

A CITATION ANALYSIS OF HOSPITALITY RESEARCH

Nguyen Minh Huan

*Vietnamese Studies Dept. - Faculty of Social Sciences & Humanities
Ton Duc Thang University*

This paper identified the most frequently cited hospitality scholars in periods from 2006 to 2015. The two refereed hospitality journals, International Journal of Hospitality Management and International Journal of Contemporary Hospitality Management were the focus of analysis. The results of a productivity analyses pertaining to repeat authorship, author affiliation, and research contributions are presented. Findings of the paper contribute to providing insights on multidisciplinary structure of hospitality research using bibliometric technique.

Keywords: *Hospitality management, Bibliometrics, Citation analysis.*

INTRODUCTION

Together with tourism research, the epistemology of hospitality research is a topic of interest of many scholars. Brymer, R (1995) described hospitality as “an umbrella term used to encompass the many and varied business that cater guests”. It can be seen that hospitality is much larger than most of other industries. Moreover, hospitality research has developed for the past decades (Lugosi et al., 2009). In recent years, hospitality has been defined as an independent academic category in SSCI, reflecting the development of the hospitality industry. Therefore, some reviewers have highlighted the

© University of the Aegean. Print ISSN: 1790-8418, Online ISSN: 1792-6521



Except where otherwise noted, this work is licensed under
<http://creativecommons.org/licenses/by-nc-nd/3.0/>

increasing complexity of academic papers and called for more efforts in various aspects including methodological issues (Mohammed et al., 2015).

At present, there are many approaches to understand the epistemology and knowledge structure of a general field, one of which is to analyze scholars and contents of publications. For the past two decades, there have been many efforts to identify the most productive and influential hospitality scholars, institutions and publications, including efforts to rate hospitality journals, individual scholars and institutions based on productivity and quantity of citations (Howey et al, 1999; Kim et al, 2009; Köseoglu et al, 2015). By using bibliometric technique to identify the most influential researchers and journals, hospitality research knowledge domain can be understood better.

Analyses on progress in knowledge and theory do not only provide understanding on the development of ideas and interpretations but also highlight effects of academic forces and knowledge formation trends (Belhassen & Caton, 2009). Besides that, Botterill (2001) stated that analysis on epistemology can be a useful means to develop general understanding on how knowledge unfolds as well as its impacts on intellectual and education products of the researched field.

Researching recent citations in hospitality, this paper aims at continuing to expand the analysis on citations of articles in leading journals in a hospitality field from 2006 to 2015. In particular, the research expects to identify such contents as the scholar who was cited most for the above period and the relationship between scholars and works which are much cited in two hospitality research journals. This paper is structured as follows. First of all, data is analyzed from the database source which is considered as the most suitable, i.e. SSCI and the methodology used. Next, results of co-citation analyses in hospitality area as well as visualization of the ‘intellectual structure’ of the discipline are shown. The final part summarizes main conclusions, limitations and future research direction.

LITERATURE REVIEW

Academic foundations of hospitality research

Hospitality research has developed gradually in terms of scope, nature, structure and closeness for the past years. Probably this is to try to catch up with fluctuations and research demands of this industry relating to diversity of the topic (Pritchard & Morgan, 2007). There are many debates on identifying scope of hospitality in the academic field. Therefore, many ideologies have developed to make hospitality research become a more general concept. Because of the importance of hospitality research, the development and experiment of many ways with many different methods is requisite for reflecting the development of subfields. Obviously, this can create significant understandings on development of hospitality research such as multidisciplinary approach. It can be seen clearly that in future, hospitality research will be able to combine, apply any method. The most important thing, however, is that such method has to increase the reliability, innovation and brings about better research results for academic research (Singala, Christou, & Gretzel, 2011).

