A bibliometric analysis of food tourism studies in Southeast Asia

Phaninee Naruetharadhol and Nathatenee Gebsombut

Abstract: The purpose of this study is to examine a situation of food tourism research in Southeast Asia. By analysing literature and bibliometric, this paper investigates the feature of food tourism research and essential contributions. The research findings deliver an investigation of food tourism research in Southeast Asia based on systematic review studies and social network analysis. The paper found that there is one central cluster of food tourism articles, based on the South East Asian region focus. Articles are grouped into four viewpoints, including macro level, micro level, customer, and author viewpoints. However, only macro-level perspective articles have a direct linkage with food tourism themes. Thus, there is room for future research in this field.

Subjects: Hospitality; Tourism; Business, Management and Accounting

Keywords: bibliometric analysis; Southeast Asia; culinary tourism; food tourism; gastronomic tourism; wine tourism; review

1. Introduction

About 40% of tourists’ budgets (Boyne, Williams, & Hall, 2002) or one-third of total expenditures in a journey’s place (Hipwell, 2007) is for food. Thus, food becomes an essential factor in destination marketing strategies (du Rand & Heath, 2006). Official national tourism websites in many countries raise food as a cultural attraction. For example, France values wine tourism which not only let tourists sip or purchase wine, but vineyards and wine activities also attract tourists to visit France (The France Tourism Development Agency, 2017). Food can enhance destination as it ties with daily and unique cultures and local production (Everett & Aitchison, 2008). Thus, culinary tourism can connect food,
cultural tourism, and destination altogether. Culinary tourism is considered as an emerging industry (Horng & Tsai, 2012a; Tsai & Wang, 2017) because food and cuisine illustrate the main themes of destination intangible heritage, which can become an international brand (Horng & Tsai, 2012a). Studies fulfilled knowledge in culinary tourism area such as food brandings (Tsai & Wang, 2017), brand equity (Jiang, Li, Liu, & Chang, 2017), culinary tourism strategy (Horng & Tsai, 2012a) and restaurant determinants of satisfaction and post-purchase behaviour (Kincaid, Baloglu, Mao, & Busser, 2010; Soriano, 2002) because food and tourism integration strategy can enhance local economic development (Hall, Sharples, Mitchell, Macionis, & Cambourne, 2004).

Southeast Asian countries have various tourist attractions to visit and absorb a local way of living. In the year 2015, Southeast Asia attracted 104.6 million international tourist arrivals, which counted as 8.8% of the market share (United Nations World Tourism Organization [UNWTO], 2016). It represented the second highest in Asia and the Pacific country zones in international tourist arrivals (UNWTO, 2016). Many cities in this country zone are famous for street food (Tsai & Wang, 2017) and many countries have their foods as major tourist attractions (Horng & Tsai, 2010). Local food does represent not only local culture but also local ingredients. Having local food and ingredients as a product can create a competitive advantage to destinations because product-based strategies grounded in destination resources can generate sustainable tourism development (Stokes, 2008; Weaver, 2001). Tourists can taste local dishes related to destinations through various options such as restaurants, food hawkers, and food court.

To understand the stage of knowledge in the food tourism industry is essential in developing the industry. Practitioners in food-related hospitality and tourism fields can apply research findings to improve and enhance their products and services. However, concerning researchers’ knowledge, there are a few studies focus on bibliometric analysis in food tourism research, especially in the Southeast Asia region. The bibliometric analysis method can help both researchers and practitioners to have a holistic standpoint and move forward to the next step to provide better products and services for customers. Thus, this research aims to clarify the extent of academic research in the area of food tourism in Southeast Asia. This study has several research objectives. First, the study investigates journal articles in tourism and hospitality categories. Second, the study determines whether there is a specific nature of studies conducted focusing on Southeast Asian countries. Third, the study learns critical findings and contributions from selected articles. Forth, the study reveals the connection among selected articles. This study analyses journal articles by using bibliometric analysis of Southeast Asian countries to understand how to fulfil the attempts. This study focuses on selected articles in the Web of Science (WoS) database up to 2018.

2. Literature review

2.1. Food tourism

The word “culinary” may denote as ingredients, foods and beverages preparation and production, inspirations, events, social structures and food tourism (Ignatov & Smith, 2006). Food is a crucial motivation dimension for tourist destination visits (Joan C. Henderson, 2009). Food can link tourism and destination together as good food is a useful dimension of tourist destinations (Horng & Tsai, 2012a) for it plays an essential role in promoting and differentiating tourist destinations (Horng & Tsai, 2010). For this reason, culinary tourism is a part of cultural tourism (Horng & Tsai, 2010). The term “Culinary tourism” was formed in 1998 (Horng & Tsai, 2012a) and is relevant to travel to discover and enjoy local cuisines and creating culinary experiences (Wolf, 2002, as cited in Horng & Tsai, 2012a; Kivela & Crotts, 2006). Ignatov and Smith (2006) described culinary tourism as tourists either consuming/purchasing or observing/studying local food or food production process and perceive that this is a critical travel motivation. Other terms regarding food tourism are tasting tourism, wine tourism, food tourism and gastronomy tourism (Boniface, 2003; Brown & Getz, 2005; Hall et al., 2004; Kivela & Crotts, 2005).
Culinary tourism resources include food, food activities, facilities, events and organisations (Ignatov & Smith, 2006; Smith & Xiao, 2008). Destination restaurants’ atmosphere, taste, and other aspects can generate tourists’ sensations and experiences during their holiday (Kivelä & Chu, 2001). Specific destinations can be famous due to their unique cuisine (Cohen & Avieli, 2004). Food is a crucial dimension for dining experience (Tsai & Lu, 2012). The local or national destination can use food tourism as a core element in destination branding (Henderson, 2009). Although food takes part in the tourism industry, there are different tourists’ needs and expectation regarding food consumption. Boyne, Hall, and Williams (2003) divided tourists into four types according to food information search; (i) tourists actively search for food information, (ii) tourists search for food information but not actively, (iii) tourists take part in food activities but not consider food as a critical element for their visit, and (iv) tourists have no interest in excellent cuisine.

