  $Q=0.3791$  and mean silhouette value is 0.5248. Each node shows a word and each connection shows the relations between words. Connections between nodes get thicker as the number of connections increase. Thickness and size of the circles around the nodes mean that centrality degrees of the nodes are high. Colouring in the network is determined in accordance with the time table above according to the years in which words are used (Ukşul, 2016: 71). As a result of the analysis, 165 words were detected and the most frequently-used top twenty words with the highest centrality degree were presented in the table 6.

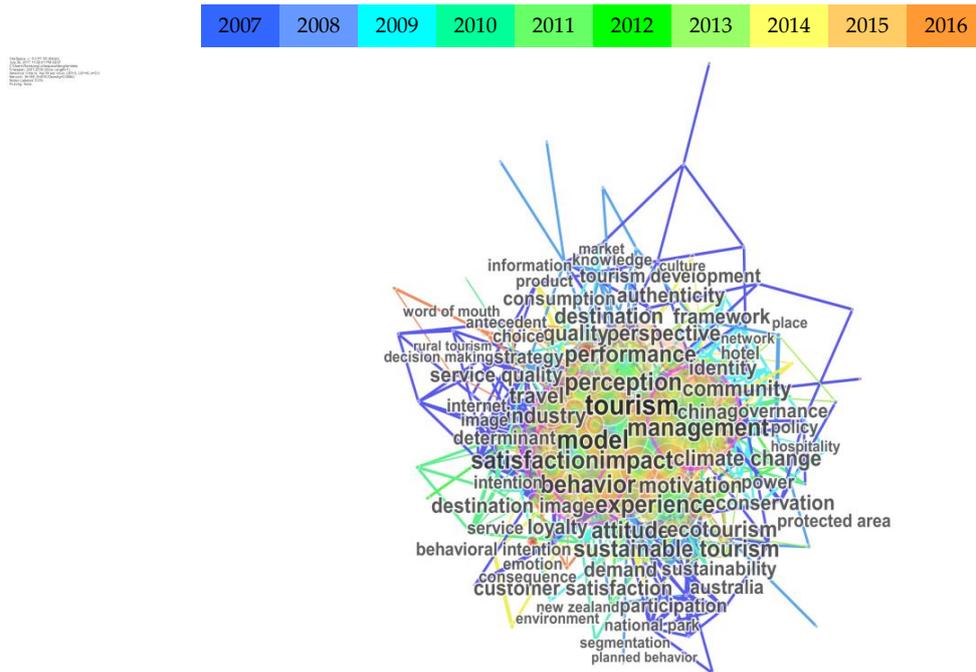


Figure 1. Word Network of Top-Five Journals

Table 6. Most Frequently-Used Top Twenty Words and Centrality Degrees

Words	Frequency	Cluster#	Words	Centrality	Cluster#
tourism	593	3	behavior	0.13	1
model	475	1	management	0.12	0
effect	331	0	satisfaction	0.12	1
management	327	0	society	0.11	0
behavior	285	1	model	0.10	1
satisfaction	277	1	perception	0.10	1
perception	257	1	destination	0.10	4
experience	248	3	attitude	0.09	0
attitude	222	0	sustainable tourism	0.09	0
performance	218	2	tourism	0.08	3
sustainable tourism	216	0	information	0.08	2
perspective	172	0	effect	0.07	0
destination	170	4	experience	0.07	3
industry	158	2	travel	0.07	3
motivation	152	3	loyalty	0.07	1
society	145	0	quality	0.06	1
climate change	139	0	identity	0.06	3
travel	136	3	conservation	0.06	0
ecotourism	130	0	firm	0.06	2
quality	129	1	performance	0.05	2

According to the data presented in Table 6, it is seen that the most frequently used words in top-five journals are “tourism” (n=593), “model” (n=475) and “effect” (n=331) and the concepts that have the highest betweenness degree are “behavior” (0.13), “management” (0.12) and “satisfaction” (0.12). Words with high centrality degrees represent the top topics that studies are concentrated on.

