

## A Bibliometric Analysis of Academic Articles about Innovation in the Perspective of Tourism Sector <sup>1</sup>

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ARTICLE INFO	ABSTRACT
<b>Keywords:</b> Bibliometric analysis Innovation Qualitative research method Tourism sector  Received 22 June 2020 Revised 25 October 2020 Accepted 6 November 2020  <b>Article Classification:</b> Research Article	<b>Purpose</b> – This study aims to make bibliometric analyses of the articles in academic journals searched between 2010 and 2019 in scientific databases about innovation from the perspective of the tourism sector. <b>Design/methodology/approach</b> – A qualitative search and bibliometric analysis method have been preferred in this study. To this end, 117 articles about innovation in the tourism sector were examined through a bibliometric analysis method within a framework of 10 parameters in various scientific databases between the specified years. The bibliometric data regarding the last 10 years were transferred into a spreadsheet, then their frequency and percentage analyses were made by the SPSS 23 statistical packet software. <b>Findings</b> – Accordingly, it was seen that most of the articles were published in the journal "International Journal of Contemporary Hospitality Management" in 2016 and that the study field of "innovation" was the most-frequently handled topic in tourism businesses. Examining the parameters of the number of authors, method, and data collection tool, it was found that most of the articles were written by two authors and the quantitative research method and surveys were mostly preferred by the authors. <b>Discussion</b> – In terms of number of authors, method and data collection tool, it was understood that the articles partially overlapped with the literature. It is thought that this study will contribute not only to the literature and the researchers interested in the field but also to the productivity and competitiveness in the sector.

### 1. Introduction

Globalization and the increased competitiveness have led businesses to take into consideration the demands of their customers about products and services and therefore to develop new products and services (Kofler et al, 2018: 68). For this purpose, businesses need an innovation culture to compete with others in the long term (Tajeddini and Trueman, 2012: 1119). On the other hand, innovation is a critical factor for long-term business success, and businesses that successfully implement innovative practices are also rewarded with growth, profitability, and access to new markets (Luqmani et al., 2017: 94). In short, innovation is an effective tool that businesses can use against increasing customer demands.

Innovation in tourism has its source in the use of information and communication technologies as a means of change (Cosma et al., 2014: 508; Wikhamn, 2019: 105). On the other hand, innovations can quickly adapt to these businesses through collaboration or external inspiration (Hansen et al., 2019: 3). Recently, the term "innovation" has been used more in defining the behavior of businesses in the tourism sector (Hjalager, 2002: 465). This concept is defined as brilliant ideas used to make inventions useful (Hjalager, 2010: 2). Innovation is seen as the solution to economic problems experienced in both developed and developing countries by bringing together various experienced sectors (Divisekera and Nguyen, 2018: 157). Innovation, in a sense, is seen as a permanent,

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global and dynamic process, and it provides sustainable improvement of the performance of businesses as well as develops and grows the country's economy (Gopalakrishnan and Damanpour, 1997: 15; Cosma et al., 2014: 507). Innovation plays an important role in changing market conditions and competitive tools and achieving competitive strategies (Yüzbaşıoğlu et al., 2014: 736). From another point of view, this concept is also important in terms of the growth, profitability, and competitive advantage of businesses in the sector (Mattsson and Orfile-Sintes, 2014: 388). In a sense, the innovative ability of the sector is also an indicator of the success in combating violent competition (Volo, 2005: 78). It is also stated that promoting innovation in tourism is an effective way of reducing costs besides increasing productivity (Hjalager, 2010: 8). In other words, the idea of making innovations to increase the competitiveness of countries in foreign trade has led to a decrease in costs (Şener and Delican, 2019: 534). In this respect, this concept is effective for business executives who can produce innovative ideas to make strategic decisions.

In this study, the articles searched in various scientific databases related to innovation from the perspective of the tourism sector were examined by the bibliometric analysis method. This bibliometric study is important in that it brings together the studies on innovation in articles about the tourism sector and creates a database on this subject. In line with the findings obtained, it is thought that this research can contribute both the growth, productivity, and sustainable competitiveness of the tourism sector and the literature.

