Cross-citation and authorship analysis of hotel performance studies

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ABSTRACT

This study develops a literature review of hotel performance studies, and provides insights by adopting a cross-citation network approach. Two research questions are defined. First question focuses on the most cross-cited papers and journals, and identifies salient trends. Second question considers who are the most popular cross-cited and citing authors. This work is rooted in bibliometric studies, and adopts a relational approach. Based on cross-citations, a network is built by using 734 papers published during the period 1996–2015, as nodes and the cross-citations between them as links. Exploratory analysis reveals spectacular growth of outputs, with the last time period (2011–2015) including 56% of outputs. The most cross-cited papers possess the characteristics of: being older; representing 1% of sample but accounting for 14% of cross-citations. The 734 papers are published in 164 journals, but they show a clear core-periphery structure with International Journal of Hospitality Management ranked first.

1. Introduction

The growth in the number of published papers in hospitality and tourism is triggered in part by the creation of new journals (Cheng et al., 2011) together with those already in existence (Park et al., 2011). Furthermore, journals outside the "hospitality, leisure, sport & tourism" field (as defined by the Journal Citation Reports) continue to attract hospitality and tourism studies (García-Lillo et al., 2016; Leung et al., 2017). Collectively, this trend has dramatically increased the amount of contributes (i.e. Koc and Boz, 2014).

A number of hospitality related reviews have been published, with the aim of identifying and rationalising some emerging trends. Köseoglu et al. (2016b) found 190 reviews published between 1998 and 2015 with the temporal trend showing a progressive increase. This study reports a list of theme-focused reviews published in leading hospitality and tourism journals, catogorised by disciplines and topics. Within "management and business", marketing accounts for the highest percentage (39%), followed by information systems (13%), human resource management (10%) and finance (10%). There is only one paper exploring the hotel performance research stream (Sainaghi, 2010a).

This paper aims to make a contribution to this gap, by developing a bibliometric approach, which is able to identify leading papers, authors, journals and time trends in the field of "performance measurement systems" or "hotel performance". The relevance of this topic, for both theory and practice, is related to the central role that competitive advantage plays in management. Based on the Porterian approach, competitive advantage is defined as "the firm's ability to achieve superior performance (compared to competitors)" (Porter, 1985, p. 3). The resource-based view of the firm (Wernerfelt, 1984, 1995) with the presence of unique resources and capabilities (Dierickx and Cool, 1989) that generate performance above the mean (Barney, 1991) is pertinent. For this reason, performance measurement lies at the heart of competitive advantage (Venkatraman and Ramanujam, 1986).

Some published reviews focused on hotel performance are based on content analysis and have explored the disciplinary structure of this field by identifying relevant topics. Sainaghi (2010a) and Sainaghi et al. (2013) classify performance measurement papers according to the four balanced scorecard perspectives, while Pnevmatikoudi and Stavrinoudis (2016) distinguish between financial and non-financial indicators. The recent study of Sainaghi et al. (2017) develops a framework structured around three dimensions of the tourism performance measurement literature: the unit of analysis (destination, cluster, and firm level), the approaches (efficiency; competitiveness; tourism productivity; metrics in use; performance measurement systems) and the disciplines (accounting and financial management; economics; strategy). Overall these studies have clearly analysed the internal structure of this field.

An important gap of these hotel performance reviews is the absence

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of any study based on *bibliometric approach*. The present paper, by looking at the actual citation and referencing behaviour of academics in terms of their outputs, will provide some fresh insights. Cross-citations (as later described) is a bibliometric method which can provide reliable linkages to illustrate relationships between academics (Gomezelj, 2016). Discovering popular scholars and their work can assist in understanding evolution of theory and practice (Yang and Wang, 2015; Zehrer and Pechlaner, 2010). Moreover, in light of the current growing pace in hospitality performance measurement research, we believe that it is an appropriate time to take stock of the research generated over the last two decades.

Based on some recurrent topics in bibliometric (as later analysed), the core research questions explored by this study, using a longitudinal analysis, are the following.

The first enquiry, focuses on the most cross-cited papers and journals and identifies salient trends.

Research question 1.A What are the most cross-cited and cross-citing papers?

Research question 1.B What are the top cross-cited journals?

Research question 1.C Are there some time trends of cross-cited hotel performance articles?

The second research question explores popular cross-cited and citing authors.

Research question 2 Who are the popular cross-cited and citing authors?

The structure of this paper is as follows. First, we make the case for the measurement of impact, and introduce bibliometrics with emphasis on cross-citations. Second, the research methodology is considered with details pertaining with sample selection, and network approach. Third, we present the results and discussion for research questions one and two. Finally, conclusions, limitations and future research are proffered.

