



## Academic foundations of hospitality management research with an emerging country focus: A citation and co-citation analysis



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### ABSTRACT

This study explores the academic foundations of hospitality management research within an emerging country using bibliometric analysis – citation and co-citation analysis. Turkey was chosen as a starting point to assess existing research within an emerging country framework because of the large impact of tourism and hospitality (T/H) on the economy and increasing amount of academic research in the field. A total of 76 hospitality management research articles from 1992 to 2013 were found in leading international T/H journals indexed by SSCI. Findings showed that over one-half of the research comes from publications engaging outside of the T/H field. Patterns emerged between T/H and management, marketing and psychology fields that indicated evolving maturity in the research. An intense dependency on supporting journals for substantiation existed and intra-disciplinary maturity was weak, but growing. Accordingly, referring to the findings related to the study, the article discusses limitations of the study and future steps.

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### 1. Introduction

This paper explores the progress of academic scholarship of tourism and hospitality management research within an emerging country. The intellectual structure is surveyed and mapped from the context of articles related to an emerging country, Turkey, in tourism and hospitality management (T/H) journals indexed by the Social Sciences Citations Index (SSCI) via bibliometric analysis – citation and a journal co-citation analysis.

Research with the tourism and hospitality management realms has reached a certain degree of maturity, demonstrated by researchers via both qualitative and quantitative methods. There are a number of scholarly works published by researchers that investigate the domain of tourism and hospitality management, (see: Crawford-Welch and McCleary, 1992; Baloglu and Assante, 1999; Howey et al., 1999; Jogaratnam et al., 2005b; Schmidgall et al., 2007; Schmidgall and Woods, 1997; Harrington and Ottenbacher,

2011; Xie, 2003; Tsang and Hsu, 2011; Park et al., 2011). Although these studies explored themes, methods, and disciplines resulting in a picture of which institutions and scholars were most influential in the field, there is a paucity of research with regard to mapping the intellectual structure and academic foundation.

A few scholars identified the roots of international T/H management using co-citation analysis based on cited authors, Xiao and Smith (2008) and Benckendorff (2009) and social network analysis based on authors Hu and Racherla (2008) and Ye et al. (2012). Conversely, a larger number of studies mapped the intellectual structure of related disciplines such as organization studies (Üsdiken and Pasadeos, 1995; Ferreira et al., 2014), general management (Tahai and Meyer, 1999; Acedo et al., 2001), strategic management (Ramos-Rodríguez and Ruiz-Navarro, 2004; Nerur et al., 2008; Furrer et al., 2008), international management (Acedo and Casillas, 2005), knowledge management (Ponzi, 2002), human resource management (Fernandez-Alles and Ramos-Rodríguez, 2009), business ethics (Tseng et al., 2010), information systems management (Culnan, 1986, 1987), and production and operations management (Pilkington and Liston-Heyes, 1999). All of these studies were executed via co-occurrence or citation analysis including an author co-citation, co-word, and co-author. However, previously published studies were not concentrated within a journal co-citation analysis. Therefore, in order to investigate what type

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of journals, inside or outside of discipline, exist at the crux of T/H research, journal co-citations analysis is needed to better understand this field.

This paper presents a citation and co-citation analysis as a part of a larger bibliometric study of T/H management research with an emerging country focus. The aim is to delineate how hospitality management research, related to an emerging country, has been developed in the T/H management literature. In addition, another main goal of the study was to explore specifically the relationship between cited journals in articles for new and established researchers as noted by [Fernandez-Alles and Ramos-Rodríguez \(2009\)](#). In this method, researchers essentially assemble pieces of a big puzzle such as discussed topics, employed methodologies, statistical techniques, and contributions of authors and institutions to perform citation and co-citations analysis. Additionally, researchers focus on disciplines, journals, industry, and countries to explore and map the evolution of epistemology, knowledge domains, and the development of disciplines and fields. We believe that this study, by focusing on an emerging country, assembled essential pieces of a much larger puzzle in order to understand how the academic foundations of tourism and hospitality developed within an international framework. As a result, hidden trends and patterns in the context of country research were revealed.

Turkey was selected as an emerging country for two reasons. First, the tourism and hospitality industry in Turkey has grown remarkably since the early 1980s, making it a key contributor to the Turkish economy ([Koseoglu et al., 2013](#); [Kara et al., 2012](#); [Eser, 2012](#); [Dortyol et al., 2014](#); [Okumus et al., 2012](#)), specifically in the areas of spa, culture, and health care tourism. According to the [Association of Turkish Travel Agencies \(2014\)](#), there was a 95% increase in the number of travel agencies and a 79% increase in the number of guest accommodations between 1983 and 2012. In 2011, over 31 million foreign tourists flocked to Turkey's large and varied number of historical sites including Istanbul, Turkey's largest city and historical capital of the Byzantine and Ottoman Empires. Sea destinations and Mediterranean cruise vacations were popular with foreign tourists; this income is central to the Turkish tourism industry. Turkey remains in the top 10 for foreign tourism, with arrivals increasing 75% from 1998 to 2013 ([UNWTO, 2013](#)). In response to the overwhelming growth in T/H, in January 2013 the Turkish government announced plans to build the world's largest airport in Istanbul at a cost of 7 billion euros ([Maierbrugger, 2013](#)).

Second, based on these developments, T/H management education and scholarship has advanced considerably ([Guzeller et al., 2009](#)). In the past decade, the number of academic tourism and hospitality programs at both the undergraduate and graduate level numbered 172 programs in total. Based on the rise in tourism and academic study in this area, the number of T/H research articles has also increased in both national ([Evren and Kozak, 2014](#)) and international realms ([Akkemik, 2012](#); [Duman and Kozak, 2010](#)). As such, this paper responds to the clear need for scholarship development in an emerging country setting, of which Turkey is an excellent example.

Several other reasons buttress the need for this study in the international academic community. First, the intended beneficiaries of this study include researchers, academicians, graduate students, industry practitioners and journal editors from general business, management, and the fields within tourism and hospitality management. Second, there is significant interest in exploring and mapping the evolutions of disciplines related to epistemology, knowledge domain, and intellectual structure within recent years. Third, within the T/H field in particular, the use of citation and co-occurrence analysis as a quantitative research methodology is rare. Additionally, although there have been numerous studies conducted via co-occurrence methods such as author co-citations, co-word, co-authorship, or co-institution in business and

management literature, only a few studies have been conducted using a journal co-citation method. Fourth, generally top tier journals or articles involve research conducted within developing countries in order to assess the evolution of a discipline; however, unique samples are also needed to provide new opportunities for researchers to further understand this field of study. In this respect, Turkey is an appropriate sample due to its steady economic growth, social/cultural diversity, and significant attention paid to it by the international academic T/H community ([Akkemik, 2012](#)). Finally, citations directly influence journal rankings. As such, editors should develop strategies to include studies conducted via citation and journal co-citation analysis in order to encourage developing countries to accelerate citations within their respective journals. Taking into consideration all of the reasons above, this study assists the international academic T/H management community in highlighting new ventures within this industry.

The paper structure is as follows. First, we present a literature review of citation and co-citation analysis within the tourism and hospitality management context. Second, methods and findings within the literature are provided to present a clear picture of the scope of research in since 1980. Finally, an inclusive evaluation of the results, limitations, and suggestions for future research is stipulated.

## 2. Literature review

### 2.1. Academic foundations of hospitality research

Debates on academic foundations of disciplines focus on epistemology and knowledge domain. An epistemology or philosophy of science is looking for answers to questions such as, How should scientific knowledge or a theory be ontologically produced? Knowledge domain as an evolving structure ([Galison, 1997](#)) is measured via qualitative and quantitative bibliometric methods. How is knowledge created and shared within the academic community? What is the best way to evaluate research output? How should the impacts of researchers and institutions be assessed? And how does a particular research field develop? ([Ye et al., 2012](#)).