Citation and co-citation analysis

Citation analysis is a branch of bibliometric analysis. Citation analysis studies the impact and quality of a scientific article, an author, or an institution based on the number of times the article and/or author is cited by others. In addition to mapping academic foundations, it is the basis for discovering what researchers think of their colleagues (Kolata, 1991). There are two methods of citation analysis, i.e. basic and advanced analysis. The basic citation analysis method is simply to count cited journals, authors or articles. Advanced citation analysis, also known as co-citation analysis, is an

investigation of the relationship between journals, articles, or authors to explore patterns within a particular intellectual (Baker, 1990). Co-citation analysis is a technique aiming at providing an insight on intellectual structure of a research field. Basis for co-citation analysis is that pairs of documents which often appear together in the list of references can have one thing in common. When two authors or papers are cited regularly together, it is likely that their ideas relate to each other (Pasadeos, Phelps, and Kim, 1998). Co-citation analysis has proven to be a useful experimental technique for describing the intellectual structure of many fields, including education (Özçınar, 2015), marketing (Backhaus, Lügger & Koch, 2011), operations management (Pilkington, & Meredith, 2009), information science (Zhao, & Strotmann, 2008), strategic management (Nerur, Rasheed, & Natarajan, 2008), and tourism (McKercher, 2008), etc. It is a common method in research to analyze citations and articles in leading journals in the same field.

Citation and co-citation analysis research related to hospitality industry

There has been a lot of research making efforts to determine the most productive and influential hospitality scholars based on productivity and number of citations. Howey et al. (1999) compared cited journals in articles published from 1994 to 1996 among the top three tourism-oriented journals (Annals of Tourism Research, Tourism Management, and Journal of Travel Research) with hospitality-oriented journals (International Journal of Hospitality Management, Hospitality Research Journal and Cornell Hotel and Restaurant Administration Quarterly). The results of the research on relationship between the six journals above showed that there were more citations occurring within disciplines than across disciplines. Kim et al. (2009) inherited Howey et al. (1999) study by research from 1994 to 2005. They concluded that there was a systematic development of both

tourism and hospitality. In addition, research fields do not much depend on the others disciplines for development.

A few studies exist in hospitality conducted via citation and co-citation analysis by Hu and Racherla (2008), Ye et al. (2012). Köseoglu et al (2015) investigated the use of citation and co-citation analysis in hospitality research from 1992 to 2013 in Turkey. The results showed that over one-half of the article comes from publications engaging outside of the T/H area. García-Lillo et al. (2016) analyzed available literature on hospitality management from all the research papers published in International Journal of Hospitality Management (IJHM) from 2008 to 2014. This paper addresses this need by using co-citation analysis to reveal the intellectual structure of the field of hospitality. All the research was conducted through analysis of citations including an author co-citation, co-author, and co-word.

METHOD

Database and journal selection

The articles published on journals are considered as 'certified knowledge' and references from these articles are considered reliable through the use of bibliometric analysis (Ramos-Rodriguez and Ruiz-Navarro, 2004). So SSCI database has been selected for its reputation and influence in academics. Its influence is so great that it is often regarded as the definitive word to determine the value of a journal and / or the contribution of scholars doing research. The study focuses on hospitality research and does not identify tourism research which rarely or never be published in the hospitality literature. Hence, the key word, title, topic, and content are limited to the scope of hospitality themes included in the SSCI.

This research provides a citation analysis of 10 years of hospitality research using reference lists of articles published in International

Journal of Hospitality Management (IJHM) and International Journal of Contemporary Hospitality Management (IJCHM) from 2006 to 2015 as the source data. The time frame is limited for convenience reason and bibliometric research often collects data for about five or ten years.

There are several reasons for that this analysis is limited to IJHM and IJCHM. Firstly, they are the most prominent and most cited journal in the hospitality field (Chang & McAleer, 2012). Secondly, scientific journals are often considered a key communication foundation for researchers (Macharzina et al., 2004). Thirdly, the data used for this research was collected from a secondary database and restricts the availability of necessary reference list based on relationship analysis. Finally, the journals analyzed in this article are "mainstream" with a wide theme and geographical scope.

Data collection and analysis

Citations from all the articles are put into a spreadsheet program (Excel) to eliminate possible misspellings in SSCI database, and sorted by the number of citations. Then, the author's name, year of publication, title, name of journal cited from each article are determined. Excel spreadsheets are used to collect data for the co-citation analysis. Citations and co-citations analysis is done through identification of Multidimensional scaling factors using SPSS software. Before analyzing the data, the article attempts to standardize inconsistent items, such as how to write the author's name, citation details, or publication years. These errors occur because of errors in the data capturing process and variation of title abbreviation. The data is modified to ensure that it won't affect the analysis results. The process of data analysis is as follows: first, reveal information about the frequency of articles by years and journals. Then, analyze the citations and co-citations. References used in articles are counted to identify characteristics of citations and co-citations, including important publications and journals with impacts

on hospitality literature. Figure 1 shows the steps used in this research.

