

Co-authorship Analysis of Social Media Research in Tourism and Hospitality

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Abstract

The importance of social media in tourism and hospitality has been acknowledged by both scholars and practitioners. Recent research shows that there was a dramatic increase in the number of articles that focus on social media research in tourism and hospitality. Although several literature review studies exist in the field, no study has performed authorship or co-authorship analysis in this research area. This study contributes to the literature by building social structure of social media research published in tourism and hospitality journals by analyzing 385 articles. Top eight most influential scholars and institutions are illustrated. The study further depicts collaboration networks in social media research at author and institutional level and discuss its implications.

Keywords: co-authorship analysis; bibliometric analysis; social media; literature review.

1 Introduction

Social media are increasingly gaining utmost importance shaping our day to day life (Zeng & Gerritsen, 2014). Over the last decade, social media users have grown exponentially, estimating 2.8 billion users worldwide in 2017 (Kemp, 2017). The profound impacts of social media on consumers and marketers were acknowledged by both researchers and industry practitioners (Leung, Law, van Hoof, & Buhalis, 2013).

The role of social media in tourism is of special importance. Not surprisingly, social media research in tourism has dramatically increased (Zeng & Gerritsen, 2014) and researchers are suggested to continue this trend (Leung et al., 2013).

Scholars regularly review prior research based on given topic in a number of ways. One way of systematic review is bibliometric analysis. No study has performed bibliometric co-authorship analysis of social media articles published in tourism and hospitality journals. Given this research gap into account, this study performs co-authorship analysis to reveal the social structure of social media research in tourism and hospitality.

2 Literature Review

2.1. Bibliometric Analysis

Bibliometric analysis look at bibliographic information of published literature of a given research topic. Compared to traditional methods they are more advanced and

provide more objective results Koseoglu, Rahimi, Okumus, and Liu (2016). Intellectual, social and conceptual structures of given research topic can be investigated by those techniques (Koseoglu, Sehitoglu, & Craft, 2015). Bibliometric techniques can be divided into evaluative and relational techniques. Evaluative techniques are used to evaluate the impact of researched units whilst relational techniques investigate the relationships amongst those units. In this study, relational bibliometric techniques will be performed as they are considered to be more advanced.

Koseoglu et al. (2016) divided relational techniques into four: i) co-citation analysis, ii) co-word analysis, iii) co-authorship analysis, and iv) bibliographic coupling. While co-citation analysis links co-cited sources, bibliographic coupling links studies that share similar sources. Co-word analysis on its turn reveals conceptual structure of researched area by investigating relationship between words.

Co-authorship analysis investigates collaboration networks that scholars create by co-authoring articles together. This method helps to identify research communities and reveals social structure of researched area better than other bibliometric analysis (Koseoglu et al., 2016). Similarly, this study will investigate collaboration networks between scholars and institutions that publish social media articles in tourism and hospitality to build the social structure of this important research area.

2.2 Bibliometric Analysis in Tourism & Hospitality Research

Koseoglu et al. (2016) reviewed bibliometric studies published in nine leading tourism and hospitality journals. Findings show that, scholars focus on relational bibliometric methods least of all, whilst traditional qualitative review studies are dominant in tourism and hospitality research. The first two bibliometric relational studies came by Xiao and Smith (2008) and Hu and Racherla (2008). Xiao and Smith (2008) performed both bibliometric coupling and co-citation analysis whilst Hu and Racherla (2008) are the first to perform co-authorship analysis. Their study focused on articles published in top hospitality journals. While there are more co-citation analysis, only two more co-authorship studies can be identified in the field. Studies by i) Racherla and Hu (2010) and ii) Ye, Li, and Law (2013) focused on i) top tourism and on ii) both tourism and hospitality journals respectively to visualize the networks between authors. No co-authorship study so far has focused on specific research area in tourism.

2.3 Social Media Literature Review Studies

A number of studies reviewed social media literature from various perspectives. The study by Ngai, Tao, and Moon (2015) examined conceptual frameworks, constructs and theories that has been used in literature. Alves, Fernandes, and Raposo (2016) synthesized articles that focus specifically on social media marketing. Knoll (2016) on his turn, reviewed articles that focused on advertising in social media.