Academic foundation and intellectual structure of a given scientific discipline can be identified via qualitative and/or quantitative methods to increase scientific communication ([Boyack et al., 2005](#)). Quantitative methods for this aim are named as *bibliometry* or *bibliometric analysis* ([Diodato, 1994](#)). Bibliometric analysis assesses certain characteristics of books and journals in disciplines via mathematical and statistical techniques ([Pritchard, 1969](#)) and is both descriptive and evaluative ([McBurney, 2002](#)). These analyses provides findings such as publications by year and research themes, contributions by authors, institutions, and regions, key words used, citations, and co-citations, related to scientific communication by analyzing published papers in specific academic fields ([Barca and Hızıroğlu, 2009](#)).

Bibliometric analyses help researchers reconstruct the history of various sciences, to question traditional dogmas, correct errors of perception ([Callon et al., 1993](#)), avoid potential subjective biases, validate expert inferences, and delineate leading schools of thought and the interrelated connections between them ([Nerur et al., 2008](#)).

### 2.2. Overview of T/H research conducted via bibliometric analysis

The evolution of tourism research as a discipline has been extensively and deeply assessed in numerous studies including [Tribe \(1997, 2000, 2004, 2006, 2010\)](#); [Coles et al. \(2006, 2009\)](#); and [Belhassen and Caton \(2009\)](#). Even so, according to [Benckendorff and Zehrer, 2013](#) "there is board consensus within the tourism academy that the corpus of tourism research is fragmented and

eclectic". The literature lacks a study that concisely presents the evolution of hospitality research, a sub-discipline of the tourism realm. In this context, research is needed to outline whether the evolution of hospitality research has been keeping pace with the evolution of tourism research as a sub-discipline (Yuan et al., 2014).

The current scope of literature consists of a number of studies that focus purely on tourism, or hospitality, or both tourism and hospitality simultaneously via bibliometric analysis. These studies can be divided into six categories: *Journals Assessment and Ranking Studies* (e.g. Cheng et al., 2011; Pechlaner et al., 2004; Ryan, 2005; Svensson et al., 2009a,b; Jamal et al., 2008; McKercher, 2005), *Article Identification Studies* (e.g. Jogaratnam et al., 2005a,b; Park et al., 2011; Sheldon, 1991; Zhao and Ritchie, 2007), *Content Analysis* (e.g. Ballantyne et al., 2009; Baloglu and Assante, 1999; Rivera and Upchurch, 2008; Svensson et al., 2009b), *Citation Analysis* (e.g. Schmidgall and Woods, 1997; Wardle and Buckley, 2014; Ye et al., 2012), *Disciplinary Relationship Analysis* (e.g. Harrington and Ottenbacher, 2011; Barrios et al., 2008), *Country Research Analysis* (e.g. Benckendorff, 2009; Tsang and Hsu, 2011; Xie, 2003).

More specifically, a significant number of studies have addressed contributions in hospitality, delineating themes and methods in Baloglu and Assante (1999), Crawford-Welch and McCleary (1992), Palmer et al. (2005), and Xiao and Smith (2006). Further, McKercher (2008) discussed contributing disciplines within hospitality, and Jogaratnam et al. (2005a) reported on influential institutions within the same field. Perhaps the most prolific scholars, McKercher (2007), Schmidgall et al. (2007) and Zhao and Ritchie (2007) contributed research within disciplines such as strategy and strategic management research along with Harrington and Ottenbacher (2011), Phillips and Moutinho (2014), Harrington et al., 2014, Olsen (2004) and Olsen and Roper (1998). Other disciplines that have been researched in the hospitality field include finance and accounting (Tsai et al., 2011; Park and Janq, 2014), human resource management (Tracey, 2014), marketing (Morosan et al., 2014), and information and communication technologies (Law et al., 2014a). Specific country research in hospitality has been reported from countries such as China (Law et al., 2014b; Zhang, 2004; Tsang and Hsu, 2011), Australia and New Zealand (Benckendorff, 2009), the United Kingdom (Page, 2003), several Nordic countries (Mehmetoglu, 2004), and Turkey (Evren and Kozak, 2014).

The main goal of this study is to investigate hospitality research with a developing country framework using citation and co-citation analysis and conducted via bibliometric tools; therefore, details about citation and co-citation analysis and hospitality research conducted via these tools are provided below.

### 2.3. Citation and co-citation analysis

Citation analysis is part of bibliometric analysis. Citation analysis refers to counting references within bibliographies of articles in order to take a virtual snapshot of intellectual structure of the discipline under study in given period of time. In addition to mapping academic foundations, it also helps to discover what researchers think of their colleagues (Kolata, 1991).

There are two approaches to citation analysis – basic and advanced. The basic citation analysis method is a simple count of cited journals, articles or authors. Advanced citation analysis, also called co-citation analysis, is an investigation of the relationships among journals, articles, or authors to explore patterns within a particular intellectual tradition (Baker, 1990).

Co-citation analysis informs whether a discipline has an inward- or outward looking approach, draws the circulation of new ideas, and explores the existence of barriers between the applied and basic sciences and between the specialists and the scientific community to which they belong (Ferreiro Alaez, 1993).

A co-citation analysis compares a number of papers that have cited any particular pair of documents and helps to explain a measure for similarity or dissimilarity of content of the two documents. It is a tool to depict groupings of authors, topics, journals, or methods (Fig. 1). Therefore, it helps us understand the way in which these clusters interrelate (Zitt and Bassecouard, 1994; Pilkington and Liston-Heyes, 1999), and reveals the evolution of a discipline by revealing patterns of association between authors or journals (White and McCain, 1998). Several authors give a detailed description of this procedure for author co-citation analysis (see: White and Griffith, 1981; McCain, 1990; White and McCain, 1998) and substantiates its validity as a means of exploring the intellectual structure of a scientific discipline (Culnan et al., 1990; White and McCain, 1998; Ding et al., 1999). Many studies have proved its validity as a tool for understanding the intellectual structure of a scientific discipline (Ramos-Rodriguez and Ruiz-Navarro, 2004).

Author co-citation analyses have been used to study various phenomena such as computer science (Schneider et al., 2009), ecology (Neff and Corley, 2009), ocean circulation (Zhang et al., 2009), solar power (Dong et al., 2012), tourism (Barrios et al., 2008) and energy analysis (Lawson et al., 2005), to name but a few. However, journal co-citation analyses have been used to assess influences of journals to identify intellectual structure of the discipline. Two such examples within the management field are Podsakoff et al. (2005) and Tahai and Meyer (1999) who used co-citation to measure influence of management journals.

### 2.4. Citation and co-citation analysis research related to hospitality management

A few studies have been conducted in hospitality management using citation analysis. Howey et al. (1999) compared cited journals in articles published from 1994 to 1996 in the top three tourism-oriented journals (*Annals of Tourism Research*, *Journal of Travel Research*, and *Tourism Management*) and hospitality-oriented journals (*Cornell Hotel and Restaurant Administration Quarterly*, *International Journal of Hospitality Management*, and *Hospitality Research Journal*). Howey et al. mapped a network of citation relationships between the six journals. When they compared their findings with previously published research, they found that more citations occurred *within* disciplines than *across* disciplines, and most of the citations came from outside of the T/H areas. Kim et al. (2009) extended Howey et al.'s (1999) study by covering the years between 1994 and 2005. They concluded that more within-discipline citation occurred, showing the systematic maturity of both tourism and hospitality areas and that the field of research did not intensely depending on other disciplines for development.

A few studies exist in tourism conducted via citation and co-citation analysis by Benckendorff (2009), Xiao and Smith (2008), Schmidgall and Woods (1997), and Schmidgall et al. (2007). Similarly, a limited number can also be found in hospitality conducted via co-authorship by Hu and Racherla (2008), and in tourism and hospitality conducted via co-institutional by Ye et al. (2012). No study within the hospitality literature exists conducted via a journal co-citation analysis to explore the academic foundation of the discipline. Therefore, this study aims to fill the void in hospitality management literature via bibliometric analysis of hospitality research in a developing country that has been published in leading T/H journals.