## 2. Literature Search

Tourism is a sector that has grown the most from the past to the present and is affected by the developments in the world economy very fast. In other words, this sector is considered important in terms of social and economic developments (Jacop et al., 2003: 280). For this reason, innovation is an important tool that is widely accepted worldwide for the customer market to reach saturation in this sector. To use this tool as a competitive advantage in this sector, it is also important that the state develops innovation-related policies that increase economic growth and national income (Mei et al., 2012: 97). However, innovation is seen as the natural result of economic development and continuous improvement in living conditions in the form of producing better quality products and services (Carlisle et al., 2013: 60). Innovation in the tourism sector is the adoption of some innovative green practices stemming from the desire to meet social interests (Chou et al., 2012: 704). This concept emerged as a new field of study in the late 1980s, but its importance started to be understood by entrepreneurs and researchers in the 2000s (Andrea, 2012: 364). In short, innovation in the tourism sector is beneficial for businesses to achieve their sustainable goals.

The following definitions have been made in the literature on innovation:

- Innovation; is associated with the creativity, change, values creation, and economic growth, and this term has been defined as components of power (Sørensen, 2007: 23; Wikhamn, 2019: 104).
- This concept is derived from the word "innovatus", which means 'renewed or changed' in Latin, or the word "innovatio", which means to creates new things (Peters and Pikkemaat, 2006: 2; Brooker and Joppe, 2014: 500).
- Besides, innovation is the application of new processes, products, or services to organizational forms in the market (Peters and Pikkemaat 2006: 2).
- It is the introduction of new products and Processes to the market and the development of the dominant feature of business (Tseng et al., 2008: 1017).
- Innovation is the activity of the people called entrepreneurs or the functions they undertake (Sweezy, 1943: 93).

In short, innovation is associated with the concept of novelty, but it is also defined as the improvement of existing services or products.

The theoretical framework of innovation was first introduced by Schumpeter, and it is useful to mention them. In this theory, the economic development process is explained systematically. In a sense, it is emphasized that

innovation causes economic development. In other words, while innovation originates from economic change, technological innovation originates from business cycles. According to this theory, it is mentioned that radical innovations are a factor that triggers rapid growth. Additionally, when entrepreneurs want to make innovations, they need to resort to resources other than banks, which leads to the risk of increasing interest rates. Accordingly, in Schumpeter's traditional view, innovation is without limits and this concept is approached within the perspective of abilities, organizational entrepreneurship, and a culture school. The main theme of these three schools is on the relationships between the members of the organization. The organizational school believes that the institutionalization of innovation will make it ordinary, while the school of organizational entrepreneurship argues that innovation should be institutionalized. In addition to this, the school of culture, however, believes that innovation should be institutionalized (Laumas, 1962: 653-658; Kleinknecht, 1990: 81; Drejer, 2004: 557; Godin, 2008: 344; Tzeng, 2009: 374-386). Although innovation, in a sense, emerges in a field of research originating from the economy, it has become the subject of business science.

Innovation is important to understand how being customer-oriented affects a business's competitive indicators and to achieve sustainable goals (Hallenga-Brink and Brezet, 2005: 141; Grisseman et al., 2013: 347). In other words, innovation is seen as an important issue for all organizations to acquire technological gains and maintain their profitability in the long run (Doğan et al., 2013: 701). Also, since innovation and improvement is a process that requires continuity in service businesses, managers knowing when and what to do and how to use appropriate methods in managing this process may be beneficial for the business (Faché, 2000: 361).

#### *2.1. Previous Studies with Bibliometric Analysis on Innovation and Its Applications in Tourism*

Various studies have been carried out on tourism in which bibliometric analyses were made. These studies, including those of Köseoğlu et al. (2016), Evren and Kozak (2014), Temizkan et al. (2015) and Viswakarma and Mukherjee (2019) will be examined in detail below:

In the bibliometric study related to tourism conducted by Köseoğlu et al. (2016), 190 academic articles published between 1988 and 2015 in tourism magazines about tourism and accommodation businesses were discussed. According to this study, it was determined that the articles in journals were mostly concentrated in the year 2008. In addition to this, it was also stated that bibliometric studies related to tourism may be useful in opening new fields, guiding disciplines, and researchers to notice the gaps in the literature.