Food tourism also links with gastronomy. Gastronomy relates with services part of the economy and the culture. Kowalczyk (2020) mentioned that gastronomy is essential in the economy and socio-demography of the city. Lately, studies in gastronomy and tourism aim to discover the current and future potential of local food in destination marketing. For example, Mohamed, Hewedi, Lehito, and Maayouf (2019) studied Egyptian DMO websites to market local food tourism and gastronomic practices and found that the usage of food culture on Egyptian DMOs websites is still in the beginning stage. Lau and Li (2019) studied urban food festival and found that urban food festival creates outstanding connotations on the opinion of a place. Urban food festival can produce placelessness experience with placeness tourism. Thus, local food can be a drive of destination food and create a destination food image. Moreover, destination food can effect food preference and consumption among tourists (Promsivapallop & Kannaovakun, 2019).

Local food was marketed paralleled to local culture (Gyimóthy & Mykletun, 2009; Sims, 2009) as food motivates tourists to visit or revisit destinations (Ignatov & Smith, 2006; Kivela & Crotts, 2006; Tresidder & Hirst, 2012). As a tourist destination, food is an essential item in many Southeast Asian cities and countries (Henderson, 2016; Henkel, Henkel, Agrusa, Agrusa, & Tanner, 2006; Tsai & Wang, 2017). Thus, these countries promote culinary tourism (Horng & Tsai, 2012a). For example, Thailand has advertised the country with the “Global Kitchen Project” and improved national gastronomic uniqueness (Sunanta, 2005). Singapore has developed food variety and cultures as a critical destination attraction (Joan C. Henderson, 2016; Horng & Tsai, 2010). From local ingredients and local cooking style, tourists can feel local culture through local food. Culinary tourism helps local communities to create job opportunities as well as to preserve local food culture (Horng & Tsai, 2012a).

2.2. Bibliometric analysis in tourism
Bibliometric analysis is an analysis based on quantitative information of significant previous academic articles from the bibliographic database (Omerzel, 2016). The bibliometric approach includes sorting citations, authorships, keywords, themes, and methodology (cited by Koseoglu, Rahimi, Okumus, & Liu, 2016). Scholars use bibliometric methods to contact research or publication performance and plot a structure of focus studies (Cobo, López-Herrera, Herrera-Viedma, & Herrera, 2011). Koseoglu et al. (2016) divided bibliometric methods into three groups, namely, review studies, relational techniques, and evaluation techniques. Review studies contain a systematic review, meta-analysis, and qualitative approach. Relational techniques include citation analysis, bibliographic analysis, co-wording analysis, and co-authorship analysis. Evaluative techniques contain productivity measures, impact metrics, and hybrid metrics.

In the tourism area, many studies applied bibliometric methods. For example, Köseoglu, Sehitoglu, Ross, and Parnell (2016) used the bibliometric method to analyse business ethic articles in tourism and hospitality industries, and Omerzel (2016) applied bibliometric analysis in evaluating articles related to innovation in hospitality and tourism. Koseoglu et al. (2016)
studied bibliometric studies in tourism and found that these methods suggestively enlarged from the year 2008 onward. Studies may utilise bibliometric analysis in order to focus on specific purposes. There are several articles uses bibliometric studies to analyse specific tourism and leisure themes such as the development of research in medical tourism (Chuang, Liu, Lu, & Lee, 2014), the core and balance framework in family leisure studies (Townsend, Van Puymbroeck, & Zabriskie, 2017) and environmental justice issue articles in leisure field (Mullenbach & Baker, 2018). Several scholars applied bibliometric studies to form knowledge in certain places such as Benckendorff (2009), Galani-Moutafi (2004), and Silva, Rodrigues, Mendes, and Pereira (2010). In term of food tourism bibliometric studies, Sánchez, de la Cruz Del Río Rama, and García (2017) studied wine tourism research state in WoS and Scopus. They found that there were differences in scope, data, volume, and coverage policies between databases. This study would like to focus on a specific theme as well as a specific place, which is the food tourism theme in the Southeast Asia region.

3. Methodology

This study confined with the published articles in peer-reviewed journals in the WoS Core Collection database, which include Science Citation Index Expanded (SCIE) and Social Sciences Citation Index (SSCI) up to early of 2018. This study applied “food”, “culinary”, “gastronomy”, “wine”, “coffee”, “tourism”, “Southeast Asia”, and specific countries as search keywords. In searching for progress, this study selected a topic to gather search result as it contains title, abstract, and keywords while searching. This study focuses on hospitality and tourism articles only. This because during search progress, some search results did not match with a food tourism focus. Then, researchers read articles and selected only articles focusing on food tourism in Southeast Asian countries. Finally, this research selected 12 articles for the study.