## 3. Method

### 3.1. Database and journal selection

Articles published in journals can be considered 'certified knowledge' and the assessment of references from these articles

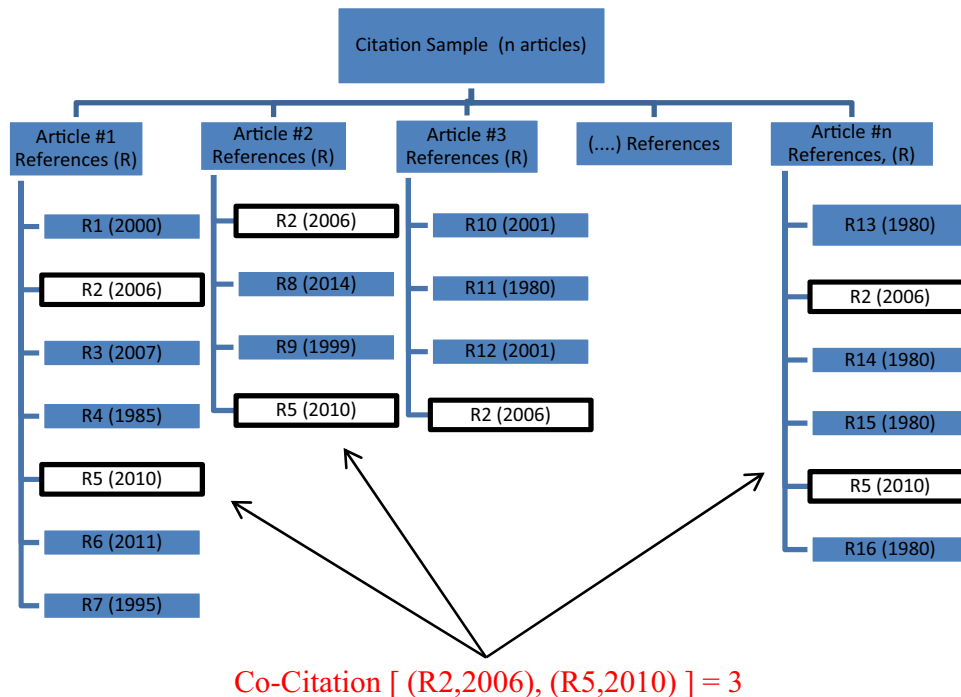


Fig. 1. Co-citation count.

Source: Adapted from Ramos-Rodriguez and Ruiz-Navarro (2004).

strengthens the reliability of results obtained by using bibliometric analysis (Ramos-Rodriguez and Ruiz-Navarro, 2004). Therefore, the SSCI database was selected due to its reputation and significance in the academic world for the purposes of this study. There are 11 leading journals that completely or partially focus on hospitality themes included in the SSCI. Two journals, *Asia Pacific Journal of Tourism Research* and *Scandinavian Journal of Hospitality and Tourism* were eliminated from the sample because of their regional focus. The remaining journals included *Annals of Tourism Research (ATR)*, *Cornell Hospitality Quarterly (CHQ)*, *Current Issues in Tourism (CIT)*, *International Journal of Contemporary Hospitality Management (IJCHM)*, *International Journal of Hospitality Management (IJHM)*, *International Journal of Tourism Research (IJTR)*, *Journal of Hospitality & Tourism Research (JHTR)*, *Journal of Travel & Tourism Marketing (JTTM)*, and *Tourism Management (TM)*. These publications were selected to achieve the objectives of the study.

### 3.2. Data collection

The articles were accessed by searching keywords such as “Turkey” or “Turkish” in the leading hospitality journals index by SSCI. The authors individually assessed the articles to determine whether they focused on Turkish hospitality by asking, “Does the article directly or indirectly relate to the hospitality activities of Turkey?” If authors responded in the affirmative, the article was accepted for subsequent steps in the study. The authors ensured data validity and reliability by reaching consensus on the articles selected.

Citations from all articles were inserted into a spreadsheet program (Excel) to eliminate possible spelling errors in SSCI database, and sorted by number of citations. Cited journals from each article were identified and cataloged. The BibExcel program was used to gather data for the co-citation analysis. The citation and co-citations analysis via factor and multidimensional scaling analysis was performed using SPSS, a statistical software package. Network

visualizations were performed using Pajek, a network analysis software package.

### 3.3. Analysis

The first step within the analysis procedure revealed information on the frequency of articles by years and journals. The second step consisted of a citation analysis and co-citation analysis. References used in the articles were counted to produce the characteristics of citations and co-citations, including important publications and journals that have had the greatest impact on hospitality literature within Turkey. Articles were analyzed to illustrate changes that have occurred in the literature. Based on articles deemed descriptive of Turkish hospitality, the sample included articles published between 1992 and 2013. As seen in Table 1, three articles were published in 1992, 1998 and 1999 respectively. These three articles were added to articles published in 2000, thus, the period was divided into two equal and consecutive 7-year sub-periods (2000–2006, and 2007–2013), to more fully illustrate significant changes and trends.

## 4. Results and discussion

### 4.1. Tourism and hospitality within Turkey by journal and year

A total of 76 hospitality articles related to Turkey were found in leading international tourism and hospitality journals indexed by SSCI during the time between 1992 and 2013. *TM* had the highest percentage (30.53% – 23 articles) of the articles related to Turkey, followed by *IJCHM* (18.42% – 14 articles), *IJHM* (15.79% – 12 articles), *ATR* (10.53% – 8 articles), *JTTM* (9.21% – 7 articles), *IJTR* (6.58% – 5 articles), and *JHTR* (3.95% – 3 articles). The remaining journals—*CHQ*, and *CIT*—had had equal percentages at 2.63% with 2 articles. Thirty-five articles appeared from 2000 to 2006, and the rest (41) were released in the second sub-period, 2007–2013 (Fig. 1). Substantial increases of 17.14% from the first



**Table 1**  
Frequencies of reference types by cited publication.

Reference type	Cited publication area					
	Tourism and hospitality		Out of tourism and hospitality		Total	
	N	%	n	%	n	%
Journal articles	1175	77.1	1593	72.6	2768	74.5
Proceedings articles	17	1.1	41	1.9	58	1.6
Books	179	11.7	367	16.7	546	14.7
Books with editors	84	5.5	88	4.0	172	4.6
Thesis	18	1.2	20	0.9	38	1.0
Internet address	47	3.1	72	3.3	119	3.2
Periodicals	4	0.3	12	0.5	16	0.4
Total	1524	100.0	2193	100.0	3717	100.0

sub-period to the second sub-period were noted. Economic development (Ouyang et al., 2000; Tsang and Hsu, 2011) and educational improvement in tourism and hospitality regarding higher education (Evren and Kozak, 2014) influenced scholarly output. Hence, the main reason for the increase might be considerable development in economic and educational disciplines and growth inside the tourism and hospitality industry within Turkey in recent decades.

Fig. 2 shows that *TM* published hospitality research related to Turkey each year from 2000 to 2013, except 2009. Although *IJCHM* and *IJHM* often published research related to Turkey, the rest of the journals did not follow suit. It is assumed the main reason the other journals, even as indexed by SSCI, rarely published research on hospitality related to Turkey is that the journals are not sufficiently known among scholars or researchers from the emerging country. A further explanation may be the expectations of research within these journals are very high and the level of quality has not reached the emerging scholarly field as of yet.

4.2. Citation analysis

This section relates information on the citation and co-citations analysis and illustrates changes within the field. The mean number of citations (3717) of the articles (76) was 48.90 (standard deviation = 24.74, median = 46, range = 0–127). The data showed a positively skewed distribution (skewness = 0.366, SE = 0.276), indicating that a small number of publications received only a few or no citations.