In tourism and hospitality, Leung et al. (2013) provided the first comprehensive review on social media research focusing on both consumer and supplier sides. In their quantitative literature review, Zeng and Gerritsen (2014) distributed social media publications in the field by year, source types, journals, regions, illustrated keywords, and methodologies that were frequently used. Finally, a recent study by Leung, Sun, and Bai (2017) performed co-citation and co-word analysis on 406 social media articles published in top business, tourism, and hospitality journals.

3 Methods

3.1 Data Collection

The process of data collection included several steps. Top 20 tourism and hospitality journals ranked by Google metrics were selected as the main sample. Titles, abstracts, and keywords of each of twenty journals were searched for social media and related keywords adopted from three previous review studies (Leung et al., 2013; Ngai et al., 2015; Zeng & Gerritsen, 2014). Search timeframe was limited to 2002 – 2016 as suggested by previous studies. EBSCOHost, Science Direct and Web of Knowledge databases were also searched to add up relevant articles. Only full-length articles that are published in refereed tourism and hospitality academic journals were selected. Final database included 385 social media articles after removing irrelevant articles.

3.2 Data treatment and analyses

The name of authors articles were copied from pdf files into a spreadsheet. Frequency analysis was performed on all author names and the results were carefully observed to find misspelling or initial variations. The same steps were performed for institutions to eliminate errors. Data analysis starts with descriptive frequency analysis to illustrate the impact of most influential authors and institutions. Subsequently, Bibexcel, Pajek, Ucinet 6, and VOSviewer software were used for social network analysis.

4 Results

Results of frequency analysis with a focus on top eight influential authors and institutions are illustrated in Table 1. The frequency in case of institutions refer to the cumulative number of publications of all authors in an institution. Results show that Rob Law and The Hong Kong Polytechnic University are most influential author and institution respectively. Following analyses map the collaboration networks at author and institutional levels as illustrated in Figures 1 and 2. The closer author or institution names appear to one another, the higher collaboration they have with each other. Also, the bigger the circle associated with the name is, the higher contribution the author or the institution has to the field. Figure 1 shows one big co-authorship component consisting of two smaller network components. No components are isolated from one another and are interrelated. At institutional level there are several large network components some of which are far away from one another (Figure 2).

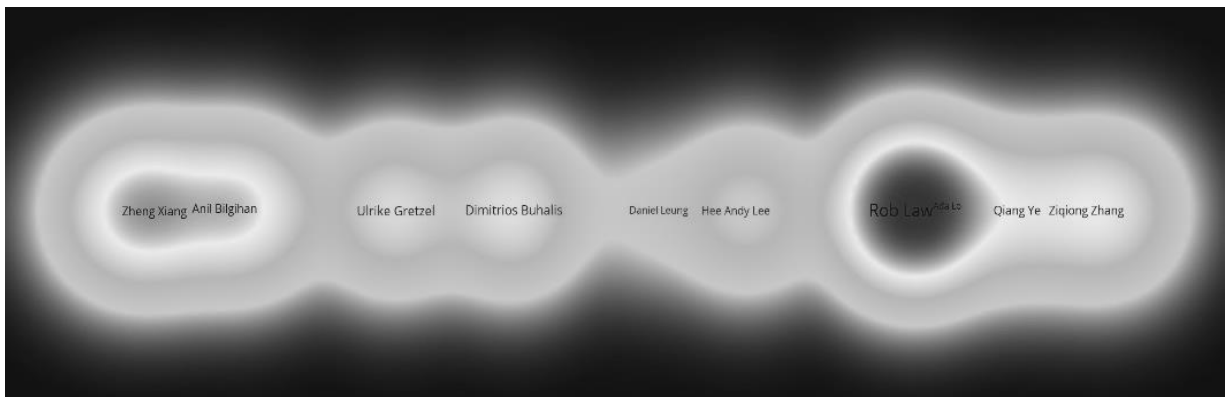


Fig. 1. Largest components of co-authorship network: author level

Table 1. Number of articles per author and Institution

Author Name	No.	Institution	No.
Rob Law	29	The Hong Kong Polytechnic University	81
Markus Schuckert	8	University of Central Florida	30
Dimitrios Buhalis	7	Harbin Institute of Technology	25
Anil Bilgihan	6	University of Florida	23
Beverley A. Sparks	6	University of Nevada	21
Svetlana Stepenkova	6	Griffith University	18
Ulrike Gretzel	6	Purdue University	18
Xianwei Liu	6	The Pennsylvania State University	18