In the study conducted by Evren and Kozak (2014) on tourism and accommodation businesses, a bibliometric analysis of 1217 academic articles published between 2000 and 2010 was made in terms of various parameters. In the study based on the last eleven years, it was found that the most articles among the journals were published in the journal named "Anatolia", and that the authors concentrated on topics such as tourism management and organization, tourism marketing and tourism economy on the subject basis. It was also stated among the findings of the study that most of the authors had the title of Faculty Member Doctors and that they chose to carry out studies involving practice. In the bibliometric study of Temizkan et al. (2015) on health tourism, it was found that the articles were published in most empirical studies and as single authors.

It was understood in the bibliometric research performed by Temizkan et al. (2015) on health tourism that the articles were mostly published at the empirical studies as single author.

However, in the study done by Viswakarma and Mukherjee (2019) about recreation research on tourism, it was determined that the articles increased in 2017 and 2018 the most.

Several studies related to innovation in tourism have been carried out in the literature. The study by Ferraz and De Melo Santos (2016) on the relationship between service innovation and performance, and that of Teixeira and Ferreira (2018), which examines the relationship between regional competitiveness and tourism innovation can be listed among them. They will be mentioned below:

Accordingly, it was determined in the first study that the articles on the subject were mostly in the journals named "The Services Industries Journal" and "Journal of Business Research", and the authors were mostly the members of the three universities in Taiwan. Additionally, journals with an impact factor size of 0,8 and above

were selected for the bibliometric analysis; it was understood that an empirical and survey-based data collection tool was preferred as the method in 61 publications.

In the second bibliometric study, it was found that the development of articles on innovation and regional competitiveness in tourism emerged in 2016 and that the studies on regional competitiveness and the study of Porter (2000) were most frequently referred to. However, when the expression 'tourism innovation' is evaluated in terms of the total publications of the countries and the references made by the countries, it is determined that England and the People's Republic of China are the first two countries in this regard. When the articles published in the field of innovation in tourism are considered in terms of the journal, it is seen that such articles are most frequently seen in the journal named "Tourism Management". Furthermore, it was understood that the study cited most about this word was the one written by Hjalager (2010).

### 3. Method

In this study, the bibliometric analysis method, which is qualitative research, was preferred. For this purpose, 117 academic articles related to innovation and their applications in the tourism sector were investigated within the framework of 10 parameters through the scientific databases of Scencedirect, Emeraldinsight, and Dergipark / Ulakbim 2010-2019.

Articles published in the last decade in academic journals related to innovation and its practices in the businesses operating in the tourism sector were included in the study due to time constraints and accessibility. All 117 articles published in academic journals in three databases were all included in the bibliometric analysis to see the trend between the years specified. For this purpose, an article was created in excel format, and the bibliometric data related to the articles were transferred to the SPSS 23 statistics program between 15.07.2019 - 11.08.2019. With the help of the SPSS 23 statistical package program, the frequency and percentage distribution rates and means of the data were calculated and presented in tables.

#### 3.1. Purpose and Importance of the Study

This study aims to make the bibliometric analysis of the articles in academic journals searched 2010-2019 in scientific databases about innovation from the perspective of the tourism sector. For this reason, the articles in the last 10 years were examined through the bibliometric analysis method within the framework of parameters such as database, journal name, year, author, pages and references, number of citations, subject, method, and data collection tool.

In this study, the subject of innovation, which is generally accepted in most business managements and whose importance is increasing day by day, is handled based on the tourism sector. Besides, carrying out a bibliometric study on tourism is useful for guiding disciplines and making researchers notice the gaps in the literature. From this point of view, it is thought that this study will contribute not only to the literature and the researchers interested in the field but also to the productivity and the sustainable competitiveness in the sector.