As outlined in Table 1, a preliminary analysis computed the frequency of citations based on reference types, journal articles, proceedings articles, books, edited books, thesis, internet address, and periodicals used in all the articles. While most (74.5%) of the citations in total were from journal articles published in both T/H and outside of T/H journals, the remaining reference types were

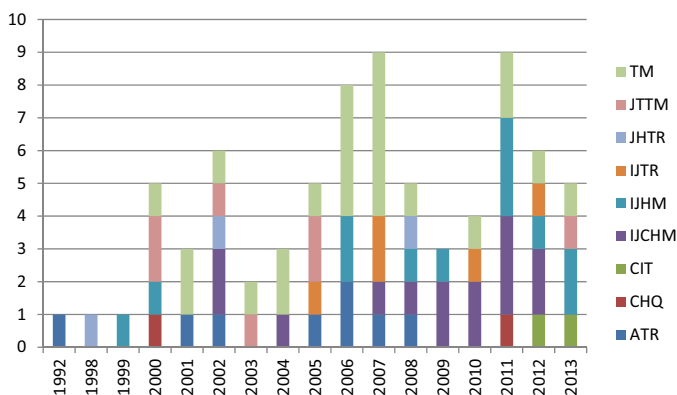


Fig. 2. Hospitality research related to Turkey by journal and year.

significantly lower. More than half of the citations (59.0%) existed outside of the tourism and hospitality literature (2193/3717).

Fig. 3 illustrates the changes of cited journals. Although the number of cited journals including both tourism/hospitality journals and outside of them were similar, 448 and 464 respectively in the sub-period (2000–2006), this balance changed considerably outside of the tourism and hospitality journals within the 2007–2013 timeframe. Cited journals from outside of tourism and hospitality field were more prominent (1129 vs. 727) in the second period. While the change rate of cited journals from outside of tourism and hospitality journals was 143.3% between 2000–2006 and 2007–2013, the change rate in cited tourism and hospitality journals decreased to just 62.3%.

Table 2 demonstrates the highest cited, top-thirty journals. They are classified into five groups:

- Hospitality oriented journals: *International Journal of Hospitality Management (IJHM)*, *International Journal of Contemporary Hospitality Management (IJCHM)*, *Cornell Hotel and Restaurant Administration Quarterly (CHRAQ)*, *Journal of Hospitality and Tourism Research (JHTR)*, and *International Journal of Hospitality and Tourism Administration (IJHTA)*.
- Tourism oriented journals: *Annals of Tourism Research (ATR)*, *Tourism Management (TM)*, *Journal of Travel Research (JTR)*, *Journal of Travel and Tourism Marketing (JTTM)*, and *Journal of Sustainable Tourism (JST)*.
- Management oriented journals: *Academy of Management Review (AMR)*, *Journal of Management (JOM)*, *Academy of Management Journal (AMJ)*, *Strategic Management Journal (SMJ)*, *Administrative Science Quarterly (ASQ)*, *Journal of Business Research (JBR)*, *The Service Industries Journal (SIJ)*, *International Journal of Service Industry Management (IJSIM)*, *Journal of Small Business Management (JSBM)*, and *Journal of Business Ethics (JBE)*.

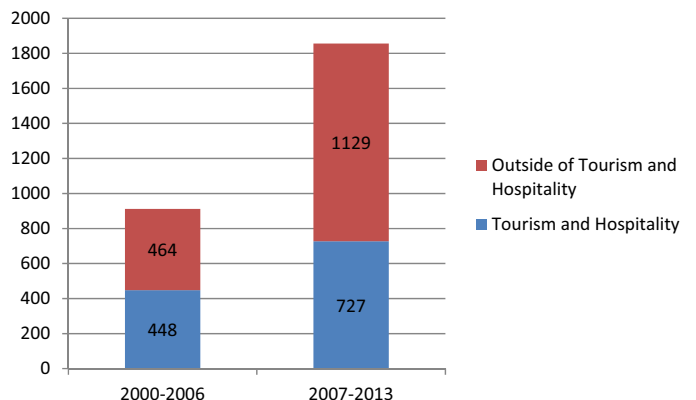


Fig. 3. The change of cited journal area.

**Table 2**  
Highly cited thirty journals frequency.

Journals	Period					
	2000–2013		2000–2006		2007–2013	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
	2768		912		1856	
ATR	194	7.01	87	9.5	107	5.8
TM	187	6.76	53	5.8	134	7.2
JTR	169	6.11	85	9.3	84	4.5
IJHM	108	3.90	33	3.6	75	4.0
IJCHM	93	3.36	21	2.3	72	3.9
CHRAQ	75	2.71	37	4.1	38	2.0
JM	62	2.24	36	3.9	26	1.4
JAP	42	1.52	6	0.7	36	1.9
JBE	42	1.52	38	4.2	4	0.2
JMR	42	1.52	26	2.9	16	0.9
JTTM	40	1.45	21	2.3	19	1.0
JVB	34	1.23	3	0.3	31	1.7
JBR	33	1.19	8	0.9	25	1.3
JR	30	1.08	18	2.0	12	0.6
EJM	29	1.05	12	1.3	17	0.9
AMJ	28	1.01	5	0.5	23	1.2
JCR	25	0.90	7	0.8	18	1.0
JHTR	24	0.87	12	1.3	12	0.6
JOM	24	0.87	2	0.2	22	1.2
SMJ	24	0.87	2	0.2	22	1.2
AMR	22	0.79	5	0.5	17	0.9
SIJ	20	0.72	8	0.9	12	0.6
JOB	20	0.72	0	0.0	20	1.1
JAMS	19	0.69	13	1.4	6	0.3
ASQ	17	0.61	3	0.3	14	0.8
IJSIM	16	0.58	6	0.7	10	0.5
JST	16	0.58	3	0.3	13	0.7
IJHTA	15	0.54	5	0.5	10	0.5
JSBM	15	0.54	5	0.5	10	0.5
PB	15	0.54	5	0.5	10	0.5
Total	1480	53.47	565	62.0	915	49.3
Others	1288	46.53	347	38.0	941	50.7
Overall total	2768	100	912	100.0	1856	100.0

- Marketing oriented journals: *Journal of Marketing (JM)*, *Journal of Marketing Research (JMR)*, *Journal of Retailing (JR)*, *European Journal of Marketing (EJM)*, *Journal of Consumer Research (JCR)*, and *Journal of the Academy of Marketing Science (JAMS)*.
- Psychology oriented journals: *Journal of Applied Psychology (JAP)*, *Journal of Vocational Behavior (JVB)*, *Journal of Organizational Behavior (JOB)*, and *Psychological Bulletin (PB)*.

As seen in Table 2, in period 2000–2013, the first three cited journals are tourism-oriented journals including *ATR*, *TM*, and *JTR*, and followed by hospitality oriented journals – *IJHM*, *IJCHM* and *CHRAQ*, respectively. The rest of the rank is generally shared by management-oriented, marketing-oriented, and psychology-oriented journals. In two periods – both 2000–2006 and 2007–2013, the first three highly cited journals are from tourism-oriented journals. However, while the top three ranking is *ATR*, *JTR*, and *TM* in 2000–2006, in the second period 2007–2013 it is *TM*, *ATR*, and *JTR*.

Fig. 4 presents changes in citation percentages in highly cited, top thirty journals from the first sub-period (2000–2006) to the second (2007–2013). As seen Fig. 3, changes in hospitality-oriented journals were considerably high. However, changes in management and psychology-oriented journals were much higher than hospitality and tourism-oriented journals. While citations from tourism-oriented journals – *TM* and *JST* increased significantly, citations from *JTR* decreased. Another important implication in as shown in Fig. 3 is that citations from marketing-oriented journals decreased.