Table 7. Citation Burst Values Over The Years

References	Burst	Begin	End	2007-2016
Baker, D. A., & Crompton, J. L. (2000). Quality, satisfaction and behavioral intentions.	10.3752	2007	2008	
Gallarza, M. G., Saura, I. G., & García, H. C. (2002). Destination image: Towards a conceptual framework.	8.9711	2007	2010	
McGehee, N. G., & Andereck, K. L. (2004). Factors predicting rural residents' support of tourism.	9.2903	2009	2012	
Andereck, K. L., Valentine, K. M., Knopf, R. C., & Vogt, C. A. (2005). Residents' perceptions of community tourism impacts.	9.4296	2009	2013	
Uriely, N. (2005). The tourist experience: Conceptual developments.	10.4199	2010	2013	
Gallarza, M. G., & Saura, I. G. (2006). Value dimensions, perceived value, satisfaction and loyalty: an investigation of university students' travel behaviour.	9.2164	2012	2013	
Steiner, C. J., & Reisinger, Y. (2006). Understanding existential authenticity.	8.7527	2012	2013	
Hair, J. F., Black, WC, Babin, BJ Anderson, RE & Tatham, RL (2006). <i>Multivariate data analysis</i> .	10.942	2012	2014	
Hair, J. F., Black, W. C., & Babin, B.J. RE Anderson (2010). <i>Multivariate data analysis: A global perspective</i> .	21.3802	2014	2016	
Hjalager, A. M. (2010). A review of innovation research in tourism.	8.8577	2014	2016	

One of the most effective methods that could be used to determine the research trends in a discipline is to determine the citation burst values of publications that the studies have cited in specific time periods. In this way, trends in the discipline in line with cited publications could be put

forward. As a result of the analysis, it was determined that total 112 references were citation burst and the top ten references with the highest values were presented in the table 7. Highest citation burst value belongs to the studies conducted by Hair, J. F., Black, W. C. and Babin, B. J., Anderson R.E. (21.38) in 2010.

### Word Analyses and Citation Bursts of Turkey-Originated Publications

The network is formed by 127 nodes (words), 494 connections and is divided into 10 clusters. The density of the network is 0.0617, modularity value is  $Q= 0.5169$  and mean silhouette value is 0.6044. As a result of the analysis, 127 words were detected and the most frequently-used top twenty words were presented in the table 8.