#### 3.2. Limitations of the Study

This study is limited in terms of its time, subject, parameters, the field of study, databases, and *journals searched in the database and its findings*.

#### 3.3. Research Questions

The research questions of this study are presented below:

- What are the databases where the journals about innovation in the tourism sector are searched?
- In which journals were the articles related to innovation in the tourism sector published?
- In which years were the articles about innovation in the tourism sector published in journals?
- What is the number of authors in the articles on innovation in the tourism sector?

- What is the number of pages of the articles on innovation in the tourism sector?
- What is the number of references to the articles on innovation in the tourism sector?
- What are the citation rates of the articles on innovation in the tourism sector?
- Which research methods did the authors use in the articles on innovation in the tourism sector?
- What is the data collection tool preferred by the authors in the articles on innovation in the tourism sector?
- What are the fields of study of the articles on innovation in the tourism sector?

#### 4. Analysis and Findings

In this section, findings related to the analysis of bibliometric data obtained from magazines in various databases are presented. SPSS 23 statistical software was used to analyze the data obtained and frequency and percentage distributions of the data were made. The findings are presented in the tables and figures below. Explanatory statistics about the research are shown in Table 1:

**Table. 1 Explanatory Statistics**

Explanatory Statistics	Year	Number of Authors	Number of Pages	Number of References	Number of Citations
Mean	2015	2,54	14,453	54,573	44,017
Median	2016	2,00	13,000	53,00	10,00
Standard Deviation	2,37	1,15	6,31	31,98	133,58
Minimum	2010	1,0	5,0	0,0	0,0
Maximum	2019	8,0	36,0	149,0	1327,0

Table 1 shows the explanatory statistics regarding the year, number of authors, number of references, and citations of articles on innovation. Accordingly, when the publishing year, number of authors, number of pages, number of references, and number of citations of the articles were analyzed, it was understood that their statistics were 2015, 3 authors, 14, 55 and 44 respectively.

And the median values were found to be the year 2016, articles with 2 authors, 13 pages, 53 references, and 10 citations, respectively. The standard deviations of publishing years and the numbers of authors, pages, references, and citations were found to be 2, 1, 6, 32, 134, respectively. Table 2 shows databases in which journals were searched:

**Table. 2 Databases in which Journals were Searched**

Database Name	Frequency	Percentage
Dergipark / Ulakbim	15	12,8
Emeraldinsight	45	38,5
Sciencedirect	57	48,7
<b>Total</b>	<b>117</b>	<b>100</b>

When the databases of the journals were analyzed, it was found that the Sciencedirect database had the most articles (57 articles; 48,7%), which is followed by the Emeraldinsight database (45 articles, 38,5%), and the Dergipark / Ulakbim database (15 articles; 12,8%). Table 3 shows the journals published in databases:

Table. 3 Journals Published in Databases

Journals Published in Databases	Frequency	Percentage
Academia Revista Latinoamericana de Administración	1	0,9
Aksaray Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi	1	0,9
Anatolia: Turizm Araştırmaları Dergisi	1	0,9
Annals of Tourism Research	2	1,7
Applied Soft Computing	1	0,9
Baltic Journal of Management	1	0,9
Benchmarking: An International Journal	1	0,9
Bingöl Üniversitesi Sosyal Bilimler Enstitüsü Dergisi	1	0,9
British Food Journal	1	0,9
Dokuz Eylül Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi	1	0,9
Energia Procedia	1	0,9
European Journal of Innovation Management	1	0,9
Forest Policy and Economics	1	0,9
Gaziantep University Journal of Social Sciences	1	0,9
Gümüşhane Üniversitesi Sosyal Bilimler Enstitüsü Elektronik Dergisi	1	0,9
Higher Education, Skills and Work-Based Learning	1	0,9
International Journal of Contemporary Hospitality Management	19	16,2
International Journal of Culture, Tourism and Hospitality Research	3	2,6
International Journal of Hospitality Management	9	7,7
İşletme Araştırmaları Dergisi	1	0,9
Journal of Enterprising Communities: People and Places in the Global Economy	1	0,9
Journal of Hospitality and Tourism Technology	1	0,9
Journal of Innovation & Knowledge	1	0,9
Journal of Marine and Island Cultures	1	0,9
Journal of Organizational Change Management	1	0,9
Journal of Science and Technology Policy Management	1	0,9
Journal of Tourism and Research	1	0,9
Journal of Tourism Theory and Research	2	1,7
Journal of Travel and Hospitality Management	1	0,9
Journal of Tourism Futures	1	0,9
Kırıkkale Üniversitesi Sosyal Bilimler Dergisi	1	0,9
Kybernetes	3	2,6
Management Decision	2	1,7
Managing Service Quality	1	0,9
Online Information Review	1	0,9
Procedia Economics and Finance	4	3,4
Procedia-Social and Behavioral Sciences	17	14,5
Social Enterprise Journal	1	0,9
Systems Engineering Procedia	1	0,9
The Journal of International Scientific Researches	1	0,9
Tourism Management	15	12,8
Tourism Management Perspectives	2	1,7
Tourism Review	1	0,9
Uluslararası Alanya İşletme Fakültesi Dergisi	1	0,9
Uluslararası Ekonomi ve Yenilik Dergisi	1	0,9
Worldwide Hospitality and Tourism Themes	5	4,3
<b>Total</b>	<b>117</b>	<b>100</b>

As can be seen in the table, it was determined that the International Journal of Contemporary Hospitality Management had the most articles (19 articles; 16,2%), which is followed by the Procedia-Social and Behavioral Sciences (17 articles; 14,5%) and the journal named Tourism Management (15 articles; 12,8%). The journals in which articles related to innovation in the tourism sector were published are presented in the table:

**Table. 4 Years that Articles were Published in Journals**

Year	Frequency	Percentage
2010	3	2,6
2011	6	5,1
2012	5	4,3
2013	10	8,5
2014	14	12,0
2015	18	15,4
2016	20	17,1
2017	15	12,8
2018	13	11,1
2019	13	11,1
<b>Total</b>	<b>117</b>	<b>100</b>

It was understood that most of the articles on innovation were published in 2016 (20 articles; 17,1%), which was followed by those published in 2015 (18 articles; 15,4%) and those published in 2017 (15 articles; 12,8%). Table 5 presents the number of authors in the articles:

**Table. 5 Number of Authors in the Articles**

Number of Authors	Frequency	Percentage
Articles with 1 author	21	17,9
Articles with 2 authors	39	33,3
Articles with 3 authors	38	32,5
Articles with 4 authors	14	12,0
Articles with 5 authors	4	3,4
Articles with 8 authors	1	0,9
<b>Total</b>	<b>117</b>	<b>100</b>

It was found that the articles were mostly written by 2 authors (39 articles; 33,3%), which is followed by articles written by 3 authors (38 articles; 32,5%), and articles written by 1 author (21 articles; 17,9%). Table 6 shows the numbers of pages of the articles:

**Table. 6 Numbers of Pages of the Articles**

Number of Pages	Frequency	Percentage
0 to 10	38	32,5
11 to 20	59	50,4
21 to 30	17	14,5
31 and above	3	2,6
<b>Total</b>	<b>117</b>	<b>100</b>

It was understood that most of the articles in the journals given in Table 6 had a page number of between 11-20 (59 articles; 50,4%), which was followed by the articles with a page number of between 0-10 (38 articles; 32,5%), and the articles with a page number of between 21-30 (17 articles; 14,5%). The citation numbers of the articles are presented in Table 7:

**Table. 7 Number of Citations of the Articles**

Number of Citations	Frequency	Percentage
0 to 15	67	57,3
16 to 30	22	18,8
31 to 45	5	4,3
45 and above	23	19,7
<b>Total</b>	<b>117</b>	<b>100</b>