#### 4.3. Co-citation analysis

In this section we delineate the academic foundations of hospitality research with an emerging country focus via a journal co-citation analysis that uses a matrix of co-citation frequencies between journals as its input (McCain, 1990). This matrix is the basis for various types of analyses. First, we performed factor analysis to extract the key subgroups in hospitality research. Second, multidimensional scaling (MDS) analysis was employed to provide a graphical representation of journal proximities. The steps to conduct a journal co-citations analysis were adapted from Leydesdorff and Vaughan (2006) and are outlined in Fig. 5.

#### 4.4. Factor analysis

Factor analysis is a technique used to reduce the amount of data generated by factors and *factor loadings* of the information gleaned from journals of each type. Journals and their articles cited within impact the research field in that the accumulation of citations and co-citations expand the field of study. As a result, new approaches to research are visible when an analysis of citations and co-citations are loaded as *factors*. Journals within the same ilk tend to load on the same factor. Factor loading is an indication of the degree to which a journal belongs to or loads on a predetermined factor based on the research question. A *factor* is thus deemed to be a subfield when the theoretical underpinnings are collected by examining the writings of the authors who load within the factor. Principal components within the Varimax rotation were employed to extract key generalizations/factors and their correlations. Only

**Table 3**  
Factors extracted for the period 2000–2006.

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
IJSIM	.945					
JAP	.929					
JM	.912					
JVB	.911					
JMR	.836					
JAMS	.835			.494		
EJM	.802					
JOM	.751	-.425				
PB	.665		-.481			
ASQ	.596				-.569	
TM		.870				
SMJ		-.786				
JSBM		-.765				
ATR		.765				
JTR		.758				
JTTM		.584				.468
SIJ			.856			
IJCHM			.836	.436		
CHRAQ			.774			
IJHM		.450	.551	.426	.407	
JBE				.949		
AMR	.449			.789		
JBR	.648			.678		
JST					-.825	
AMJ	.426				-.729	
JCR		.449	-.400		.479	
JHTR						.840
IJHTA						.727
JR	.519					.631
Variance explained	8.56	4.49	3.53	3.05	2.81	2.77
Cumulative percent of variance explained	29.52	45.03	57.22	67.76	77.46	87.01

Significant factor correlations: factors 2 and 5: 0.39; factors 3 and 5: 0.38.

**Table 4**  
Factors extracted for the period 2007–2013.

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
IJCHM	.879					
ATR	-.843	-.460				
JCR	-.839					
JTTM	-.808					
AMR	.767					
IJHM	.752	.407				
AMJ	.748			.490		
TM	-.742	-.413				
JTR	-.733	-.408				
CHRAQ	.686		-.441			
SMJ	.669					
PB		.919				
JVB		.912				
JAMS		.896				
JAP		.874				
JOM	.444	.823				
JHTR		.746				
JOB	.535	.620				
JBE			.909			
JMR			.904			
JR			.783			
EJM		-.493	.768			
JM		.420	.664			-.440
JSBM	.403	-.423	.629			
IJHTA			-.554	-.470	-.531	
JBR				.943		
ASQ	.436			.791		
JST					-.807	
SIJ		-.495			-.733	
IJSIM		.455				.855
Variance explained	8.08	7.23	4.93	2.88	2.44	1.64
Cumulative percent of variance explained	26.94	51.04	67.46	77.06	85.17	90.65

Significant factor correlations: factors 1 and 2: 0.38; factors 1 and 4: 0.33.

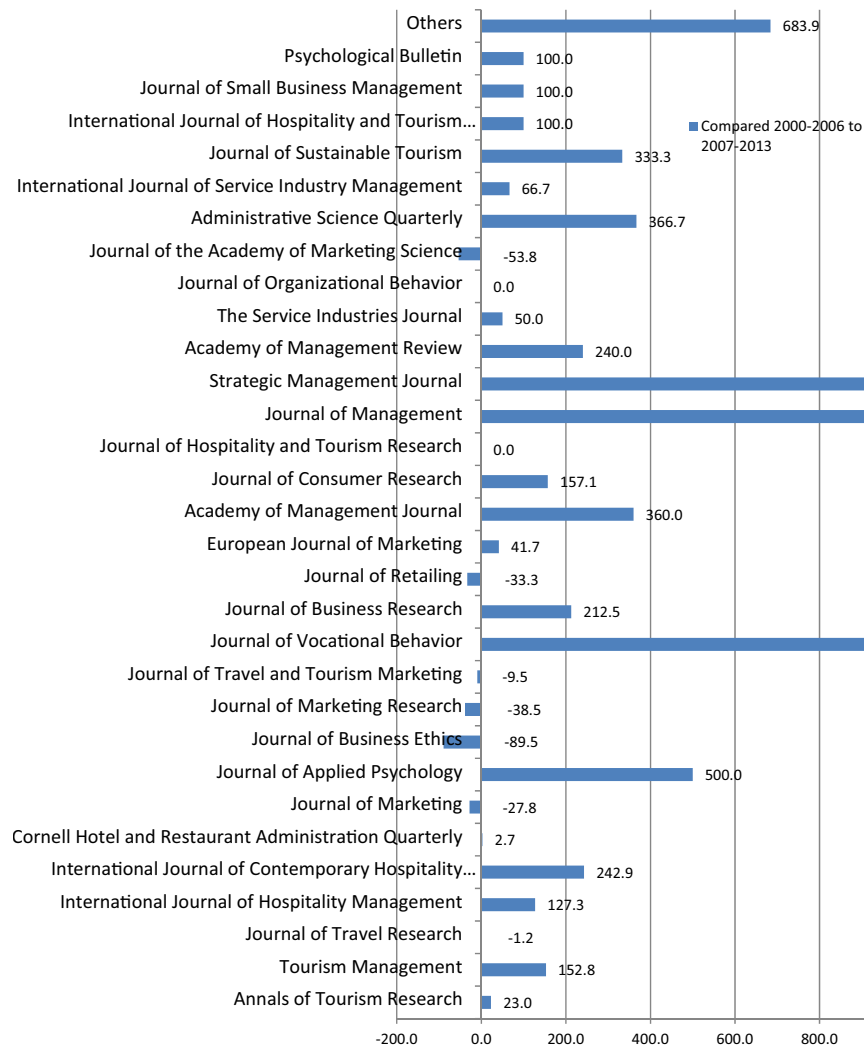


Fig. 4. Changes in influence of cited journals (%).

factors with a minimum Eigenvalue (or latent root) of 1 were extracted. The Eigenvalue is an indication of the amount of variance explained by a factor (Hair et al., 1998; Nerur et al., 2008). Six factors were extracted for each period, 2000–2006; 2007–2013; and 2000–2010. To be consistent with other co-citation analyses, only journals with loadings above ±0.4 were included in a factor. Tables 3–5 summarize the factors and their relationships.

Table 3 outlines five factors from an analysis of the first period, 2000–2006. Factor 1, assigned by journals outside of T/H area such as *IJSIM*, *JAP*, *JM*, *JVB*, *JMR*, *JAMS*, *EJM*, *JOM*, *PB*, *ASQ*, *AMR*, *JBR*, *AMJ*, and *JR*, illustrates the strong influence of the management, marketing and psychology-oriented journals in hospitality management research with an emerging country focus. Factor 2, which includes journals such as *EJM*, *TM*, *SMJ*, *JSBM*, *ATR*, *JTR*, *JTTM*, *IJHM*, and *JCR*, presents the beginning of tourism-oriented journals with both marketing and management-oriented journals. Factor 3 shows the emergence of hospitality-oriented journals (*IJCHM*, *CHRAQ*, and *IJHM*) with management (*SIJ*), marketing (*JCR*), and psychology (*PB*)-oriented journals. Factor 4 represents hospitality-oriented journals (*IJCHM* and *IJHM*) with management (*JBR*, *AMR*, and *JBE*), and marketing (*JAMS*) oriented journals. In Factor 5 *IJHM* is with management (*ASQ* and *AMJ*), tourism (*JST*), and marketing-oriented journals (*JCR*). Factor 6 includes tourism (*JTTM*), hospitality (*JHTR* and *IJHTA*), and marketing (*JR*) oriented journals. While *IJCHM* is present in two factors (3 and 4), *IJHM* influenced four factors (2,

3, 4, and 5). Factor correlations were significant between factors 2 and 5 and factors 3 and 5. Therefore, the analysis of the first period for academic foundations of hospitality research with an emerging country focus depicted a heavy dependence on management, marketing and psychology disciplines, multidisciplinary and interdisciplinary origins of hospitality management research, and the field's eclectic orientation.