After collected and selected articles, analysis from both qualitative and quantitative data was applied. This study employed bibliometric methods. Ruhanen, Weiler, Moyle, and McLennan (2015) mentioned that bibliometric study used statistics to evaluate academic articles. First, a primarily quantitative approach was selected as it can classify, measure and analyse information in the articles such as journal, authors, keywords, research methodological approach, data collection, and results. Previous studies in tourism applied the analysis approach (Köseoglu et al., 2016; Line & Runyan, 2012; Omerzel, 2016; Ruhanen et al., 2015). Later on, this research conducted a systematic literature review approach. Regarding Kwok, Xie, and Richards (2017), a systematic review (i) focuses on specific issues, (ii) involves structural approach, (iii) focuses on specific study areas, (iv) categorises the most excellent indication and (v) the future research can extend the knowledge. As this research would like to evaluate the status of food tourism articles, thus the study focused on the methodological approach, findings, and implementation. Lastly, this research operated a social network analysis approach. The analysis offers information about the social network altogether (Hambrick, 2017). It has been used in various topics in tourism fields such as destination image (Wang, Li, & Lai, 2018), online reviews (Tussyadiah & Zach, 2017) and tourist attractions (Liu, Huang, & Fu, 2017). A sociogram was created for the analysis because it displays nodes and lines of the network members and reveals their relationships (Hambrick, 2017). Thus, this research employs social network analysis to realise the structure of food tourism studies in South East Asian Countries. Research methods can be explained, as illustrated in Figure 1.

4. Findings

4.1. Descriptive analysis

After journal selection, the research analysed articles using quantitative methods, including the bibliometric analysis and network analysis. As shown in Table 1, articles were in Asia Pacific Journal of Tourism Research, International Journal of Hospitality Management, Tourism Management, Tourist Studies, International Journal of Tourism Research, Journal of
The first article was published in the year 1996, which is the work, by Telfer and Wall (1996). The most published year is the year 2012 which contains works of Chaney and Ryan (2012), J. C. Henderson, Yun, Poon, and Xu (2012), Horng and Tsai (2012a, 2012b), and Kasim and Ismail (2012). In terms of authorship, two authors contain more than half of the selected articles, followed by a single author. Lastly, Singapore is the most selected country as a place of study, followed by Indonesia, Thailand, and Malaysia. Two articles studied food tourism in Singapore (Chaney & Ryan, 2012; Henderson et al., 2012), while three articles conducted studies between Singapore and other countries (Horng & Tsai, 2010, 2012a, 2012b). Two articles did a study using two Southeast Asian countries, containing Singapore and Thailand (Horng & Tsai, 2010, 2012a).

Table 2 shows the results of the methodological analysis in food tourism articles in Southeast Asian countries. This study applied the theoretical and methodological approaches codes and coding description from Ruhanen et al. (2015). As a whole, there were four approaches found in the selected articles. Case study and empirical study are the most applied approaches, followed by a comparative case study. The perspective of the study exhibits concerned aspects of the articles. The analysis found that the studies focus on the perspective of macro-level most, followed by micro-level, customer perspective, and author perspective.

In term of data used in selected articles, qualitative data accounted for 66.67%, while quantitative data were 33.33%. Moreover, the sample frame was primary data for 66.67%, followed by mixed between primary and secondary data for 33.33%. Lastly, in term of statistical analysis, qualitative methods such as content analysis were found as the most selected approach, accounting for 66.67%. Quantitative methods accounted for 33.33% with descriptive analysis, Mann–Whitney test, Chi-square, and a multiple regression model.
4.2. Review analysis

In the review analysis session, this paper would like to analyse the situation of published articles from three perspectives, including, macro-level, micro-level, and customer and author level. The research at macro-level focuses on how articles research the national scope. A work of (Horng & Tsai, 2010) investigated the food culture presented in East Asian countries government tourism websites, including Singapore and Thailand. A work by Horng and Tsai (2012a) studied vital success factors in culinary tourism in Asia-Pacific perspectives, which Singapore and Thailand were in this research. The article of Horng and Tsai (2012b) compared marketing strategies between Singapore and Hong Kong. A work from Chaney and Ryan (2012) focused on Singapore's World Gourmet Summit as a gastronomic tourism example, which promotes Singapore as a gastronomic destination. Lastly, Chong (2017) applied Diamond Model of Porter (1990) in analysing the competitive position of the wine tourism industry in Thailand. All papers collected qualitative data and analysed through qualitative approaches. Moreover, all articles specially described the food tourism theme such as gastronomic tourism, culinary tourism or wine tourism.
Selected papers describe concepts of food tourism in broad manners, and then discuss situations within the countries. Horng and Tsai (2010) analysed tourism government websites in term of culinary marketing techniques and found that the websites provide culinary tourism experience information for potential tourists with their distinct characters. Moreover, the article provides a guideline to improve the websites. Horng and Tsai (2012a) formed vital success factors in Asia-Pacific perspectives and found that they were related to resources, governmental principals, marketing strategies, and educational environments. Horng and Tsai (2012b) discovered culinary tourism development in Hong Kong and Singapore in term of marketing strategies. In terms of Singapore, the study found that the country has diversified cuisine and culture. The success of marketing strategies can enhance the achievement of cooperation between the public and private sectors. This research provides ideas for building a culinary image by promoting culinary tourism through various forms such as food events, and authentic experiences. Both studies applied the resource-based theory perspective to analyse the strategies. Chaney and Ryan (2012) defined the development of New Asian Cuisine in Singapore and its role for the destination promotion using a case of the World Gourmet Summit. The paper analysed factors assisting the success of the Summit. Chong (2017) studied a situation of wine tourism in Thailand and found that it was a new-born industry, which required awareness of tourists and tourism operators. More knowledge and supports from supporting industries sector and government agency were needed. Thus, there are various types of food products, services, and activities served in Southeast Asian countries for the various rank of tourists groups. Most articles focus on food tourism as a marketing destination or tourist attractions. These articles take eyes on some specific emphasis such as the World Gourmet Summit, government website, tourism strategies, and wine tourism.