Figure 1 Steps used in co-citation analysis



RESULTS AND DISCUSSION

Co-citation analysis

This section uses a matrix based on the frequency of co-citations from two hospitality journals as its input (McCain, 1990). This matrix is the basis for many following types of analysis. First, factor analysis is done to extract the important subgrouping in the hospitality

research. Then multidimensional scaling (MDS) analysis is used to create visual images (maps) from the matrix. This map reflects the epistemology of hospitality research based on co-citations between articles. With the aid of both factor analysis and multidimensional scaling, the group of scholars are analyzed, from which some key conclusions about the multidisciplinary structure of hospitality from 2006 to 2015 can be drawn.

Factor analysis

Factor analysis is an analysis technique in SPSS which is applied in this research to complement MDS. This technique can be explained as detecting correlations between initial variables through the creation of some variables or factors. In other words, it is used to reduce the number of data generated by factors and factor loadings of initial information gathered from hospitality journals. Factor loadings indicate the extent to which the author belongs or loads on predetermined factors based on research questions. Therefore, the factors are considered subfield when the theory background is collected to check the works of authors who load within the factor. The matrix of raw co-citation is analyzed using analysis on the key element with varimax rotation (replacing missing values with the average value). The eigenvalue is an indication of the amount of variance explained by a factor (Nerur et al., 2008).

Table 1 and 2 provides a list resulting from the citation analysis of the documents most often cited by research papers published in The International Journal of Hospitality Management (IJHM) and International Journal of Contemporary Hospitality Management (IJCHM) during the period analyzed.

Table 1 List of the documents most often cited from IJHM (2006-2015)

*TOURISMOS: AN INTERNATIONAL MULTIDISCIPLINARY JOURNAL OF
TOURISM*

Volume 13, Number 1, pp. 01-25

UDC: 338.48+640(050)

Ranking	Most-cited documents	Number of citations	Ranking	Most-cited documents	Number of citations
1	Baron, 1986	27274	36	Churchill, 1982	689
2	Hu, 1999	15935	37	Youndt, 1996	678
3	Ajzen, 1991	12361	38	Bolton, 1991	654
4	Fornell, 1981	11290	39	Sweeney, 2001	603
5	Barney, 1991	9646	40	Smith, 1999	598
6	Bentler, 1980	6474	41	Tax, 1998	578
7	Armstrong, 1977	4167	42	McWilliams, 2000	562
8	Morgan, 1994	3919	43	Arnould, 1993	553
9	Parasuraman, 1988	3354	44	Ashforth, 1993	548
10	Parasuraman, 1985	3044	45	Carman, 1990	536
11	Zeithaml, 1988	2289	46	McGuire, 1988	532
12	Huselid, 1995	2051	47	Garriga, 2004	514
13	Oliver, 1980	2001	48	Brady, 2001	502
14	Zeithaml, 1996	1864	49	Hartline, 1996	477
15	Cronin, 1992	1613	50	Westbrook, 1991	470
16	Oliver, 1999	1237	51	Morris, 1996	452
17	Bitner, 1990	1101	52	Wong, 2002	436
18	MacDuffie, 1995	1095	53	McWilliams, 2006	426
19	Cronin, 2000	1079	54	Bitner, 1994	421
20	Bitner, 1992	1064	55	Brotheridge, 2002	420
21	Waddock, 1997	1019	56	Aupperle, 1985	409
22	Delery, 1996	1009	57	Solomon, 1985	404
23	Bitner, 1990	1008	58	Baker, 2000	393
24	Crosby, 1990	1006	59	Luo, 2006	379
25	McWilliams, 2001	956	60	Pugh, 2001	363
26	Anderson, 1994	955	61	Bebchuk, 2009	357
27	Garbarino, 1999	927	62	Bolton, 1999	356
28	Fornell, 1992	844	63	Yang, 2004	298
29	Ichniowski, 1997	839	64	Carroll, 2010	277
30	Becker, 1996	838	65	Lichtenstein, 2004	267
31	Grönroos, 1984	759	66	Cochran, 1984	259
32	Boulding, 1993	748	67	Sweeney, 1999	259
33	Delaney, 1996	743	68	Maignan, 2004	254
34	Heskett, 1994	698	69	James, 1989	250