It was found that most of the articles had a citation number of between 0-15 (67 articles; 57,3%), which was followed by articles with citations of 45 and above (23 articles; 19,7%), and the articles with citations of between 16-30 (22 articles; 18,8%). The numbers of references to the articles are given in Table 8:

**Table. 8 Numbers of References to the Articles**

Numbers of References	Frequency	Percentage
0 to 20	20	17,1
21 to 40	23	19,7
41 to 60	29	24,8
61 and above	45	38,5
<b>Total</b>	<b>117</b>	<b>100</b>

As can be seen in Table 8, most of the articles had 61 references and above (45 articles; 38,5%), which was followed by articles with 41-60 references (29 articles; 24,8%), and the articles with 21-40 references (23 articles; 19,7%). Table 9 shows the research methods preferred by the authors of the articles:

**Table. 9 Research Methods in the Articles**

Research Method	Frequency	Percentage
Conceptual	18	15,4
Quantitative	64	54,7
Qualitative	35	29,9
<b>Total</b>	<b>117</b>	<b>100</b>

When the research methods in the articles were analyzed, it was found that the authors mostly preferred the quantitative research methods (64 articles; 54,7%), which was followed by qualitative research methods (35 articles; 29,9%), and the conceptual research methods (18 articles; 15,4%). Table 10 shows the data collection tools preferred by the authors of the articles.

**Table. 10 Data Collection Tools Preferred by the Authors of the Articles**

Data Collection Methods	Frequency	Percentage
Open-ended interview form	1	0,9
Survey	65	55,6
Delphi	1	0,9
In-depth unstructured interview	1	0,9
Compilation	15	12,8
Case study	12	10,3
Index analysis	1	0,9
Content analysis	2	1,7
Literature review	2	1,7
Metaphysical analysis	1	0,9
Interview	8	6,8
PMP (mobile location) method	1	0,9
Semi-structured interview	7	6,0
<b>Total</b>	<b>117</b>	<b>100</b>



It was understood that among the data collection tools used in the articles, the authors preferred the survey method mostly (65 articles; 55,6%), which was followed by the compilation method (15 articles; 12,8%) and the case study method (12 articles; 10,3%). Table 11 shows the businesses in which studies were carried out:

**Table. 11 Fields of Study of the Articles**

<b>Fields of Study</b>	<b>Frequency</b>	<b>Percentage</b>
Innovation in destination marketing	1	0,9
Innovation in destination management	1	0,9
Innovation in handicraft businesses	1	0,9
Innovation in airline operators	1	0,9
Innovation factors	1	0,9
Innovation and business performance	1	0,9
Innovative marketing information system	1	0,9
Sustainable tourism from an innovative perspective	1	0,9
Innovation in rural tourism businesses	3	2,6
The effect of personality on individual innovation behaviors	1	0,9
Innovation in accommodation businesses	9	7,7
Innovation in accommodation camps	1	0,9
Innovation in accommodation and tourism businesses	1	0,9
Innovative behavior of hotel employees	1	0,9
Innovative service behavior of hotel employees	1	0,9
Innovation in hotel businesses	35	29,9
Innovation and sustainable growth in hotel businesses	1	0,9
Innovation management practices in hotel businesses	1	0,9
Innovation perceptions of hotel managers	1	0,9
Innovation in travel agencies	1	0,9
Innovation in travel service engineering	1	0,9
Innovation in tourism destinations	2	1,7
Innovation in tourism businesses	38	32,5
Innovation in tourism and accommodation businesses	4	3,4
Innovations that change tourism	1	0,9
Innovation in food businesses	1	0,9
Innovation in food and beverage businesses	6	5,1
<b>Total</b>	<b>117</b>	<b>100</b>

As can be seen in Table 11, it was determined that innovation practices in tourism businesses came first in the first place (38 articles; 32,5%) in the tourism sector, which was followed by innovation in hotel businesses (35 articles; 29,9%), and innovation in accommodation businesses (9 articles; 7,7%).