| Category                                | No. of articles | % of articles |
|-----------------------------------------|-----------------|---------------|
| Theoretical and methodological approaches|                 |               |
| Case study                              | 4               | 33.33%        |
| Empirical study                         | 5               | 41.67%        |
| Comparative case study                  | 2               | 16.67%        |
| Theory (framework) building             | 1               | 8.33%         |
| Perspective of the study                |                 |               |
| Macro-level                             | 5               | 41.67%        |
| Micro-level                             | 3               | 25.00%        |
| Customer                                | 3               | 25.00%        |
| Author                                  | 1               | 8.33%         |
| Type of Data                            |                 |               |
| Qualitative data                        | 8               | 66.67%        |
| Quantitative data                       | 4               | 33.33%        |
| Mix                                     | 0               | 00.00%        |
| Sample Frame                            |                 |               |
| Primary data                            | 8               | 66.67%        |
| Secondary data                          | 0               | 00.00%        |
| Mix                                     | 4               | 33.33%        |
| Statistical technique/Analysis Methods  |                 |               |
| Qualitative methods (e.g. content analysis) | 8           | 66.67%        |
| Quantitative methods (e.g. Descriptive analysis) | 4            | 33.33%        |

Source: Created by the authors.
Research at the micro-level perspective focused on a business standpoint. The article by Telfer and Wall (1996) analysed the connection between food production and tourism, based on a case study of food production projects in the selected hotel. The article by Kasim and Ismail (2012) emphasised environmental management practices in restaurants in Malaysia. Lastly, a paper from Ernawati, Sanders, and Dowling (2017) analysed products in community-based tourism, in which food and beverage are one of the elements. This research is in micro-level perspective, as this article would like to identify the criteria of products in order to create sustainability of community-based tourism. Among the three studies, there is only one paper with a qualitative approach, while the rest used a quantitative approach.

The studies discover businesses in many aspects, which generate information about food tourism. Telfer and Wall (1996) explored the economic linkage between food production and tourism. As the food is an original consumed product in tourists’ travel, to prepare enough food production for the tourism industry is essential. This study analysed food production projects of a hotel case in Indonesia. They found that there were connections between food production and tourism. The attention for economic benefit for local people was considered significant. Thus, the link between businesses and local production is essential to sustain the tourism industry. Kasim and Ismail (2012) discovered environmentally friendly practices used in the restaurant business. They found that there were weak practices in the restaurant business even though there were concerns about environmental topics. These may relate to various stakeholders such as the public sector, business partners, green supply chain businesses, and customers. Thus, the overall environmental friendly practice needs interactions among sectors.

Ernawati et al. (2017) studied community-based tourism products perceived by host communities and tourists. Food and beverage are parts of nine products in this research. Perceptions of food and beverage were mostly associated. Both hosts and tourists agreed to favour the freshness of ingredients, local cooking practices and recipes, taste, hot and hygiene food, drink, and utensils. However, both hosts and tourists did not favour to have meals in restaurants. The agreement not to favour restaurants may relate to the nature of community-based tourism. From selected articles, it seems that the micro level studies mostly focused on business practices. Although there is no direct focus on any food tourism topic, it seems that the relationship between tourism business and food supplies is needed for declaring. Among three articles, concerns toward ingredients were raised in term of environmentally friendly practice, hygiene, and food production. With a less direct focus on culinary or gastronomic tourism at the micro level, there is room for researchers to extend the knowledge in this area.

Lastly, the customers and authors viewpoint articles focus on the perception of customers or authors in a specific situation. There are four articles in this group—two articles conducted through qualitative methods, and the others conducted with quantitative methods. The article of J. C. Henderson et al. (2012) studied hawker centres attractiveness in tourists’ aspect. The paper of Wong and Musa (2014) studied retirement motivation in choosing Malaysia as a second home. This article has food variety as a part of motivators. Next, the study of Bell (2015) described an authentic space of home cooking school in Indonesia in economic and cultural aspects. Lastly, the study of Torres Chavarria and Phakdee-auksorn (2017) analysed attitudes of international tourists concerning street food in Thailand.

These studies show the perception of tourists and authors towards providers such as food hawker centres, street food, second home, and home cooking school. J. C. Henderson et al. (2012) studied hawker centres in Singapore and found that they have the potential to be an attractive amenity for tourists. Thus, the hawker centres can be tourists’ attractions through destination marketing and product development. Wong and Musa (2014) discovered motivations of foreign retirees to be participants in a second home. Food is one of the motivations found in this study. The research showed that food variety which included exotic fruits and food diversity was a new motivation.
Moreover, the food importance is more than to fulfil the fundamental requirement, but rather leads to experience and fulfil needs. Bell (2015) studied home cooking school in Bali, Indonesia. The study explored the local space of home cooking school entrepreneur. It found that daily lives of local people could become a commodity and generate income for their family. Comparing to professional cooking school, there was rather a friend-like atmosphere in the home cooking school as residents may share their personal space with tourists through the service. The author mentioned that the case of personal space in the home cooking school might reflect the local politico-economic topics. Lastly, Torres Chavarria and Phakdee-aksorn (2017) explained attitudes of international tourists in terms of street foods in Phuket, Thailand. They identified important antecedents of intentions towards street foods. Affection was the most powerful factor affecting the intentions. Studies in customer perceptions mostly focused on how tourists perceived food service and products such as hawker centres, street foods or food variety. Unique characters of products and services provided in destinations can become an advantage as it may provide authentic feelings for tourists. In terms of author perception, the study specified topic in a very deep detail, which help generate insight of the topic. However, studies in author perception are quite rare.