Table 2 List of the documents most often cited from IJCHM (2006-2015)

Ranking	Most-cited documents	Number of citations	Ranking	Most-cited documents	Number of citations
1	Baron, 1986	27274	26	Jaworski, 1993	1512
2	Hu, 1999	15933	27	Teece, 2007	1126
3	Fornell, 1981	11288	28	Hart, 1995	1118
4	Barney, 1991	9644	29	Slater, 1995	1117
5	Anderson, 1988	8762	30	Cronin, 2000	1079
6	Teece, 1997	5497	31	Delery, 1996	1009
7	Wernerfelt, 1984	4600	32	Fornell, 1982	961
8	Armstrong, 1977	4166	33	Anderson, 1994	955
9	Morgan, 1994	3919	34	Garbarino, 1999	927
10	Rotter, 1966	3848	35	Anderson, 1993	899
11	Jensen, 1986	3704	36	Mulaik, 1989	890
12	Churchill, 1979	3597	37	Hurley, 1998	868
13	Parasuraman, 1988	3354	38	Becker, 1996	838
14	Dyer, 1998	2891	39	Reed, 1990	802
15	Eisenhardt, 2000	2722	40	Delaney, 1996	743
16	Rosen, 1974	2692	41	Helfat, 2003	731
17	Dierickx, 1989	2314	42	Mahoney, 1992	729
18	Zeithaml, 1988	2291	43	Rumelt, 1991	690
19	Peteraf, 1993	2235	44	Oliver, 1997	634
20	Vargo, 2004	2219	45	Sweeney, 2001	604
21	Huselid, 1995	2051	46	Carman, 1990	536
22	Zeithaml, 1996	1864	47	Cronin, 1994	505
23	Narver, 1990	1846	48	Salanova, 2005	397
24	Kohli, 1990	1799	49	Lam, 2004	368
25	Grant, 1991	1670	50	Yang, 2004	298

Principal components with oblimin rotation were employed to extract the key generalizations/ factors and their correlations. Only factors with a minimum eigenvalue (or latent root) of 1 were extracted. Eigenvalue is an indication of the amount of variance explained by a factor (Hair, Anderson, and Tatham, 1998). Six factors were extracted from IJHM and three factors from IJCHM for the years 2006-15. To

be consistent with other co-citation studies, only authors with loadings above ± 0.4 were included in a factor. Tables 3 and 5 summarize the factors and their relationships. From the results, table 4 and 6 presents main themes identified in the factor analysis of 2 journals.

Table 3 Factors extracted from IJHM (2006-2015)

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Sweeney	.724					
Sweeney.b	.679					
Zeithaml.b	.655					
Baker	.642					
Cronin.b	.629					
Bolton.b	.607					
Cronin	.596					
Yang	.578					
Grönroos	.556					
Brady	.550					
Parasurama	.547					
n.b						
Anderson	.520					
Boulding	.499					
Zeithaml.a	.495					
Bitner	.472					
Heskett	.462					
Fornell.b	.460					
Oliver	.458					
Churchill	.446					
Bolton	.417					
Morris		.974				
Wong		.952				
Brotheridge		.950				
Hu		.940				
Ashforth		.887				
Ajzen		.886				
James		.821				
Baron		.820				
Fornell		.573				
Luo			.998			
Sen			.993			
Maignan			.977			
Lichtenstei			.930			
n						
Garriga			.926			

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
McWilliams.b			.925			
McWilliams			.922			
Carroll			.912			
McGuire			.895			
Waddock			.895			
McWilliams.c			.889			
Aupperle			.888			
Cochran			.866			
Bebchuk			.638			
Delaney				.940		
Huselid				.934		
Delery				.928		
Youndt				.927		
Becker				.925		
Macduffie				.921		
Ichniowski				.908		
Barney				.838		
Smith				-.566		
Westbrook				-.447		
Bitner.b				-.440		
Oliver.c				-.424		
Arnould				-.420		
Pugh					.555	
Bitner.d					.525	
Hartline					.522	
Solomon					.493	
Morgan						-.812
Garbarino						-.754
Crosby						-.708
Armstrong						-.662
Oliver.b						-.460
Variance explained	39.927	9.751	8.555	2.878	1.602	1.213
Percent of total variance explained	59.887	74.889	88.050	92.478	94.942	96.809

Total variance explained: 96.809%

Factor 1 contains the following group of 20 research papers.