As presented in Table 4, there was no change in the number of significant factors; however major changes appeared in the second period, 2007–2013. Factor 1 was dominated by tourism (*ATR*, *JTTM*, *TM*, and *JTR*) and hospitality-oriented journals (*IJCHM*, *IJHM*, and *CHRAQ*) with management (*AMR*, *AMJ*, *SMJ*, *JOM*, *JOB*, *JSBM* and *ASQ*) and marketing-oriented (*JCR*) journals. This relationship demonstrated the beginning of the strong influence of the hospitality and tourism-oriented journals. Factor 2 showed leading tourism-oriented journals (*ATR*, *TM*, and *JTR*) with hospitality (*IJHM* and *JHTR*), management (*JAMS*, *JOM*, *JSBM*, *IJSIM*, and *SIJ*), psychology (*PB*, *JVB*, *JAP*, and *JOB*), and marketing-oriented journals (*EJM* and *JM*). Factor 3 included hospitality-oriented journals (*CHRAQ* and *IJHTA*) with marketing (*JMR*, *JR*, *EJM*, and *JM*), and management-oriented journals (*JBE* and *JSBM*). In factor 4, a hospitality (*IJHTA*)-oriented journal is included with leading management (*AMJ*, *JBR*, and *ASQ*)-oriented journals. While factor 5 includes journals from hospitality (*IJHTA*), tourism (*JST*), and management (*SIJ*), factor 6, which has marketing (*JM*) and management-oriented



**Table 5**  
Factors extracted for the period 2000–2013.

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
JVB	.934					
PB	.926					
JAP	.921					
JOM	.821					
IJSIM	.632		.626			
JOB	.629	.567				
JAMS	.617		.556			.481
JHTR	.553		.419			
SIJ	-.518		.448		-.469	
ATR		-.845				
IJCHM		.843				
CHRAQ		.800				
JCR		-.746				
IJHM		.721				
TM		-.693				
JTTM		-.690			-.463	
JTR		-.673			-.468	
JR			.941			
JM			.864			
JMR			.825			
EJM			.825			
ASQ				.819		
JBR				.811		
AMJ		.469		.721		
SMJ		.418		.721		
JSBM	-.419			.717		
AMR		.576		.624		
JST					-.873	
IJHTA					-.790	
JBE						.909
Variance explained	6.40	6.18	4.77	4.51	2.603	1.61
Cumulative percent of variance explained	21.35	41.96	57.85	72.87	81.54	86.90

Significant factor correlations: factors 1 and 2: 0.36; factors 2 and 4: 0.56.

journals (*IJSIM*), does not include any hospitality and tourism journals. Factor correlations were significant between factors 1 and 2 and factors 1 and 4. Therefore, the analysis of the second period for academic foundations of hospitality research with an emerging country focus illustrates major changes. Although there is diversity within subgroups, the field shows disciplinary cohesion rather than fragmentation because of the relationship between factors.

Looking at all periods (2000–2013) in Table 5, although factor 1 and 3 included only one hospitality-oriented journal (*JHTR*) among management, marketing, and psychology-oriented journals, hospitality, (*IJCHM*, *CHRAQ*, and *IJHM*) and tourism-oriented journals (*ATR*, *JTTM*, *TM*, and *JTR*) dominate factor 2. Leading management-oriented journals (*ASQ*, *JBR*, *AMJ*, *SMJ*, *JSBM*, and *AMR*) loaded with tourism-oriented journals (*JTTM* and *JTR*) in factor 4. Factor 5 loaded with *SIJ*, *JST* and *IJHTA*; however factor 6 does not include any T/H oriented journals. Factor correlations are significant between factors 1 and 2 and factors 2 and 4. Therefore the analysis of the period (2000–2013) related to the academic foundation of hospitality research within an emerging country focus revealed that journals, particularly psychology-oriented, from outside of T/H area strongly influenced hospitality research. Hence, the growth of the field hinges on journals outside of the T/H field. However, because of the relationship between factors, there is a significant integration between T/H and other journals to produce hospitality research.

#### 4.5. Multidimensional scaling

Multidimensional scaling (MDS) is a data reduction procedure that allows us to generate a map using similarities, or dissimilarities between objects (Wilkinson, 2002). In this case, the objects of interest within our study are citations and co-citations within specified journals. The correlations found between journals were used to render a two-dimensional graph of articles within the search

criteria that illustrated journal closeness and adjacency. Since journals represent a collection of symbolic ideas, a visual depiction of their spatial separation in two-dimensional space allows us to visualize the theoretical distance between various scholarly threads of research. The similarity of journals may be discerned by examining the proximity of journals on a map. This map is a reflection of the perception of the overall community of journals that cite the works of these journals (White and McCain, 1998; Nerur et al., 2008).

The evolution of the field of study may be discerned by examining changes in the temporal configuration of such maps. Figs. 5–7 depicts shifting temporal configurations over certain periods of time. Keep in mind, factor loadings are a function of the relationships that journals have with others in the network, as well as on their wide ranging sphere of influence. The stress and  $r^2$  values are an indication of the quality of fit. Although the stress value for 2000–2006 period is poor, above 0.2, the stress values for 2007–2013 and 2000–2013 are perfect, equals 0 which suggests an acceptable fit for co-citation data (McCain, 1990; Nerur et al., 2008). The fit would be considerably enhanced by considering higher dimensions. While a two-dimensional solution may not have the explanatory power of a solution involving higher dimensions, it has the advantages of being easy to map and interpret. Despite the fit being fair, at best, a two-dimensional solution is a reasonably good approximation of what one might get from higher dimensions.

Figs. 6–8 depict the map of the academic structure of the articles as two-dimensional scales. The proximity of two journals in the map also indicated that these two journals are usually cited together, suggesting that there is considerable commonality or interconnection between the two (Nerur et al., 2008). For instance, *IJHTA* and *JST* appear in proximity in all three maps. This is indicative of both as pioneers in the development of hospitality research related to Turkey and that they have contributed considerable