2. Literature review: bibliometric studies

Within an interdisciplinary field, traditional qualitative literature reviews tend to be limited in terms of the volume of data they can handle and are reliant on subjective judgments. In comparison, a bibliometric citation analysis can consider large datasets for quantitative analysis. A bibliometric approach evaluates and monitors the progress of given disciplines by sorting data, including citations, author affiliations, keywords, themes discussed, and methods employed for published studies in the disciplines via basic/advanced statistical techniques (Leung et al., 2017). As suggested by Hall (2011), bibliometrics has become an increasingly significant issue in tourism studies, while the application in hospitality is considerably less developed (Köseoglu et al., 2016a). Citations are objective measures, which illustrate the exchange of ideas within any field of enquiry (García-Lillo et al., 2016). Researchers will cite papers they believe to be important for their research (Benckendorff, 2009). Collectively, citations are influential as

they represent quality at the journal and individual level (Köseoglu et al., 2016b).

In recent years, there have been attempts to systematically analyse the hospitality and tourism management field (Köseoglu et al., 2016a). Citation based measures are less prone to systematic biases than subjective (Baumgartner and Pieters, 2003). Citations are one of the measures used to judge research quality and impact and have been a feature of a number of hospitality and tourism studies. Commencing with the work of Weaver and McCleary (1989), the application of bibliometrics to assess knowledge domains in hospitality and tourism are a feature of a number of studies.

Benckendorff and Zehrer (2013) categorise bibliometric methods into two groups: evaluative techniques and relational techniques. Evaluative techniques focus on the impact of academic studies by assessing performance with productivity measures, impact metrics, and hybrid metrics (Hall, 2011). Relational techniques delve into relationships among published research by considering their citations, authors, author affiliations, and keywords to conduct co-occurrence (Figueroa-Domecq et al., 2015). Relational evaluation has been applied much less frequently to understand tourism research activity and to date most studies have focused on co-authorship analysis (Ye et al., 2013). In fact, the majority of papers (190 contributes) analysed by Köseoglu et al. (2016a) are reviews (157, 83%) or evaluative studies (13%), while relational articles are marginal (4%). The present research contributes to this gap by adopting a relational approach, using cross-citation analysis (as later explained) in the field of hospitality and in particular in sub-research stream of hotel and performance.

The few relational papers are mainly based on network analysis (Benckendorff and Zehrer, 2013; Figueroa-Domecq et al., 2015; Gomezelj, 2016; Hu and Racherla, 2008; Köseoglu et al., 2015; Racherla and Hu, 2010; van der Zee and Vanneste, 2015; Ye et al., 2013; Yuan et al., 2014). In fact, this methodology helps to represent co-citation, co-authorship and more generally, interaction and relationships among scholars, universities or journals. For this reason, the present paper adopts this approach.

Bibliometric papers − both evaluative and relational – are mainly oriented to identify leading papers (Jamal et al., 2008), scholars (Schmidgall et al., 2007), journals (Svensson et al., 2009a, 2009b) research collaboration (Köseoglu et al., 2015; Zehrer and Pechlaner, 2010) or showing temporal trends (Cheng et al., 2011). These gaps have inspired the research questions previously stated.

Having clarified the positioning of this study, it is important to operationalise the relational approach. Citation relationships among authors can be categorized in three key ways: co-citation, coupling and cross-citation (Wang et al., 2012) (Fig. 1). *Co-citation* analysis use pairs of documents which often appear together in reference lists and have something in common (Xiao and Smith, 2008). This methodology, as reported in Fig. 1, focuses on references and, in this sense, explores the pillars of a specific research stream. In this sense, co-citation analysis
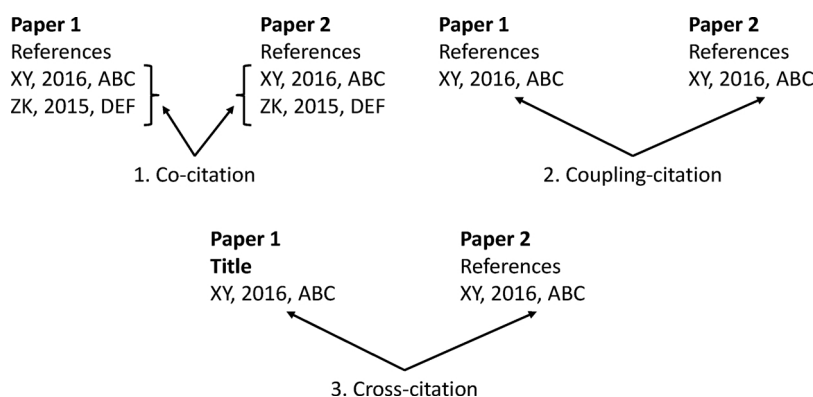

Fig. 1. Co-citation, coupling-citation and cross-citation.