Nevertheless, it is possible to distinguish three sub-groups within this

factor. The first of the sub-groups identified is shaped by the works of Sweeney (2001), Baker (2000), Yang (2004). These articles focus their attention in the perceived value understood as one of the main antecedents of customer satisfaction. The second sub-group would include the following works related to the stream of research on service quality developed within the context of service marketing: Zeithaml (1988), Cronin (1992), Bolton (1991), Grönroos (1984), Brady (2001), Parasuraman (1988), Boulding (1993). The third sub-group brings together the works of Anderson (1994), Oliver (1980), Churchill (1982), Bolton (1999), all of which deal with customer satisfaction. The concept of satisfaction is analyzed from two distinct perspectives in the literature about marketing: a cognitive side which understands this term as an evaluative judgment resulting from the comparison between consumer expectations and the perception of the value of the product/service received; and another emotional perspective which sees satisfaction as an emotional state derived from the experience with consumption.

Table 4 Main themes of IJHM identified in the factor analysis.

	Themes
Factor 1	Studies on perceived value as antecedent to behavior intentions Service quality, consumer satisfaction
Factor 2	Emotional labor
Factor 3	CSR and performance
Factor 4	Human resource management
Factor 5	Service encounter
Factor 6	Relational marketing

The second of these conglomerates or Factor 2 would be shaped by the works of Morris (1996), Wong (2002), Brotheridge (2002), Ashforth (1993), James (1989). All these articles are related to the emotional labor. Service delivery tasks characteristically require direct contact with the client during most of the working hours. That

is why the employees who work with customer must control their emotions during their labor interaction.

The third of these clusters or Factor 3 identified is shaped by the works of Luo (2006), Sen (2006), Maignan (2004), Lichtenstein (2004), Garriga (2004), McWilliams (2001), Carroll (2010), McGuire (1988), Waddock (1997), Aupperle (1985), Cochran (1984), Bebchuk (2009) about the impact that corporate social responsibility and the development by firms of a socially responsible behavior may have on business performance.

In the case of Factor 4 brings together the works of Delaney (1996), Huselid (1995), Delery (1996), Youndt (1996), Becker (1996), MacDuffie (1995), Ichniowski (1997). The source-works included in this conglomerate, all of them of a human resource management, are situated amongst the most cited works by the literature in the research developed here. There is broad agreement that a strategic approach to HRM involves implementing and designing a set of internally consistent policies and practices that ensure a firm's human capital (employees' collective knowledge, abilities, and skills) contributes to the achievement of its business objectives.

As for Factor 5, the source-works included in this conglomerate deals with what is known in the service context as service encounter. In particular, it contains 3 research papers: the works of Pugh (2001), Bitner (1990), Solomon (1985). These authors recognize that consumers react intensely to service failures. The recent and wide-ranging focus on service encounter satisfaction and service quality speak to both the importance and the complexity of the issues. First and foremost, customer satisfaction depends directly on the management and monitoring of individual service encounter. The management of individual encounters is nested within broader managerial issues of organizational structure, philosophy, and culture that also can influence service delivery and ultimately customer perceptions of service quality.

Finally, the last of these conglomerates or Factor 6 identifies gathers the source-works of Morgan (1994), Crosby (1990), Armstrong (1977), both of them belonging to one of most recent research streams in the context of marketing: “relational marketing”. The emphasis in relational marketing is on long-term, mutually beneficial relationships between sellers, buyers, and industrial networks, interaction to build and develop these relationships, and a focus on variables such as trust, commitment, cooperation, and dependence.

Table 5 Factors extracted from IJCHM (2006-2015)

	Factor 1	Factor 2	Factor 3
Salanova	.975		
Yang	.927		
Zeithaml	.923		
Garbarino	.922		
Mulaik	.921		
Lam	.916		
Anderson.c	.911		
Hu	.901		
Zeithaml.b	.899		
Anderson	.897		
Cronin	.891		
Sweeney	.883		
Parasuraman	.878		
Anderson.b	.878		
Rotter	.873		
Fornell.b	.850		
Fornell	.848		
Morgan	.840		
Rumelt	-.832		
Reed	-.824		
Jensen	-.818		
Churchill	.758		
Cronin.b	.754		
Teece	-.746		
Carman	.677		
Vargo	.581		
Jaworski		.991	
Slater		.991	
Hurley		.961	
Rosen		-.675	
Armstrong		.564	
Delaney			.951
Delery			.925
Becker			.912
Huselid			.908
Variance explained	21.795	5.858	3.657
Percent of total variance explained	62.270	79.007	89.456