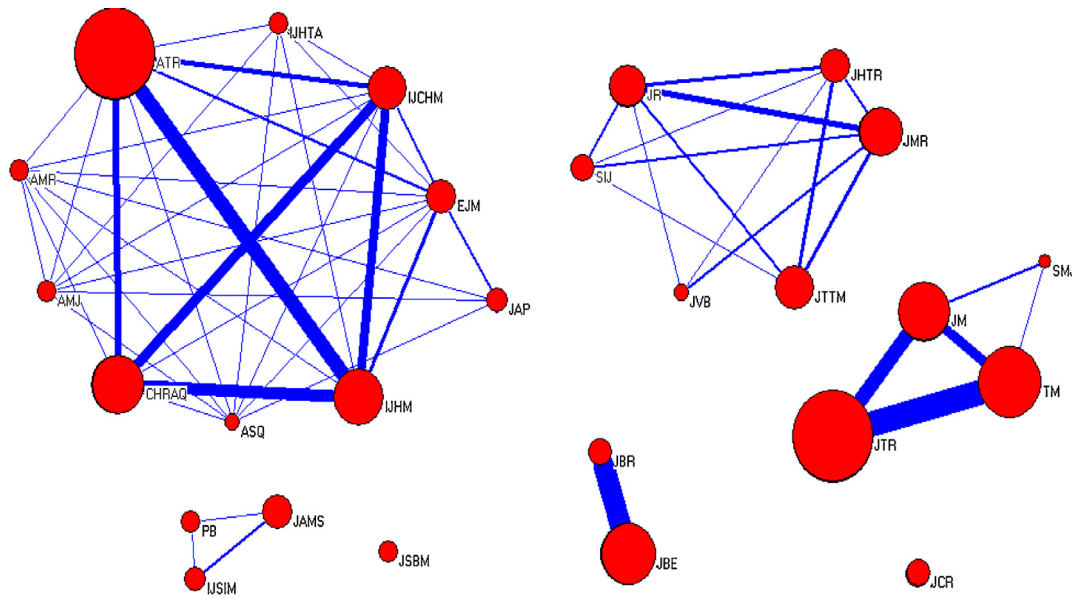


Fig. 9. Network visualization of mostly cited 30 journals in hospitality management research related to Turkey published in T/H journals indexed by SSCI (2000–2006).

prominent relationships between journals. However, we provide a qualitative approach when we interpret the network structures. In this respect, while the size of nodes presents their relative frequency in a network structure, the width of links illustrates the strength of the relationship between each pair (Ferreira et al., 2014; Benckendorff, 2009).

Figs. 9–11 demonstrate the strengths of the relationships between cited journals in the articles and confirm the most critical cited journals. Fig. 9 outlines seven clusters from a network analysis of the first period (2000–2006). The first cluster indicates there are relationships among a tourism-oriented journal (*ATR*), hospitality-oriented journals (*IJCHM*, *CHRAQ*, *IJHM*, and *IJHT*), management (*AMR*, *AMJ*, and *ASQ*), marketing (*EJM*), and psychology-oriented journals (*JAP*). The links between tourism oriented and hospitality-oriented journals are the strongest in the cluster, except *IJHTA*. The hospitality oriented journals nodes are linked weakly with marketing, management, and psychology oriented journals in the cluster.

The largest node in this cluster is *ATR*. The second cluster, which includes journals tourism oriented journal (*JTTM*), hospitality-oriented journals (*JHTR*), management (*SIJ*), marketing (*JR*, and *JMR*), and psychology-oriented journals (*JVP*), presents a stronger link between *JR* and *JMR* than links between the journals in the cluster. There is a strong link between *JHTR* and *JR*; however the link is lesser than the tie between marketing oriented journals (*JR* and *JMR*). The third cluster, which includes tourism (*TM* and *JTR*), management (*SMJ*), and marketing-oriented journals (*JM*) has the strongest link between *TM* and *JTR* in the network in given period. However, although *JM* is linked strongly with *TM* and *JTR*, the link with *SMJ* is considerably weaker. Cluster four (*PB*, *IJSIM*, and *JAMS*), cluster five (*JSBM*), cluster six (*JBR* and *JBE*), and cluster seven (*JCR*) do not include any hospitality or tourism-oriented journals. The links between these clusters are weak, except cluster six, which has a significantly strong link between *JBR* and *JBE* in the network visualized from citations of the articles.

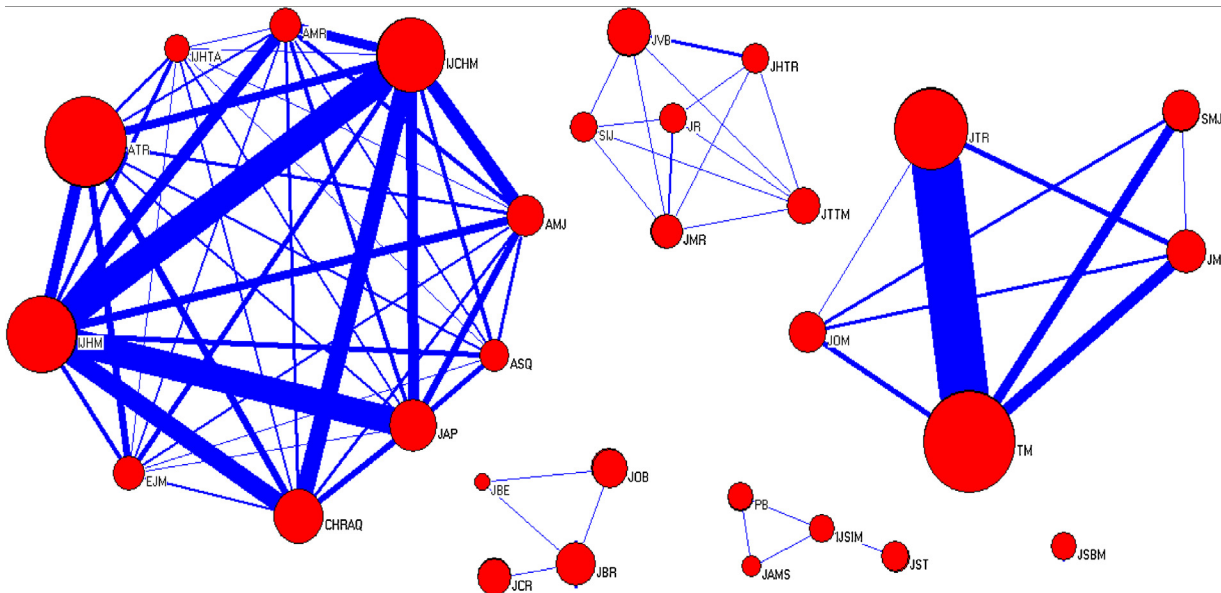


Fig. 10. Network visualization of mostly cited 30 journals in hospitality management research related to Turkey published in T/H journals indexed by SSCI (2007–2013).

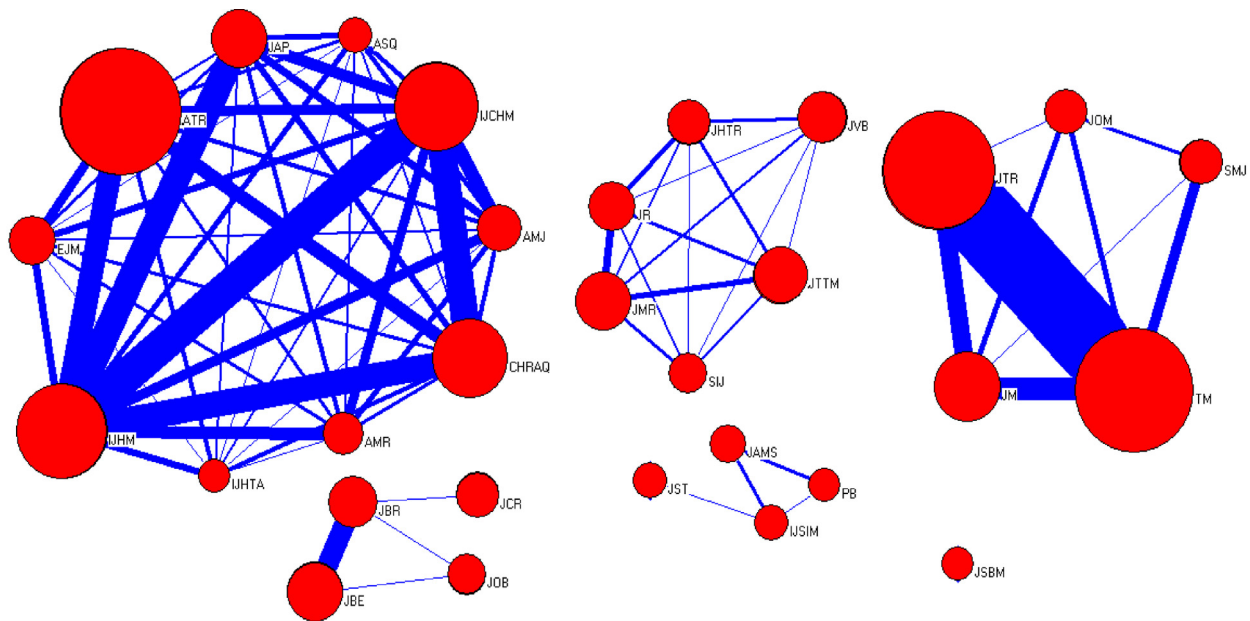


Fig. 11. Network visualization of mostly cited 30 journals in hospitality management research related to Turkey published in T/H journals indexed by SSCI (2000–2013).