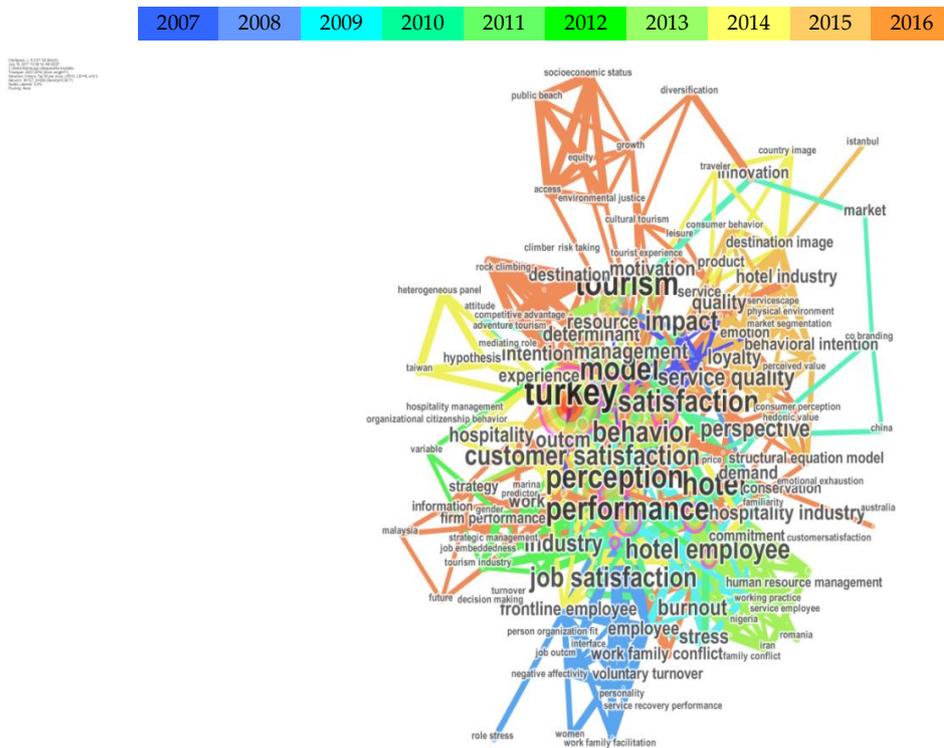


Figure 2. Word Network of Turkey-Originated Publications

The most frequently used words in Turkey-originated studies are “Turkey (n=52)”, “tourism (n=32)” and “model (n=31)”. The words “model (0.20)”, “satisfaction (0.20)” and “management (0.19)” are the concepts with the highest centrality degree in Turkey-originated studies.

Table 8. *Most Frequently-Used Top Twenty Words and Centrality Degrees*

Words	Frequency	Cluster#	Words	Centrality	Cluster#
Turkey	52	5	model	0.20	2
tourism	32	3	satisfaction	0.20	3
model	31	2	management	0.19	1
performance	31	0	source	0.17	4
perception	29	2	job satisfaction	0.16	0
hotel	28	4	performance	0.15	0
satisfaction	26	3	perception	0.15	2
behavior	21	2	hotel employees	0.13	4
effect	17	3	Turkey	0.12	5
hotel employees	17	4	hotel	0.10	4
customer satisfaction	16	1	customer satisfaction	0.09	1
job satisfaction	15	0	burnout	0.09	4
industry	12	5	intention	0.09	1
service quality	12	3	behavior	0.08	2
perspective	10	2	outcome	0.08	0
burnout	9	4	front line workers	0.08	0
outcome	9	0	effect	0.07	3
management	9	1	perspective	0.07	2
quality	8	3	product	0.07	1
intention	8	1	emotion	0.07	3

Table 9. *Citation Burst Values Over The Years*

References	Burst	Begin	End	2007-2016
Karatepe, O. M., & Uludag, O. (2007). Conflict, exhaustion, and motivation: A study of frontline employees in Northern Cyprus hotels.	2.5898	2009	2011	
Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies.	2.5898	2009	2011	
Kim, H. J. (2008). Hotel service providers' emotional labor: The antecedents and effects on burnout.	2.5898	2009	2011	
Yavas, U., Babakus, E., & Karatepe, O. M. (2008). Attitudinal and behavioral consequences of work-family conflict and family-work conflict: does gender matter?	2.7247	2009	2012	
Deery, M. (2008). Talent management, work-life balance and retention strategies.	3.209	2011	2013	

While having examined the references to which Turkey-originated publications made citation, citation bursts were observed in total 5 references. Citation burst values of these studies are close to each other and the highest citation burst value belongs to the study by Deery, M. (3.20) in 2008.

## CONCLUSION

In this study, by examination of the Turkey-originated and other international publications in terms of publication numbers, it was determined that the highest number of studies was published in Tourism Management. Turkey-originated publications published in Tourism Management cover 23.9% of the total publications while other international publications cover 40.4% of total publications. Fluctuations are seen in the distribution of publication numbers according to years.

When studies are examined according to publication types, the fact that the high number of studies is published as an article and book summary draws attention. Another remarkable result is that the number of proceedings papers published in top-five journals and Turkey-originated publications is very low. The number of proceedings papers is 0.1% in top-five journals and 2.3% in Turkey-originated publications.

39% of the Turkey-originated publications were conducted by two authors. Foreign researchers comprise almost 30% of the authors. It indicates that Turkish authors have international contacts. The fact that the authors travel to other countries for educational purposes or as researchers is considered to be the biggest factor underlying this result. The authors having contributed to Turkey-originated publications with one article comprise 48.6% of total authors. This ratio is very low compared to the contribution rate with the single article in the literature. In their study, Ruiz-Castillo and Costas (2014: 922) determined the average of interdisciplinary single article contribution as 69%. In Turkey-originated publications, Osman M. Karatepe and in other international publications Rob Law have the highest number of articles. Osman M. Karatepe created 13.6% of the Turkey-originated publications. In the context of author productivity, those in China and New Zealand draw attention.