Total variance explained: 89.456%

Table 6 Main themes of IJCHM identified in the factor analysis

Themes	
Factor 1	Perceived quality of service, customer satisfaction, studies on structural equation models,
Factor 2	Market orientation
Factor 3	Human resource management

With regard to Factor 1, one can also identify three different sub-groups closely related to one another as well. The first of the aforementioned sub-group brings together the works of Yang (2004), Zeithaml (1996), Cronin (2000), Parasuraman (1988), Cronin (1994), Carman (1990). All these articles are related to the perceived quality of service. The second of the sub-groups identified is shaped by the works of Garbarino (1999), Lam (2004), Anderson (1994). All of which deal with customer satisfaction. The third of the sub-groups identifies gathers the source-works of Anderson (1988), Fornell (1981) about the studies on structural equation models.

Factor 2 contains the following group of research works: Jaworski (1993), Slater (1995), Hurley (1998). These research papers focus market orientation. Researchers have emphasis on delivering superior quality products and services to customers. Because customer expectations and needs continually delivering consistently high-quality services, and products require ongoing tracking and responsiveness to changing marketplace needs, i.e., being market-oriented.

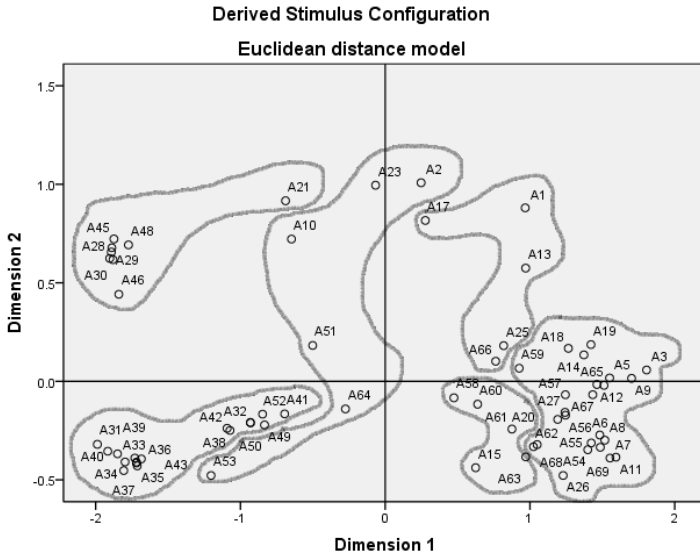
The third of these conglomerates or Factor 3 would be shaped by the works of Delaney (1996), Delery (1996), Becker (1996), Huselid (1995). All these articles are related to human resource management. The importance of (HRM) as a competitive tool and the relationship between organizational performance and human resource

management has been the subject of systematic research. Authors have identified and examined certain HRM practices as crucial to developing organizational competitive advantage (e.g. see Delery, 1996, Becker, 1996). Researchers also found connections between HRM and various measures of organizational performance (e.g. see, Huselid, 1995, Delery, 1996).

Multidimensional scaling (MDS)

Multidimensional scaling is a data reduction procedure that allows us to create a map using the similarities, or dissimilarities between subjects (Wilkinson, 2002). In this case, the subjects of interest in this research include citations and co-citations in 2 hospitality journals. The correlations found in the 2 journals are used to draw a 2D graph of the authors cited together. Specifically, the points are placed on the map based on the proximity in co-citation matrix (where the high values reflect the high similarity). Points representing authors with high similarity will be located close to each other, while the points representing authors with a relatively lower similarity will be located further from each other in the map. It allows us to visualize the theoretical distance between various academic topics of the research (Nerur et al., 2008).