Although macro perspective articles have a bigger amount than other groups, a portion of all groups is not far different. There is a direct connection between macro perspective articles and food tourism. All articles in the macro perspective articles directly describe the food tourism keywords such as culinary tourism, gastronomic tourism, and wine tourism. However, there is no direct food tourism keyword in other perspective articles. In term of data analysis, the macro-level and author perspectives articles were all conducted with qualitative approaches. Research in micro-level and customer perspectives applied both quantitative and qualitative approaches.

4.3. Bibliometric analysis
A bibliometric analysis was done through Gephi program to find the relationship among studies. Bibliometric analysis is a method in categorising relevant previous studies by using quantitative information from the specific database (Gomezelj, 2016). This study applied social network analysis to gather social actors and the interactions among them. Du, Li, Brown, Peng, and Shuai (2014) mentioned that a social network comprises of multiple points and the connections between them and the analysis encompass quantitative exploration on the relationships. Results from the analysis present a valuable raise of conventional forms of analysis. This research collected bibliometric of 12 articles and specific papers cited those articles. Then it searched for linkage among research because scholars found particular research useful then they cite articles (Gomezelj, 2016). Thus, the methodology constructs the academic fundamentals of the present literature.

They were focusing on seed articles, resulting in Figure 2 displays one central cluster and four ungrouped articles. This result helps in to clarify the dominant attention of food tourism studies in Southeast Asian countries. The work of Telfer and Wall (1996) and Horng and Tsai (2010) have played a vital role in connecting other studies in the network. The work of Horng and Tsai (2010) had the most intense cooperation with other seed articles in the cluster as it had five direct connections and two indirect connections. The work of Telfer and Wall (1996) had two direct connections and two indirect connections with other seed articles in the cluster. It is apparent from Figure 2 that other scholars cited all seed articles in the cluster. Moreover, articles in all perspectives formed the cluster.

Apart from the cluster, there are four other seed articles not cooperate with other seeds articles. Works from Wong and Musa (2014) and Kasim and Ismail (2012) have been cited from other articles apart from the cluster. Lastly, works from Chong (2017) and Ernawati et al. (2017) were recent articles in the study field. Non-clustered articles were in macro-level, micro-level, and customers’ perspectives. However, only works from Chong (2017) has a direct connection with the food tourism terms.
5. Discussions and conclusions

Food is a critical part of the tourism industry because tourists consume food almost half of their budget (Hipwell, 2007). After the term “Culinary tourism” formed in 1998 (Horng & Tsai, 2012a), there have been several studies focusing on food tourism such as gastronomic tourism, wine tourism, and coffee tourism. This study aims to investigate the stage of knowledge and nature of food tourism studies in Southeast Asia. Businesspersons in food-related hospitality and tourism fields can improve and enhance their products and services before research results.

Moreover, in terms of research perspectives, bibliometric analysis in food tourism research can create a holistic standpoint. Thus, this research aims to clarify the extent of academic research in the area of food tourism in Southeast Asia by using bibliometric analysis through several research methods. First, the study investigates journal articles in tourism and hospitality categories. Second, the study determines whether there is specific nature of studies conducted focusing on Southeast Asian countries. Third, the study learns key findings and contributions from selected articles. Forth, the study reveals connection among selected articles. This article applied bibliometric methods to understand publications structures and focus on food studies. The edge of the published articles was limited to the WoS Core Collection database in English language only.

Within the selected articles, the first study was published in the year 1996 (Telfer & Wall, 1996). With a decade disappear, the later articles have been published since the year 2010 (Horng & Tsai, 2012a) onward. The growth in food tourism studies in Southeast Asia was quite small, with the most expansion in the year 2012. The study found that articles were mostly based on Singapore, followed by Indonesia, Thailand, and Malaysia. The articles were found with two authorships most. Case study and empirical study were two most applied methodological approaches. In terms of the perspective of study, macro perspective was the most focus theme, followed by micro-level, customer, and author perspectives, respectively. Moreover, qualitative and primary data were the most applied data in term of the type of data and sample frame. In term of analysis methods, qualitative approaches were the most applied method.
The analysis used in this study provides an idea of the position of food tourism studies in Southeast Asia. This paper divided studies into four groups, which adjusted from the work of (Omerzel (2016)). However, only macro perspective studies had a deep focus on specific food tourism such as gastronomic tourism, culinary tourism or wine tourism. In the macro perspective, various food commodities, services, and activities were parts of marketing destination or tourist attractions. None of the micro perspective studies had a relation with specific food tourism keywords.

On the other hand, the attention was on the relationship between food and environmentally friendly practice, hygiene, and food production. The focus of tourists’ perception is toward food service and product features.

The growth in food tourism studies in Southeast Asia was relatively small. Macro perspective was the most focus theme, followed by micro-level, customer, and author perspectives, respectively. Qualitative and primary data were the most applied data in term of the type of data and sample frame. Qualitative approaches were the most applied method. Case study and empirical study are the most applied approaches, followed by a comparative case study.

Macro perspective studies had a deep focus on specific food tourism such as gastronomic tourism, culinary tourism or wine tourism. Food commodities, services, and activities were parts of marketing destination or tourist attractions. The attention of the micro perspective studies was on the relationship between food and environmentally friendly practice, hygiene, and food production. The focus of tourists’ perception is toward food service and product features.

Social network analysis cluster was formed, and the investigation of the cluster discovered the character of the field. There is central cluster connected eight seed articles. The work of Horng and Tsai (2010) played an important role as it was directly cited from a macro level, customer, and author perspectives seed articles.

Source: Created by the authors.
product features. Although there was no direct emphasis on exact food tourism topics found in author perspective, there were detailed food features taken into account. Thus, there is room for future research in concentrating on specific food tourism topics. Moreover, as the major approach is qualitative methods, there is room for quantitative methods to ascertain the findings in future research.