Six clusters are revealed from a network analysis of the second period (2007–2013), as depicted in Fig. 10. The network visualization is similar with the first period. However there are a few remarkable exceptions. First, the links in the second period are stronger than first period. Second, a management-oriented journal (*JOM*) involved the third cluster in the first period. In the second period, the link between *TM* and *SMJ* in cluster three is considerably stronger than the first. Third, a tourism-oriented journal (*JST*) are involved in the fourth cluster in the first period. Last, in the second period, marketing (*JCR*) and psychology-oriented journals (*JOB*) exist within the sixth cluster in the first period.

When we look at the period (2000–2013) as seen in Fig. 11, the network does not have significant changes from second period. In this period, while the links are stronger, inter-disciplinary, particularly cross-disciplinary, and trans-disciplinary relationship are growing remarkably.

## 5. Conclusions, limitations, and future research

The main goal of this study was to investigate and map academic foundations of hospitality research related to an emerging country, Turkey, as published in leading tourism and hospitality (T/H) journals indexed by SSCI. Citation and a journal co-citation analyses were conducted to achieve the aims of the study. The findings of the study contribute significantly to T/H and general management literature since the study is the first attempt to explore the academic foundations of hospitality research in an emerging country domain via citations and a journal co-citation analysis.

First, over one-half of citations come from publications that engage outside of the T/H field. Most of citations are from academic journals, and over one-half of journals are from outside disciplines such as management, marketing, psychology, and tourism-oriented journals. The longitudinal comparison of cited journals indicated that there is an increasing trend toward outside-discipline citing. Conversely, citations from a few leading tourism (*ATR* and *JTR*) and hospitality (*CHRQ* and *JHTR*) journals are decreasing or stable. Additionally, while citations from psychology (*JAP* and *JOB*) and management (*SMJ*, *ASQ*, *JBR*, and *JOM*) journals are increasing, articles in marketing journals (*JR*, *JAMS*, and *JM*) are

significantly decreasing. Contrary to Kim et al. (2009), there continues to be considerable dependency on other disciplines in hospitality management research related to emerging countries. This indicates a risk to the growth and maturity of the T/H field.

Second, as mentioned earlier, a co-citation analysis informs us how academic foundations or intellectual structures of a discipline are progressing over time. Although there are a number of papers that report co-citation analysis based on author, a review of the literature showed no article conducted via journal co-citation analysis. Hence, this paper employed a journal co-citation analysis technique and extends our understanding of how a discipline is influenced by others. As seen in our study, there are interesting co-citation patterns among management, marketing, psychology, tourism, and hospitality-oriented journals. These patterns can help researchers identify new paths to understanding and editors to develop new strategies to increase the maturity of the discipline by assessing its evolution.

Third, a map generated by journal co-citation analysis visually depicts the relationships between cited journals, or lack thereof, in the field. According to our findings, mapping academic foundations of hospitality research related to an emerging country is intensively dependent on other disciplines for substantiation. As explained in an earlier section, fields that support T/H include management, marketing, and psychology. As a result, there is a disparate relationship in the T/H literature within the leading hospitality journals. This indicates that the level of intra-disciplinary maturity is weak and needs further development.

Fourth, “a longitudinal comparison of such maps across a significant slice of the history of the field also informs us about the changes occurring in the social construction of the field and the evolving consensus, or lack thereof, about the domain of the field” (Nerur et al., 2008: 333). Co-citation patterns and maps in this study depict that the academic foundations of hospitality research with an emerging country focus began within hospitality and tourism-oriented journals. However, this expanded to other journals from outside of T/H area in the second time span. As time progresses, in order to sustain and expand the maturity of the discipline, editors need to invite and encourage articles that respond to the weak quadrant in our map above.



Network visualization provided several clear insights. First, early articles focusing on Turkey published in leading T/H journals included research from tourism-oriented journals. Second, as time progressed, articles within hospitality-oriented journals increasingly contributed valuable insights. Third, within the given period (2000–2013), articles from journals outside the realm of the T/H industry (i.e. marketing, management, and psychology) grew significantly. As such, the strength of the relationships between hospitality and management, marketing, and psychology journals has intensified.

Upon examination of clusters among journals for the entire period (2000–2013), a few interesting findings emerged. First, various journals clustered together. For instance, leading tourism oriented journal, *ATR*, clustered with the hospitality journals (*IJHM*, *IJCHM*, *CHRAQ*) rather than leading tourism hospitality journals, *TM* and *JTR*. While *ATR* is oriented more toward theory building than *TM* and *JTR*, hospitality journals are generally practice-oriented. For this reason, it can be assumed that hospitality-oriented journals benefit from findings published in *ATR* that support practitioner-based approaches. Second, according to Kim et al. (2009), although there were strong relationships between three tourism oriented journals (*ATR*, *TM*, and *JTR*), the relationships between hospitality-oriented journals (*IJHM*, *CHRAQ*, and *JHTR*) were not as strong as tourism-oriented journals. However, the current study indicated there were strong relationships between hospitality-oriented journals (*IJHM*, *CHRAQ*, and *JHTR*). Third, while practitioner-oriented management journals (*SMJ* and *JOM*) were clustered with tourism-oriented journals, hospitality-oriented journals were clustered with theory building journals (*AMJ*, *ASQ*). Last, psychology-oriented journals were clustered separately. These findings are supported by the work of Yuan et al. (2014) in that the relatedness of journal clusters were formed based on a commonality of cited literature.

In sum, the findings of the present study match those of previous studies (Kim et al., 2009; Howey et al., 1999; Benckendorff and Zehrer, 2013; Evren and Kozak, 2014). The academic foundations of hospitality research focusing on an emerging country, Turkey, are fragmented and eclectic. There is a significant and ever-increasing dependency upon the use of citations from outside of hospitality journals, causing inter-disciplinary, cross-disciplinary and trans-disciplinary issues in the discipline based on emerging country. To generalize these findings more research focusing on other countries is needed.

Findings of the current study will be helpful for researchers and editors within T/H, however, several limitations should be acknowledged. First, methodological limitations existed including the varied decision process of differing journals and the subjective nature of map interpretation (Ramos-Rodríguez and Ruiz-Navarro, 2004). Second, the sample of our current study was limited to a single emerging country, Turkey. Contributions can be generalized by examining the contributions of other rapidly emerging nations – such as China, Russia, Brazil and India – to international leading T/H journals or other journals publishing hospitality research. Third, this study focused only on the articles published in leading international T/H journals. There are a number of emerging international business and management journals focusing on hospitality themes or publishing hospitality research that deserve further study. Journals from outside the T/H field were not considered in the evaluation, nor were T/H journals with a purely regional focus. This creates an opportunity for future research. Additionally, researchers can assess the content of dissertations and theses, as well as conference papers focusing on developing countries' hospitality practices. Fourth, this study did not interpret relationships from quantitative approaches (e.g. centrality, degree, etc.) among findings by social network analysis to delineate academic foundations of the hospitality research. Last, to gain additional insights on academic foundations of the discipline, other citation analysis

such as an author co-citation, co-word, and co-authorship should be conducted to quantitatively and qualitatively identify key networks involved in the field.

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