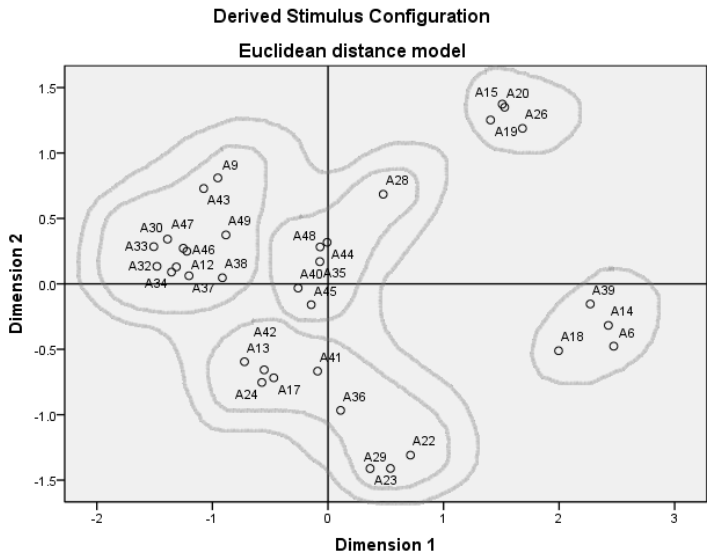
Figure 2 Academic structure of IJHM (2006-2015)



Stress value is 0.07107. Proportion of variance (RSQ) is 0.98278

The evolution of the field of study may be discerned by examining changes in the temporal configuration of such maps. The stress value (0.07107, lower than an acceptable value 0.2) and R^2 (0.98 for two-dimensions) showed an outstanding fit for the data (McCain, 1990). As a result, two large groups emerged from right to left on the MDS. Group 1 with most documents from factor 1, 4, 5, 6 and group 2 with documents from factors 2 and 3.

Figure 3 Academic structure of IJCHM (2006-2015)



Stress value is 0.06033. Proportion of variance (RSQ) is 0.98553.

The stress and R2 values are an indication of how good the fit is. The stress values for all the periods are below 0.2, which suggests an acceptable fit for co-citation data (stress value is 0.06033; R2 is 0.98553). 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. Figure 2 show that two large groups emerged from left to right on the MDS. Group 1 with most documents from factor 1, and group 2 with documents from factors 2 and 3.

CONCLUSIONS, LIMITATIONS, AND FUTURE RESEARCH

This article aims at analyzing the epistemological structure of the discipline in the hospitality field using the bibliometric method. This article mainly focuses on the use of the experimental method – co-citation analysis - to explore the main research groups in the hospitality sector, namely analysis of articles published in 2 hospitality journals in the time frame from 2006 to 2015. This method provides a clear tool to identify new directions in current research and model, as well as puts the paper of the author in a specific research field. Moreover, this method can be very useful for new researchers in identifying the most significant contributions to the scientific discipline.

This research is limited to three major hospitality journals as well as defines the analysis period (2006-2015) to carry out experimental research leading to the limited scope of the result because it cannot give us an overview of the interdisciplinary structure in hospitality research. Obviously, there will be some significant changes in the result and conclusions if the scope of the journals included in the analysis or the analysis period is extended. Therefore, future research can certainly add value to the evaluation by including the variety of journals and using a wider variety of analysis methods. Among many ways to evaluate the contributions to a particular field, the citation analysis is a popular method used in the social sciences industry. It can be argued that citation analysis describes more accurately an individual, and thus institutions that scholars are related to, and influences on academic development. The reason to set a value on citation analysis is that not only the article of an individual cited but also contributions to the specific research field.

REFERENCES

- Backhaus, K., Lügger, K., & Koch, M. (2011). The structure and evolution of business-to-business marketing: a citation and co-citation analysis. *Industrial Marketing Management*, 40(6), 940-951.