With the bibliometric analysis, the notional background of food tourism studies in Southeast Asia was revealed. Social network analysis cluster was formed, and the investigation of the cluster discovered the character of the field. The results showed one central cluster, which connected eight seed articles. The work of Horng and Tsai (2010) played an essential role in the field because it has had a prominent connection with other seed articles in the cluster. The article was directly cited from a macro level, customer, and author perspectives seed articles. It was co-cited with other seed articles in the cluster. The work of Telfer and Wall (1996) was also described in specific seed articles. The results showed that the work directly and indirectly connected with macro-perspective seed articles only. Table 3 shows the summary of research objectives and research finding.

The contribution of this paper is its illustration of a value of bibliometric techniques as methods for disclosing food tourism research connection. This paper should be valuable for food tourism service providers and researchers. Business can apply food tourism to focus on their managerial implication. Moreover, this paper extends the social network analysis to understand the relationship between seed papers. Researchers can apply the methodology to other study fields. This paper hopes to encourage the further utilisation of social network analysis in the hospitality and tourism field of study.

Limitations of this study should be marked. First, this study is limited to Southeast Asian countries. The specific location leads to the restricted number of selected articles and cannot represent the industry. Second, selected articles were retrieved based on the WoS index in English, which may not contain every article in this theme. Third, the research terms were limited to food, culinary, gastronomic, wine, coffee, tourism, Southeast Asia, and specific Southeast Asian country names. Other food tourism terms were not in consideration of this study. Fourth, selected articles were limited only in hospitality and tourism categories. Future research in bibliometric and review analysis can enhance these limitations to fulfil the gap.

Acknowledgements
The authors would like to sincerely thank International College Khon Kaen University for the valuable supports.

Funding
The authors received no direct funding for this research.

Author details
Phaninee Naruetharadhol1
E-mail: phaninee@kku.ac.th
ORCID ID: http://orcid.org/0000-0001-7158-0581
Nathatenee Gebsombut1
E-mail: nathge@kku.ac.th
ORCID ID: http://orcid.org/0000-0003-1822-8751
1 International College, Khon Kaen University, Khon Kaen, Thailand.

Citation information
Cite this article as: A bibliometric analysis of food tourism studies in Southeast Asia, Phaninee Naruetharadhol & Nathatenee Gebsombut, Cogent Business & Management (2020), 7: 1733829.

References
Bell, C. (2015). Tourists infiltrating authentic domestic space at Balinese home cooking schools. Tourist Studies, 15(1), 86–100. doi:10.1177/1468797614550958
Benckendorff, P. (2009). Themes and trends in Australian and New Zealand tourism research: A social network analysis of citations in two leading journals (1994–2007). Journal of Hospitality and Tourism Management, 16(1), 1–15. doi:10.1016/j.jhtm.2016.11.011
Boniface, P. (2003). Tasting Tourism: Travelling for Food and Drink. London, UK: Routledge. https://doi.org/10.4324/9781315241777
Boyne, S., Williams, F., & Hall, D. (2002). On the trail of regional success: Tourism, food production and the Isle of Arran Taste Trail. In A.-M. Hjalager & G. Richards (Eds.), Tourism and gastronomy (pp. 91–114). London: Routledge.
Boyne, S., Hall, D., & Williams, F. (2003). Policy, support and promotion for food-related tourism initiatives. Journal of Travel & Tourism Management, 14(3–4), 131–154. doi:10.1016/S0966-9582(03)00033-X
Brown, G., & Getz, D. (2005). Linking wine preferences to the choice of wine tourism destinations. Journal of Travel Research, 43(3), 266–276. doi:10.1177/0047287504273027
Chaney, S., & Ryan, C. (2012). Analyzing the evolution of Singapore’s world gourmet summit: An example of gastronomic tourism. International Journal of Hospitality Management, 31(2), 309–318. doi:10.1016/j.ijhm.2011.04.002
Chong, K. L. (2017). Thailand wine tourism: A dream or a reality? Asia Pacific Journal of Tourism Research, 22(6), 604–614. doi:10.1080/10941665.2017.1308389
Chuang, T. C., Liu, J. S., Lu, L. Y. Y., & Lee, Y. (2016). The main paths of medical tourism: From transplantation to beautification. Tourism Management, 45, 49–58. doi:10.1016/j.tourman.2014.03.016
Cobo, M. J., López-Herrera, A. G., Herrera-Viedma, E., & Herrera, F. (2011). Science mapping software tools: Review, analysis, and cooperative study among tools. *Journal of the American Society for Information Science and Technology, 62*(7), 1382–1402. doi:10.1002/asi.21525

Cohen, E., & Avieli, N. (2004). Food in tourism - Attraction and impediment. *Annals of Tourism Research, 31*(4), 755–778. doi:10.1016/j.annals.2004.02.003

Du, H., Li, N., Brown, M. A., Peng, Y., & Shuai, Y. (2014). A bibliographic analysis of recent solar energy literatures: The expansion and evolution of a research field. *Renewable Energy, 66*, 696–706. doi:10.1016/j.renene.2014.01.018

Du Rand, G. E., & Heath, E. (2006). Towards a framework for food tourism as an element of destination marketing. *Current Issues in Tourism, 9*(3), 206–234. doi:10.1080/13683500500615980

Ernawati, N. M., Sanders, D., & Dowling, R. (2009). Commodifying culinary heritage as meal adventures in sustaining regional identity: A case study of Tanayiku natural ecology park. *Journal of Hospitality & Tourism Research, 33*(3), 259–283. doi:10.1177/1356766709104271