## 5. Conclusion, Discussion, and Suggestions

Businesses should follow the technological environment very well and comply with the innovations in order to compete and to be able to survive. In this direction innovation is effective for businesses to compete with other businesses. For this reason, this concept has been a driving force for the growth and profitability of many sectors. The tourism sector is one of them. Nowadays, it is inevitable for the businesses to develop their visions based on innovation and also to make these investments on this field. Therefore, it is an important strategy for the businesses not to ignore innovation. It is stated in the literature that the increased growth and profitability of the enterprises as a whole are also important in terms of the development of the country's economy, an increase in per-capita income, and productivity from a macro perspective. For this purpose, in this study, the studies conducted based on tourism in refereed journals are chosen as research subjects.

This study aimed to analyze 117 articles published 2010-2019 in refereed journals in databases related to innovation within the framework of the tourism sector through the bibliometric analysis method. The findings of the study were obtained as a result of the frequency and percentage analysis made through the SPSS 23 statistics program.

It was observed that the Scencedirect database came in the first place, the Emeraldinsight database in the second place, and the Ulakbim / Dergipark database in the third place among the databases where the articles were searched. Accordingly, it can be concluded that the number of articles searched in international databases is higher than the articles published in the national database.

It was determined that the journal "International Journal of Contemporary Hospitality Management" had the most articles, which was followed by the journal "Procedia-Social and Behavioral Sciences" and the "Journal Tourism Management". In a sense, this means that the top three journals are mostly published in the field of tourism. Accordingly, it can be said that these results are partially in line with the findings in the bibliometric study by Teixeira and Ferreira (2018).

On the other hand, when the articles are investigated according to the parameters of year and number of authors, it has been observed that the two author articles were published the most in 2016. Related to this, it can be deduced that the articles about innovation on yearly basis have been concentrated this year, and the writers have wished publishing together other than publishing separately. However, it can be stated that these results differ from the findings of the studies performed by Temizkan et al. (2015), Viswakarma and Mukherjee (2019).

Among the 117 articles published in refereed journals between the aforementioned years, it was determined that authors mostly focused on innovation practices in tourism businesses, which was followed by innovation in hotel businesses, and innovation in accommodation businesses. Additionally; it was observed that they were interested in fields of study such as innovation in food businesses and innovation in rural tourism businesses.

When articles were examined in terms of the method and data collection tool, it was determined that the quantitative research method was mostly preferred and the questionnaire forms were mostly used as the data collection tool. Accordingly, it can be stated that general findings were mostly presented in the articles and qualitative studies that examine an event or behavior in depth were less preferred by authors compared to quantitative ones. It can be said that these results are partially similar to the findings of the studies conducted by Evren and Kozak (2014), Temizkan et al. (2015) and Ferraz and De Melo Santos (2016).

Numbers of citations, pages and references were found to be between 0-15, 11-20 and 61 and above, respectively. It can be concluded that the average number of citations was 44, indicating that the authors of the article received 44 citations on average, that is, the index h was 44 on average, which means an i10 index of 4 for an average of 44 citations; and that the number of pages was within the range of article writing rules of most journals in the social sciences field, though they vary depending on the publication policies of the journals. However, some journals may limit the number of words in addition to the number of pages.

It is thought that this study can contribute to both researchers and the literature and the growth of the tourism sector, and the adoption of an innovation-oriented sustainable competition approach by the businesses operating in the sector, and the establishment of a bibliometric database on innovation based on the tourism sector, by filling the gaps with its findings.

For the bibliometric studies on the subject of innovation in the tourism sector in the future, it can be said that further articles and database reviews should be conducted, the relationship between innovation and other variables should be analyzed, and data analysis should be done through social network analysis using programs such as Ucinet and Vosviewer. Also, it can be offered as another suggestion that the authors should opt for mixed studies in which qualitative or both quantitative and qualitative methods are used together rather than using quantitative methods only, and prefer other data collection tools other than the survey. Thus, it is thought that it can contribute to the literature in terms of both number and quality with an increase in such studies.

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