- Baker, D. R. (1990, September). Citation analysis: A methodological review. *In Social Work Research and Abstracts* (Vol. 26, No. 3, pp. 3-10). Oxford University Press.
- Belhassen, Y., & Caton, K. (2009). Advancing understandings: A linguistic approach to tourism epistemology. *Annals of Tourism Research*, 36(2), 335-352.
- Botterill, D. (2001). The epistemology of a set of tourism studies. *Leisure Studies*, 20(3), 199-214.
- Brotherton B. and Wood R.(2008) *The Sage Handbook of Hospitality Management*,pp. 2,4,39. London: Sage Publications Ltd.
- Brymer, R. A. (1995). *Hospitality management: an introduction to the industry* (No. Ed. 7). Kendall/Hunt Publishing Co..
- Chang, C. L., & McAleer, M. (2012). Citations and impact of ISI tourism and hospitality journals. *Tourism Management Perspectives*, 1, 2-8.
- García-Lillo, F., Úbeda-García, M., & Marco-Lajara, B. (2016). The intellectual structure of research in hospitality management: A literature review using bibliometric methods of the journal international journal of hospitality management. *International Journal of Hospitality Management*, 52, 121-130.
- Howey, R.M., Savage, K.S., Verbeeten, M.J., Van Hoof, H.B., (1999). Tourism and hospitality research journals: cross-citations among research communities. *Tour.Manage.* 20(1), 133–139.
- Hu, C., Racherla, P., (2008). Visual representation of knowledge networks: a social network analysis of hospitality research domain. *Int. J. Hosp. Manage.* 27(2),302–312.
- Kim, Y., Savage, K.S., Howey, R.M., Van Hoof, H.B., (2009). Academic foundations for hospitality and tourism research: a reexamination of citations. *Tour. Manage.*30, 752–758.
- Kolata, G. (1991). Who's no. 1 in science. Footnotes say US-The New York Times, 12.
- Köseoglu, M. A., Schitoglu, Y., & Craft, J. (2015). Academic foundations of hospitality management research with an emerging country focus: A citation and co-citation analysis. *International Journal of Hospitality Management*, 45, 130-144.
- Lugosi, P., Lynch, P., & Morrison, A. (2009). Critical hospitality management research. *The Service Industries Journal*, 29(10), 1465-1478.

- Macharzina, K., Wolf, J., & Rohn, A. (2004). Quantitative evaluation of German research output in business administration: 1992–2001. *MIR: Management International Review*, 335-359.
- McCain, K. W. (1990). Mapping authors in intellectual space: A technical overview. *Journal of the American society for information science*, 41(6), 433.
- McKercher, B. (2008). A citation analysis of tourism scholars. *Tourism Management*, 29(6), 1226-1232.
- Mohammed, I., Guillet, B. D., & Law, R. (2015). The contributions of economics to hospitality literature: A content analysis of hospitality and tourism journals. *International Journal of Hospitality Management*, 44, 99-110.
- Nerur, S. P., Rasheed, A. A., & Natarajan, V. (2008). The intellectual structure of the strategic management field: An author co-citation analysis. *Strategic Management Journal*, 29(3), 319-336.
- Özçınar, H. (2015). Mapping teacher education domain: A document co-citation analysis from 1992 to 2012. *Teaching and Teacher Education*, 47, 42-61.
- Pasadeos, Y., Phelps, J., & Kim, B. H. (1998). Disciplinary impact of advertising scholars: Temporal comparisons of influential authors, works and research networks. *Journal of Advertising*, 27(4), 53-70.
- Pilkington, A., & Meredith, J. (2009). The evolution of the intellectual structure of operations management—1980–2006: A citation/co-citation analysis. *Journal of Operations Management*, 27(3), 185-202.
- Pritchard, A., & Morgan, N. (2007). De-centring tourism's intellectual universe, or traversing the dialogue between change and tradition. The critical turn in tourism studies: Innovative research methodologies, 11-28.
- Ramos-Rodríguez, A. R., & Ruíz-Navarro, J. (2004). Changes in the intellectual structure of strategic management research: A bibliometric study of the Strategic Management Journal, 1980–2000. *Strategic Management Journal*, 25(10), 981-1004.
- Singala, M., Christou, E., & Gretzel, U. (2011). *Web 2.0 in Travel, Tourism and Hospitality: Theory. Practice and Cases*. Ashgate Publishing, Farnham.
- Wilkinson L. 2002. Multidimensional scaling. In *Systat 10.2 Statistics II* . Systat Software: Richmond, CA; 119–145.

- Ye, Q., Song, H., Li, T., 2012. Cross-institutional collaboration networks in tourism and hospitality research. *Tour. Manage. Perspect.* 2(3), 55–64.
- Zhao, D., & Strotmann, A. (2008). Comparing all-author and first-author co-citation analyses of information science. *Journal of Informetrics*, 2(3), 229-239.

Nguyen Minh Huan (nguyenminhhuan@tdt.edu.vn)

Vietnamese Studies Dept. - Faculty of Social Sciences & Humanities

Ton Duc Thang University

19 Nguyen Huu Tho Str., Tan Phong Ward, Dist. 7, Ho