Gyimóthy, S., & Myklebust, R. J. (2009). Scary food: Commodifying culinary heritage as meal adventures in tourism. *Journal of Vacation Marketing, 15*(3), 259–273. doi:10.1177/1356766709104271

Hall, C. (Ed.), Sharpies, L. (Ed.), Mitchell, R. (Ed.), Maconis, N. (Ed.), Cambourne, B. (Ed.). (2004). *Food Tourism Around The World*. London: Routledge. https://doi.org/10.4324/9780080477862

Hambrick, M. E. (2017). Sport communication research: A social network analysis. *Sport Management Review*, 20(2), 170–183. doi:10.1016/j.smr.2016.08.002

Henderson, J. C. (2009). Food tourism reviewed. *British Food Journal, 111*(11), 317–326. doi:10.1108/0007070091051470

Henderson, J. C. (2016). Local and traditional or global and modern? Food and tourism in Singapore. *Journal of Gastronomy and Tourism, 2*(1), 55–68. doi:10.3727/216929716X14546359634949

Henderson, J. C., Yun, O. S., Foon, P., & Xu, B. W. (2012). Hawker centres as tourist attractions: The case of Singapore. *International Journal of Hospitality Management, 31*(3), 849–855. doi:10.1016/j.ijhm.2011.10.002

Henkel, R., Henkel, P., Agrusa, W., Agrusa, J., & Tanner, J. (2006). Thailand as a tourist destination: Perceptions of international visitors and Thai residents. *Asia Pacific Journal of Tourism Research, 11*(3), 269–287. doi:10.1080/10941660600753299

Hipwell, W. T. (2007). Taiwan aboriginal ecotourism - Tanayiku natural ecology park. *Annals of Tourism Research, 34*(4), 876–897. doi:10.1016/j.annals.2007.07.002

Horrin, J.-S., & Tsai, C.-T. (2010). Government websites for promoting East Asian culinary tourism: A cross-national analysis. *Tourism Management, 31*(1), 74–85. doi:10.1016/j.tourman.2009.01.009

Horrin, J.-S., & Tsai, C.-T. (2012a). Culinary tourism strategic development: An Asia-Pacific perspective. *International Journal of Tourism Research, 14*(1), 40–55. doi:10.1002/jtr.834

Horrin, J.-S., & Tsai, C.-T. (2012b). Exploring marketing strategies for culinary tourism in Hong Kong and Singapore. *Asia Pacific Journal of Tourism Research, 17*(3), 277–300. doi:10.1080/1094166X.2011.625432

Ignatov, E., & Smith, S. (2006). Segmentation of Canadian culinary tourists. *Current Issues in Tourism, 9*(3), 235–255. doi:10.1080/13683500500615980

Jiang, W. H., Li, Y. D., Liu, C. H., & Chang, Y. P. (2017). Validating a multidimensional perspective of brand equity on motivation, expectation, and behavioural intention: A practical examination of culinary tourism. *Asia Pacific Journal of Tourism Research, 22*(5), 524–539. doi:10.1080/10941665.2017.1278106

Kasim, A., & Ismail, A. (2012). Environmentally friendly practices among restaurants: Drivers and barriers to change. *Journal of Sustainable Tourism, 20*(4), 551–570. doi:10.1080/09669582.2011.621540

Kincoid, C., Baloglu, S., Mao, Z., & Busser, J. (2010). What really brings them back?: The impact of tangible quality on affect and intention for casual dining restaurant patrons. *International Journal of Contemporary Hospitality Management, 22*(2), 209–220. doi:10.1108/09596111011018197

Kivelå, J. J., & Chu, C. Y. H. (2001). Delivering quality service: Diagnosing favorable and unfavorable service encounters in restaurants. *Journal of Hospitality & Tourism Research, 25*(3), 251–271. doi:10.1177/109634800102500300

Kivelå, J., & Crotts, J. C. (2005). Gastronomy tourism: A meaningful travel market segment. *Journal of Culinary Science & Technology, 4*(2–3), 39–55. doi:10.1300/J385v04n02_03

Kivelä, J., & Crotts, J. C. (2006). Tourism and gastronomy: Gastronomy’s influence on how tourists experience a destination. *Journal of Hospitality & Tourism Research, 30*(3), 354–377. doi:10.1177/109634800600626797

Koseoglou, M. A., Rahimi, R., Okumus, F., & Liu, J. (2016). Bibilomeric studies in tourism. *Annals of Tourism Research, 61*, 180–198. doi:10.1016/j.annals.2016.10.006

Koseoglou, M. A., Sehitoglu, Y., Ross, G., & Parnell, J. A. (2016). The evolution of business ethics research in the realm of tourism and hospitality: A bibliometric analysis. *Journal of Contemporary Hospitality Management, 28*(8), 1598–1621. doi:10.1080/JCHM-04-2015-0188

Kowalczyk, A. (2020). Dimensions of Gastronomy in Contemporary Cities. In A. Kowalczyk & M. Derek (Eds.), *Gastronomy and urban space*. The urban book series. Cham. Springer. http://doi.org/10.1007/978-3-030-34492-4_3

Kwok, L., Xie, K. L., & Richards, T. (2017). Thematic framework of online review research A systematic analysis of contemporary literature on seven major hospitality and tourism journals. *International Journal of Contemporary Hospitality Management, 29*(8), 1507–1534. doi:10.1108/IJCHM-11-2015-0664

Lau, C., & Li, Y. (2019). Analyzing the effects of an urban food festival: A place theory approach. *Annals of Tourism Research, 74*, 43–55. doi:10.1016/j.annals.2018.10.004

Lin, N. D., & Runyan, R. C. (2012). Hospitality marketing research: Recent trends and future directions. *International Journal of Hospitality Management, 31*(2), 477–488. doi:10.1016/j.ijhm.2011.07.006