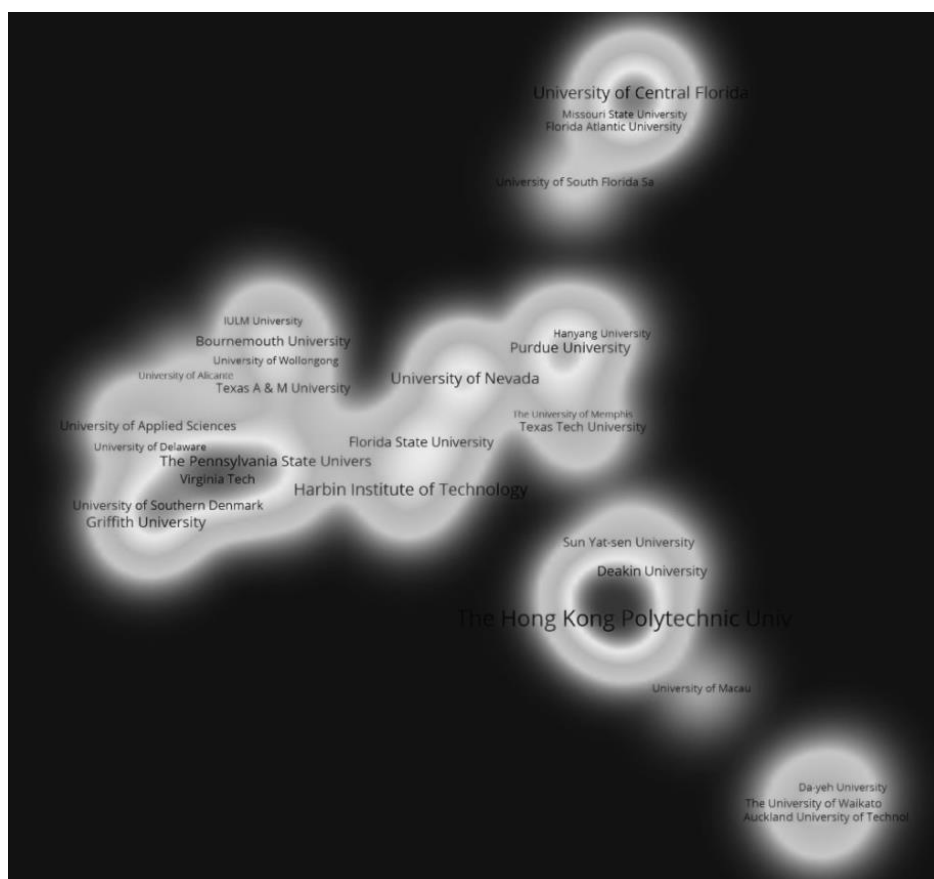


Fig. 2. Largest component of co-authorship network: Institutional level

5 Implications

This study is the first attempt to contribute to social media research in tourism and hospitality by mapping co-authorship networks at author and institutional level. Several important findings are revealed.

Largest components of collaboration networks were illustrated. This helps to build social structure of social media research in the field. At authorship level, only one big component was revealed with ten authors. This means that those authors collaborate with each other interchangeably whilst consistent collaboration between other authors is not high. At institutional level, several large collaboration networks could be identified. The smallest component had three institutions. This means that institutions in these components collaborate with more than one institution which shows that social structure of collaboration network at institutional level is more diverse.

In practice, junior scholars can consider selected authors or co-author networks for research collaborations or institutions and institutional networks for research projects and relevant job opportunities. Businesses, government agencies can also use these results and collaborate with selected institutions for consultation or other purposes.

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