Doğu Akdeniz University and Muğla University are the leading universities regarding Turkey-originated publications. It is seen that

specific authors are influential on the productivity of these institutions. In the context of publications in top-five journals, Hong Kong Polytechnic University is the most productive institution. The issue drawing attention here is that institutions in China and Australia leave world famous institutions in USA and England behind regarding the productivity although these countries are very effective in various fields. The findings concerning the author and institution productivity show parallelism with the results of the study carried out in 2009 by Ballantyne et al. On the country basis, the USA is the country with the highest publication production rate. In their study, Zhang et al. (2015) determined the USA, England and Australia as the most productive countries and Hong Kong Polytechnic University as the most productive institution. 25.9% of the total publications in the top-five journals were created by authors in USA. Also, Turkish authors created the most of the common publications with the authors in USA.

As a result of the citation analysis, it was observed that Turkey originated and other international publications published in Tourism Management had the highest citation numbers. Citations made for the studies published in Tourism Management comprise half of the citations that Turkey-originated studies received. Studies of which citation number is between 1 to 10 are dominant in top-five journals and Turkey-originated publications. It is determined that 22.9% of the studies in top-five journals and 19.2% of Turkey-originated studies were not cited by those indexed in Social Science Citation Index.

Words used in Turkey-originated and other international studies are similar in general. According to word's usage frequencies and centrality, it could be stated that experimental researches have an important place in both Turkey-originated and other international publications. In general, it is seen that the studied topics are organizational behavior, management organization and human resources management. In the studies, particularly intangible objects such as attitude, perception, intention, experience, behavior and satisfaction were measured. In the studies published in top-five journals, studies on sustainable tourism, destinations, local people and travelling experience are observed, as well.

Cited references and burst values do support the trends found as a result of the word analysis. In Turkey-originated publications, cited references and burst values cover, in line with word analysis results, conflict, behavior and service quality topics. It was observed that Turkey-

originated studies, similar to those (Karagöz & Yüncü 2013; Evren & Kozak 2014) carried out within the same context in literature, mainly focused on management, organizational behavior and human resources management. The highest citation burst value in other international publications between 2012 and 2016 was measured in “Multivariate Data Analysis” book. This indicates that experimental researches have an important place within the studies in general. In addition, it was determined that topics such as behavioral intention, satisfaction, sustainable tourism, destination image, local people, tourist experience, travelling motivation and innovation were in focus during the specific year ranges. In other international publications, the most popular topics are innovation and sustainable tourism. Contrary to the existing findings (Benckendorff & Zehrer 2013; Zhang et al., 2015), it was also realized that the number of studies focusing on management and behavior were dominant in other international publications. Moreover, the studies are remarkably affected by the fields of marketing, sustainability, psychology and sociology.

The limitations of the current study are the fact that it only includes studies from journals indexed within the Social Science Citation Index, and the non-Turkey originated studies published in only the top-five journals. Future studies could include more local or international journals into the analysis, and other important databases such as Scopus and Google Academic could be used as a data collection tool. The future studies can be enriched with parameters such as the methodology examinations and testing the compatibility with the bibliometrical rules. Through the comparative analysis of the studies carried out in tourism field and other disciplines within different time ranges and published in different scientific journals, the changes observed in trends over the time can be examined.

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Appendix. *Journals that published Turkey-originated studies*

<b>Journals</b>	<b>Publication Numbers (2007-2016)</b>
Tourism Management	51
Journal of Travel Research	5
Journal of Sustainable Tourism	5
Cornell Hospitality Quarterly	4
Annals of Tourism Research	14
International Journal of Contemporary Hospitality Management	37
International Journal of Hospitality Management	28
Journal of Travel & Tourism Marketing	12
Current Issues in Tourism	9
Journal of Hospitality & Tourism Research	2
Asia Pacific Journal of Tourism Research	4
Tourism Geographies	9
International Journal of Tourism Research	9
Journal of Destination Marketing & Management	3
Leisure Sciences	1
Journal of Leisure Research	3
Journal of Tourism and Cultural Change	2
Tourism Economics	9
Journal Of Hospitality Leisure Sport & Tourism Education	6