Liu, B., Huang, S., & Fu, H. (2017). An application of network analysis on tourist attractions: The case of...
Xinjiang, China. *Tourism Management*, 58, 132–141. doi:10.1016/j.tourman.2016.10.009

Mohamed, M. E., Hewedi, M., Lehto, X., & Maayouf, M. (2019). Marketing local food and cuisine culture online: A case study of DMO’s websites in Egypt. *International Journal of Tourism Cities*. doi:10.1108/IJTC-05-2019-0067

Mullenbach, L. E., & Baker, B. L. (2018). Environmental justice, gentrification, and leisure: A systematic review and opportunities for the future. *Leisure Sciences*, 1–18. doi:10.1080/01490400.2018.1458261

Omerzel, D. G. (2016). A systematic review of research on innovation in hospitality and tourism. *International Journal of Contemporary Hospitality Management*, 28 (3), 516–558. doi:10.1108/IJCHM-10-2014-0510

Porter, M. E. (1990). The competitive advantage of nations. *Harvard Business Review*, 68(2), 73–93.

Promsviapop, P., & Kannaovakun, P. (2019). Destination food image dimensions and their effects on food preference and consumption. *Journal of Destination Marketing & Management*, 11, 89–100. doi:10.1016/j.jdmm.2018.12.003

Ruhanner, L., Weiler, B., Moyle, B. D., & McLennan, C.-L. J. (2015). Trends and patterns in sustainable tourism research: A 25-year bibliometric analysis. *Journal of Sustainable Tourism*, 23(4), 517–535. doi:10.1080/09669582.2014.978790

Sánchez, A. D., de la Cruz Del Río Rama, M., & García, J. Á. (2017). Bibliometric analysis of publications on wine tourism in the databases Scopus and WoS. *European Research on Management and Business Economics*, 23(1), 8–15. doi:10.1016/j.jedeen.2016.02.001

Silva, J. A., Rodríguez, P. M. M., Mendes, J., & Pereira, L. N. (2010). A tourism research agenda for Portugal. *International Journal of Tourism Research*, 12(1), 90–101. doi:10.1002/jtr.740

Sims, R. (2009). Food, place and authenticity: Local food and the sustainable tourism experience. *Journal of Sustainable Tourism*, 17(3), 321–336. doi:10.1080/09669580802359293

Smith, S. L. J., & Xiao, H. (2008). Culinary tourism supply chains: A preliminary examination. *Journal of Travel Research*, 46(3), 289–299. doi:10.1177/0047287506303981

Soriano, D. R. (2002). Customers’ expectations factors in restaurants: The situation in Spain. *International Journal of Quality & Reliability Management*, 19(8/9), 1055–1067. doi:10.1108/02656710210438122

Stokes, R. (2008). Tourism strategy making: Insights to the events tourism domain. *Tourism Management*, 29 (2), 252–262. doi:10.1016/j.tourman.2007.03.014

Sunanta, S. (2005, October 14–16). The globalization of Thai cuisine. Paper presented at the Canadian Council for Southeast Asian Studies Conference, Toronto: York University.

Telfer, D. J., & Wall, G. (1996). Linkages between tourism and food production. *Annals of Tourism Research*, 23 (3), 635–653. doi:10.1016/0160-7383(95)00087-9

The France Tourism Development Agency. (2017). Wine and gastronomy: A Sancerre way of life. Retrieved from http://www.visitfrenchwine.com/en/product/wine-and-gastronomy-sancerre-way-life

Torres Chavarría, L. C., & Phakdee-ouksorn, P. (2017). Understanding international tourists’ attitudes towards street food in Phuket, Thailand. *Tourism Management Perspectives*, 21, 66–73. doi:10.1016/j.tmp.2016.11.005

Townsend, J. A., Van Puymbroeck, M., & Zabriskie, R. B. (2017). The core and balance model of family leisure functioning: A systematic review. *Leisure Sciences*, 39(5), 436–456. doi:10.1080/01490400.2017.1333057

Tresidder, R., & Hirst, C. (2012). Marketing in food, hospitality, tourism and events: A critical approach. Oxford: Goodfellows Publishers.

Tsai, C. T., & Lu, P. H. (2012). Authentic dining experiences in ethnic theme restaurants. *International Journal of Hospitality Management*, 31(1), 304–306. doi:10.1016/j.ijhm.2011.04.010

Tsai, C. T., & Wang, Y. C. (2017). Experiential value in branding food tourism. *Journal of Destination Marketing & Management*, 6(1), 56–65. doi:10.1016/j.jdmm.2016.02.003

Tussyadiah, I. P., & Zach, F. (2017). Identifying salient attributes of peer-to-peer accommodation experience. *Journal of Travel & Tourism Marketing*, 34(5), 636–652. doi:10.1080/10548408.2016.1209153

United Nations World Tourism Organization. (2016). UNWTO tourism highlights Retrieved from http://www.e-unwto.org/doi/book/10.18111/9789284418145

Wang, Y., Li, X., & Lai, K. (2018). A meeting of the minds: Exploring the core–periphery structure and retrieval paths of destination image using social network analysis. *Journal of Travel Research*, 57(5), 612–626. doi:10.1177/0047287517706262

Weaver, D. (2001). Sustainable tourism: Is it sustainable? In B. Faulkner, G. Moscardo, & E. Law (Eds.), *Tourism in the twenty-first century: Reflections on experience* (pp. 300–311). London: Continuum.

Wong, K. M., & Musa, G. (2014). Retirement motivation among ‘Malaysia my second home’ participants. *Tourism Management*, 40, 141–154. doi:10.1016/j.tourman.2013.06.002
